



ACCORDS

ADULT AND CHILD CENTER FOR OUTCOMES  
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO  
CHILDREN'S HOSPITAL COLORADO

# Reassessing Evidence: What is Needed for Real World Research and Practice



## COPRH Con

Colorado Pragmatic  
Research in Health  
Conference

## Conference Program

June 5-6, 2023  
10am-3:30pm MT

### Featured Distinguished Speakers

Ross C. Brownson, PhD | Washington University in St. Louis

Ned Calonge, MD, MPH | Colorado School of Public Health

Maria Fernandez, PhD | University of Texas Health Science Center at Houston

Faith R. Kares, PhD | Beloved Community

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# Welcome to COPRH Con 2023

## Reassessing Evidence: What is Needed for Real World Research and Practice

We are delighted you are able to join us for the fourth Colorado Pragmatic Research in Health Conference (COPRH Con).

There are a variety of ways of conceptualizing pragmatic research – from pragmatic clinical trials to drug trials focused on real-world evidence to dissemination and implementation research. For COPRH Con, we conceptualize pragmatic research as research designed to be conducted in the real world using usual care settings, resources, and structures.

Pragmatic research is intended to help support a decision by service and care providers – and policy makers, patients, and other partners – on whether and in what context to adopt, deliver, or make use of an intervention. COPRH Con brings both established and emerging pragmatic methods, measures, and models, many of which come from the blossoming field of dissemination and implementation (or ‘D&I’) science. These methods help to ensure that pragmatic research is not seen as messy or poorly done research, but rather relevant AND rigorous.

Of great importance is the fact that conducting research in diverse, real world settings helps to ensure that our evidence can be applied successfully across different populations and contexts – which is critical for promoting health equity.

[The Adult and Child Center for Outcomes Research and Delivery Science \(ACCORDS\)](#), at the University of Colorado Anschutz Medical Campus, is proud to welcome you to the fourth Colorado Pragmatic Research in Health Conference.

The University of Colorado Anschutz Medical Campus (AMC), located just outside of Downtown Denver, is the largest academic health campus in the Rocky Mountain region and is at the forefront of transformative education, research, medicine, and healthcare.

The Anschutz Health Sciences Building (AHSB), home to ACCORDS and COPRH Con 2023, officially opened on AMC in December of 2021 and boasts nearly 400,000 square feet of translational health sciences research, mental and behavioral health, education, and personalized clinical care.



We welcome you to the University of Colorado Anschutz Medical Campus!

Warmest of welcomes,  
Sarah Brewer, PhD and the COPRH Con Planning Committee



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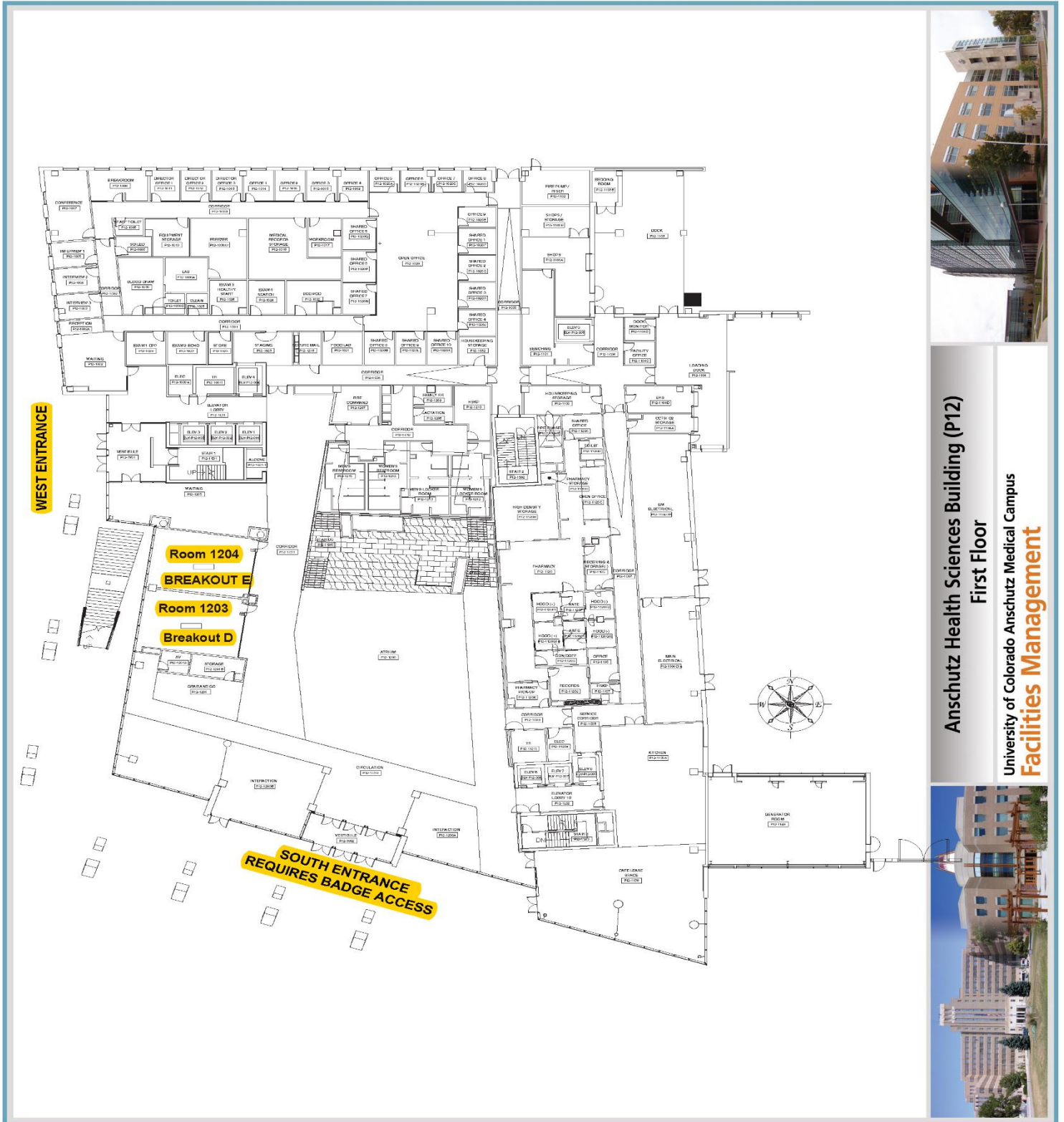
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# COPRH Con Facilities

## 1<sup>st</sup> Floor, Anschutz Health Sciences Building

- Breakout Room D: P12-1203
- Breakout Room E: P12-1204



Anschutz Health Sciences Building (P12)

First Floor

University of Colorado Anschutz Medical Campus  
Facilities Management

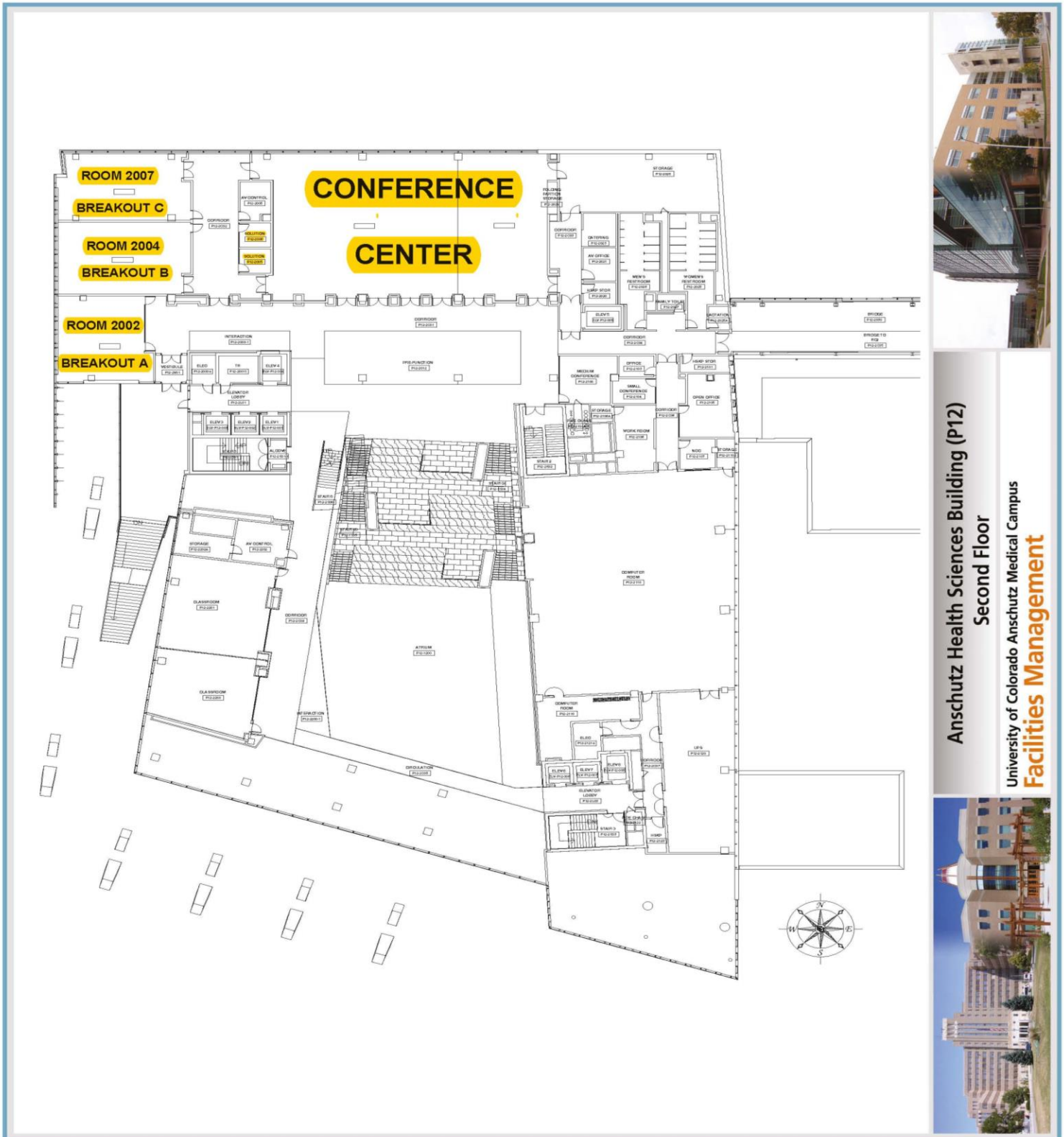


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## 2<sup>nd</sup> Floor, Anschutz Health Sciences Building

- Don Elliman Conference Center: P12-2010/2011
- Breakout Room A: P12-2002
- Breakout Room B: P12-2004
- Breakout Room C: P12-2007



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## Conference Planning Committee

**Sarah Brewer, PhD, MPA**  
Conference Chair



Sarah Brewer, PhD, MPA directs the ACCORDS Education Program, serves as a Qualitative and Mixed Methodologist in the ACCORDS Qualitative and Mixed Methods Core, and is Assistant Professor of Family Medicine. She is also Associate Director for the Colorado Children's Outcomes Network, a state-wide practice-based research network (PBRN) of pediatric practices in Colorado focused on answering clinically relevant research questions. Dr. Brewer's research interests include disease prevention and establishment of healthy behavior in pediatric care, the role of community in refugee health during resettlement, and effective implementation of community engagement in health research and the health care system. She earned a PhD in Health and Behavioral Sciences from the University of Colorado Denver, a graduate certificate in Public Health Sciences from the Colorado School of Public Health, and Master of Public Administration with a focus in health policy from University of Colorado Denver, and B.A. in International Studies and German Languages and Literature from the University of Denver.

**Mandy Allison, MAEd, MD, MSPH**



Mandy Allison, MAEd, MD, MSPH is an Associate Professor of Pediatrics at the University of Colorado School of Medicine. She has taught residents, medical students, and advanced practice provider students and provided clinical care to linguistically, ethnically, and culturally diverse patients since 2004. She has served as a Principal Investigator and Co-Investigator on foundation-funded grants and federal grants from AHRQ, CDC, and NIH in the areas of immunization delivery, school health, and early childhood development. She has served as the Co-Director of the Prevention Research Center for Family and Child Health (PRC) with Dr. David Olds, Nurse Family Partnership (NFP) founder, since 2019. Her recent and current research includes a formative study of home-visiting for women with previous live births and a qualitative study of health care experiences of mothers with a history of substance use disorder. She was a co-investigator on a Robert Wood Johnson Foundation-funded project (Dr. Venice Williams, PI) examining the role of collaboration and system integration of home-visiting with other community providers in achieving positive maternal-child health outcomes. Finally, she is currently a multiple principal investigator on two pragmatic trials. One is a randomized clinical trial of Nurse Family Partnership home-visiting for people with previous live births, and the other is a trial of enriching home-visiting to improve maternal and child cardiovascular health.

**Liza M. Creel, PhD, MPH**



Liza M. Creel, PhD is an Associate Professor in the Division of Health Care Policy and Research at the University of Colorado Anschutz Medical Campus School of Medicine. She is also a member of the Economic Analysis Core within ACCORDS and Affiliate Faculty in the Farley Health Policy Center. Dr. Creel's research is in the areas of maternal and child health, organizational collaboration within the healthcare and social service systems, and policy evaluation as it relates to impacts on cost, quality, and access. Dr. Creel serves as PI and Co-I on several studies, including a Robert Wood Johnson Foundation supported grant to examine cross-sector alignment among organizations serving pregnant and parenting women in recovery. Dr. Creel has taught courses in health policy analysis, health policy research, and microeconomic theory. She received her PhD in Health Services Research from Texas A&M University School of Public Health and her MPH from the University of Michigan School of Public Health.



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**Brooke Dorsey Holliman, PhD**



Brooke Dorsey Holliman, PhD is an Assistant Professor in the Department of Family Medicine in the School of Medicine. She specializes in the use of qualitative and mixed methods in health services research, and is skilled at health policy and program evaluation. Dr. Dorsey Holliman's research focuses on health disparities and inequalities due to socioeconomic status, race/ethnicity, and social and structural factors. Prior to joining the University of Colorado, she was the founding Director of the Qualitative Core for the Mental Illness Research Education and Clinical Center at the Rocky Mountain Regional VA Medical Center. Dr. Dorsey Holliman earned her B.A. in Psychology from North Carolina Central University, a M.A. in Forensic Psychology from the University of Denver, and a Ph.D. in Health and Behavioral Sciences from the University of Colorado Denver.

**Russell Glasgow, PhD**



Russell Glasgow, PhD is Director of the Dissemination and Implementation Program of ACCORDS and research professor in the Department of Family Medicine at the University of Colorado School of Medicine. Prior to Fall 2013, he was Deputy Director for Implementation Science in the Division of Cancer Control and Population Science at the U. S. National Cancer Institute (<http://cancercontrol.cancer.gov/IS/>). Dr. Glasgow is an implementation scientist and evaluation expert who has worked on many transdisciplinary research issues including chronic illness self-management, worksite health promotion, primary care based interventions, and community-based prevention programs involving community health centers.

**Mónica Pérez Jolles, PhD**



Mónica Pérez Jolles, PhD, MA is a health services and implementation scientist seeking to close the health gap through team-based science. Her focus brings together scientists from various backgrounds to support Federally Qualified Health Centers (FQHCs) in their efforts to implement complex interventions; particularly family-centered and trauma-informed care. Projects include a PCORI-funded Eugene Engagement Award developing a toolkit to increase the capacity of behavioral health care providers to engage in Patient-Centered Outcomes Research (PCOR), and a randomized CER study aimed at increasing parent activation skills for Latinx parents with children in need of mental health services. Currently, she leads a NIMH-funded pilot study using implementation mapping to refine a multi-faceted implementation strategy supporting pediatric screenings addressing toxic stress and trauma in community-based primary care settings, using a stepped-wedge pragmatic trial. Dr Pérez Jolles research has been recognized nationally as she has been the recipient of two leading fellowships supported by the National Institutes of Health.



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**Allison Kempe, MD, MPH**



Allison Kempe, MD, MPH Ergen Family Endowed Chair in Pediatric Outcomes Research at Children's Hospital Colorado, is the founding Director of ACCORDS. She is a tenured Professor of Pediatrics at the University of Colorado School of Medicine and the Colorado School of Public Health and has conducted health services, outcomes, and implementation/dissemination research for over thirty years. She has extensive experience in conducting pragmatic trials, in program evaluation and in the conduct of surveys, with over 200 publications focusing on improving health care and health care delivery. Finding and testing methods of improving immunization rates and other preventive care delivery and decreasing disparities in health and health care delivery for children have been the major focus of her own research. She has received numerous R01 level grants from NIH, AHRQ, and the CDC throughout her career. Additionally, Dr. Kempe has played a major mentorship role for many fellows and junior faculty. She directed two federally funded primary care research fellowships for over 10 years and developed a fellowship for surgical and subspecialty faculty who wish to become outcomes or health services researchers. Currently, she is a Co-Director of a K12 from NHLBI that focuses on implementation and dissemination science.

**Bethany Kwan, PhD, MSPH**



Bethany Kwan, PhD, MSPH is an Associate Professor and Associate Vice Chair for Research in the Department of Emergency Medicine at the University of Colorado School of Medicine, Anschutz Medical Campus. She received her PhD in social psychology from the University of Colorado Boulder in 2010, following a MSPH from the University of Colorado Health Sciences Center in 2005. She holds a BS in Chemistry and Psychology from Carnegie Mellon University ('01). As an investigator in the University of Colorado's Adult & Child Center for Outcomes Research and Delivery Science (ACCORDS), she conducts pragmatic, patient-centered research and evaluation on health and health care in a variety of areas. With an emphasis on stakeholder engagement and dissemination and implementation (D&I) methods, her work addresses the integration of physical and behavioral health, chronic disease self-management, improving processes and systems of care to achieve the Quadruple Aim, pragmatic trials using electronic health data, and enhancing quality of life for patients and care partners. She works with patients and other stakeholders at all phases of research, from prioritization, to design, implementation, and dissemination of research. She mentors and teaches students, trainees, and fellow faculty on Designing for Dissemination to ensure that research innovations are efficiently and effectively adopted, used, and sustained in real world settings to improve health and well-being for all. Dr. Kwan is a member of the ACCORDS D&I program and directs the Colorado Clinical & Translational Sciences Institute (CCTSI) Dissemination & Implementation Research Core.



