PUTTING THE "CARE" BACK IN HEALTHCARE:
IMPLEMENTATION SCIENCE APPROACHES TO IMPROVE HEALTH EQUITY

Sarah Javier, PhD (she/her)
Research Health Science Specialist
Center for Innovation to Implementation
VA Palo Alto Healthcare System
Stanford University School of Medicine

Presented at the UC Davis Center for Healthcare Policy and Research Seminar Series

March 22, 2023
12-1PM PST

DISCLAIMER

The views expressed in this presentation are that of the author and do not necessarily represent the views of the Department of Veterans Affairs or the United States government.

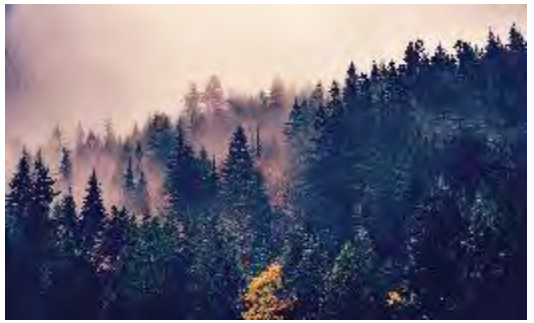
AGENDA

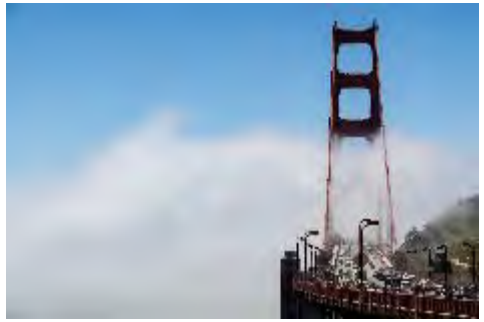
I. Formative Work

II. Implementation science approaches to improve health equity

III. Application of IS in health equity research

IV. Future directions





I.

FORMATIVE WORK

WHO AM I?

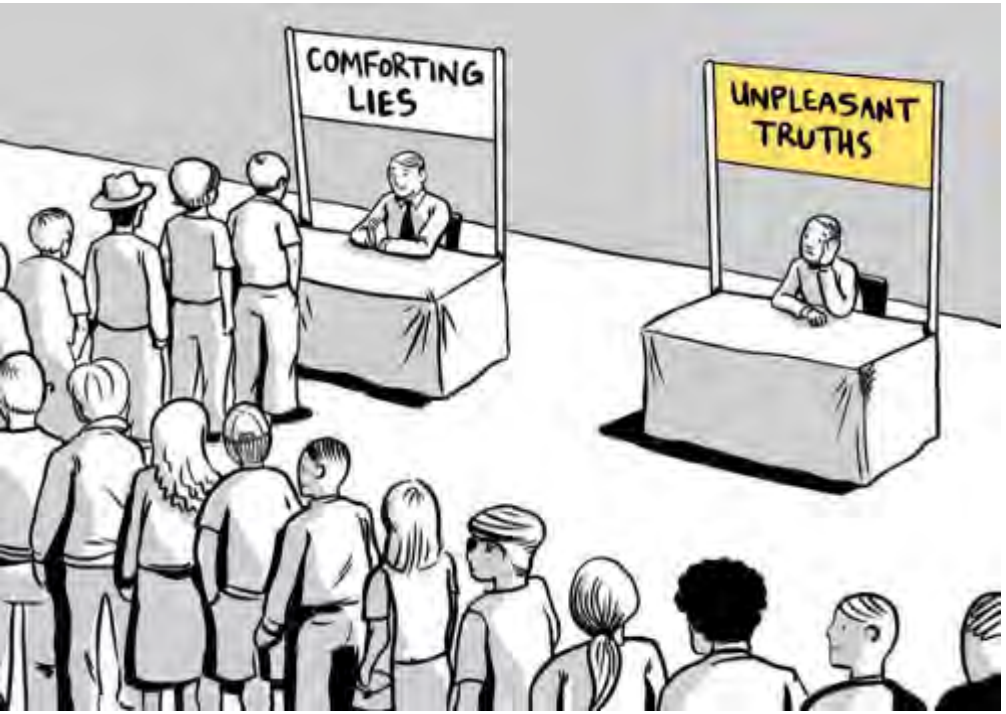
- Trained as a non-clinical health psychologist at Virginia Commonwealth University
- Background in mixed methods, program evaluation, health disparities, and qualitative research
- Currently focused on the intersection of implementation science, health equity, and chronic pain in the VA