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# Reassessing Evidence: What is Needed for Real World Research and Practice

June 5 - 6, 2023 | 10am-3:30 pm MT



Agenda   Monday, June 5, 2023		
SCHEDULE (Mountain Time)	TITLE	SPEAKERS
9:00-10:00 AM Breakout Room C (P12-2007)	<b>Pre-Conference Session:</b> Welcome and Overview of Pragmatic Research for Community and Patient Partners	Sarah Brewer, PhD, MPA
10:00-10:15 AM Don Elliman Conference Center	<b>Welcome Address*</b> The Colorado Pragmatic Research in Health Conference: An Overview	Sarah Brewer, PhD, MPA Allison Kempe, MD, MPH
10:15-11:15 AM Don Elliman Conference Center	<b>Keynote Address*</b> Evidence in Pragmatic Research: Whose Evidence on What for What?	Ross Brownson, PhD
<b>15 MINUTE BREAK</b>		
11:30-12:15 PM Don Elliman Conference Center	<b>Panel Discussion*</b> Evidence: How Much, What Kind, And For What?	Janine Higgins, PhD Marc Bonaca, MD Russell Glasgow, PhD Ross Brownson, PhD^
12:15-1:45 PM Don Elliman Conference Center	<b>Networking Lunch</b> <ol style="list-style-type: none"> <li>Community Engagement</li> <li>Dissemination and Implementation (D&amp;I) Science</li> <li>Cost</li> <li>Health Equity</li> <li>Patient Engagement</li> </ol>	<ol style="list-style-type: none"> <li>Lisa Neal-Graves, JD</li> <li>Amy Huebschmann, MD</li> <li>Liza M. Creel, PhD, MPH</li> <li>Demetria McNeal, PhD; Mandy Allison, MD</li> <li>Lisa DeCamp, MD; Ricardo Gonzales-Fisher</li> </ol>
1:45-2:30 PM <ol style="list-style-type: none"> <li>Breakout Room A (P12-2002)</li> <li>Breakout Room B (P12-2004)</li> <li>Breakout Room C (P12-2007)</li> </ol>	<b>Concurrent Sessions</b> <ol style="list-style-type: none"> <li>Assessing and Translating Evidence Using Mixed Methods Frameworks: An Illustrative Case of Mixed Methods Work Conducted to Enhance and Expand the Nurse Family Partnership</li> <li>Community-Engaged Approaches to Identify and Assess Evidence: The Dilemma of Evidence-Based and Evidence-Informed Practices</li> <li>Systematic Reviews or Scoping reviews? Assessing Evidence for Pragmatic Research</li> </ol>	<ol style="list-style-type: none"> <li>Gregory Tung, PhD</li> <li>Mónica Pérez Jolles, PhD^; Jenn Russell, MHA; Fardus Ahmed, MSW; Lorenzo Ramírez</li> <li>Tianjing Li, PhD</li> </ol>
<b>15 MINUTE BREAK</b>		
2:45-3:30 PM Don Elliman Conference Center	<b>Plenary Address*</b> Interrogating Neutrality: Unpacking the Power Dynamics Intrinsic to Research	Faith R. Kares, PhD
<b>3:30 PM</b>	<b>END OF DAY 1   CONTINUE TO NEXT PAGE FOR DAY 2</b>	



Agenda   Tuesday, June 6, 2023		
SCHEDULE (Mountain Time)	TITLE	SPEAKERS
9:00-10:00 AM	<b>Coffee Hour</b> Informal networking, poster viewing	
10:00-10:45 AM Don Elliman Conference Center	<b>Plenary Address*</b> Hybrid Effectiveness Implementation Study Methodology: Reflections and Recommendations	Maria Fernandez, PhD
<b>15 MINUTE BREAK</b>		
11:00-11:45 AM 1. Don Elliman Conference Center 2. Breakout Room B (P12-2004) 3. Breakout Room C (P12-2007)	<b>Concurrent Sessions</b> 1. Generating Evidence with Hybrid Trials 2. Reporting Pragmatic Evidence Using EQUATOR Network Checklists 3. Communicating Evidence for Change: Non-Academic Writing for the Public and Policymakers	1. Maria Fernandez, PhD 2. Liza M. Creel, PhD, MPH; Amy Huebschmann, MD; Brooke Dorsey Holliman, PhD; Katie Colborn, PhD^ 3. Shale Wong, MD, MSPH; <i>Farley Health Policy Center Staff</i>
11:45-1:15 PM Don Elliman Conference Center	<b>Lunch</b>	11:45-12:30 PM <b>Poster Session</b>
		12:30-1:15 PM <b>Best of COPRH Con Poster Presentations</b>
1:15-2:00 PM Don Elliman Conference Center	<b>Panel Discussion*</b> Putting Evidence Into Practice: Challenges In Using Evidence To Make Change <ul style="list-style-type: none"> <li>• <b>Cost</b> evidence</li> <li>• Implementation <b>feasibility</b></li> <li>• Involving <b>community partners</b></li> </ul>	<ul style="list-style-type: none"> <li>• Mark Gritz, PhD</li> <li>• Borsika Rabin, PhD, PharmD</li> <li>• Andrea Nederveld, MD, MPH</li> <li>• Gregory Tung, PhD^</li> </ul>
<b>15 MINUTE BREAK</b>		
2:15-3:15 PM Don Elliman Conference Center	<b>Keynote Address*</b> Applying Evidence for System and Policy Change	Ned Calonge, MD, MPH
3:15-3:30 PM Don Elliman Conference Center	<b>Closing Address*</b> Looking Towards COPRH Con 2024	Sarah Brewer, PhD, MPA
<b>3:30 PM</b>	<b>END OF DAY 2   END OF COPRH CON 2023</b>	

\*Streaming on Zoom  
^Session moderator

# Keynote and Plenary Speakers

## Day 1

**Ross C. Brownson, PhD**  
Keynote Address



**Ross C. Brownson, PhD** is the Lipstein Distinguished Professor of Public Health at Washington University in St. Louis. He directs the Prevention Research Center and co-directs the Washington University Implementation Science Center for Cancer Control. Dr. Brownson is the lead editor of the text, *Dissemination and Implementation Research in Health: Translating Science to Practice*. He is the recipient of the American Public Health Association's (APHA) Abraham Lilienfeld Award for excellence in teaching and mentoring (2003) and the APHA Award for Excellence (2016).

**Faith R. Kares, PhD**  
Plenary Address



**Faith R. Kares, PhD** is a social science researcher who specializes in race/ethnicity, social and economic (in)equities, and organizational culture. She has 20+ years of experience conducting mixed-methods research in various contexts, including but not limited to evaluating the efficacy of California's juvenile justice system, studying the impact of STEM out-of-school time programming on the science and career identities of underrepresented minority youth in Chicago, conducting ethnographic research among working poor families in Metro Manila advocating for affordable housing, and evaluating the operations and practices of the Chicago Police Department as part of the city's police reform efforts.

Dr. Kares' work raises questions of power, (in)equity, in/exclusion, and justice. Through an enduring commitment to innovative research design and participatory methodologies, she is dedicated to engaging broader audiences and making research relevant and accessible to all communities. Additionally, she teaches courses in the Honors College at the University of Illinois at Chicago, and provides trainings to nonprofit and local/federal government entities on how to mitigate bias in research. She holds a Ph.D. in Cultural Anthropology from Northwestern University.



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**Maria Fernandez, PhD**  
Plenary Address



**Maria Fernandez, PhD** is Vice President of Population Health and Implementation Science at the University of Texas Health Science Center at Houston (UTHealth), the Lorne Bain Distinguished Professor of Public Health and Medicine, and Professor of Health Promotion and Behavioral Sciences. She is also the Director of the Center for Health Promotion and Prevention Research, and the Founding Co-Director of the new UTHealth Institute for Implementation Science. Her research focuses on cancer and chronic disease prevention and control among underserved populations in the U.S. and globally. She has extensive expertise in research translation and dissemination and implementation (D&I) research and has conducted studies to accelerate and improve the use of evidence-based interventions and guidelines for the prevention and control of cancer, diabetes, and cardiovascular disease in clinical and public health settings. Dr. Fernandez has spent her career conducting participatory community-engaged research and practice to develop, evaluate, implement, and disseminate interventions to improve health equity. She was recently awarded the Association for Schools and Programs of Public Health Research Excellence Award and the UTHealth President's Scholar Award for Research Excellence.

**Ned Calonge, MD, MPH**  
Keynote Address



**Ned Calonge, MD, MPH**, is the associate dean for public health practice at the Colorado School of Public Health and an associate professor of family medicine at the School of Medicine on the CU Anschutz Medical Campus. He chairs the Board on Population Health and Public Health Practice of the National Academies of Science, Engineering and Health and serves on the National Academies' Roundtable on the Promotion of Health Equity. He currently chairs the Advisory Committee for Heritable Disorders of Newborns and Children for HRSA. He is past chair of the US Preventive Services Task Force at AHRQ and past chair of the Community Preventive Services Task Force at CDC. Prior to his role at the School of Public Health, Dr. Calonge served as the president and CEO of the Colorado Trust, the chief medical officer of the Colorado Department of Public Health and Environment, and the chief of Preventive Medicine for the Colorado Permanente Medical Group. He is a past president of the Colorado Medical Board and was elected to the National Academy of Medicine in 2011.



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# Supporting Presenters

*\*denotes COPRH Con Planning Committee Member*



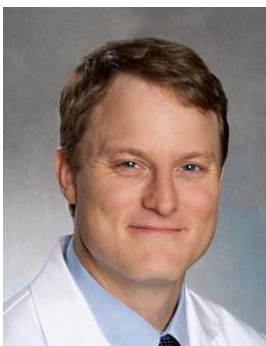
**Farduus Ahmed, MSW**  
**Instructor, Dept. of Psychiatry**  
**University of Colorado School of Medicine**

**Farduus Ahmed, MSW, SWC**, is an instructor in the Department of Psychiatry at the University of Colorado School of Medicine. She is a mental health clinician and educator who provides culturally and linguistically responsive, and trauma-informed clinical service to refugee/immigrant clients and their families. Farduus also leading a three-year project funded by the U.S. Department of Justice to expand services, education, and outreach on Female Genital Mutilation/Cutting (FGM/C). Ms. Ahmed is an experienced community leader, advocate, researcher, and consultant who brings more than a decade of engaging with diverse populations in areas of women's health, newcomer health and mental health. She specializes in consultancies that support refugees and immigrants, offering expert opinion, program analysis, and recommendations to service providers and systems to promote the self-sufficiency, integration and empowerment of refugee women and their families.



**Mandy Allison, MAEd, MD, MSPH\***  
**Associate Professor of Pediatrics**  
**University of Colorado School of Medicine**

Mandy Allison, MAEd, MD, MSPH is an Associate Professor of Pediatrics at the University of Colorado School of Medicine. She has taught residents, medical students, and advanced practice provider students and provided clinical care to linguistically, ethnically, and culturally diverse patients since 2004. She has served as a Principal Investigator and Co-Investigator on foundation-funded grants and federal grants from AHRQ, CDC, and NIH in the areas of immunization delivery, school health, and early childhood development. She has served as the Co-Director of the Prevention Research Center for Family and Child Health (PRC) with Dr. David Olds, Nurse Family Partnership (NFP) founder, since 2019. Her recent and current research includes a formative study of home-visiting for women with previous live births and a qualitative study of health care experiences of mothers with a history of substance use disorder. She was a co-investigator on a Robert Wood Johnson Foundation-funded project (Dr. Venice Williams, PI) examining the role of collaboration and system integration of home-visiting with other community providers in achieving positive maternal-child health outcomes. Finally, she is currently a multiple principal investigator on two pragmatic trials. One is a randomized clinical trial of Nurse Family Partnership home-visiting for people with previous live births, and the other is a trial of enriching home-visiting to improve maternal and child cardiovascular health.



**Marc Bonaca, MD, MPH**  
**Associate Professor of Medicine**  
**University of Colorado School of Medicine**

**Marc P. Bonaca, MD, MPH** is a Cardiologist and Vascular Medicine Specialist who serves as the Executive Director of CPC Clinical Research and CPC Community Health which is an Academic Research Organization created by and affiliated with the University of Colorado Anschutz Medical Campus. He is the Director of Vascular Research and an Associate Professor of Medicine at the University of Colorado School of Medicine and the inaugural holder of the William R. Hiatt Endowed Chair in Cardiovascular Research. CPC is a core resource of the University of Colorado research and community outreach infrastructure.



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**Sarah Brewer, PhD, MPA\***  
**Director, ACCORDS Education Program**  
**Assistant Professor, Dept. of Family Medicine**  
**University of Colorado School of Medicine**

**Sarah Brewer, PhD, MPA** directs the ACCORDS Education Program, serves as a Qualitative and Mixed Methodologist in the ACCORDS Qualitative and Mixed Methods Core, and is Assistant Professor of Family Medicine. She is also Associate Director for the Colorado Children's Outcomes Network, a state-wide practice based research network (PBRN) of pediatric practices in Colorado focused on answering clinically relevant research questions. Dr. Brewer's research interests include disease prevention and establishment of healthy behavior in pediatric care, the role of community in refugee health during resettlement, and effective implementation of community engagement in health research and the health care system. She earned a PhD in Health and Behavioral Sciences from the University of Colorado Denver, a graduate certificate in Public Health Sciences from the Colorado School of Public Health, and Master of Public Administration with a focus in health policy from University of Colorado Denver, and. B.A. in International Studies and German Languages and Literature from the University of Denver.



**Kathryn (Katie) Colborn, PhD, MSPH**  
**Associate Professor, Dept. of Medicine**  
**University of Colorado School of Medicine**

**Kathryn Colborn, PhD** is an Associate Professor the Division of Healthcare Policy and Research in the Department of Medicine. She Directs the Biostatistics and Analytics Core at ACCORDS. She also holds a secondary appointment in the Department of Biostatistics and Informatics in the Colorado School of Public Health, and she co-directs the Data Informatics and Statistics Core (DISC) of the Palliative Care Research Cooperative Group (PCRC). She has received extramural funding for her own research and has collaborated on numerous extramural research grants. Her research interests include design and analysis of randomized controlled trials and cluster randomized trials, analysis of electronic health record data, and health services and outcomes research.



**Liza M. Creel, PhD, MPH\***  
**Associate Professor, Dept. of Medicine**  
**University of Colorado School of Medicine**

**Liza M. Creel, PhD** is an Associate Professor in the Division of Health Care Policy and Research at the University of Colorado Anschutz Medical Campus School of Medicine. She is also a member of the Economic Analysis Core within ACCORDS and Affiliate Faculty in the Farley Health Policy Center. Dr. Creel's research is in the areas of maternal and child health, organizational collaboration within the healthcare and social service systems, and policy evaluation as it relates to impacts on cost, quality, and access. Dr. Creel serves as PI and Co-I on several studies, including a Robert Wood Johnson Foundation supported grant to examine cross-sector alignment among organizations serving pregnant and parenting women in recovery. Dr. Creel has taught courses in health policy analysis, health policy research, and microeconomic theory. She received her PhD in Health Services Research from Texas A&M University School of Public Health and her MPH from the University of Michigan School of Public Health.



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**Lisa Ross DeCamp, MD, MSPH**  
**Associate Professor**  
**University of Colorado School of Medicine, Children's Hospital Colorado**

**Lisa Ross DeCamp, MD, MSPH**, is an associate professor at the University of Colorado School of Medicine and Children's Hospital Colorado. She is affiliated with the Adult and Child Consortium for Health Outcomes Research and Delivery Science (ACCORDS), and core faculty in the Latino Research and Policy Center at the Colorado School of Public Health. As a clinician scientist she is focused on understanding and addressing health disparities, with a particular focus on Latino children in immigrant families. Dr. DeCamp is a practicing general pediatrician bilingual in English and Spanish. She currently practices at an academic primary care clinic in the Children's Hospital Colorado Health System serving primarily Medicaid-insured children.



**Brooke Dorsey Holliman, PhD\***  
**Assistant Professor, Dept. of Family Medicine**  
**University of Colorado School of Medicine**

**Brooke Dorsey Holliman, PhD** is an Assistant Professor in the Department of Family Medicine in the School of Medicine. She specializes in the use of qualitative and mixed methods in health services research, and is skilled at health policy and program evaluation. Dr. Dorsey Holliman's research focuses on health disparities and inequalities due to socioeconomic status, race/ethnicity, and social and structural factors. Prior to joining the University of Colorado, she was the founding Director of the Qualitative Core for the Mental Illness Research Education and Clinical Center at the Rocky Mountain Regional VA Medical Center. Dr. Dorsey Holliman earned her B.A. in Psychology from North Carolina Central University, a M.A. in Forensic Psychology from the University of Denver, and a Ph.D. in Health and Behavioral Sciences from the University of Colorado Denver.



**Russell Glasgow, PhD\***  
**Research Professor, Department of Family Medicine**  
**University of Colorado Anschutz Medical Campus**

**Russell Glasgow, PhD** is the Director of the Dissemination and Implementation Science Program of ACCORDS (<https://bit.ly/2BnJzuk>) and research professor in the Department of Family Medicine at the University of Colorado School of Medicine. He is one of the original developers of the RE-AIM ([www.re-aim.org](http://www.re-aim.org)), PRISM and Dynamic Sustainability frameworks and directs an NCI funded implementation science center. He is an implementation scientist whose work focuses on public health issues of studying and enhancing the reach and adoption of evidence-based programs; adaptation and context; and pragmatic research methods and measures to enhance health equity and sustainment.



**Emma Gilchrist, MPH**  
**Deputy Director**  
**Farley Health Policy Center**

**Emma Gilchrist, MPH** is an instructor in the CU Department of Family Medicine at the University of Colorado School of Medicine. As deputy director of the Farley Health Policy Center, she oversees the planning, execution, and completion of its programs and projects. She has been a project manager and qualitative researcher for federal, state, and foundation grants and contracts; and works to improve health through policies that advance behavioral health integration, prevention and health promotion, community engagement, and workforce development. Ms. Gilchrist enjoys mentoring students and fellows. She received her Master of Public Health degree from the University of Michigan, and she previously worked at the University of Michigan Center for Managing Chronic Disease.



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**Mark Gritz, PhD**

**Associate Professor, Division of Health Care Policy and Research  
Director of Operations, ACCORDS**

**R. Mark Gritz, PhD**, is Director of Operations for ACCORDS, an Associate Professor and Head of the Division of Health Care Policy and Research, and the Director of Operations at the Farley Health Policy Center. He received his PhD in Economics from Stanford University and has over 30 years of experience in directing and managing demonstrations, evaluations, research, and technical assistance projects designed to improve economic, health and other outcomes affecting the well-being of economically-disadvantaged and other vulnerable populations. Many of these projects have involved youth, women from low-income families, veterans, elderly, and other targeted populations, including several research and evaluation efforts examining the needs and experiences of low-income youth, unemployed workers, working single mothers, socio-economically disadvantaged populations, and disabled veterans. Before returning to Colorado he held several corporate management positions where he directed over 100 scientific and technical staff, had responsibility for the financial performance of international business units, and managed intellectual property portfolios. His current work focuses on healthcare value and its association with socio-economics factors with an eye towards rapidly responding to research and policy analysis needs of government agencies in Colorado.



**Ricardo Gonzalez-Fisher, MD, MPH**

**Ricardo Gonzalez-Fisher, MD, MPH** was born in Canton, Ohio, and moved to Mexico with his family at the age of 3 years old. As an immigrant in Mexico, he became a Surgical Oncologist with significant experience in various roles, including senior leadership, academia, team building and research on issues related to cancer incidence, treatment, and survivorship. In 2012, Dr. Gonzalez-Fisher moved to Colorado and obtained a master's degree in Public Health. Since 2016 Dr Gonzalez-Fisher serves as a public health professional at Servicios de La Raza managing the Ventanilla de Salud program at the Mexican Consulate in Denver, actively participating in COVID-19 education, testing and vaccination for underserved Latino communities across the State of Colorado. Dr. Gonzalez-Fisher participates in several NIH funded research projects through the University of Colorado Anschutz Medical Campus and Metropolitan State University of Denver where he is Associate Faculty.



**Janine Higgins, PhD**

**Associate Professor, Dept. of Pediatrics  
University of Colorado School of Medicine**

**Janine Higgins, PhD**, is Associate Professor of Pediatrics in the University of Colorado School of Medicine, Aurora. She received her PhD in biochemistry at the University of Sydney, with a thesis focusing on the effect of carbohydrate sub-type, in particular resistant starch, on insulin sensitivity in rats. Her research focuses on preventing weight regain following weight loss in obese rodents and the metabolic effects of resistant starch in children, adults, and rats. She is also an investigator on the NIH multi-center Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) study. She is currently the Colorado Clinical and Translational Sciences Institute (CCTSI) Nutrition Research Director. Her latest endeavors seek to translate the data from adult studies to children and adolescents who are the population at greatest risk for an explosion in the prevalence of the metabolic syndrome and, therefore, the population with the greatest possible benefit from resistant starch consumption partners in Central America, Mexico, and the United States. Her current research focuses on: systems science approaches to design and implement multi-level and multi-sectoral interventions to prevent cardiovascular disease; hypertension control in Guatemala's public primary care system; diabetes prevention and care in Urban Indian Health Organizations; and regenerative foodscapes that promote food sovereignty and support healthy, equitable and sustainable diets and the environment.



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**Amy Huebschmann, MD, MS, FACP**  
**Associate Professor, Div. of General Internal Medicine**  
**University of Colorado School of Medicine**

**Amy Huebschmann, MD, MS, FACP** is an Associate Professor at the University of Colorado School of Medicine with the Division of General Internal Medicine and the Center for Women's Health Research. Dr. Huebschmann began her education at the University of Illinois at Urbana-Champaign, earning a BS in Environmental Engineering. She earned her medical degree in 2000 from Vanderbilt University School of Medicine and completed her residency at the University of Colorado School of Medicine. Continuing her education, most recently she earned an MS in Clinical Sciences in 2015 at the University of Colorado. She has been funded continuously by the NIH since 2011. Her overarching research goal is to reduce the burden of cardiovascular disease by delivering evidence-based programs to prevent and treat cardiovascular risk factors, such as sedentary behavior.



**Allison Kempe, MD, MPH\***  
**Professor, Dept. of Pediatrics**  
**University of Colorado School of Medicine, Children's Hospital Colorado**

**Allison Kempe, MD, MPH**, Ergen Family Endowed Chair in Pediatric Outcomes Research at Children's Hospital Colorado, is the founding Director of ACCORDS. She is a tenured Professor of Pediatrics at the University of Colorado School of Medicine and the Colorado School of Public Health and has conducted health services, outcomes, and implementation/dissemination research for over thirty years. She has extensive experience in conducting pragmatic trials, in program evaluation and in the conduct of surveys, with over 200 publications focusing on improving health care and health care delivery. Finding and testing methods of improving immunization rates and other preventive care delivery and decreasing disparities in health and health care delivery for children have been the major focus of her own research. She has received numerous R01 level grants from NIH, AHRQ, and the CDC throughout her career. Additionally, Dr. Kempe has played a major mentorship role for many fellows and junior faculty. She directed two federally funded primary care research fellowships for over 10 years and developed a fellowship for surgical and subspecialty faculty who wish to become outcomes or health services researchers. Currently, she is a Co-Director of a K12 from NHLBI that focuses on implementation and dissemination science.



**Lisa Neal-Graves, JD, MS, ME**  
**CEO, Aurora Wellness Community**  
**University of Colorado School of Medicine**

**Lisa Neal-Graves** is the CEO of Aurora Wellness Community (AWC), a CU Medicine Entity. AWC is a partnership with the Aurora Community, CU Anschutz School of Medicine, and CU Medicine to BUILD HEALTH, WEALTH, and WELL-BEING in Aurora, with a particular focus on residents who live in zip codes 80010, 80011, and 80012. This organization will focus on addressing the social determinants of health with a new primary care clinic as well as other services and ecosystems necessary to meet the needs of Aurora residents. Lisa has 30+ years of experience, having served as a Chief Innovation Officer, Chief Technology Officer, SVP, and VP with various tech companies focused on delivering innovative services and solutions.



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**Mónica Pérez Jolles, PhD\***

Associate Professor, Dept. of Pediatrics  
University of Colorado School of Medicine

**Mónica Pérez Jolles, PhD, MA** is a health services and implementation scientist seeking to close the health gap through team-based science. Her focus brings together scientists from various backgrounds to support Federally Qualified Health Centers (FQHCs) in their efforts to implement complex interventions; particularly family-centered and trauma-informed care. Projects include a PCORI-funded Eugene Engagement Award developing a toolkit to increase the capacity of behavioral health care providers to engage in Patient-Centered Outcomes Research (PCOR), and a randomized CER study aimed at increasing parent activation skills for Latinx parents with children in need of mental health services. Currently, she leads a NIMH-funded pilot study using implementation mapping to refine a multi-faceted implementation strategy supporting pediatric screenings addressing toxic stress and trauma in community-based primary care settings, using a stepped-wedge pragmatic trial. Dr Pérez Jolles research has been recognized nationally as she has been the recipient of two leading fellowships supported by the National Institutes of Health.



**Tianjing Li, MD, MHS, PhD**

Associate Professor, Dept. of Ophthalmology  
University of Colorado School of Medicine

Tianjing Li, PhD is an Associate Professor in the [Department of Ophthalmology at the University of Colorado Anschutz Medical Campus](#) with a secondary appointment in the Department of Epidemiology at the Colorado School of Public Health. The goal of Dr. Li's research is to develop, evaluate, and disseminate methods for comparing healthcare interventions and to provide trust-worthy evidence for decision-making.



**Borsika Rabin, PhD, MPH, PharmD**

Assistant Professor, Dept. of Family Medicine/Public Health  
University of California, San Diego

**Borsika Rabin, PhD, MPH, PharmD** is an Assistant Professor at the Department of Family Medicine and Public Health at the School of Medicine, University of California San Diego where she also serves as the co-Director of the UC San Diego D&I Science Center. Dr. Rabin serves as the co-lead of the Implementation Core for the Triple Aim QUERI Program for Denver VA and an Implementation Scientist at the Center of Excellence in Stress and Mental Health at the San Diego VA. She is a member of the ACCORDS Dissemination and Implementation Science Program at the University of Colorado. Her research focuses on dissemination and implementation (D&I) of evidence-based interventions, adaptations, measurement, and the evaluation and development of interactive, web-based interventions and tools with a special emphasis on tools that can support planning for D&I interventions. She designed and developed a number of web-based resources including the D&I Models in Research and Practice (<https://dissemination-implementation.org/> websites).



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**Lorenzo Ramirez**  
**Community Research Liaison**

**Lorenzo Ramirez** has worked as a Community Research Liaison in the various Latino communities of Metro Denver for the past 14 years with a focus on Community Engagement and Community Based Participatory Research CBPR.



**Alison Reidmohr, MA**  
**Communications Officer**  
**Farley Health Policy Center**

**Alison Reidmohr, MA** has worked in communications and health policy for more than 10 years in Montana and Colorado. After moving to Colorado in 2017, she started work as the tobacco communications strategist at the Colorado Department of Public Health and Environment, leading statewide media campaigns, including those promoting the Colorado QuitLine and Tobacco Free Colorado. She was promoted to deputy communications director and led CDPHE's COVID-19 prevention marketing efforts through 2020. Her focus and expertise lie in policy and legislative communications, communications strategy, and public health marketing. In 2022, she earned her master of arts degree in communication from the University of Colorado, Denver, after conducting original research on Colorado's digital contact tracing application, CO Exposure Notifications. She works full time for the Farley Health Policy Center, for which she leads all communications activities.



**Jenn Russell, MHA**  
**Senior Professional Research Associate**

**Jenn Russell, MHA** is a member of the Choctaw Nation of Oklahoma and has worked at the Colorado School of Public Health's Centers for American Indian and Alaska Native Health for the past 16 years. Currently she serves as the Project Director for the IHS Tribal Injury Prevention Cooperative Agreement Program Monitoring Contract where she provides technical assistance and resources to 27 tribal communities implementing evidence-based interventions to prevent unintentional and intentional injury. Previously, she served as the Associate Director for the IHS Special Diabetes Program for Indians Coordinating Center (SDPI CC) cooperative agreement. With the SDPI CC, she provided daily technical assistance directly to 68 IHS-funded grantees and conducted over 40 site visits focused on successful implementation of public health interventions. Additionally, Jenn serves as the Chair for the Board of Directors for Denver Indian Health and Family Services, Denver's Urban Indian Health Organization.



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**Gregory Tung, PhD**  
**Associate Professor, Dept. of Health Systems, Management, and Policy**  
**Colorado School of Public Health**

**Greg Tung, PhD** is an associate professor in the Colorado School of Public Health's Department of Health Systems, Management & Policy. His research interests relate to how scientific evidence is incorporated into policy and program decision making, with a special emphasis on injury prevention. Dr. Tung works on a diverse range of injury topics, including the prevention of youth violence, suicides, poisonings and child abuse. His research interests also include the integration of health services and public health systems, with a focus on non-profit hospital community benefit activities. Dr. Tung is a mixed methods researcher and utilizes both quantitative (e.g. multi-level, and time-to-event analysis) and qualitative (e.g. case studies) methods. He is a faculty member in the Injury & Violence Prevention Center.



**Shale Wong, MD, MSPH**  
**Professor, Dept. of Pediatrics/Family Medicine**  
**University of Colorado School of Medicine**

**Shale Wong, MD, MSPH** is a pediatrician and professor of pediatrics and family medicine at the University of Colorado School of Medicine, teaching child health, advocacy, policy and health care reform with focused interests in integrated care and achieving health equity. She is director of the Eugene S. Farley, Jr. Health Policy Center and Vice Chair for Policy and Advocacy in the Department of Pediatrics. Shale served as health policy advisor to First Lady Michelle Obama for development and implementation of her signature child obesity initiative, Let's Move, and assisted in launching Joining Forces to improve wellness and resilience of military families. Additionally, she was a senior program consultant to the Robert Wood Johnson Foundation. She continues to serve on several national and community advisory boards. As a lifelong dancer, she is inspired to advance health through the arts.



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**COPRH Con**

Colorado Pragmatic  
Research in Health  
Conference

## **Conference Materials**



# Evidence in Pragmatic Research: Whose Evidence on What for What?

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Ross C. Brownson, PhD

## Presentation Abstract

Evidence, in multiple forms, is a foundation of pragmatic research. For public health and clinical practice, evidence includes: Type 1 evidence on etiology and burden; Type 2 evidence on effectiveness of interventions; and Type 3: evidence on dissemination and implementation within context. Because current concepts of evidence have been relatively narrow and insufficient, this presentation will identify and discuss challenges and debates about the uses, usefulness, and gaps in evidence for pragmatic research. Intersecting gaps include the need to: (1) reconsider how the evidence base is determined, (2) improve understanding of contextual effects on implementation, (3) sharpen the focus on health equity in how we approach and build the evidence-base, and (4) learn from audience and stakeholder differences. Recommendations for enhancing the uses and usefulness of evidence will be presented.

## Learning Objectives

1. Describe the historical basis for evidence in clinical disciplines and public health.
2. Identify key types of evidence and methods of generation.
3. Explore the core concepts of context, external validity, and health equity.
4. Describe thresholds of evidence among various audiences (research, practice, policy).
5. Describe tools and resources for enhancing uses of evidence.



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**Table 1.1. COMPARISON OF THE TYPES OF SCIENTIFIC EVIDENCE**

Characteristic	Type One	Type Two	Type Three
Goal/action	Identify a problem or priority (something should be done)	Identify what works (what should be done)	Identify how to implement (what works for whom, in what context, and why)
Typical data/relationship	Size and strength of preventable risk—disease relationship (measures of burden, descriptive data, etiologic research)	Relative effectiveness of public health intervention	Information on the adaptation and implementation of an effective intervention
Common setting	Clinic or controlled community setting	Socially intact groups or community-wide	Socially intact groups or community-wide
Example 1 questions	Does smoking cause lung cancer?	Will price increases with a targeted media campaign reduce smoking rates?	What are the political challenges of price increases in different geographic settings?
Example 2 questions	Is the density of fast-food outlets linked with obesity?	Do policies that restrict fast-food outlets change caloric intake?	How do community attitudes about fast-food policies influence policy change?
Quantity	Most	Moderate	Least

From: Brownson RC, Baker EA, Deshpande AD, Gillespie KN. *Evidence-Based Public Health*. 3<sup>rd</sup> Edition. New York: Oxford University Press; 2018.

Thought Questions:

1. For your area of research and/or practice, for which type of evidence is the gap the largest, and how might you begin to fill this gap? Is this gap mainly related to how evidence is generated or how evidence is being applied?
2. How might you better communicate and disseminate your evidence to various audiences, particularly those outside the research world?
3. What are your evidence needs to more fully address health disparities and health equity? Who should be engaged in your work to better focus on health equity?



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Selected resources and tools to support practice and research on pragmatic, evidence-based dissemination and implementation<sup>a</sup>

<i>Category</i>	<i>Name</i>	<i>Description</i>	<i>Weblink</i>
<i>Engagement and partnerships</i>			
	Community Tool Box	The Community Tool Box is a free, online resource for those working to build healthier communities and bring about social change. The Tool Box seeks to promote community health and development by connecting people, ideas, and resources.	<a href="https://ctb.ku.edu/en">https://ctb.ku.edu/en</a>
	Engage for Equity	The tools provide a step-by-step approach for research partnerships to examine where they are now and where they want to be in the future. Each step includes a short description and an interactive exercise or tool.	<a href="https://engageforequity.org/tool_kit/">https://engageforequity.org/tool_kit/</a>
	Advancing Health Equity Toolkit	This practice-oriented toolkit leads agencies, teams, community-based organizations, and community partnerships through different public health processes using a health equity lens. The modules include interactive reflection questions across a framework for evidence-based decision making.	<a href="https://www.wixsite.com/evidence-based-decision-making">Home   Evidence-Based Decision Making &amp; Health Equity (wixsite.com)</a>
	Stakeholder Engagement Navigator	The Navigator is designed to help teams select the most appropriate engagement method or tool for a particular project. It is an interactive tool that takes into account the purpose, resources, frequency of engagement, and expertise.	<a href="https://dicemethods.org/Tool">https://dicemethods.org/Tool</a>
<i>Study planning</i>			
	Dissemination and Implementation Models in Health Research and Practice	An interactive, online resource designed to help researchers and practitioners navigate dissemination and implementation theories, models, and frameworks through planning, selecting, combining, adapting, using, and linking to measures. Newly added frameworks address the interface between health equity and implementation science.	<a href="https://dissemination-implementation.org/">https://dissemination-implementation.org/</a>
	T-CaST (Theory, Model, and Framework Comparison and Selection Tool)	T-CaST offers explicit criteria to facilitate theory comparison during the selection process. The tool is also potentially useful in selecting theories, models and framework beyond the field of implementation science.	<a href="https://impsci.tracs.unc.edu/tcast/">https://impsci.tracs.unc.edu/tcast/</a>



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	PRECIS-2 (PRagmatic Explanatory Continuum Indicator Summary) and PRECIS-2 PS	PRECIS-2 is a tool to help in designing health services research and to consider where a trial lies across 9 dimensions across the pragmatic/explanatory (efficacy) continuum; the newer PRECIS-2 PS is focused on designs related to provider strategies for implementation studies.	<a href="https://www.precis-2.org/">https://www.precis-2.org/</a>  <a href="https://implementationscience.biomedcentral.com/articles/10.1186/s13012-020-01075-y">https://implementationscience.biomedcentral.com/articles/10.1186/s13012-020-01075-y</a>
	APEASE (Acceptability, Practicability, Effectiveness, Affordability, Side-effects, and Equity)	The APEASE criteria provide a framework for assessing interventions, intervention components and ideas. APEASE can be applied to anything from a general concept to a detailed plan for a proposed intervention, or a formal evaluation of an intervention that has already been implemented.	<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/875385/PHEBI_Achieving_Behaviour_Change_Local_Government.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/875385/PHEBI_Achieving_Behaviour_Change_Local_Government.pdf</a>
	MOST (Multiphase Optimization Strategy)	MOST is a research framework, based in engineering principles, for determining the most efficient and effective version of an intervention. It uses a 3-phase approach to assess the effectiveness of individual program elements and consider whether effectiveness varies depending on context.	<a href="https://www.hvresearch.org/precision-home-visiting/innovative-methods/multiphase-optimization-strategy-most/">https://www.hvresearch.org/precision-home-visiting/innovative-methods/multiphase-optimization-strategy-most/</a>
	The Hexagon Tool	At any stage of implementation, the Hexagon Tool can be used by communities and organizations to better understand how a new or existing program or practice fits into an implementing site's existing work and context.	<a href="https://nirn.fpg.unc.edu/resources/hexagon-exploration-tool">https://nirn.fpg.unc.edu/resources/hexagon-exploration-tool</a>
	Annotated Bibliography of Economic Analysis Resources for Implementation Science	This tool is a compilation of resources, tools, and studies about cost/cost-effectiveness research in implementation science. It covers costing methods and cost-effectiveness analyses that are important for measuring and improving the value of healthcare and public health practices.	<a href="https://www.cuanschutz.edu/cost-annoat-biblio-disc-one-pager-3122119e99fe6302864d9a5bfff0a001ce385.pdf">cost-annoat-biblio-disc-one-pager-3122119e99fe6302864d9a5bfff0a001ce385.pdf (cuanschutz.edu)</a>
	Measuring Health Policy Implementation	This website is designed to help policy researchers, evaluators, and implementation science researchers identify and select measures to assess the implementation of health policies in a variety of settings (e.g., hospitals, outpatient clinics, neighborhoods, schools).	<a href="https://www.health-policy-measures.org/">https://www.health-policy-measures.org/</a>
<i>Research proposals, articles, reporting, and guidelines</i>			
	Tool for Rating Research Proposals for Sensitivity to Health Equity Issues	This tool assesses research proposals for their sensitivity to health equity issues. The tool consists of a series of questions that prompt for evaluation of how well equity issues have been considered in terms of the population context, study rationale, intervention design, sample design, data collection and analysis plan, evidence of community engagement, and team composition.	<a href="https://ajph.aphapublications.org/doi/suppl/10.2105/AJPH.2019.305221">https://ajph.aphapublications.org/doi/suppl/10.2105/AJPH.2019.305221</a>



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	GRADE (Grading of Recommendations, Assessment, Development and Evaluations)	GRADE is a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations.	<a href="https://bestpractice.bmj.com/info/us/toolkits/learn-ebm/what-is-grade/">https://bestpractice.bmj.com/info/us/toolkits/learn-ebm/what-is-grade/</a>
	Expanded CONSORT (Consolidated Standards of Reporting Trials)	The expanded CONSORT includes data about participation and representativeness at multiple levels of settings, as well as staff and individual recipients, and about intervention sustainability after project support ends. It adds a focus on transparent reporting of inclusions, exclusions and participation at multiple levels and includes a fillable PDF for manuscript submissions.	<a href="https://www.re-aim.org/expanded-consort-figure-for-planning-and-reporting-d-i-research/">https://www.re-aim.org/expanded-consort-figure-for-planning-and-reporting-d-i-research/</a>
	Standards for Reporting Implementation Studies (StaRI) Statement	StaRI is used for reporting of implementation studies, which employ a range of study designs to develop and evaluate implementation strategies with the aim of enhancing adoption and sustainability of effective interventions	<a href="https://www.equator-network.org/reporting-guidelines/stari-statement/">https://www.equator-network.org/reporting-guidelines/stari-statement/</a>
<i>Dissemination, scale-up, and sustainability</i>			
	Dissemination Planning Tool	A tool to help researchers evaluate their research and develop appropriate dissemination plans, if the research is determined to have "real world" impact	<a href="https://www.ahrq.gov/patient-safety/resources/advances/vol4/planning.html">https://www.ahrq.gov/patient-safety/resources/advances/vol4/planning.html</a>
	ExpandNet	A global network of representatives from international organizations, non-governmental organizations, academic and research institutions, ministries of health and specific projects who seek to advance the science and practice of scaling up	<a href="https://expandnet.net/">https://expandnet.net/</a>
	Clinical Assessment Sustainability Tool (CSAT)	<b>The CSAT</b> measures the sustainability of evidence-based practices in clinical settings. Users receive a tailored report that can be used by clinical and healthcare settings to plan for and implement changes within their organization.	<a href="https://www.sustaintool.org/csat/">https://www.sustaintool.org/csat/</a>
	Program Assessment Sustainability Tool (PSAT)	<b>The PSAT</b> measures the sustainability of evidence-based practices in community settings. Users receive a tailored report that can be used by public health and community organizations to plan for and implement changes within their organization.	<a href="https://www.sustaintool.org/psat/">https://www.sustaintool.org/psat/</a>

<sup>a</sup>This table is illustrative and is not meant to be comprehensive. We have focused on sources that are more regularly updated.



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# Evidence: How Much, What Kind, And For What?

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Janine Higgins, PhD; Marc Bonaca, MD; Russell Glasgow, PhD; Ross Brownson, PhD

## Presentation Abstract

This panel will build on the ideas introduced in Dr. Ross Brownson's opening keynote on evidence in pragmatic research. Three pragmatic researchers will represent perspectives along the translational research spectrum and discuss the various ways they think about, generate, and apply evidence in their own research work.

## Learning Objectives:

1. Discuss how evidence is defined and used at within and across phases of translational research.
2. Identify differences in perspectives on "pragmatic" research and evidence.
3. Describe how different partners or audiences think about and apply evidence.

## Thought Questions:

1. For your field and phase of research, what is the most important type of evidence?
2. To what extent does health equity play a role in evidence use and generation in your pragmatic research?
3. How do you frame (types of) evidence when communicating to different audiences?

## References and Tools

Brownson RC, Shelton RC, Geng EH, Glasgow RE. Revisiting concepts of evidence in implementation science. *Implementation Science*. 2022 Dec;17(1):1-25.

Brownson RC, Baker EA, Deshpande AD, Gillespie KN. *Evidence-Based Public Health*. 3rd Edition. New York: Oxford University Press; 201



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# Systematic Reviews or Scoping Reviews? Assessing Evidence for Pragmatic Research

Tianjing Li, MD, MHS, PhD

## Presentation Abstract

Comprehensive assessment and synthesis of scientific literature play a crucial role in various areas such as formulating public health policy, allocating healthcare resources, reviewing and approving health claims, developing clinical practice guidelines, and treating patients with diverse needs. Research exists on a continuum, ranging from highly explanatory studies, such as efficacy studies, to highly pragmatic ones. Irrespective of where a research study falls on this continuum, a comprehensive and reproducible approach can be adopted to summarize the evidence.

Systematic review attempts to identify, appraise, and synthesize all relevant studies that fit pre-specified criteria to answer a research question in a transparent, objective, and reproducible way. Meta-analysis, the statistical analysis of a collection of results from individual studies, is an optional component of a systematic review. On the other hand, a scoping review serves the purpose of assessing the potential size and scope of available research literature. It typically addresses a broader question and is exploratory in nature. Researchers conduct scoping reviews to map out the existing literature, identify gaps, and determine whether more focused systematic reviews are warranted.

Systematic review and scoping review are invaluable tools for evidence-based ‘real-world’ decision making. Embracing the power of evidence synthesis ensures that healthcare interventions and policies are grounded in reliable evidence, ultimately leading to improved health outcomes for individuals and populations alike.

## Learning Objectives:

1. Provide a broad understanding of the application of systematic review and scoping review in the context of pragmatic research.
2. Describe the differences between the two approaches.
3. Acquire essential knowledge regarding the fundamental steps involved in conducting systematic review and scoping review.