FORMATIVE WORK: TAILORING AN EVIDENCE-BASED INTERVENTION TO ENHANCE TREATMENT-SEEKING BEHAVIORS AMONG ASIAN AMERICAN WOMEN

Background

- Asian American women may manifest eating disorders, including anorexia, bulimia, and binge eating disorders at rates equivalent to or higher than White women
  (Franko, Becker, Thomas, & Herzog, 2007; Marques et al., 2011)
- Lack of culturally-appropriate diagnostic tools may indicate that symptoms of eating disorders and other mental health conditions are hidden from clinicians and practitioners
  (Franko et al., 2007; Goyal et al., 2012; Shao, Richie, & Bailey, 2016)
- Asian American women have low treatment seeking behaviors across all mental health conditions, including eating disorders
  (Abbas et al., 2010; Lee-Winn, Mendelson, & Mojtabai, 2014; Meyer, Zane, Cho, & Takeuchi, 2009)

THE BODY PROJECT



- The **Body Project** is the gold-standard prevention intervention for reducing eating disorder symptomatology (Stice et al., 2006)
- This intervention is rooted in **Cognitive Dissonance Theory** (Festinger, 1957)
  - In the Body Project, participants are asked to take counter-attitudinal stances towards societal body image ideals over several role play, discussion, and homework activities
  - By completing the intervention, participants should be able to change their internalized ideals about body image, which impacts their behaviors

A CASE FOR CULTURAL SENSITIVITY

Cultural sensitivity results in:

- Increased care utilization
- Better treatment retention and adherence
- Higher overall satisfaction with care

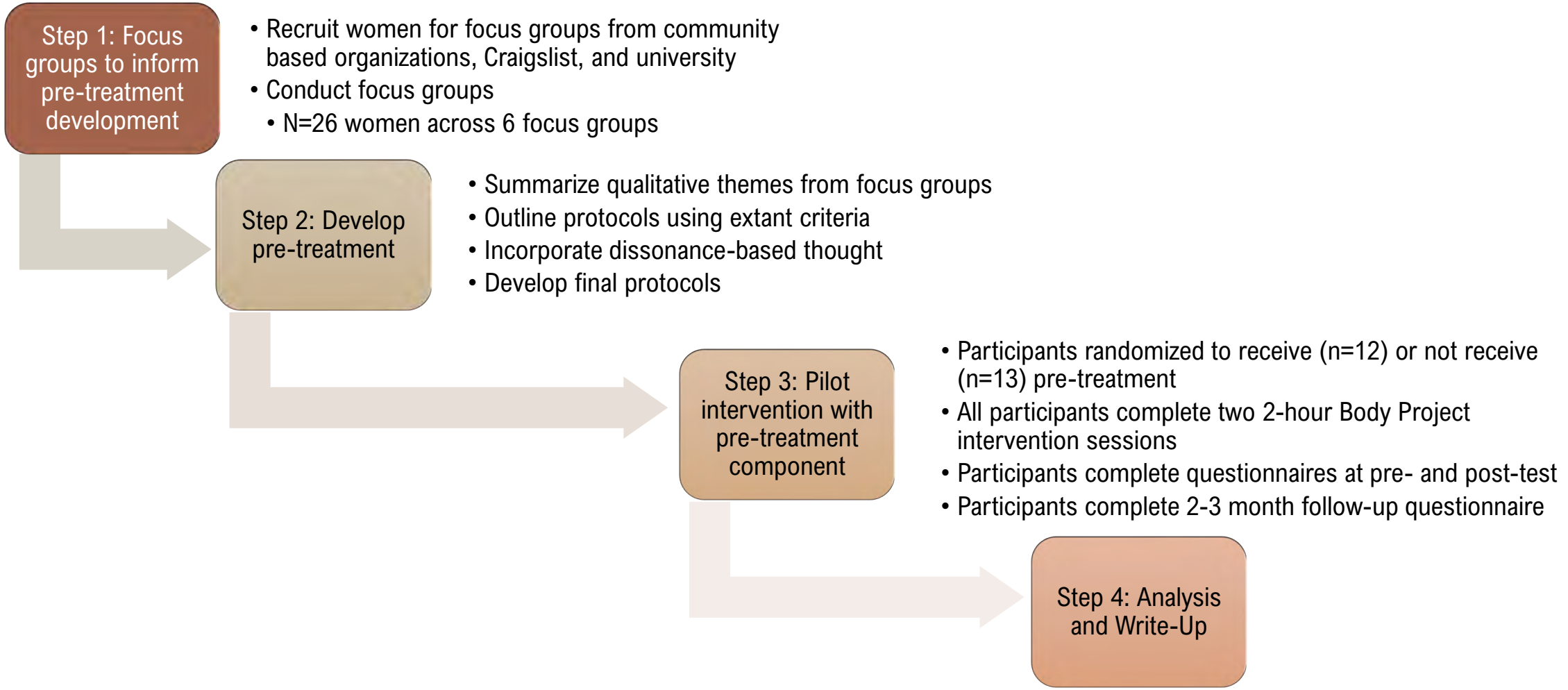
(Barrera, Castro, Strycker, et al., 2013; Roncoroni, Tucker, Wall, et al., 2014)