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# Community-Engaged Approaches to Identify and Assess Evidence: The Dilemma of Evidence-Based and Evidence-Informed Practices

Mónica Pérez Jolles, PhD; Jenn Russell, MHA; Farduus Ahmed, MSW; Lorenzo Ramírez

## Presentation Abstract

For several decades, there has been an emphasis on improving the quality of health services based on the best available evidence. This approach seeks to assure patients receive proven interventions, there is transparency in the evidence behind them and it promotes knowledge sharing among professionals. There is still a debate on what constitutes evidence-based interventions (EBIs) and the difference between them and evidence-informed interventions. We define interventions as programs, treatments, policies, or other action(s) seeking to improve care for patients. EBIs are often considered by funding agencies as the gold standard because efficacy and effectiveness have been demonstrated in certain settings and with some populations. Yet, practitioners and community members often face challenges in implementing EBIs that work in their communities, with a cultural component, especially in diverse communities. Challenges include language and cultural differences, stigma in mental health, and Western values having priority in the development and dissemination of evidence. EBIs is also a term mostly used in academic research, and there is a need for EBIs to be introduced in non-academic communities while promoting and regaining trust. Evidence is tested in specific settings and communities and shared experiences in communities can enrich the research process. We open the space for a dialogue on the pros and cons of EBIs and potential ways to inform and enrich EBIs through context-based experiences and implementation practices.

## Learning Objectives:

1. Increase awareness and understanding of evidence-based and evidence-informed practices and their role in reassessing evidence in research and practice
2. Understand the pros and cons/limitations of using either approach to develop evidence from a community-based perspective
3. Consider a comprehensive view of practices and additional factors that can contribute to evidence (e.g., clinical experience) as well as sources of information beyond empirical studies (e.g., case studies)
4. Learn ways to involve community partners in identifying and assessing evidence in research, for specific purposes, and from an approach that values partners' experiences and values



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# Assessing and Translating Evidence Using Mixed Methods Frameworks: An Illustrative Case of Mixed Methods Work Conducted to Enhance and Expand the Nurse Family Partnership

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Gregory Tung, PhD

## Presentation Abstract

In this session we will walk through an example of the use of mixed methods frameworks in ongoing efforts to enhance and expand the Nurse Family Partnership (NFP) in the United States. The NFP is a nurse home visitation program that aims to improve birth, health, education, and economic outcomes for first time mothers and their babies facing concentrated adversity. Three separate randomized controlled trials have demonstrated consistent program impacts from the NFP and the program has been implemented broadly across the United States. Ongoing efforts to maintain and improve program effectiveness and explore delivery of the program to multiparous women have been guided by mixed methods research. The mixed methods frameworks and the translational elements used to facilitate this will be the focus of this session.

## Learning Objectives:

1. Introduce mixed methods frameworks
2. Illustrate how mixed methods frameworks can be used to generate and translate evidence into program improvements and expansion



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# Interrogating Neutrality: Unpacking the Power Dynamics Intrinsic to Research

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Faith R. Kares, PhD

## Presentation Abstract

This talk will engage social scientists, medical practitioners and researchers, and members of the Schools of Medicine and Public Health, in interrogating hegemonic approaches to research that tend to uplift white supremacy culture traits and, in so doing, elide alternative ways of knowing. Dr. Kares' presentation will offer an opportunity for audience members to pause, interrogate deeply their own unique positioning, and consider how that informs their approach to evidence. It will also provide conference participants specific, concrete tools and strategies with which to mitigate their biases and reject how white supremacy culture characteristics show up in their work.

## Learning Objectives:

1. To critically analyze hegemonic research practices (both data gathering and analysis) through an antiracist lens;
2. To acquire more inclusive and equitable approaches to research;
3. To amplify the merits of qualitative and mixed methods research in spaces (e.g., medical and healthcare industry) largely dominated by quantitative research

## Thought Questions:

1. What do these topics (addressing power in research, interrogating neutrality) bring to the fore for you?
  - i. What resistance emerges when you hear "interrogating neutrality"?
  - ii. What makes you curious?
  - iii. What resonates with you?
2. What viewpoints or perspectives are you missing from your work? Which ones tend to be elevated or amplified?
3. What practices might you implement or further engage to disrupt power imbalances in your approaches to and/or uses of research?



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# Hybrid Effectiveness Implementation Study Methodology: Reflections and Recommendations

**Maria Fernandez, PhD**

## Presentation Abstract

Hybrid effectiveness implementation studies encompass a research methodology that integrates elements of both effectiveness research and implementation research within a single study. Effectiveness research focuses on assessing the impact of interventions on clinical or public health outcomes, including behavior change, disease progression, symptom reduction, or improved survival rates. On the other hand, implementation research aims to understand the processes, strategies, and factors that influence the successful adoption, implementation, and sustainability of interventions in real-world settings.

This plenary session will provide a comprehensive overview of hybrid approaches, examining the current trends in the utilization of hybrid studies. The speaker will emphasize the significance of refining terminology and methodology within this field and discuss the need for critical appraisals in hybrid research. By incorporating insights from diverse perspectives, attendees will gain valuable insights into selecting the most suitable hybrid study type based on evidence, context, and stakeholder participation.

The session will offer practical recommendations to navigate the complexities associated with hybrid studies. Participants will learn about key considerations when determining the appropriate hybrid study design for their research questions and objectives. Additionally, an introduction will be given to an innovative online tool currently under development, designed to facilitate hybrid effectiveness-implementation research. Overall, this plenary session will provide attendees with a comprehensive understanding of hybrid effectiveness implementation studies, their significance in advancing research and practice, and practical strategies to enhance their utilization and effectiveness.

## Learning Objectives:

1. Discuss the concept of “hybrid designs” that combine elements of effectiveness and implementation research and review trends in use of designs.
2. Understand the need for critical appraisals in the field of hybrid studies and the importance of refining terminology and methodology.
3. Explore the distinction between the terms "design" and "study" and recognize the implications of using appropriate terminology in hybrid study research.
4. Evaluate the limitations of the hybrid 1-2-3 typology and address questions that emerge when categorizing hybrid studies.
5. Gain insights into selecting the most suitable hybrid study type based on evidence, context, and stakeholder participation



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# Generating Evidence with Hybrid Trials

**Maria Fernandez, PhD**

## Presentation Abstract

The workshop titled "Generating Evidence with Hybrid Trials" aims to provide participants with the necessary knowledge and skills to select and design hybrid effectiveness-implementation studies. This workshop will assist participants in navigating the process of choosing a specific hybrid type (1, 2, or 3) and research design to address their research question effectively. Following a brief orientation session, the workshop will use breakout sessions and large group discussions to engage participants. Facilitators will guide participants in considering various factors such as: the nature of effectiveness data on the intervention of interest, how much they expect the intervention will need to be adapted, how much they already know about implementation determinants for the intervention in their context of interest, and how ready they are to evaluate an implementation strategy in a real-world setting. Participants will also discuss research designs that are most appropriate given population, setting and hybrid study type. Participants are encouraged to come with a study in mind that they believe would benefit from a hybrid design, as the workshop will focus on assisting them in making informed decisions about hybrid type, research design, and measurement strategies. By the end of the workshop, participants will have increased their knowledge and skills to select the appropriate hybrid type and research design for their hybrid effectiveness-implementation study. This will better enable them to generate robust evidence that bridges the gap between research and practice, ultimately improving the implementation of evidence-based interventions in real-world settings.

## Learning Objectives:

1. Familiarize participants with the concept of hybrid effectiveness-implementation studies, providing basic concepts about types of evidence generated through studies that combine elements of effectiveness and implementation research.
2. Facilitate small group discussions to assist participants in evaluating their research questions and making informed decisions about the most appropriate hybrid type based on several considerations.
3. Provide a platform for participants to engage in an interactive discussion, share insights, and receive feedback from both facilitators and peers, thereby enhancing their understanding of hybrid trial design and selection.
4. Guide participants in examining population characteristics, study settings, and the chosen hybrid study type to determine the most suitable research design for their specific research question.
5. Enable participants to apply the acquired knowledge and skills to their own research projects, ensuring they leave the workshop equipped with the tools necessary for designing and implementing hybrid effectiveness-implementation studies.
6. Encourage participants to collaborate with fellow researchers, fostering an environment of knowledge sharing and networking within the field of hybrid trial methodology.



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# Reporting Pragmatic Evidence Using the EQUATOR Network Checklists

Amy Huebschmann, MD; Liza M. Creel, PhD, MPH; Brooke Dorsey Holliman, PhD; Kathryn Colborn, PhD

## Presentation Abstract

The EQUATOR network provides reporting guidelines for various study designs and has many tailored to pragmatic research designs. The COnsolidated criteria for REporting Qualitative research (COREQ) is a set of guidelines for reporting on qualitative research, especially with interview and focus group data. The 32-item COREQ checklist was originally published in 2007 and established reporting standards for interview and focus group research in health. The Consolidated Health Economic Evaluation Reporting Standards (CHEERS) Checklist is a set of guidelines for reporting on health economic evaluations. The 28-item CHEERS checklist, originally published in 2013 and updated in 2022, establishes reporting standards for economic analyses to ensure transparency and offer consideration in planning for analyses. The Standards for Reporting Implementation Studies (StaRI) Statement was published in 2017 and establishes guidelines for reporting on implementation studies, accommodating a variety of study designs with the intent to develop and/or evaluate implementation strategies and improve implementation outcomes.

As qualitative research gains popularity as an approach to accounting for experiences and nuance in health services research studies, economic evaluations are increasingly used to inform decision-making and assess value in health interventions relative to other options. Simultaneously, implementation science has developed as an essential approach for bridging the T3-T4 translation gap and moving seemingly effective interventions to adoption and sustainment in real world settings. In fact, qualitative and economic approaches have become standard components of many implementation studies as they contribute evidence on context, user experiences, and costs relative to outcomes, which relate closely to other constructs of implementation science. The COREQ, CHEERS and StaRI Checklists can be useful for designing and planning research, as well as for reporting in and reviewing manuscripts. Each checklist lays out guidelines for reporting in different sections, e.g., by study phase, manuscript section, or intervention vs. implementation strategy. This presentation will review the core elements of the COREQ, CHEERS, and StaRI Checklists, highlight applications of the Checklists, and review limitations of each.

## Learning Objectives:

1. Describe the core elements of the COREQ, CHEERS, and StaRI Checklists.
2. Describe examples of applications of the COREQ, CHEERS, and StaRI Checklists.
3. Identify limitations of reporting guidelines and checklists broadly and of the COREQ, CHEERS, and StaRI Checklists, specifically.



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## References and Tools

### Qualitative Research:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357.

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med*. 2014;89(9):1245-1251.

<https://www.equator-network.org/reporting-guidelines/coreq/>

### Economic Evaluation:

Husereau D, Drummond M, Augustovski F, de Bekker-Grob E, Briggs AH, Carswell C, Caulley L, Chaiyakunapruk N, Greenberg D, Loder E, Mauskopf J, Mullins CD, Petrou S, Pwu RF, Staniszewska S; CHEERS 2022 ISPOR Good Research Practices Task Force. Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) Statement: Updated Reporting Guidance for Health Economic Evaluations.

Husereau D, Drummond M, Augustovski F, et al. Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) Statement: Updated Reporting Guidance for Health Economic Evaluations. *Value Health*. 2022;25(1):3-9. doi:10.1016/j.jval.2021.11.1351

<https://www.equator-network.org/reporting-guidelines/cheers/>

<https://www.equator-network.org/wp-content/uploads/2013/04/CHEERS-2022-checklist-1.pdf>

### Implementation Studies:

Pinnock H, Barwick M, Carpenter CR, Eldridge S, Grandes G, Griffiths CJ, Rycroft-Malone J, Meissner P, Murray E, Patel A, Sheikh A, Taylor SJC, for the StaRI group. Standards for Reporting Implementation Studies (StaRI) statement. *BMJ*. 2017;356:i6795. <http://www.bmj.com/content/356/bmj.i6795.full>

StaRI checklist in Word file: <https://www.equator-network.org/wp-content/uploads/2017/01/StaRI-checklist-for-author-completion.docx>

<https://www.equator-network.org/reporting-guidelines/stari-statement/>

### Other Reporting Guidelines:

Reporting Guideline Search Tool: <https://www.equator-network.org/reporting-guidelines/>



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# Communicating Evidence for Change: Non-Academic Writing for the Public and Policymakers

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Shale Wong, MD, MSPH; Emma Gilchrist, MPH; Alison Riedmohr, MA

## Learning Objectives:

1. Discuss three different types of non-academic communications to reach public and policymaker audiences.
2. Practice translating research evidence into a key message for public or policymaker audiences.
3. Learn how to use a strategic dissemination tool for your research.

## Thought Questions:

1. When thinking about your research findings, which might be useful to inform policy development at the organizational, local, state or federal level?
2. Which audiences could use this information to improve their decision making or support equitable policies?
3. How could you leverage news and information (public radio, local or national newspaper, blogs, social media, e-mail/newsletters, meetings) to share your research?



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## Strategic Dissemination Tool

**Desired outcomes:** as a result of your research, what is your desired change? How could that change show up in a policy at the organizational, local, state, or federal level?

**Audience:** who are the decisionmakers for your policy? What other individuals/organizations support this change? What other individuals/organizations are in opposition? Note: prioritize audiences closest to the change and who could be most easily persuaded to support it: those in strong support may be helpful as spokespersons, but the goal is typically to convince the “movable middle.”

**Motivation(s):** what motivates the audience to care and take action? (for example, re-election; cost-savings; helping patients and families be healthier)

**Product(s):** what products will be accessible to the audience through the channel you choose (see below) and provide the appropriate amount of detail for their needs and attention availability? (for example: policy brief, video, blog, news article)

**Channel(s):** how will the product travel to the audience?

- Owned: distributed through your own channels – for example, posted on your own organization’s website and social media platform; testimony given by you; one-pager you leave with legislative staff
- Earned: requests to share from other entities – for example, media interview, news story
- Paid: paid opportunities – for example, digital ads and paid social, billboards, bus wraps
- Partner: distributed through partner resources – for example, an advocacy organization’s newsletters and flyers

**Message(s):**

- Consider the audience’s motivations, values, priorities
- Build on windows of opportunity
- Consider what actions (if any) you would like them to take
- Use clear language; avoid jargon and acronyms
- Don't assume knowledge of the topic, but don't talk down to your audience
- Use balance data with compelling and purposeful stories



**Desired outcomes:**

- Outcome #1:
- Outcome #2:
- Outcome #3:

Audience	Motivation(s)	Product(s)	Channel(s)	Message(s)



## Preparing Testimony Tool

Read the bill you want to testify in support or opposition:

- <https://leg.colorado.gov/bills>

Review the Colorado General Assembly’s guidance on participating in legislative hearings:

- Senate: <https://leg.colorado.gov/agencies/senate/participation-legislative-hearings>
- House of Representatives: <https://leg.colorado.gov/agencies/house-representatives/guide-public-hearings>

Select how you want to participate (in person, virtually):

- <https://www2.leg.state.co.us/CLICS/CLICS2023A/commsumm.nsf/signIn.xsp>

Information Gathering:

- Read news articles about bill, taking notes of the high points and summarizing. Some options for finding articles when you are developing testimony: Colorado Sun, Colorado Politics, websites of advocacy organizations.

Preparing Testimony:

- Take a position on your bill and craft testimony either supporting or opposing the bill. Aim for 2-3 minutes and use the below structure. Think about how you are going to focus on narrative (the heart) and data (the head) from the infographic on the right. Be prepared to share your testimony or a leave-behind that includes source citations in case of questions from legislators. .

### Testimony Structure - IPASS

**I** – **introduce** yourself (position, who you represent, etc.)

**P** - what is the **problem**?

**A** - consider your **audience**:

why is this important to them personally?

why should they care?

**S** – **support** your ask with anecdotes, personal stories, and/or data.

**S** – what is the **solution**?



Source: Willette and Ganz; *Public Narrative, Collective Action, and Power*





## How to Write a Health Policy Brief

Shale L. Wong, MD, MSPH,  
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Robert Graham Policy Center, Washington, DC

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Although many health care professionals are interested in health policy, relatively few have training in how to utilize their clinical experience and scientific knowledge to impact policy. Developing a policy brief is one approach that health professionals may use to draw attention to important evidence that relates to policy. This article offers guidance on how to write a policy brief by outlining 4 steps: (a) define the problem, (b) state the policy, (c) make your case, and (d) discuss the impact. The steps and tips offer a starting point for health care professionals interested in health policy and translating research or clinical experience to impact policy.

*Keywords:* health policy, policy brief, healthcare

In today's practice of medicine, clinicians, researchers and health professionals are frequently interested in health policy and seek opportunities to weigh in on issues where they may be both well-informed and well-positioned to take action. However, traditional training of health professionals does not prepare us to consider or discuss our work for the purpose of impacting policy. Understanding some basic guidance for translating unique clinical experience or scientific knowledge into policy terms, is the first step toward developing a policy lens. A well-written policy brief has a clear and specific purpose and assumes the author's under-

standing of what it is, and what it is not, as well as clearly targeting the audience for whom it is intended. Writing a brief, while conceptually straightforward, may be challenging to initiate or compose. We offer an approach to preparing a policy brief, aiming to provide a point of departure for individuals in the health professions who seek a starting place.

If policy may broadly be considered *movement in a direction for a reason*, a policy brief would in turn be a *focused discussion of an action to achieve intentional and purposeful movement*. This discussion should include the best available data or evidence to support a devised policy or range of policy options, and a narrative analysis that considers the impact of a proposed policy. As important as it is to know what constitutes a policy brief, it is important to recognize what a policy brief is not. A policy brief is not equivalent to an advocacy statement and while it may inform or motivate action, it should refrain from advocating a singular call to action. Nor is it an opinion piece that could suggest implications beyond parameters defined by the supportive evidence. A policy brief is analytic in nature and allows the author to remain objective even if the evidence appears persuasive. Furthermore, a brief is by definition, brief, which often presents the greatest challenge to an author who must share the specific purpose while limiting the compre-

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hensive context, rationale and potential variability in implementation, regulation or application of a proposed policy.

The first step is to call it what it is, a policy brief. Include those words in the title to frame the issue that follows. A variety of other kinds of documents may make mention of policy but clearly have a different focus. Issue and research briefs may present data and evidence to articulate a problem without necessarily suggesting policy as a solution. In contrast, a policy brief puts front and center the problem to be addressed by policy, then presents relevant evidence to support or analyze a proposed policy. Consider, for example, the introduction of this policy brief by Richardson, recently published in *Health Affairs*. It begins with a heading of Health Policy Brief followed by the title, Off-Label Drug Promotion. In the first paragraph we read,

... the FDA generally does not restrict physician prescribing practices, and many drugs are prescribed “off label”—that is, for indications that have not been approved by the agency. In recent years there has been renewed debate over whether and how the FDA should regulate the pharmaceutical industry’s communication to physicians around off-label uses. (Richardson, 2016)

This early statement very clearly frames the discussion to follow, regarding potential policy regulation that would have direct impact on clinical practice.

There is no ideal length for a policy statement. The framework that we propose is intended for a focused policy brief, 1–4 pages. A “one-pager” may present talking points with a single figure to illustrate key data. Use of images and infographics, or inclusion of a story may extend the length but also prove influential to illustrate the data. A more complete exploration of an issue that describes a variety of policy options could best be represented in a white paper of 8, 20, or 50 pages. Different styles and lengths depend on the purpose, the complexity of the issue, and perhaps most importantly, the audience of interest. When we seek the attention of policymakers, the most relevant data and framing will take into consideration direct impact on their constituency. A policy action that impacts a specific interest group will be narrow in scope, focusing to reduce extraneous noise. For both narrow and broad audiences understanding the political context and environment is essential. This allows opportunity to bring

forward opposing views and potential barriers in the form of counter arguments to proposed policy actions. Table 1 provides examples to illustrate differences in style and length for policy, research and issue briefs.

For this report, we recognize that our audience of interest is largely health care providers, clinicians, clinical researchers, or those health professionals who are seeking a way to frame policy-relevant data in a brief that persuades deeper review or understanding of a health or health care issue. This should be considered a form of health communication that will in turn, target another audience that has power or interest to influence policy-making. Thus, we offer a simple framework to guide your development of a policy brief: 4 steps and 4 tips to get you started.

## Four Steps

### Step 1: Define the Problem

What is the issue or the problem? Why is it important? Why now? Who is impacted and who cares? When defining your problem, be specific to your audience and clearly frame the issue. Who has the influence to make a change that will address this problem? If the audience is expected to be policymakers (and their staff), community leaders (grassroots or grasstops), industry or nongovernmental organization executives, the problem should be defined in terms relevant to their policy intervention, respectively.