Research Question: Could adding a culturally-sensitive "pre-treatment" session to an eating disorder prevention intervention based on cognitive dissonance theory increase mental health treatment-seeking behaviors among Asian American women?

PURPOSE OF STUDY

To examine the feasibility of implementing a novel, culturally-sensitive pre-treatment session prior to a dissonance based intervention for eating disorders; secondarily, to examine eating disorder-related outcomes between pre-tx and no pre-tx groups

PROJECT FLOWCHART

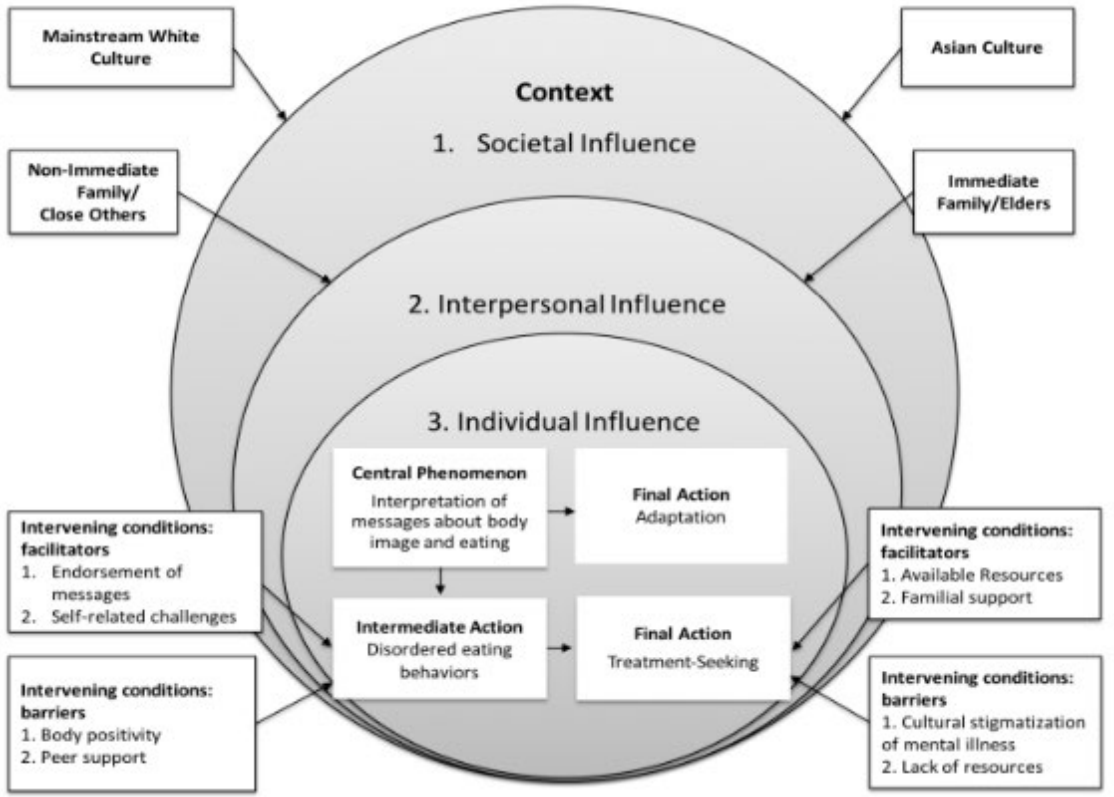


LESSONS LEARNED FROM THIS STUDY THAT LED ME TO HEALTH EQUITY AND IMPLEMENTATION SCIENCE

Research Question: Could tailoring an intervention based on cognitive dissonance theory increase mental health treatment-seeking behaviors among Asian American women?

Answer: Unsure

- Study not powered enough to say for sure (n=13 in no pre-tx group; n=12 in pre-tx group)
- Issues with recruiting Asian American women in the community
- No notable changes on outcome measures (eating restraint, eating concern, shape concern, weight concern, body dissatisfaction, attitudes towards seeking professional psychological help) between pre-tx and no pre-tx group
- Focus groups with women and analyses indicated that influences at multiple levels (systemic, interpersonal, intrapersonal) shape peoples' attitudes towards treatment-seeking