### Step 2: State the Policy

Identify 1–3 specific policy actions that will address the problem. In a focused policy brief, the goal is to limit the menu of potential actions to target a policy approach of interest. A more extensive policy review or proposal may be a comprehensive white paper that elucidates many related policy options. Consider a focused brief to describe one policy in depth as opposed to exploring a problem and all of the potential policy solutions.

### Step 3: Make Your Case

Display and describe relevant data using 1–2 figures or tables; declare potential bias based on the data sources; refer to other related policies

Table 1  
Examples of Different Briefs

Type of Brief	Title	Length	Audience
Policy one-pager	Fewer Americans Report a Personal Physician as Their Usual Source of Health Care. Anuradha Jetty, et al. <i>American Family Physician</i> , December, 2015 <a href="http://www.aafp.org/afp/2015/1215/p1053.pdf">http://www.aafp.org/afp/2015/1215/p1053.pdf</a>	1 page	Family medicine providers, others in primary care
Policy brief	Off-Label Drug Promotion. Elizabeth Richardson. <i>Health Affairs</i> , June, 2016 <a href="http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=159">http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=159</a>	4 pages	Policymakers, health professionals, journalists
Policy white paper	Recommendations for Acute Care Delivery and Payment Reform. Jesse Pines, et al. <i>Brookings Institute</i> , July, 2015 <a href="https://www.brookings.edu/wp-content/uploads/2016/06/072414-Recommendations-for-Acute-Care-Delivery-and-Payment-Reform-WEB.pdf">https://www.brookings.edu/wp-content/uploads/2016/06/072414-Recommendations-for-Acute-Care-Delivery-and-Payment-Reform-WEB.pdf</a>	10 pages	Policymakers, health professionals
Research brief	Moving Toward Active Transportation: How Policies Can Encourage Walking and Bicycling. Ralph Buehler, et al. <i>Active Living Research</i> , January, 2016 <a href="http://activelivingresearch.org/sites/default/files/ALR_Review_ActiveTransport_January2016.pdf">http://activelivingresearch.org/sites/default/files/ALR_Review_ActiveTransport_January2016.pdf</a>	6 pages	Local policy and community decision makers, health and environment professionals
Issue brief	Children's Health Coverage: The Role of Medicaid and CHIP and Issues for the Future. Elizabeth Cornacione, et al. <i>Kaiser Family Foundation</i> , June, 2016 <a href="http://files.kff.org/attachment/Issue-Brief-Childrens-Health-Coverage-The-Role-of-Medicaid-and-CHIP-and-Issues-for-the-Future">http://files.kff.org/attachment/Issue-Brief-Childrens-Health-Coverage-The-Role-of-Medicaid-and-CHIP-and-Issues-for-the-Future</a>	9 pages	Policymakers, journalists, general public

that are not discussed. Redirect to other policy references when possible or appropriate.

#### Step 4: Discuss the Impact

Briefly discuss the implications of both action and inaction; analyze estimated pros and cons of the policy action; consider intended and unintended consequences; address opposing arguments. Conclude with a restatement of how this policy specifically addresses this problem.

#### Four Tips: General Recommendations

1. Call your document a policy brief. Title the brief with a name that refers to the problem and/or the policy. Clarity is critical.
2. State your conclusion at the beginning. Be bold and clear with your key point. Then, provide analysis to support the statement.

Use illustrative images, figures or a select story to bring data to life.

3. Remain objective rather than impassioned in your analysis. Remember, this is not an opinion editorial. There is a place for that style of writing. Do not confuse the two. This is a policy statement.
4. Restate your key message to start and end with impact.

Many authors of policy briefs share an understanding and realization that they are hard to write. This is in part because strength lies in brevity and brevity challenges inclusion of everything needed and nothing more, however interesting “more” may seem. As with all guiding frameworks, these steps should not be misconstrued as a singular formula for a policy brief. At best, these steps may provide modest assistance to those who strive to improve policy

by using evidence and need to wrestle complex issues into a form that is understandable by both experts and novices who care about an issue and are positioned to move in a direction for a reason. The value of bringing practicing health professionals into the policy discussion cannot be overstated. Policy changes and reform shape every element of medicine and clinical practice today. With transformation, comes opportunity to guide and shape decision making that is grounded in evidence and clinical experience. Translating health communication for a policy-focused audience ensures that our voice is heard and we remain engaged in shaping our future.

### References

- Buchler, R., Götschi, T., & Winters, M. (2016). *Moving toward active transportation: How policies can encourage walking and bicycling*. San Diego, CA: Active Living Research. Retrieved from [www.activelivingresearch.org](http://www.activelivingresearch.org)
- Cornachione, E., Rudowitz, R., & Artiga, S. (2016). *Issue brief: Children's health coverage: The role of Medicaid and CHIP and issues for the future*. Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation.
- Jetty, A., Green, L., Bazemore, A. W., & Petterson, S. M. (2015). Fewer Americans report a personal physician as their usual source of health care. *American Family Physician, 92*, 1053.
- Pines, J., Wiler, J., George, M., McStay, F., & McClellan, M. (2015). *Center for health policy at Brookings—July 2015 health policy brief: Recommendations for acute care delivery and payment reform*. Retrieved from <http://www.brookings.edu/research/papers/2015/07/24-%20acute-care-delivery-payment-reform-pines>
- Richardson, E. (2016). Health policy brief: Off-label drug promotion. *Health Affairs*. Retrieved from [http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief\\_id=159](http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=159)

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# COPRH Con Poster Abstracts

## Reassessing Evidence: What is Needed for Real World Research and Practice

### 01. Best of COPRH Con 2023

Theme 1: Pragmatic Trial Examples

#### Invested in Diabetes: Comparative effectiveness of standardized vs patient-driven diabetes shared medical appointments

Bethany Kwan PhD, MSPH, Associate Professor, University of Colorado School of Medicine

**Background:** Shared medical appointments (SMAs) for primary care patients with T2D are an evidence-based approach to improving diabetes self-management and control. SMAs provide diabetes self-management education and support (DSME/S) often paired with a prescribing provider visit. It is not known which SMA features are most effective for improving outcomes important to patients and practices.

**Methods:** The study design was a cluster randomized trial comparing a standardized diabetes SMA model (set content delivered by a health educator) to a patient-driven SMA model (patient topic selection plus a multidisciplinary team including behavioral health and peer mentors). Using covariate constrained randomization, 22 primary care practices were randomly assigned to implement either standardized or patient-driven SMAs. The Reach-Effectiveness-Adoption-Implementation-Maintenance (RE-AIM) framework guided evaluation. The primary patient-centered outcome was diabetes distress (diabetes distress scale; DDS-17); secondary outcomes included diabetes self-care behaviors and clinical outcomes data extracted from electronic health records: HbA1c, blood pressure, and body mass index (BMI). Reach was assessed using a participation tracker and patient interviews. Descriptive statistics, generalized linear mixed models, and content analysis were used for analysis.

**Results:** Patients (N = 1085) attended a median of 4 of 6 SMA sessions. There were no differences in attendance across conditions. DDS-17 scores decreased from 2.1 to 1.9 ( $p < .001$ ) on a scale from 1 (no distress) to 6 (high distress) in patient-driven SMAs and from 2.2 to 1.9 ( $p < .001$ ) in standardized SMAs. Controlling for covariates, there was a small, significant effect of condition on diabetes distress in favor of standardized SMAs ( $F(1,841) = 4.3, p = .04$ ). Except for blood pressure, there were significant improvements in all other outcomes, but no differences between conditions. HbA1c decreased significantly over time (average change of 0.45%), from 8.33% to 7.87% ( $p < .001$ ) for patient-driven and from 8.28% to 7.84% ( $p < .001$ ) for standardized. There were significant improvements in self-care (diet, exercise, blood sugar monitoring, foot checks, medication taking). There was a small, significant decrease in BMI for both patient-driven (Mdiff (SD) = -.26 (1.90),  $p = .01$ ) and standardized SMAs (Mdiff (SD) = -0.31 (2.42),  $p = .01$ ).

**Conclusions:** Both patient-driven and standardized diabetes SMAs were effective at lowering HbA1c and improving diabetes distress and self-care behaviors. Contrary to expectations, standardized SMAs led to greater improvements in diabetes distress than the patient-driven SMAs. Overall, results confirm evidence that diabetes SMAs are effective and valued by both patients and practices; how a practice chooses to deliver the SMAs can be determined by availability of staff and practice and patient

preferences for standardization vs customization.

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### 02. Best of COPRH Con 2023

Theme 2: Pragmatic Research Methods & Measures

#### Cultural Adaptations of Evidence-Based Interventions for Application in Global Contexts

Sidra Beg MSc, Research Coordinator & PhD Student, University of Texas Health Science Center, Houston

**Background:** Health inequities are compounded by limited access to interventions shown to improve health outcomes. Cultural adaptation of evidence-based interventions (EBIs) may be needed to make them more acceptable and effective for new communities and settings. The systematic adaptation of EBIs can allow for tailoring interventions to fit the needs of new communities and settings without compromising fidelity. Cultural adaptation refers to: "The systematic modification of an intervention or strategy to consider language, culture, and context in such a way that it is compatible with the client's cultural patterns, meanings, and values". The purpose of this paper was to describe the current state of cultural adaptations including frameworks, common processes, and examples. We describe how cultural adaptations have been used to modify the content, format, or delivery of an EBI in response to the needs and preferences of the target population, or characteristics of the intervention setting.

**Methods:** We reviewed the literature on cultural adaptation including commonly used frameworks and models for adaptation. We further categorized them according to (a) foundational theoretical approaches to adaptation and (b) process or stage frameworks. We then provide recommendations on methodical, systematic cultural adaptation of EBIs in diverse settings and populations both globally and locally.



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Results: Cultural adaptation literature includes frameworks that are used for categorizing adaptations, and process or stage frameworks. Both intervention content and implementation strategies have been adapted. Cultural adaptations have been shown to improve intervention comprehension, acceptance, engagement, and satisfaction, and to lead to better outcomes. Conclusions: Cultural adaptation of interventions when performed with rigor can improve fit and effectiveness of EBIs and has been associated with better outcomes. Building on these initial findings, we hope to encourage the systematic use of cultural adaptation tools to methodically cater interventions for new target settings and communities.

Authors: Ana Baumann (University of Washington). Maria E Fernandez (UTHealth Houston)

### 03. Best of COPRH Con 2023

Theme 3: Translating Evidence into Practice

#### Using Human-Centered Design to Improve Usability and Inclusiveness of a Website for Program Implementation

Anowara Begum MPH, Research Services Senior Professional, University of Colorado Denver/ ACCORDS

Background: School-based asthma programs (SBAPs) have improved health and educational disparities for youth with asthma. To support scaling out effective SBAPs, this study team used a human-centered design (HCD) approach to develop our implementation guide. This HCD approach initially focused on the end-users who would adopt the SBAP — school nurses. Informed by the Pragmatic Robust Implementation Sustainability Model (PRISM), we also sought to incorporate other diverse perspectives, iteratively refining the guide with input from school nurse experts and our Community Advisory boards (CABs), in order to consider factors that would influence equitable reach to students and families.

Setting/population: To inform the HCD process of implementation guide development, a workgroup was convened with two members from the National Association of School Nurses, business partners from a company with HCD and website design expertise (Acclaro Design), two school nurses with prior experience implementing our SBAP, as well as research team members with expertise in asthma and implementation science.

Methods: Using an HCD approach, our Acclaro Design team members first interviewed five school nurses to identify their 'user journeys', including a range of nurses practicing in urban and rural areas of Colorado. The interviews focused on their pain points in their school nurse jobs/activities, in general, and related to asthma care. These user journeys also identified opportunities for success related to asthma care. Our workgroup met monthly to iteratively co-design a website with organization tailored to the activities in the school nurse 'user journey', and iteratively solicited feedback on the preliminary implementation guide from the multi-disciplinary workgroup, as well as the program's 5 regional CABs. Results: The user journeys of our priority end-users of school nurses included a demanding schedule with limited time to address asthma, and workloads and priorities that change

seasonally — including an intense student enrollment phase in Fall, viral illnesses in Winter, and preparing for the next school year in Spring. Their work also often spanned multiple schools, requiring an "on-demand" online implementation guide. Accordingly, our research team co-created our online implementation guide as a public-facing website with input from our workgroup and CABs. Presenting initial prototypes of the website implementation guide to the CABs influenced the addition of inclusive resources for students and families, such as videos and highly visual resources for multilingual students and families with lower levels of health literacy. Conclusion: Working with diverse community leaders in the field and business partners to develop an implementation guide that is relevant to the perspectives and work activities of implementing staff is critical; to address inequities, it is also key to work with communities to provide inclusive resources for the intervention recipients.

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### 04. Best of COPRH Con 2023

Theme 1: Pragmatic Trial Examples

#### Engaging Potential Adopters in the Design of a Physical Activity Support Program: Preliminary Findings

Danielle Ostendorf PhD, MS, Instructor or Assistant Professor, University of Colorado

Background: Adopting and maintaining high levels of physical activity (PA) is a challenge among adults with overweight/obesity. We designed a theory-based lifestyle intervention (called Move) to help initiate and sustain  $\geq 300$  minutes/week of PA in this population. Move will be delivered virtually with 4 intervention components: 1) 3 x 60-minute group-based classes (the core component of Move); 2) 3 x 45-minute individual sessions; 3) ~20 x 2-8-minute mental guided imagery recordings; and 4) an online fitness membership.

Setting/Population: We recruited 20 "co-designers" from diverse backgrounds to participate in human-centered design testing sessions. Co-designers included: 1) 10 patients with BMI 25-45 kg/m<sup>2</sup> and insufficient activity (<150 min/wk moderate-intensity PA); 2) 5 facilitators of lifestyle interventions; and 3) 5 leaders who make decisions about lifestyle programs that are offered in their organizations. Patients included 90% female and 50% white, 10% Black, 30% Latino, 10% Asian persons. On average, patients were persons aged 52 years (SD=10) with BMI of 32.2 kg/m<sup>2</sup> (SD=5.7) and self-reported PA of 36 min/wk (SD=44). Facilitators were 100% female and 100% white, 60% Latino persons. Leaders were 80% female and 60% white, 20% Black, 20% Asian persons.



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**Methods:** We conducted four cycles of human-centered design testing where co-designers reviewed prototypes of Move components. Cycles 1-2 were conducted with the first 10 co-designers (5 patients, 2 facilitators, 3 leaders) who completed a 120-min "think aloud" interview and a 30-min follow-up semi-structured interview. In cycles 3-4, 10 new co-designers (5 patients, 3 facilitators, 2 leaders) completed two, 30-minute interviews. Interviews were recorded and transcribed verbatim. After each cycle, we conducted rapid qualitative analyses to identify areas for revision. Quantitative data included acceptability, feasibility, and appropriateness (scale range 1-5) of program components and the Net Promoter Score (scale range -100 to +100). Higher scores are considered more favorable. We revised Move components prior to conducting the next cycle. Results are reported for the core component of the group-based classes.

**Results:** Co-designers indicated high levels of acceptability. Recommended revisions included more examples/case studies, open-ended questions, structured self-monitoring, handouts, and a more approachable action plan, as well as less authoritative and academic language. Mean (SD) scores by cycle were: 1: 4.35 (0.76), 2: 4.58 (0.71), 3: 4.65 (0.58), 4: 5.00 (0.00) for acceptability; 1: 4.40 (0.64), 2: 4.96 (0.09), 3: 4.45 (0.48), 4: 5.00 (0.00) for feasibility; 1: 4.45 (0.44), 2: 4.75 (0.42), 3: 3.90 (0.94), 4: 4.50 (1.00) for appropriateness. Net Promoter Scores by cycle were 1: 44, 2: 63, 3: 40, and 4: 83. Cycle 4 scores are preliminary (n=6/10 completed thus far).

**Conclusions:** Engagement of potential adopters in the design of Move resulted in a more acceptable and feasible program. Results will inform a future pilot trial of Move.

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05.

Theme 1: Pragmatic Trial Examples

### **Anxiety in Turner syndrome: Engaging community to address barriers and facilitators to diagnosis and care**

Alexandra Carl MPH, Research Services Professional, eXtraOrdinary Kids Turner Syndrome Research and Clinic Team, Children's Hospital of Colorado, Aurora, Colorado

**Background.** Turner syndrome (TS) is a genetic condition caused by complete or partial loss of the second sex chromosome, affecting 1 in 2000 females. Despite complex medical manifestations, the TS community identifies anxiety as a major contributor to reduced quality of life. This study aimed to improve understanding of anxiety symptomatology in individuals with TS and to identify barriers and facilitators to diagnosis and care. **Setting/Population.** The current joint pilot study was conducted in partnership between patient-advocacy group Turner Syndrome Colorado and the eXtraOrdinary Kids TS team. This partnership has been actively addressing the challenge of limited resources and fractured care for youth with TS for 10 years.

**Methods.** A mixed methods study design integrated community engagement, including community leaders as decision-making co-Is and a collaborative and paid community advisory board. The wider TS community was engaged through an online survey (N=135) followed by in-depth interviews (Caregivers=5, Individuals with TS=5). Descriptive statistics were used to summarize survey results. Team-based rapid analysis synthesized interview findings, which academic partners and the CAB used to develop overarching themes. **Results.** Participants with TS represented diverse ages (Caregiver survey: 12y±6; individual with TS survey: 26y±12) and geographical locations. Most identified as white (93.4%) and non-Hispanic (90.0%), and caregiver respondents had high educational attainment and annual income. Half of respondents reported experiencing anxiety symptoms 4 or more days per week, and caregivers and individuals reported anxiety affects their daily life (mean of 4.2 and 5.1 out of 10 respectively). Individuals with TS reported feeling anxious more often at school/work, while both caregivers and individuals reported anxiety expression increased at home. Insomnia was the most common symptom of anxiety endorsed across age and rater groups. Children were primarily triggered by stimulating environments and medical appointments and displayed aggression and hyperactivity as symptoms of anxiety. Perceived anxiety symptoms in adolescents included clinging and rumination and were triggered by conflict and increased expectations. Therapy and medication were rated as helpful when used, and use increased with age. Qualitative themes were: Anxiety impacts the whole family, TS creates a unique anxiety experience, and there are opportunities for early identification and intervention. Stakeholder comments supporting these themes will be presented.

**Conclusions.** Anxiety in TS presents differently across the lifespan and may necessitate a nuanced, TS-informed and family-systems approach to diagnosis and care. We are developing educational products to share our findings. Future research directions include adapting existing anxiety screening tools and interventions to improve utility for the TS population through engagement with a more diverse community sample.



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## Reassessing Evidence: What is Needed for Real World Research and Practice

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06.

Theme 1: Pragmatic Trial Examples

### Effectiveness of an ICD Decision Aid as part of a Pragmatic Implementation Trial

Bryan Wallace MPH, PhD(c), Senior Research Professional, U of Colorado

**Background:** The decision to accept treatment with an implantable cardioverter-defibrillator (ICD) is a preference-sensitive decision ideal for understanding the effectiveness of decision aids (DA). We previously developed and piloted DAs (in both video and brochure formats) for discussions between clinicians and patients about ICDs for heart failure. This study aims to understand the effectiveness of this DA as part of a pragmatic randomized trial.

**Setting/Population:** Implementation occurred at 7 diverse electrophysiology centers across the US. Eligibility criteria for patients included  $\geq 18$  years of age, English speaking, and having had a discussion with a medical professional about a primary prevention ICD, ICD replacement, or adding defibrillation to cardiac resynchronization devices.

**Methods:** The DECIDE-ICD Trial was a type-2 effectiveness-implementation hybrid, stepped-wedge trial design, with implementation occurring at sites between March 2018 and December 2021. The RE-AIM framework guided our planning and implementation evaluation. RE-AIM has been used to translate research into practice and to help plan programs and improve their effectiveness in real-world settings. In our pragmatic trial design, DA's were to be delivered to patients prior to meeting with an electrophysiologist by clinical staff. The primary outcomes were decision quality at 1 and 6 months (knowledge and value-treatment concordance). Secondary outcomes included decision conflict, decision regret, and decision self-efficacy.

**Results:** Between April 2018 and February 2022, 770 patients enrolled (323 control, 437 intervention). There was no difference in knowledge 52.0% vs. 53.6% with an adjusted mean difference of 1.60% (-1.40, 4.61) at 1 month and 51.2% vs. 54.1%, adjusted mean difference 2.87% (-0.17, 5.91) at 6 months. Decision conflict, decision regret showed no differences at either time point as well. Decision self-efficacy

improved at 1 month by 2.88/100 points (0.65, 5.11) and 6 months by 3.92 points (1.66, 6.18).