Reference: Javier, S. J., & Belgrave, F. Z. (2019). "I'm not White, I have to be pretty and skinny": A qualitative exploration of body image and eating disorders among Asian American women. Asian American Journal of Psychology, 10(2), 141–153. https://doi.org/10.1037/aap0000133

II.

IMPLEMENTATION SCIENCE APPROACHES TO IMPROVE HEALTH EQUITY

The principle underlying a commitment to reduce – and ultimately, eliminate – disparities in health and in its determinants, including social determinants. Pursuing health equity means **striving for the highest possible standard of health for all people** and giving special attention to the needs of those at greatest risk of poor health, based on social conditions.

-Braveman, Kumanyika, Fielding, et al., 2011

WHAT IS HEALTH EQUITY?

KEY PRINCIPLES OF HEALTH EQUITY

1. All people should be valued equally
2. Good health is essential to an individual's well-being and ability to participate fully in the workforce and a democratic society
3. Everyone should be able to achieve their optimal health status without distinction based on membership (or assumed membership) to a certain group
4. The nation's prosperity depends on the entire population's health
5. Governments must promote the right for every person to attain the highest attainable standard of health and the right to a standard of living adequate for health and well-being
6. Ill health is an obstacle to overcoming social disadvantage
7. The resources needed to be healthy should be distributed fairly