**Conclusions:** This trial was negative, with findings that should be considered within the context of a number of secular trends. A CMS mandate for use of DA in all ICD decisions at the start of the trial contaminated the control group, and a pandemic in the middle of the trial further biased results to the null. By making implementation at the last three sites very difficult and less successful, CMS should continue to encourage the use of shared decision making to support good quality care and communication while also explicitly allowing for provisions for ongoing health services research studying the effects of such mandates. Future work with the ICD decision aids will focus on creating an interactive tool to allow tailoring of the data to individual characteristics.

**Keywords:** ICD, electrophysiology, SDM, implementation, REAIM

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07.

Theme 1: Pragmatic Trial Examples

### Feasibility and Preliminary Outcomes of Collaborative Decision Skills Training in a VA Open Trial

Jennisa Bangal Student, Research Assistant, UC San Diego

**Background:** Collaborative Decision Skills Training (CDST) is a group therapy intervention meant to help individuals with serious mental illness (SMI) develop knowledge and skills to effectively engage in their treatment decision-making. The preliminary outcomes of CDST in a civilian pilot (n=21) were positive and provided evidence for fidelity and acceptability of the intervention. Before implementation in a VA Psychosocial Rehabilitation and Recovery Center (PRRC) context, CDST was adapted using a community-engaged, iterative, and mixed methods approach. PRRC clinicians and Veterans formed an Adaptation Resource Team and met with research staff to discuss potential areas of adaptation, and based on these suggestions, updates were made to the CDST clinician and participant manuals. This study aims to assess CDST's feasibility of implementation and its preliminary effectiveness in improving treatment outcomes and collaborative decision-making skills in Veterans receiving care in PRRCs. **Setting:** This is a mixed methods, one-armed feasibility study including 9 Veterans with SMI conducted in a VA PRRC in Southern California.

**Methods:** The primary developer trained and provided fidelity monitoring to the usual care clinicians to deliver CDST. We measured the effectiveness of CDST through quantitative assessments, qualitative interviews, and recordings of the Veteran appointments with PRRC providers. The participants complete the self-assessments and interviews at three time



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points: at baseline, post-intervention (1 month), and follow-up (3 months).

Results: Similar to the civilian pilot, the open trial produced favorable results. Veterans demonstrated significant improvements in initiating collaborative decision making in interactions with providers as seen in large effect sizes from baseline to post-intervention (Cohen's  $d = 1.03$ ) and baseline to follow-up (Cohen's  $d = 1.22$ ). Veteran-initiated collaboration in non-decisional contexts increased by a large effect size from baseline to post-intervention (Cohen's  $d = 1.31$ ) and a small effect size for baseline to follow-up (Cohen's  $d = 0.34$ ). Personal recovery increased by a small effect size from baseline to post-intervention (Cohen's  $d = 0.50$ ) and a large effect size from baseline to follow-up (Cohen's  $d = 1.08$ ). Attendance, therapist fidelity, and participant satisfaction were high (88%, 87%, and 88% respectively). Attrition was nonexistent (0%).

Conclusions: Overall, we found initial evidence of effectiveness for Collaborative Decision Skills Training for Veterans as seen in the improvements in the participants' treatment outcomes and their decision-making engagement. Also, we found initial evidence of feasibility as seen in the high therapist fidelity, attendance, and satisfaction. Although there was no control group for this trial, further research about the effects of CDST in Veterans is currently being investigated in a hybrid type 1 study with a treatment group with an active control.

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08.

Theme 1: Pragmatic Trial Examples

### Educational Pilot Intervention for Primary Care Management of Severe Acne at a Rural Indian Health Service Medical Center

Lucinda Kohn MD, MHS, Assistant Professor, University of Colorado

Background: Acne is common in American Indians and more likely to be severe and scar. Thirty-one percent to 38.1% of American Indian adults and 64% of American Indian adolescents report active acne. American Indians, especially those who live on or near reservations, do not have equal opportunity to seek care from dermatologists for acne due to Indian Health Service (IHS) funding limits and geographic barriers to dermatology care. Although primary care providers should have mastery in the management of acne, dermatologists are more experienced at treating severe acne than other clinicians and are more likely to prescribe systemic treatments for acne. The purpose of this study was to teach primary care clinicians (PCPs) in a rural IHS medical center how to manage severe acne with isotretinoin. Isotretinoin is a

systemic medication approved by the Federal Drug Administration for the treatment of severe acne. Unlike antibiotics or hormonal therapies, a 6-month course of isotretinoin is curative of acne. Due to its teratogenicity, it is monitored by a Risks Evaluation Mitigation Strategies program and its management is not commonly taught to non-dermatologists.

Methods: This was a pilot study with a single intervention arm. Ten PCPs at an IHS medical center participated in a 12-month hybrid acne management intervention. The intervention consisted of monthly virtual lectures, real-time consultations with the dermatologist by text and phone, and site visits, including an acne clinic where available PCP participants were paired with a dermatologist.

Results: On average, PCPs were 49.3 years old. They specialized in pediatrics (80%) and internal medicine (20%). By the end of the program, six of the PCPs (60%) started and managed a patient on isotretinoin, and nine PCPs (90%) pitched isotretinoin to at least one patient. PCPs who started and managed a patient on isotretinoin reported feeling "comfortable," "very comfortable," or "neutral" prescribing and managing isotretinoin; they also attended more than half (>6) of the classes and contacted the pediatric dermatologist at least once with questions related to acne management. The PCPs who did not manage or start a patient on isotretinoin (40%) also reported "neutral" comfort with isotretinoin. From the start of the curriculum to 3 months after the last lecture, 23 patients at the IHS medical center filled isotretinoin prescriptions at the IHS pharmacy; 17 of these patients were started on isotretinoin by the PCPs in this program, and 6 patients from the clinic were started on isotretinoin by outside dermatologists. In post-intervention interviews, PCP cited clinic barriers, including time constraints and competing demands as one of the major barriers to intervention reach.

Conclusion: Although the intervention successfully increased PCP prescription of isotretinoin for severe acne, reach to the AIAN adolescents serviced by this IHS medical center was limited due to clinic barriers, including time constraints and competing demands.

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09.

Theme 1: Pragmatic Trial Examples

### Preventing Maternal depression, Self-Harm Ideation, and Substance Use through Relationship Education during Home Visiting

Qing Li MD, DrPH, Adjunct Clinician Scientist, University of Mississippi Medical Center, Jackson

Background: Pregnancy-associated injury-related deaths due to drug use, homicide and suicide continue increasing in the U.S. However, limited studies evaluated integrated strategies



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to address their co-occurring precursors: maternal depression (MD), intimate partner violence (IPV), and substance use (SU), and self-harm ideation (SHI) has never been included. These precursors are common but have not been monitored in injury-related maternal early warning systems for continuous screening and prevention to reduce maternal morbidity and mortality as obstetrical causes have been. Our study aimed to evaluate the effectiveness of nurse home visiting augmented with relationship education on preventing MD, SHI, and SU and inform pragmatic studies with sustaining interest.

**Setting/Population:** We performed secondary data analyses of a 3-wave longitudinal randomized, controlled trial. Findings on IPV were published. In Oregon, 238 first-time, low-income pregnant mothers of the Nurse-Family Partnership (NFP) program were randomized into a standard or augmented program.

**Methods:** Trained nurses integrated the Within My Reach curriculum and IPV screening and referral with the NFP workflow one-on-one with mothers at home. At pregnancy, 1- year and 2-year follow-up, research assistants interviewed mothers with the Edinburgh Postnatal Depression Scale including an SHI item, Alcohol Use Disorder Identification Test, and Drug Abuse Screening Test. Multilevel analyses and generalized estimating equations were performed, adjusting for race/ethnicity, age, education level, and nativity status.

**Results:** Probable Major Depression (PMD, 25%), SU (36%), and SHI (8%) were common. Mothers in the augmented group reported more stable relationships with their child's father (66% vs. 50%,  $p=0.01$ ). Compared to the standard program, the NFP augmented program did not reduce PMD, SHI, or SU over these two years because the wave-intervention interaction terms were not significant [ $p > 0.05$ ].

**Conclusions:** Large trans-disciplinary studies are needed to address mechanisms of change, integrate strategies (e.g., engage fathers, target SHI and SU), and improve real-world home visiting models to prevent MD, SHI, and SU collectively. We plan to build a consortium with experts, providers, payers, and families to implement a type 2 hybrid effectiveness- implementation pilot trial of injury related maternal early warning systems. We will develop the simultaneous piloting of implementation strategies during an effectiveness trial. These designs can improve the effectiveness and advance our approach to scaling up programs (e.g., provider training, quality assurance). Our consensus building process will engage stakeholders and marginalized communities (e.g., tribal, mothers with childhood sexual abuse), integrate preventive interventions into early warning systems to address injury-related disparities, and promote safe and equitable motherhood and stable and nurturing relationship.

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10.

Theme 1: Pragmatic Trial Examples

### **Qualitative Evaluation of Telemedicine Spirometry Testing for Veterans with ALS (E-TEST VA) using the Practical Robust Implementation and Sustainability Model**

Marcie Lee MA, MPH, Health Services Researcher, Department of Veterans Affairs, Eastern Colorado Health Care System

**Background:** Individuals who have served in the military have a higher risk of Amyotrophic Lateral Sclerosis (ALS). ALS is a neurodegenerative condition characterized by progressive skeletal muscle weakness and impacts function, including pulmonary function. Recognizing trajectories of pulmonary decline can lead to initiation of therapies that can slow disease progression, prevent complications, or provide comfort for the patient. Spirometry is used to routinely monitor lung function to determine prognosis and therapy needs. The implementation of a pilot Evaluation of Telemedicine Spirometry Testing for Veterans with ALS (E-TEST VA) was accelerated during the COVID pandemic due to challenges with in-person spirometry testing. We used the Practical Robust Implementation and Sustainability Model (PRISM) to inform the ongoing implementation and evaluation of the program. PRISM helps to identify factors needed to implement a successful program and to measure success.

**Setting/Population:** We are evaluating E-TEST VA at two Veteran Affairs Medical Centers (VAMCs), the Rocky Mountain Regional VAMC and Puget Sound VAMC. Medical Centers (VAMCs), the Rocky Mountain Regional VAMC and Puget Sound VAMC.

**Methods:** PRISM-informed semi-structured interviews were conducted with staff and providers to assess implementation between November 2022 and February 2023. Audio recordings were transcribed verbatim, checked for accuracy, and analyzed in ATLAS.ti v22. We used thematic inquiry analysis and directed content analysis methods.

**Results:** Staff ( $n=6$ ) found implementation of telehealth spirometry to be effective in monitoring respiratory decline in patients with ALS. Respiratory therapists (RT) facilitated appropriate spirometry use by extensively training patients and caregivers in-person and through telehealth. Most patients with ALS were able to use the device independently or with assistance from their home caregiver. Both VAMCs worked through challenges with patients to send results in time for their in-person appointments. Providers perceived telehealth spirometry testing as accurate and reliable and could reduce the patient's in-person clinic time. If patient spirometry measurements were notably lower than previous levels, RTs initiated appropriate follow-up testing and treatment.

**Discussion:** PRISM informed our evaluation by highlighting organizational factors such as ongoing technical support that were essential to making this telehealth program successful. Staff reported that having telehealth spirometry measures were helpful for monitoring pulmonary function. Additionally, staff



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reported that overall patients responded positively and could use the device independently or with caregiver support with continued training and support. These results could inform the development of other telehealth spirometry programs (e.g. lung cancer screening). Telehealth spirometry programs such as this should consider organizational factors such as ongoing program support to be implemented successfully.

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11.

Theme 1: Pragmatic Trial Examples

### **Shifting Paradigms in Medically Complex Rehabilitation: an effectiveness-implementation trial protocol in skilled nursing facilities**

Mattie Pontiff PT, DPT, PhD, Post-doctoral Fellow, University of Colorado-Anschutz Medical Campus- Department of Physical Medicine and Rehabilitation; VA Eastern Colorado Center of Innovation (COIN), VA Eastern Colorado Health Care System

**Background:** One in five hospitalized older adults will require skilled nursing facility (SNF) rehabilitative care to address hospital-associated deconditioning. Yet, most patients do not demonstrate improvement in physical function following rehabilitation. Current SNF rehabilitation standard of care focuses on lower-intensity activities, which often fail to sufficiently overload skeletal muscle. Achieving physiologic overload is critical to driving underlying improvements for functional strength and mobility. A high-intensity resistance training approach, i-STRONGER, has been effective for improving function and decreasing length of stay compared to usual care for older adults admitted to SNFs. However, this approach has not been applied consistently across SNF settings. Thus, we are currently conducting a pragmatic cluster randomized trial to evaluate large-scale effectiveness and understand determinants and critical processes of i-STRONGER implementation as the new standard of care in SNFs nationwide.

**Setting/population:** We will target 32 SNFs (16 i-STRONGER vs. 16 usual care) for participation in this randomized pragmatic hybrid I effectiveness-implementation clinical trial. Patient data from ambulatory older adults (>50 years) admitted for short-term rehabilitation will be analyzed.

**Methods:** i-STRONGER effectiveness and processes underlying successful i-STRONGER implementation will be

evaluated using the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, Maintenance). To improve program success, the Expert Recommendations for Implementation Change (ERIC) were used to choose implementation strategies. Following enrollment, clinicians at all sites will complete training in collecting standardized outcome measures (gait speed, Short Physical Performance Battery, modified Barthel Index of Activities of Daily Living). Clinicians at i-STRONGER sites will complete an online, self-paced i-STRONGER training and begin applying i-STRONGER as the new standard of care. Patient outcomes data will be collected across all sites for 12 months and compared between usual care and i-STRONGER sites. Effectiveness will be determined as the change in physical function between patient admission and discharge. Clinician surveys and focus groups will identify processes and factors influencing Reach (proportion of patients treated with i-STRONGER), Adoption (proportion of clinicians utilizing i-STRONGER), Implementation (i-STRONGER fidelity), and Maintenance (i-STRONGER sustainment).

**Conclusions:** This study seeks to provide evidence of wide-spread implementation and effectiveness of high-intensity rehabilitation in hopes of improving patient function in SNFs across the country. The pragmatic and large-scale design is intended to elicit a paradigm shift in rehabilitative practice to improve patient care in SNF settings. Study outcomes will critically inform future work aimed at large-scale i-STRONGER implementation in rehabilitation settings.

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12.

Theme 2: Pragmatic Research Methods & Measures

### **Applying the PRISM framework to adapt, implement, and sustain an evidence-informed, school-based, occupational health intervention**

Rebecca Guerin PhD, CHES, Chief, Social Science and Translation Research Branch, National Institute for Occupational Safety and Health (NIOSH) Centers for Disease Control and Prevention (CDC)

**Background:** Implementation science (IS) approaches have great potential to speed the movement of occupational safety and health (OSH) innovations into sustained practice to improve worker safety, health, and well-being. A key premise of IS is packaging and conveying the evidence necessary to



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improve public health in ways that consider context and are thus relevant to local partners and end-users and that reduce OSH inequities. Despite their utility for understanding context, implementation processes, and outcomes, IS theories, models, and frameworks (TMFs) are not widely used in OSH research and practice. The Practical Robust Implementation and Sustainability Model (PRISM)—the contextually expanded Reach, Effectiveness, Implementation, Adoption, Maintenance (RE-AIM) framework—has wide applicability for addressing OSH challenges by providing a pragmatic, feasible, and robust way to consider important contextual factors that hinder/facilitate the uptake of evidence-informed OSH interventions.

**Methods/Setting/Population:** We are conducting a 5-year, hybrid type 2 effectiveness/implementation study using PRISM to adapt, implement, evaluate, and sustain an effective OSH injury prevention intervention, the OSHA 10-hour General Industry training, for high school career technical education (CTE) programs in the Miami Dade Public School Systems, the fourth largest U.S. public school district. We are assessing multilevel effectiveness, implementation, and context data for study teachers (N=30-40) trained to deliver the intervention, CTE students (N≈2,000), school administrators, and intervention partners/external facilitators from the American Federation of Teachers. Study data collection is ongoing through 2024. We developed an extensive database to ensure systematic and longitudinal use of PRISM, aligning all qualitative (interviews, focus groups) and quantitative (surveys) items/instruments with one or multiple PRISM constructs. The database will also help to organize and interpret findings. Adaptations are being captured iteratively via a web-based application to investigate effects on program delivery and outcomes.

**Results:** We organized a total of 628 individual items in the database by PRISM construct, accounting for all domains, with RE-AIM outcomes organized separately. Multiple constructs were addressed across more than one phase (pre-implementation, implementation, evaluation/sustainment) allowing for longitudinal assessment. Furthermore, constructs were often measured at several levels (i.e., administrator, teacher, student) allowing for a multilevel perspective. For PRISM context domains, most items were associated with Recipient characteristics (n=300). For RE-AIM outcomes, most items were tagged as Effectiveness (n=407) followed by Implementation (n=70). For PRISM context domains, most items were associated with Recipient characteristics (n=300). For RE-AIM outcomes, most items were tagged as Effectiveness (n= 407) followed by Implementation (n=70).

**Conclusions:** The pragmatic, comprehensive, and longitudinal use of the PRISM framework has facilitated the initial and ongoing phases of this complex, multi-level intervention and helped engage diverse project partners. Looking systemically across PRISM domains has also allowed us to identify and address study gaps that may affect long-term sustainability and future program scale up/out.

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13.  
Theme 2: Pragmatic Research Methods & Measures

### **Are functional outcomes measuring patient change? A protocol for ensuring outcomes reliability in pragmatic trials**

Lauren Hinrichs PT, DPT, PhD(c), OCS, PhD trainee, University of Colorado Anschutz Medical Campus

**Background:** There is a critical need to evaluate whether novel rehabilitation interventions improve patients' physical function in real-world clinical settings. Changes in physical function can be measured using objective, clinician-administered outcome measures; however, lack of standardization and inconsistent administration make it difficult to capture true change in patient function following an intervention. Clinician-administered outcome measures improve the external validity of pragmatic trial outcomes but may compromise their reliability, as protocol deviations and subjectivity pose risk to accuracy. Thus, to support effectiveness evaluations in pragmatic clinical research, implementation strategies such as outcomes training and monitoring are needed to ensure consistent and reliable outcomes collection. This work describes implementation strategies used to support outcomes collection as part of a large, cluster-randomized, hybrid I effectiveness implementation trial.

**Setting/Population:** Physical therapists (PTs) and physical therapist assistants (PTAs) across a target of 32 skilled nursing facilities (SNFs), who evaluate and treat older adults receiving rehabilitation care following a hospitalization.

**Methods:** To optimize pragmatism while ensuring effectiveness metrics reflect true patient change in this trial, PTs and PTAs will be trained to collect the Short Physical Performance Battery (SPPB), as subscores will serve as primary and secondary effectiveness outcomes. Across all sites, PTs and PTAs will collect and document the SPPB at patient evaluation and discharge as standard of care. Beyond training, additional implementation strategies to support reliability and consistency of outcome collection and documentation include: 1) champion-led tapered reliability assessments; 2) chart audits with tapered summaries and routine feedback by an internal SNF network auditor [therapist facilitator (TF)]; and 3) custom electronic medical record fields.

**Results:** To date, 15 teams have undergone SPPB outcome measure training. Fourteen champions have been trained to perform reliability assessments. Fifty-seven reliability assessments have been performed, with 100% surpassing thresholds for reliability. Thirteen teams are currently receiving TF audit and feedback.

**Conclusions:** Evaluation of clinician-administered physical function measures, collected as part of standard of care, optimizes pragmatism of translational research. However,



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challenges arise when balancing pragmatism and outcome reliability. For an ongoing hybrid I effectiveness implementation trial, novel, multi-faceted implementation strategies aim to assure reliability and consistency of clinician-collected and documented outcome measures and may inform future approaches to pragmatic, rehabilitation research.

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14.

Theme 2: Pragmatic Research Methods & Measures

### Caregiver Rating of Dementia Care Quality using the Patient Portal

Hillary Lum MD, PhD, Associate Professor of Medicine, University of Colorado

Background: Asking family caregivers for their perspectives on the quality of dementia care provided to the person living with dementia is important. Additionally, there is a need for caregiver-reported outcome measures that can be routinely assessed as part of clinical care and/or real-world effectiveness studies. The patient portal offers an opportunity to assess these pragmatic measures and integrate them into clinical practice and/or research.

Setting: UCHealth Seniors Clinic

Population: Family caregivers of patients with dementia

Methods: The Caregiver Rating of Dementia Care Quality Questionnaire is a 10-item measure that focuses on dementia-related assessment and screening, treatment advice, and counseling that caregivers have received in the past year. Responses are "yes, no, unsure, or not applicable". Responses are stored in the electronic health record. This initiative attached the questionnaire to an electronic portal message. Up to two messages were sent to family caregivers of patients with dementia who receive primary care from UCHealth Seniors Clinic, have a portal account, and are part of a dementia caregiver support program, Living with Dementia. Response rates of these pragmatic measures were assessed.

Results: Eighty-two caregivers were sent the questionnaire. Within three weeks, 36 (44%) completed the questionnaire. Caregivers were mean age  $66 \pm 13$ , 80% women, 10% Black, 5% Asian. For the 10-item questionnaire the mean number of 'yes' responses was 6.7 (range 1-10), 'no' responses was 1.2 (range 0-5), 'unsure' responses was 1.4 (range 0-4). The item with the most 'yes' responses (29/36, 85%) was advice for handling problems related to dementia; the item with the most 'no' responses was counseling related to advance care

planning (15/32, 47%). The most common question marked 'not applicable' related to counseling related to the patient's driving (17/36, 47%).

Conclusions: We demonstrated preliminary feasibility of a new pragmatic measure called the "Caregiver Rating of Dementia Care Quality Questionnaire". This measure was completed through the patient portal and provides a real-world tool to elicit caregiver perspectives of dementia care provided. Understanding how dementia caregivers perceive health care services can inform and equip healthcare teams to better implement and assess dementia care models.

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Theme 2: Pragmatic Research Methods & Measures

### Development and Properties of a Quantitative Measure for the Practical Robust Implementation and Sustainability Model

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Background: We developed and evaluated a quantitative survey based on the Practical Robust Implementation and Sustainability Model (PRISM) as part of a mixed-method, hybrid type-II trial (described in detail in Pittman et al., 2021) to evaluate the implementation and effectiveness of a web-based screening tool (eScreening) in VA settings. The survey was used to assess PRISM's contextual domains at each site to help characterize differences between sites and identify factors that may predict greater or lesser implementation success. The purpose of this study is: 1) To describe the process of the PRISM survey instrument development; 2) To characterize the reliability and validity of this quantitative survey; and 3) To investigate the utility of this instrument across eScreening implementation sites.

Methods: Eight VA Healthcare Systems stratified by rurality, staffing level, and patient volume, with an interest in implementing eScreening at their facility participated. During the pre-implementation phase, 30 clinic team members or supervisors completed the PRISM survey and other existing quantitative measures of implementation outcomes (Weiner et al., 2017).

Results: Development: The survey was developed based on an existing tool, expert feedback, and iterative pilot testing and feedback. Three to six items rated on a five-point Likert scale (1 = completely disagree to 5 = completely agree) were created for each of the six PRISM domains (i.e., Organizational Perspective, Patient Perspectives, Infrastructure, Organizational Characteristics, Patient Characteristics, and External Environment). The final survey contained 29 items and took approximately 14 minutes to complete. The mean overall score for the 29-item survey across participants and sites was 3.95 (.42) and mean PRISM domain scores across



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participants and sites ranged from 3.5 (.40) for Patient Characteristics to 4.1 (.22) for Organizational Characteristics. Properties: Internal consistency for the subscales ranged from .51 to .82; and concurrent validity with the other implementation outcomes - Weiner scales - varied from  $r = .696$ ,  $p < .001$  for feasibility to  $r = .796$ ,  $p < .001$  for appropriateness. Utility: This brief, low burden, quantitative scale was helpful to compare contextual domains across sites to identify areas to target for improvement.

**Conclusions:** There is a need for pragmatic quantitative measures of contextual factors to promote comparison across sites or time. PRISM, a widely used framework for developing and implementing evidence-based activities, was converted to a survey that has exhibited good psychometric and pragmatic properties and demonstrated variability over several clinic sites involved in the implementation of eScreening.

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16.

Theme 2: Pragmatic Research Methods & Measures

### Using PRISM assessment to enhance the implementation of eScreening across seven VA clinics

Borsika A. Rabin PhD, MPH, PharmD, Associate Professor, University of California San Diego

**Background:** PRISM assessment has been proposed as an innovative methodology to support the assessment and improvement of fit between the implementation context and the intervention and implementation strategy. The process builds on the Practical Robust Implementation and Sustainability Model, which includes a set of multilevel context domains and the widely used Reach, Effectiveness, Adoption, Implementation, and Maintenance outcomes. We present findings from the use of the PRISM assessment across seven VA clinics implementing eScreening, a patient-facing, web-based interface, to increase the rate and decrease the time for the completion of suicide screening for Veterans and increase referral to mental health treatment.

**Settings/population:** Military to VA programs in seven VA facilities; four urban and three rural.

**Methods:** We conducted the PRISM assessment during implementation of eScreening. Questions developed by Glasgow et al. 2020 were adapted to the study context and were deployed across seven VA clinics that participated in the implementation of eScreening. The assessment instrument consisted of 19 questions aligning with the PRISM context (n=6) and RE-AIM (n=13) outcome dimensions of PRISM.

Responses were selected on a Scale of 1 through 4 ranging from "Not at all likely" to "Very much likely", and a "Don't know" answer was also an option. Additional comments were also collected as free text. Key implementation partners at each site were invited to complete the online assessment instrument. Results from the surveys were summarized for each site graphically and included comments during debriefing and action planning meetings. Group discussion involving implementation partners and research team members, including an external facilitator, were used to identify strategies to improve implementation of eScreening.

**Results:** Seven VA clinics completed the PRISM assessment and attended group meetings with an average 5.6 (range 4 to 8) participants. The most lowest scores identified of RE-AIM outcomes for discussion were Reach 1, Adoption 2. The only score significantly below average for PRISM context domains was related to Patient Expectations. **Conclusions:** PRISM assessment was utilized as a one-time activity to enhance the implementation of eScreening across seven VA clinics. The process was feasible and yielded important mid- implementation data on the alignment of eScreening with the dynamically changing local context. In this study, PRISM assessment was used as one component of the external facilitation implementation strategy. We will provide recommendations for those intending to use PRISM assessment for their studies.

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Theme 2: Pragmatic Research Methods & Measures

### Developing and Testing a Community-based Social Determinants of Health Screening Tool for School-based Asthma Programs

Julia Reedy MA, Qualitative Analyst, University of Colorado- ACCORDS

**Background:** Asthma affects approximately 8.5% of children in Colorado. Asthma disparities are often influenced by social determinants of health (SDOH) factors including socioeconomic status and financial security, healthcare access, and housing. Our school-based asthma program (SBAP) effectively addresses poorly controlled asthma and disparities, especially when coupled with screening for and addressing SDOH needs. Existing SDOH screening tools are designed for clinical settings. Therefore, our team sought to



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develop and pilot test a community-based screening tool for administration as part of our SBAP.

Setting/population: We engaged three groups for tool development: 1) Research team personnel 2) members of 1 state and 4 regional Community Advisory Boards (CABs) and 3) a community health center in rural CO where we piloted the tool.

Methods: We used a four-phase iterative design process to develop and pilot a pragmatic community-based SDOH screening tool: 1) Using a modified Delphi process informed by research team members and CAB interview data, we identified appropriate and priority domains for SDOH screening in SBAPs; 2) We conducted a literature review to identify validated items appropriate for inclusion and determine tool layout to accommodate for limited literacy/health literacy populations; 3) We presented a screening tool draft at CAB meetings for refinement; 4) We conducted a qualitative pilot study in a community health center to test the refined SDOH screener and receive feedback on the tool.

Results: The Delphi process yielded six SDOH domains: healthcare access, transportation, food insecurity, public benefits, housing, and utilities. The screener layout, adapted from the Boston Medical THRIVE tool, included graphic cues for each domain. CABs endorsed the proposed domains and layout. In the pilot, 41 screening tools were completed and 36 parents (17% Spanish-speaking) provided feedback on the tool. Families understood the purpose of the tool, felt questions were clear and appropriate, liked the graphics and layout, and felt the screening tool was quick to complete. Four parents participated in brief semi-structured interviews (1 Spanish-speaking). Feedback was positive overall, but some expressed concerns about families' willingness to disclose needs. The clinic care coordinator liked the layout and visuals in the pilot screener, and felt it was easier to quickly identify and address SDOH needs as compared to their clinic's existing tool. The care coordinator recommended including a confidentiality statement to encourage honest reporting from patients.

Conclusions: This study led to the development of an acceptable, community-based SDOH screening tool that identifies and addresses key needs associated with asthma outcomes and asthma disparities. This tool will be implemented as part of the Better Asthma Control for Kids SBAP with the intention of further reducing asthma disparities by supporting families' unmet SDOH needs.

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18.  
Theme 3: Translating Evidence into Practice

### Exploring Feasibility of a School-based Asthma Program: Understanding Programmatic Needs and Unique Regional Contexts

Julia Reedy MA, Qualitative Analyst, University of Colorado-ACCORDS

Background: Asthma is one of the most prevalent chronic pediatric conditions affecting 8.5% of children in Colorado disproportionately impacting minority and low-income families. For almost two decades, the Colorado School-based Asthma Program (SBAP) has successfully worked to address and reduce asthma disparities for children in the Denver area. Our Better Asthma Control for Kids (BACK) program seeks to disseminate this program outside of Denver to other regions of Colorado.

Setting/population: We engaged community representatives from five rural and semi-urban regions across Colorado: Lower Arkansas Valley, Colorado Springs, Greeley/Weld/Morgan, Mesa/Delta, and Montezuma/Cortez. Regions were included based on their diverse populations (e.g. Latinx, Native American/American Indian race, rates of free-reduced lunch, non-English speaking, rural) and interest in implementation of an SBAP. Study participants include school nurses, parents, pediatric providers, public health professionals, pulmonary specialists, and community organization representatives.

Methods: We conducted in-depth, semi-structured key informant interviews with community representatives from each of the five regions in order to assess the feasibility of SBAP implementation in community contexts beyond the Denver area. All data were recorded, transcribed, and coded. We used thematic content analysis to identify common programmatic needs for implementation and to understand the unique community contexts requiring program tailoring. Our inductive and deductive analyses were informed by the Practical, Robust, Implementation and Sustainability Model (PRISM).

Results: Thirty-nine total participants were interviewed across all five regions. A group of six common needs emerged that participants felt were essential to make SBAP implementation feasible and successful. These include 1) Buy-in from community partners involved in asthma care 2) prioritization of asthma as a key health concern and an understanding of how it intersects with other health priorities 3) improved relationships and coordination to support asthma management 4) more resources and improved knowledge of existing resources to support healthcare and social determinants of health needs 5) Asthma education for parents, children, school staff, and community members 6) improved processes for collecting and managing asthma care plans at school. In addition, each region has one or more unique defining characteristics which will require program tailoring for fit to each of these contexts (e.g. military health system integration in Colorado Springs, "rugged individualism" of Mesa/Delta).

Conclusions: This exploratory feasibility assessment identified common needs for SBAP program translation to regional contexts outside of the urban, resource-rich context of Denver. Unique regional differences offer opportunities to tailor the BACK program for fit to each local context and promote successful and sustainable implementation



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## Reassessing Evidence: What is Needed for Real World Research and Practice

Authors: Julia Reedy, ACCORDS, University of Colorado. Sarah E. University of Colorado. Danielle Maestas, ACCORDS, University of Colorado. Lisa Ross DeCamp, ACCORDS, Department of Pediatrics, University of Colorado. Lisa Cicutto, National Jewish Health. Amy Huebschmann, ACCORDS, Division of General Internal Medicine, Ludeman Family Center for Women's Health Research, University of Colorado. Stanley J. Szefer, ACCORDS, Department of Pediatrics, University of Colorado, Breathing Institute, Children's Hospital Colorado

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Theme 3: Translating Evidence into Practice

### Changing the Narrative around Substance Use in Las Animas and Huerfano counties

Claudia Amura PhD, MPH, Research Assistant Professor, University of Colorado College of Nursing

**Background:** Boot Camp Translation (BCT) is a type of stakeholder engagement method that enhances local uptake of evidence by forming critical partnerships between academia and local community leaders, as well as increasing local relevance by using language and materials that resonate with the community. We here showcase the WE-CAN effort to create a communications campaign to educate the public, decrease stigma around substance use disorder, and promote access to care in these highly impacted rural Colorado communities.

**Setting/Participants:** The Las Animas and Huerfano Colorado frontier counties formed a coalition in 2021 with the goal of addressing high substance use and relatively low access to treatment impacting their communities. Over 15 community and health service organizations serving these two counties joined. A total of 30 community participants (15 coalition members, 16 adult community members, 12 adolescents, 5 providers) participated in two iterative rounds of interviews. In addition, 40 community members completed online pre-post online surveys.

**Methods:** Leveraging existing partnerships, stakeholders met monthly to participate in a BCT-guided process to co-create a messaging campaign to overcome stigma around substance use, as well as evaluate acceptability of messages. We used an iterative process of message co-creation through a digital whiteboard collaboration platform (Jamboard), synthesis, Importance vs Feasibility analysis, and group consensus processes. Pilot evaluation included focus groups/interviews, pre-post surveys to gather acceptability, feasibility, and impact of the anti-stigma campaign.

**Results:** The theory-driven, community-informed messages were built into intervention materials for dissemination to the community. We considered perspectives regarding message appropriateness for various audiences (adults, youth, providers), context and cultural fit, essential elements and tailoring of messages, and definition of relevant communication channels for our rural audiences. Over 30 unique materials were co-created to include information/education on substance use, dismantling stereotypes and stigma, seeing the whole person, and hope messages. Twelve printed materials were distributed in community settings (hospitals, restaurants, public spaces, schools), and other digital materials were posted in social media (webpage and Facebook).

Brewer, ACCORDS, Department of Family Medicine, Pilot testing of materials and processes to assess preliminary impact of the WE-CAN campaign on perceptions of stigma and knowledge around substance use is underway.

**Conclusions:** The ongoing substance use crisis is a call to action. Results from a joint effort between local workforces and communities can inform the design and implementation of public health interventions that are rooted in evidence, community input, and health equity.

Authors: Claudia R. Amura, PhD, MPH<sup>1,2</sup>, Meagan Bean, MPHc<sup>1,2</sup>, Marsy Key<sup>3</sup>, Kim Gonzalez<sup>3</sup>, Las Animas Partners for a Drug Free Community Coalition, Huerfano Creating the Change Coalition.

1. University of Colorado College of Nursing, Colorado School of Public Health; 3.Las Animas Huerfano Counties District Health Department

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Theme 3: Translating Evidence into Practice

### Development of a promotora empowerment training for a church-based physical activity program for Latinas

Jackelyne Garcia MA, Graduate Student Researcher, San Diego State University

**Background:** Promotoras (i.e., community health workers) have been shown to effectively deliver physical activity (PA) programs in community settings including churches. However, they often require additional training to overcome implementation barriers such as advocating for support for PA programs. This study describes the development of a promotora empowerment training curriculum for an evidence-based PA intervention in churches for Latinas. The curriculum incorporates motivating and engaging others, problem-solving skills, interpersonal skills, and adapting the program to increase the likelihood of successful implementation.

**Setting/population:** Around 2-3 promotoras will be selected from each church to take part in a six-week training aimed at implementing the physical activity program. The promotoras will receive training to lead six weekly classes at their respective churches. Out of the 32 churches, 24 will be randomly chosen to receive enhanced conditions for the evidence-based study. Promotoras in this group will receive additional training based on the results of the study.

**Methods:** The study uses Implementation Mapping design by: (1) conducting a needs assessment; (2) identifying implementation outcomes and performance objectives, identifying determinants, and creating matrices of change objectives; (3) identifying and selecting theoretical methods implementation strategies; (4) creating implementation protocols and materials; and (5) evaluating implementation. Empowerment theory was used to inform the development of this training, which suggests that empowerment occurs through a process of learning, utilizing problem-solving skills and achieving perceived or actual control.

**Results:** Findings from our focus groups suggest that promotoras needed additional training in advocating for resources and problem-solving with church staff. In addition, empowerment theory and results from focus groups provided information on relevant implementation outcomes (e.g., engage church leaders), performance objectives (e.g., identify



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resources), determinants of each performance objectives and change objectives which are mapped onto identified performance objectives and determinants. The training will be delivered by a promotora coordinator in Spanish. Implementation outcomes will be evaluated by examining program fidelity and participant engagement.

Conclusion: This study offers a roadmap for future promotora training development and can inform on whether additional promotora training leads to successful implementation outcomes and enhanced effectiveness. In addition, this project is a demonstration of how Implementation Mapping methodology can be utilized to improve care outcomes for a high-priority population in real-world community settings.

Authors: Melanie Gomez, San Diego State University. Jennifer Schneider, San Diego State University. Taynara Formagini Farag, San Diego State University. Oliva Lafuente, San Diego State University. Elva Arredondo, San Diego State University.

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Theme 3: Translating Evidence into Practice

### Engaging patients and clinicians to co-create feasible and sustainable approaches to implement evidence-based cancer control

Monica Perez Jolles PhD, MA, Associate or Full Professor, ACCORDS

Background: To guide cancer treatment decisions for older adults (>65 age), geriatric and patient-centered risk assessments are recommended — including social determinants of health (SDoH) and behavioral risk factors that influence patient care. Such assessments can guide treatment discussions, inform the intensity of treatment, and identify supportive care needs; yet are not implemented routinely in oncologic clinics. This ongoing pilot study uses co-creation engagement strategies with a multi-perspective steering committee, clinic-based workshops, and a diverse group of patients. The goal is to integrate screenings in areas relevant to older adult cancer patients in a way that is feasible, actionable, and sustainable. This approach will improve the alignment of cancer treatment decisions for older cancer patients – the resulting package is termed the “Integrated Aging Assessment for Action in Cancer Patients” (IA3-CP).

Setting/population: Professional partners with diverse roles across three oncology clinics (n=15) in the University of Colorado Cancer Center have participated in the co-creation process (oncologists, nurses, clinic leadership, Electronic Medical Records builders). Older adult cancer patients (n=5-10) ages >65 years participating in workshops and user test sessions.

Methods: To develop our IA3-CP, we use D&I strategies including co-creation engagement approaches with our partner clinics and patients, and form-function methods to develop workflow processes to feasibly integrate the IA3-CP into the oncology teams' cancer treatment planning processes. We are conducting 45-60-minute workshops with clinic personnel and patients to specify the core functions and forms of the IA3-CP and clinical workflows needed. Facilitators use prioritization and ranking exercises to inform decision-making.

Results. We have obtained valuable expertise from partners on informing the intervention's core functions (e.g., function priority for patients such as service linkage after screenings),

acceptability, potential challenges to its implementation, suggestions for workflow, and strategies that include the presentation and delivery of the screening tool (e.g. FUNCTION: Integrated, actionable report to care team and patient/caregiver; FORMS: online or paper-based, EMR integration). The Function of completion of the IA3-CP will take a different form in the solid tumor clinics than in the blood clinic based on clinic characteristics (e.g., preference for completion prior to a visit or in the waiting room)

Conclusions. The developing IA3-CP intervention package has great potential to allow busy oncology practices to conduct evidence-based screenings to fit clinic workflows and provide equitable patient care with attention to SDoH. Our co-creation method used to develop the IA3-CP is an emerging and generalizable D&I science method with great potential to engage diverse partners and enhance attention to invested partner perspectives in the research

Authors: Monica Perez Jolles, PhD, UCD SOM/Pediatrics. Elizabeth R. Kessler, MD, UCD Division of Medical Oncology. Amy Huebschmann, MD, UCHealth/GIM. Bryan Ford, MPH, ACCORDS. Russell Glasgow, PhD, ACCORDS/SOM.

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Theme 3: Translating Evidence into Practice

### Pathway to Suicide Prevention in Primary Care

Reina Doyle MPH, Senior Instructor, University of Colorado School of Medicine, Partners for Children's Mental Health  
Background: Suicide is the second leading cause of death among youth aged 10 to 24 in the United States.<sup>1</sup> Approximately 45% of individuals who died by suicide had contact with a primary care provider (PCP) within one month of suicide<sup>2</sup>, making PCPs well positioned to intervene with youth at risk of suicide. Partners for Children's Mental Health created an evidence-informed program based in the Zero Suicide framework that provides training and implementation support for pediatric primary care providers. This poster will focus on the successes and challenges clinics have experienced implementing the program into practice.  
Setting/Population: Pediatric primary care practices in Colorado are eligible to participate in this program. To date, all practices were in the Denver metro area.

Methods: The program includes two didactic trainings with providers and clinic staff on the care pathway and includes: suicide screening, risk assessment, safety planning, lethal means safety counseling, referral, and follow-up. Additionally, the program includes two consultation meetings where we co- create workflows with clinic champions, and one year of implementation and data support.