-Braveman, Kumanyika, Fielding, et al., 2011

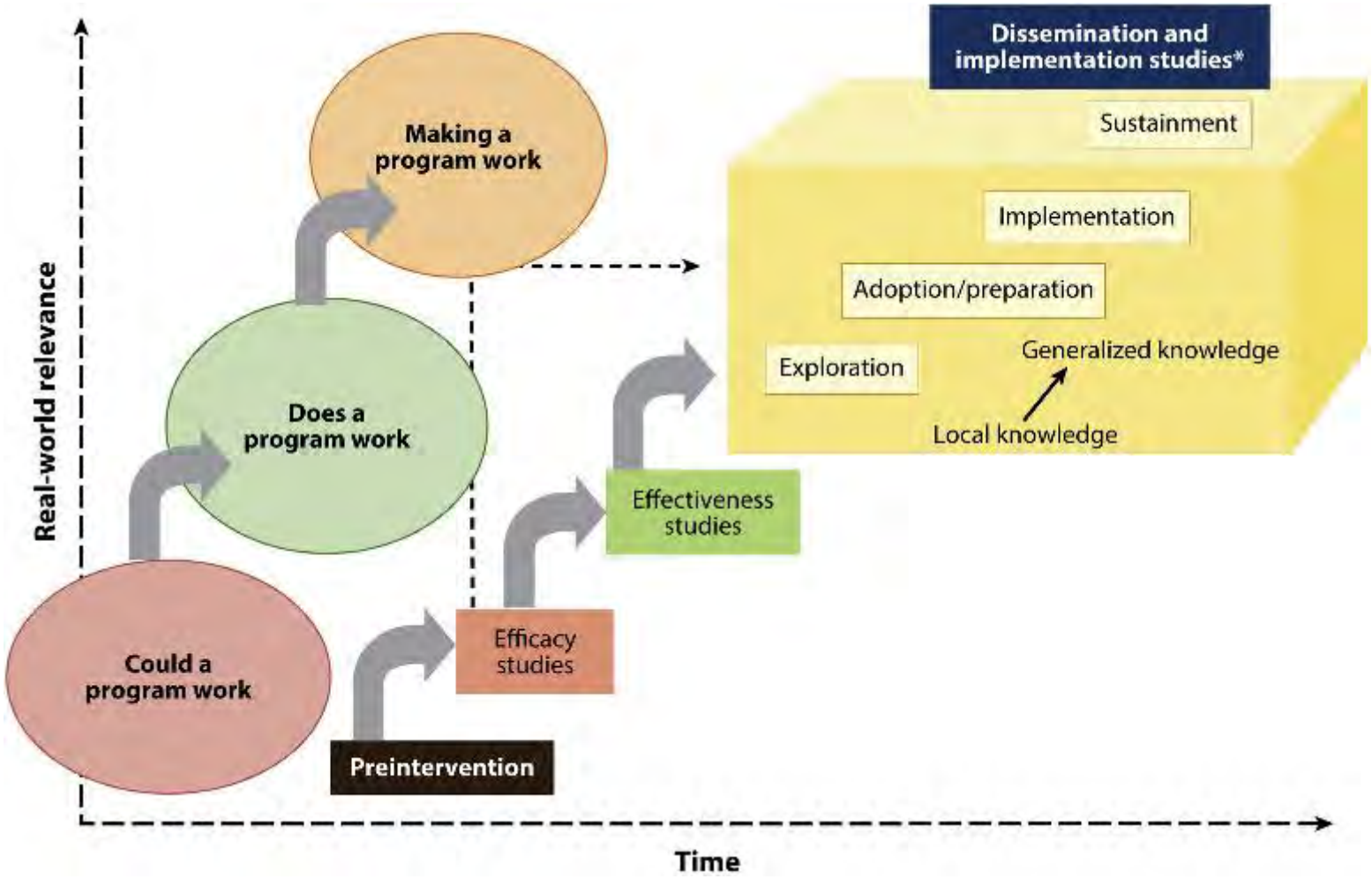
IMPLEMENTATION SCIENCE AT A GLANCE

What is implementation science? The study of methods and strategies that facilitate the uptake of evidence-based interventions into regular use

Three Aims of Implementation Science (Kirchner, Smith, Powell, et al., 2019):

1. To develop effective strategies for implementing evidence-based practices, which improve health-related processes and outcomes
2. To produce generalizable knowledge regarding implementation strategies by understanding the different processes, barriers, and facilitators that can influence either success or failure
3. To aid in the development, testing, and refinement of relevant theories, conceptual frameworks, and measures to advance implementation science

IMPLEMENTATION SCIENCE AT A GLANCE



Reference: Brown, Curran, Palinkas, et al. (2017). An overview of research and evaluation designs for dissemination and implementation. *Annual Review of Public Health, 38,* 1-22.

SYNERGIES BETWEEN HEALTH EQUITY AND DISSEMINATION AND IMPLEMENTATION (D&I) RESEARCH

There are many commonalities and synergies among health equity and D&I research (Nooraie et al., 2020):

- Both are **action-oriented** and recognize the multi-level and embedded nature of context and the need for adaptation to the unique needs and characteristics of key populations, settings, and stakeholders
    - Health equity is sometimes an important driving force in selecting settings or populations for D&I research
- Both approaches value **stakeholder engagement** and have ties with community-based participatory research (CBPR)

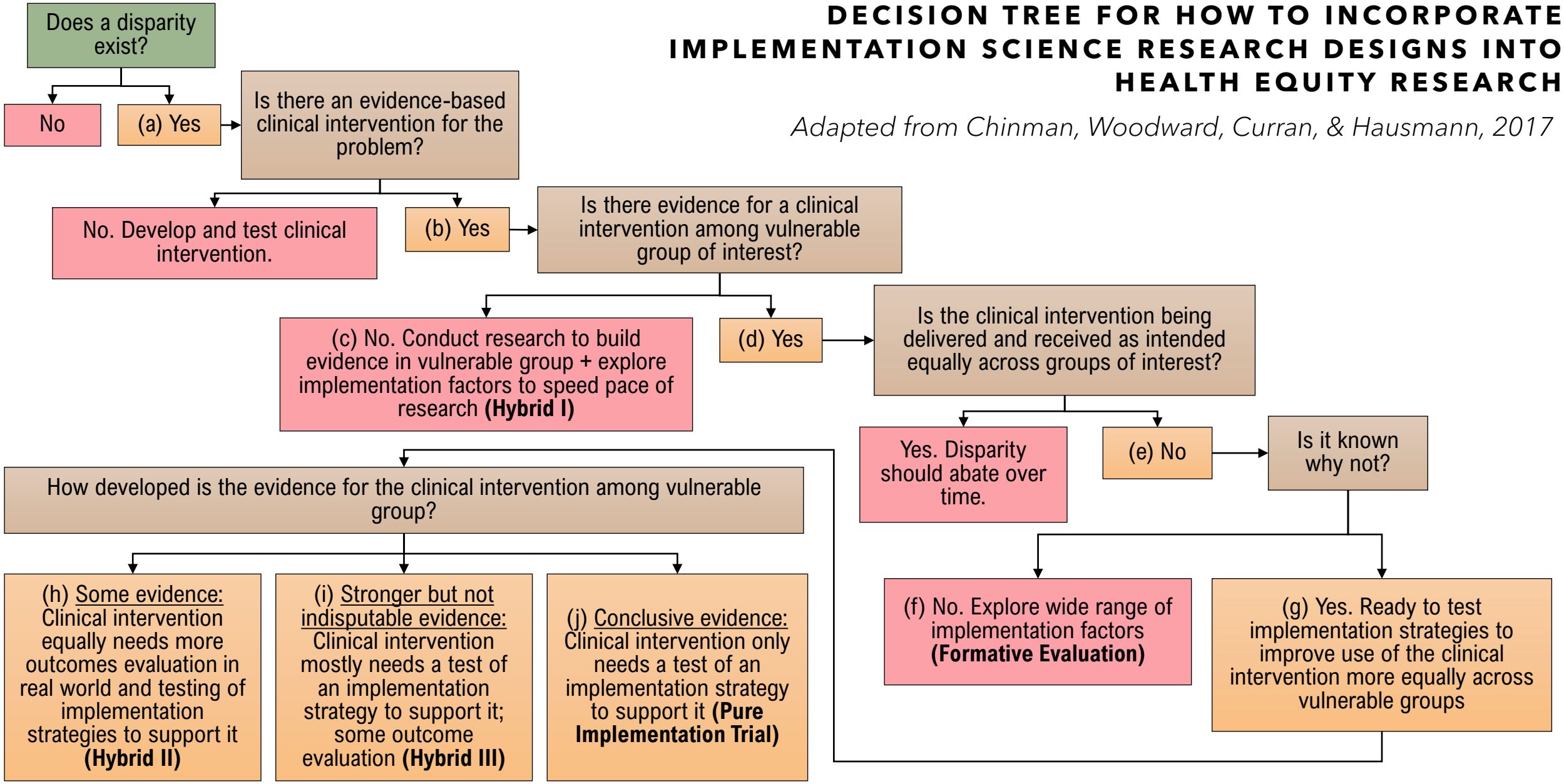
EXAMPLE QUESTIONS GUIDING DISSEMINATION AND IMPLEMENTATION RESEARCH (D&I) VS. HEALTH EQUITY RESEARCH (FROM A CFIR PERSPECTIVE)