Primary care providers and staff complete a baseline and three-month follow-up survey, which assess confidence implementing the care pathway and perspectives on implementation. Additionally, one year of patient-level data is collected from clinics' electronic medical records. Descriptive statistics are used to analyze quantitative survey data and a paired t-test is used to analyze pre/post confidence scores. An inductive approach is used to analyze qualitative survey data.

Preliminary Results: Nine clinics participated in the program between August 2020 and December 2023. Of these, five started implementing the program. Nine providers from four clinics completed the follow-up survey. Providers from the fifth clinic will complete the survey in April 2023.



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Successes are improved provider confidence co-creating safety plans and providing lethal means safety counseling to patients/families ( $p=0.05$  and  $p=0.02$ , respectively) and high screening rates (88%). Barriers are time constraints and difficulties finding behavioral health care for patients; only one third of survey respondents agreed that they had enough time for assessment/referral and 11% agreed that they could quickly find mental health providers for their patients with suicidal thoughts .

Conclusions: Preliminary data suggest the program improves confidence, although time and availability of appropriate mental health care are challenges to implementation. Ongoing implementation support provides an opportunity to troubleshoot challenges with clinics but solutions to structural barriers require further thought. For next steps, we will continue to collect data on our existing program. Additionally, we recently submitted a NIH Planning Grant (R34) to investigate the impact of receiving training and implementation support

Authors: Brian Pitts, MD (University of Colorado School of Medicine, Children's Hospital Colorado, Partners for Children's Mental Health). Tripti Sharma, MA, LPC (Children's Hospital Colorado, Partners for Children's Mental Health). Stephanie De Jesus Ayala, MS, LPC (Children's Hospital Colorado, Partners for Children's Mental Health). Eliza Elliotte, BA (University of Colorado School of Medicine, Partners for Children's Mental Health). Bruno Anthony, PhD (University of Colorado School of Medicine, Children's Hospital Colorado, Partners for Children's Mental Health)

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Theme 3: Translating Evidence into Practice

### Understanding Rural Latina Parent Experiences with Asthma Management: Opportunities for Tailoring a School-based Asthma Program

Andrea Jimenez-Zambrano PhD, MPH, Instructor, University of Colorado

Background: Our Colorado School-Based Asthma Program (SBAP) has leveraged asthma navigators to reduce asthma disparities for low-income and racial/ethnic minority children in the Denver metropolitan area. To disseminate our SBAP to rural Colorado, we sought to understand rural Latino parents' experiences and perspectives on asthma management and to identify possible adaptations to ensure accessibility, acceptability and cultural responsiveness.

Setting/population: Latino parents/caregivers of children aged 5-12 years with asthma were recruited based existing asthma diagnosis from two safety-net primary care clinics in rural communities in Colorado.

Methods: We employed in-depth semi-structured interviews that explored barriers and facilitators to asthma management: day-to-day asthma self-management practices, cultural beliefs related to asthma, and willingness to engage in a SBAP. Transcripts of interviews were coded and analyzed for thematic domains and compared for concurrence and differences by language spoken.

Results: A total of 15 interviews were conducted with rural Latina caregivers (5 English- and 10 Spanish-speaking). Participants included mothers ( $n=13$ ) and two grandmothers; mean age was 39 years, 80% were married, and 73% reported Medicaid

coverage for their child with asthma. Latina parents had knowledge gaps about asthma management and struggled to understand why their child had asthma. Difficulty accepting the diagnosis presented an obstacle to effective management. Spanish-speaking Latina caregivers described unique challenges to asthma management, specifically language- related inequities in access to health care (e.g., limited availability of translation, and Spanish-language educational materials). Commonly, Latina participants had misperceptions of their child's asthma severity, despite descriptions of uncontrolled asthma with unpredictable flares, and persistent questions/confusion about asthma management. Specifically, some participants felt confident managing their child's asthma and perceived it as mild while simultaneously describing sub- optimal management characterized by frequent use of rescue inhalers and poor adherence to maintenance medications. Latina parents also experienced geographic barriers associated with rurality, including long travel distances to seek care, and limited primary care availability for urgent asthma needs. A concern for the proposed SBAP was that many children with asthma did not have asthma care plans at school.

Conclusion: Findings suggest that Latina parents experience distinct barriers and needs related to asthma management, including lack of acceptance of the diagnosis and confusion about management. These perspectives will guide tailoring for our SBAP to rural Latino families in Colorado, focusing on addressing challenges related to language, access and management-related misperceptions.

Authors: Andrea Jimenez-Zambrano<sup>1,2</sup>, Julia Reedy<sup>1</sup>, Sandra Garcia-Hernandez<sup>1</sup>, Sarah E. Brewer<sup>1,3</sup>, Stanley Szefer<sup>1,2,6</sup>, Lisa R. DeCamp<sup>1,2</sup>, Allison Kempe<sup>1,2</sup>, Amy G. Huebschmann<sup>1,4,5</sup>

University of Colorado Anschutz Medical Campus: 1Adult and Child Center for Health Outcomes Research and Delivery Sciences 2Department of Pediatrics 3Department of Family Medicine, 4Department of Medicine, Division of General Internal Medicine, 5Ludeman Family Center for Women's Health, 6Breathing Institute.

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Theme 3: Translating Evidence into Practice

### Using Clinical Decision Support Order Nudges to Encourage use of Alternatives to Opioid Analgesics

Nat Trusczyński PhD, Research Associate, University of Colorado Anschutz

Background: Emergency Departments (ED) reliance on opioid analgesics has contributed to the opioid crisis. Best practices for the use of alternatives to opioids (ALT) to effectively treat pain exist but are underutilized. Behavioral nudges are interventions with potential to influence provider medication choices towards best practices by manipulating choice architecture or taking advantage of workflows. The objective of this project was to develop and implement clinical decision support (CDS) order nudges encouraging preferential use of ALT medications when providers attempted to order opioids in the ED or upon discharge. Setting/Population: CDS order nudges were activated across 12 EDs in a large, academic healthcare system in the Rocky Mountain Region. All sites share a centralized electronic health record (EHR). Together, the sites served more than 500,000 patients a year across urban, suburban, and rural settings.

Methods: To encourage greater use of the evidence-based ALTs, we developed a choice architecture order nudge which triggered when a provider searched for an opioid medication by name (e.g., "morphine," "oxycodone"). The CDS altered the search scope to remove one-off opioid orders and, instead, presented an order panel which defaulted to the searched opioid with options to



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include concomitant ALT orders (e.g. ibuprofen, acetaminophen). Throughout development, focus groups with physicians helped us make design choices for the CDS. Users could manually deselect the opioid. We evaluated CDS effectiveness with automated logging and computation of the proportion of opioid and ALT medication orders with and without the CDS nudge.

Results: From 6/2021 to 12/2022, the CDS order nudge fired 50,610 times. After firing, ALTs were order 3,237 times. Overall, there was an increase in the proportion of ALT orders among all regions from 56.5% to 61.2%. Patients for whom the CDS nudge displayed had a decrease in the proportion of opioids ordered during the visit over time, with variation among EDs (median -10%, interquartile range -37% to -7%), and a decrease in prescribed opioids at discharge (median -56%, range -73% to -35%).

Conclusions: CDS nudges that manipulate choice architecture, defaults, and search scope may be an effective intervention to improve opioid stewardship within EDs, driving increases in concomitant ALT orders. This approach has the advantage of presenting a best-practice within the user's workflow, without reliance on interruptive alerts. Additional work should focus on patient-centered endpoints and understanding differences in provider response across varied settings.

Authors: Sean Michael, MD, University of Colorado Anschutz. Jason Hoppe, DO, University of Colorado Anschutz.

reveal themes identified in the Public Health Program Capacity for Sustainability framework such as political support, program adaptation, and strategic planning. Promotoras identified several barriers such as minimal support from priests and church staff. Considerations for sustaining a PA program in church settings include hiring promotoras who are committed to supporting church members, and ensuring liability protection even after the university has ended oversight of the program. Additionally, promotoras suggested increasing training for teaching PA classes, delivering nutrition and PA information to participants, and problem solving for class disruptions.

Conclusions: Overall, promotora perspectives are vital in promoting the sustainment of EBIs in faith-based organizations by conveying the needs and perspectives of the community to the implementing organization, and enhancing the cultural sensitivity of the program. The use of frameworks can guide the development and evaluation of sustainment strategies that are tailored to the unique needs of the target population.

Authors: Jackie Garcia, Jennifer Schneider, Elva Arredondo, San Diego State University.

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Theme 3: Translating Evidence into Practice

### Using promotora perspectives to identify key strategies for program sustainment in faith-based settings

Melanie Gomez B.S., Graduate Student Researcher, San Diego State University

Background: While evidence-based interventions (EBIs) designed to increase physical activity (PA) have been shown to improve health outcomes, long term sustainment of these programs can be challenging due to limited ongoing funding. This is especially true in faith-based settings where churches have limited resources, and staff face competing demands. Faith in Action is a promotora-led EBI designed to increase moderate-to-vigorous PA among churchgoing Latinas. Promotoras (i.e. Community Health Workers) have a deep understanding of the needs and resources of their community; they can help to build trust between community members and outside institutions, facilitate buy-in for EBIs, and promote program sustainability. The current study aimed to identify key strategies for the successful sustainment of Faith in Action in faith-based settings from the perspective of promotoras.

Setting/population: Participants included Latina promotoras (n=6) who led the physical activity classes in churches.

Methods: Research staff conducted, audio recorded, and transcribed focus groups with Faith in Action promotoras. Transcripts are being analyzed using rapid qualitative analysis, summarizing data in templates based on the domains from the Public Health Program Capacity for Sustainability framework, such as funding stability, partnerships, and organizational capacity.

Coding discrepancies are being reconciled as a group. Summaries are being transferred into a matrix for topic monitoring to observe trends and reflect on patterns.

Preliminary results:



ACCORDS Preliminary results

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# Putting Evidence into Practice: Challenges in Using Evidence to Make Change

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**Andrea Nederveld, MD; Borsika Rabin, PhD; Mark Gritz, PhD; Gregory Tung, PhD**

## Presentation Abstract

This panel will explore various challenges in the process of moving evidence-based practices into real-world clinical and community settings. Panelists will discuss how issues of cost and evidence of cost-benefit, feasibility of interventions, and the engagement of community and other partners can present both barriers and opportunities for scaling interventions and building sustainability. The discussion will also explore approaches to overcoming challenges to make change and improve health and health systems.

## Learning Objectives:

1. Identify challenges in translating evidence into practice change.
2. Discuss types of evidence that can help facilitate the uptake of evidence-based practices.
3. Describe practices, approaches, or methods to overcome barriers to change.

## Thought Questions:

1. What are the most important barriers to translating evidence into change in your own area of research?
2. To what extent do the challenges in evidence uptake in your area of research or practice intersect with health equity concerns? What strategies could
3. Who else needs to be involved in your work to increase your ability to move evidence into practice?



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# Applying Evidence for System and Policy Change

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**Ned Calonge, MD, MPH**

## Presentation Abstract

There are multiple levels of decision-making where evidence can influence policy and systems change. At what might be called the “small p” level implementation of evidence-based programs are made by integrated health care systems, insurance companies, health care provider groups, professional and national advocacy organizations, and federal panels and committees, all with their own inputs and processes for making decisions that impact systems at different levels. At the “big P” level, elected officials have control of policy decisions that create change at the state or federal level. There is a recognizable rule set for legislative decision making that researchers can learn and use to translate their work into systems change. Several examples of Colorado policy decisions demonstrate the interface between evidence and policy. Finally, how one “packages” or puts one’s research together for presentation to policy makers is a key part of the success of the translation of research into systems change.

## Learning Objectives:

1. Understand the role of healthcare research and evidence in influencing policy and systems change.
2. Identify different points of entry, opportunities and approaches to promote and translate their research in policy and systems change.
3. Consider approaches to presenting their findings in ways that can best drive or otherwise influence change in policies and systems.



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# About ACCORDS

## Adult and Child Center for Outcomes Research and Delivery Science

[The Adult and Child Center for Outcomes Research and Delivery Science \(ACCORDS\)](#) encompasses T3-T4 research across the life spectrum for the University of Colorado (CU) Anschutz Medical Campus, with infrastructure support provided jointly from the Dean's Office of the School of Medicine and Children's Hospital Colorado (CHCO). The program was first established in 1998 as the Colorado Health Outcomes program (COHO). In 2014, COHO merged with the Children's Outcomes Research (COR) program, with **Allison Kempe, MD**, named the Program Director. The name highlights the focus on the entire life spectrum as well as on "delivery science," encompassing comparative effectiveness, patient-centered outcomes, and dissemination and implementation research.

ACCORDS is a group of investigators from multiple disciplines. Some have primary offices on campus, while a much larger group maintain off-site research homes. Currently, over 50 investigators, 15 biostatisticians/analysts, 39 research assistants, four instructors, and 11 administrative personnel have office space with ACCORDS. In FY2019, 32 grants were awarded totaling \$14 million, reflecting a 38 percent success rate for submitted proposals. ACCORDS provided 490 consultations to 28 departments/division in the School of Medicine and assisted with 63 faculty recruitments. ACCORDS houses two fellowship programs focusing on primary and subspecialty clinician scientists, and currently has a K12 training grant focused on dissemination and implementation science. During FY2019, ACCORDS hosted four seminar series, two distinguished lecturers, and four educational workshops.

ACCORDS brings together T3-T4 researchers from across the CU Anschutz campus. Collaborating investigators represent all School of Medicine departments, as well as the Colorado School of Public Health, the Skaggs School of Pharmacy and Pharmaceutical Sciences, and the College of Nursing. ACCORDS also has strong research affiliations with the Colorado Clinical and Translational Sciences Institute (CCTSI), Denver Health, Kaiser Permanente, U.S. Department of Veterans Affairs, Colorado Department of Public Health and Environment, and the Colorado Department of Health Care Policy and Financing. ACCORDS is as an incubator for research ideas, fosters interdisciplinary collaboration, and develops focused areas of research of national prominence.

The mission of ACCORDS is to improve health, locally and nationally, by supporting state-of-the-art outcomes and community translational research to guide clinical practice and health policy.

The objectives of ACCORDS are to:

- Increase competitiveness of the School of Medicine/CHCO for funding from multiple research, education and training program sponsors, especially Patient-Centered Outcomes Research Institute, Agency for Healthcare Research and Quality, and the National Institutes of Health
- Strengthen affiliations with key external partners, including Denver Health, U.S. Department of Veterans Affairs, Kaiser Permanente, and the Colorado Department of Public Health and Environment, to increase access to populations and collaborators necessary for certain grants



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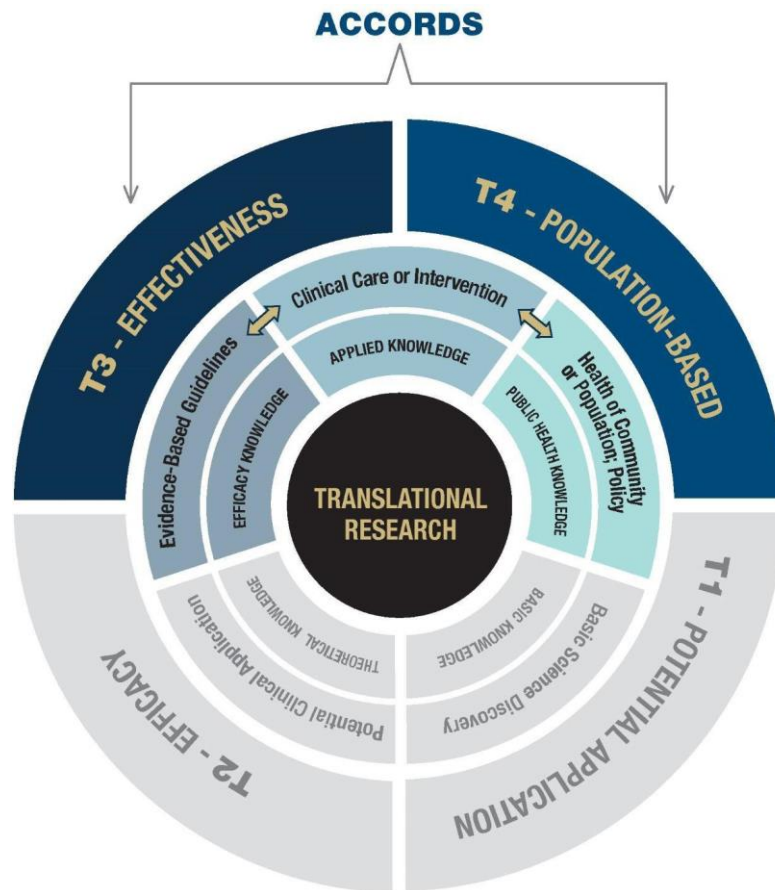
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- Improve faculty development for both senior and junior faculty interested in outcomes and delivery research by providing an interdisciplinary home for developing research, a mentored training ground, and substantial educational activities
- Improve the ability of the School of Medicine/CHCO to recruit senior and junior faculty interested in health outcomes, health services research, dissemination and implementation science, comparative effectiveness, and patient-centered outcomes research
- Achieve greater national visibility for the School of Medicine/CHCO as leaders in the areas of health outcomes, dissemination and implementation science, comparative effectiveness research, and training

ACCORDS is organized into programmatic areas: (1) Dissemination and Implementation Science; (2) Education; (3) Research Training and Mentorship; (4) Patient-Centered Decisions; (5) Data Science, and (6) Community Engagement and Outreach.

ACCORDS also has methodological cores in qualitative and mixed methods, practice-based research networks, biostatistics and analysis, economic analysis, and health informatics/mobile health. These cores provide support to the programmatic areas and consultative support to investigators. A major focus of these cores is to provide support for the development of new projects and grant proposals.

For more information, please visit <https://medschool.cuanschutz.edu/accords>.



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## D&I Science Graduate Certificate Program

[The Dissemination and Implementation \(D&I\) Science Graduate Certificate](#) at the University of Colorado was designed to address a local and national need for rigorous training in D&I Science in health services research.

D&I science is the study of methods and strategies to facilitate the spread, adoption, implementation, and sustainment of evidence-based practices, interventions and policies in real world and diverse health settings. As a transdisciplinary scientific field, D&I science can address multiple cross-cutting research topics (e.g., increasing equity in access to and quality of care; use of innovative technologies and data science to improve routine care) and health conditions (e.g., mental health, cancer and cardiovascular disease morbidity and mortality, geriatric care) of high priority. D&I science also has the potential to make precision health more actionable and relevant and can make the translation of discoveries in this and other high priority areas more rapid.

The D&I Science Graduate Certificate Program is designed to provide pragmatic training to researchers who want to develop competencies in D&I science and practice which can be applied across multiple topic areas and settings in health services, clinical and community health, and public health research. The program is intended to provide researchers with solid foundational skills in D&I science, as well as intermediate and advanced skills in select D&I competency areas.

The D&I Science Graduate Certificate Program has two sponsoring units: the Adult and Child Center for Outcomes Research and Delivery Science (ACCORDS) acts as the primary sponsor and the Clinical Sciences Graduate Program at the University of Colorado Anschutz Medical Campus acts as the secondary sponsor. It is coordinated through the ACCORDS Dissemination and Implementation Science Program.

For questions about the D&I Certificate program please [contact Christina Studts, PhD, MSPH, LCSW](#), the program director.

# Overview of Dissemination & Implementation (D&I) Science Workshop

Presented by **ACCORDS** Dissemination & Implementation (D&I)  
Science Graduate Certificate Program

***Coming November 2023***

Questions? Contact [accords.education@cuanschutz.edu](mailto:accords.education@cuanschutz.edu)



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ADULT AND CHILD CENTER FOR OUTCOMES  
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO  
CHILDREN'S HOSPITAL COLORADO

# Introduction to Qualitative Research Workshop

Presented by **ACCORDS** Qualitative and Mixed Methods Research Core

**WHEN:** September 6 and September 8, 2023

**WHERE:** Donald M. Elliman Conference Center, Anschutz Health Sciences Building

**WHO:** Junior faculty (K applicants/awardees) & post-doctorates with developed project ideas

## MORNING LECTURES | 8:00 am-12:00 pm MT

- ❖ Lectures and Q&A with experts on all aspects of qualitative health services research design, data collection, analysis, and dissemination

## AFTERNOON WORKSHOP | 1:00 pm- 4:00 pm MT

- ❖ Work through your own qualitative research study idea in small groups with qualitative research experts
- ❖ Applications due **July 7, 2023 at 11:59 PM MT**



## FACILITATORS

Juliana Barnard, MA

Sarah Brewer, PhD

Caroline Tietbohl, PhD



Andrea Jimenez-Zambrano, PhD

Brooke Dorsey Holliman, PhD



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# Save the Date for COPRH Con 2024

June 5 - 7, 2024



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