Adapted from Chinman, Woodward, Curran, & Hausmann, 2017

Dissemination and Implementation Research		Health Equity Research
How do we get people to use an evidence-based practice (EBP)?	**Main Research Question**	Why don't certain groups use an evidence based practice (EBP)?
What characteristics of an EBP are known to influence the success of implementing said EBP?	**Characteristics of Intervention**	What characteristics of an EBP predict better success at reducing health inequities?
What policies, incentives, or requirements are associated with successful implementation of an EBP?	**Outer Setting**	What social determinants perpetuate inequities in use of an EBP?
What parts of the organization (i.e., healthcare setting, clinic, etc.) may influence implementation of the EBP?	**Inner Setting**	What parts of the organization (i.e., healthcare setting, clinic, etc.) maintain disparities in use of an EBP?
What are characteristics of people we want to implement and use an EBP?	**Characteristics of Individuals**	What moderates the association between characteristics of people we want to implement/use an EBP and disparities in use of the EBP?
What implementation strategies (e.g., engaging stakeholders, data audit and feedback, networking, marketing, etc.) show the most promise for getting an EBP into place?	**Implementation Process**	What implementation strategies (e.g., engaging stakeholders, data audit and feedback, changing infrastructure, marketing, etc.) show the most promise for reducing health inequities in use of an EBP?

DECISION TREE FOR HOW TO INCORPORATE IMPLEMENTATION SCIENCE RESEARCH DESIGNS INTO HEALTH EQUITY RESEARCH

Adapted from Chinman, Woodward, Curran, & Hausmann, 2017



III.

APPLICATION OF IMPLEMENTATION SCIENCE IN HEALTH EQUITY RESEARCH

EQUITY IN PAIN TREATMENT (EQUIPT): PROJECT BACKGROUND

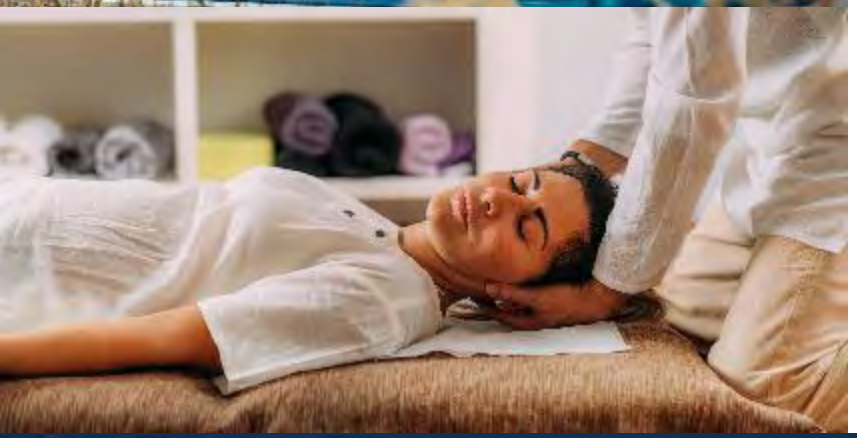
SOCIAL DETERMINANTS OF PAIN

- Chronic, non-cancer pain is a critical issue for Veteran health care (Nahin, 2017)
- Gaps in pain care persist among certain groups despite groups being equally as likely to suffer from chronic pain
  - Veterans of color are less likely than White Veterans to receive comprehensive pain management and monitoring
    (Burgess et al., 2013; Hausmann et al., 2013)
  - Women Veterans prescribed higher dose or long-term opioid regimens compared with men
    (Gibson et al., 2019)
- Social determinants of health can exacerbate pain severity (Brown et al., 2018; McClendon et al., 2021)

Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved on 16 March 2023 from https://health.gov/healthypeople/objectives-and-data/social-determinants-health

PAIN CARE PARADIGM SHIFT

- Three formative reports shifted the pain care paradigm from opioid therapy to non-pharmacological pain treatments (NPTs)
  - 2011 Institutes of Medicine "Relieving Pain in America"
  - 2016 HHS National Pain Strategy
  - 2016 Comprehensive Addiction and Recovery Act
- 2015 VA/DoD Clinical Practice Guidelines: NPTs indicated for **all** Veterans experiencing chronic pain

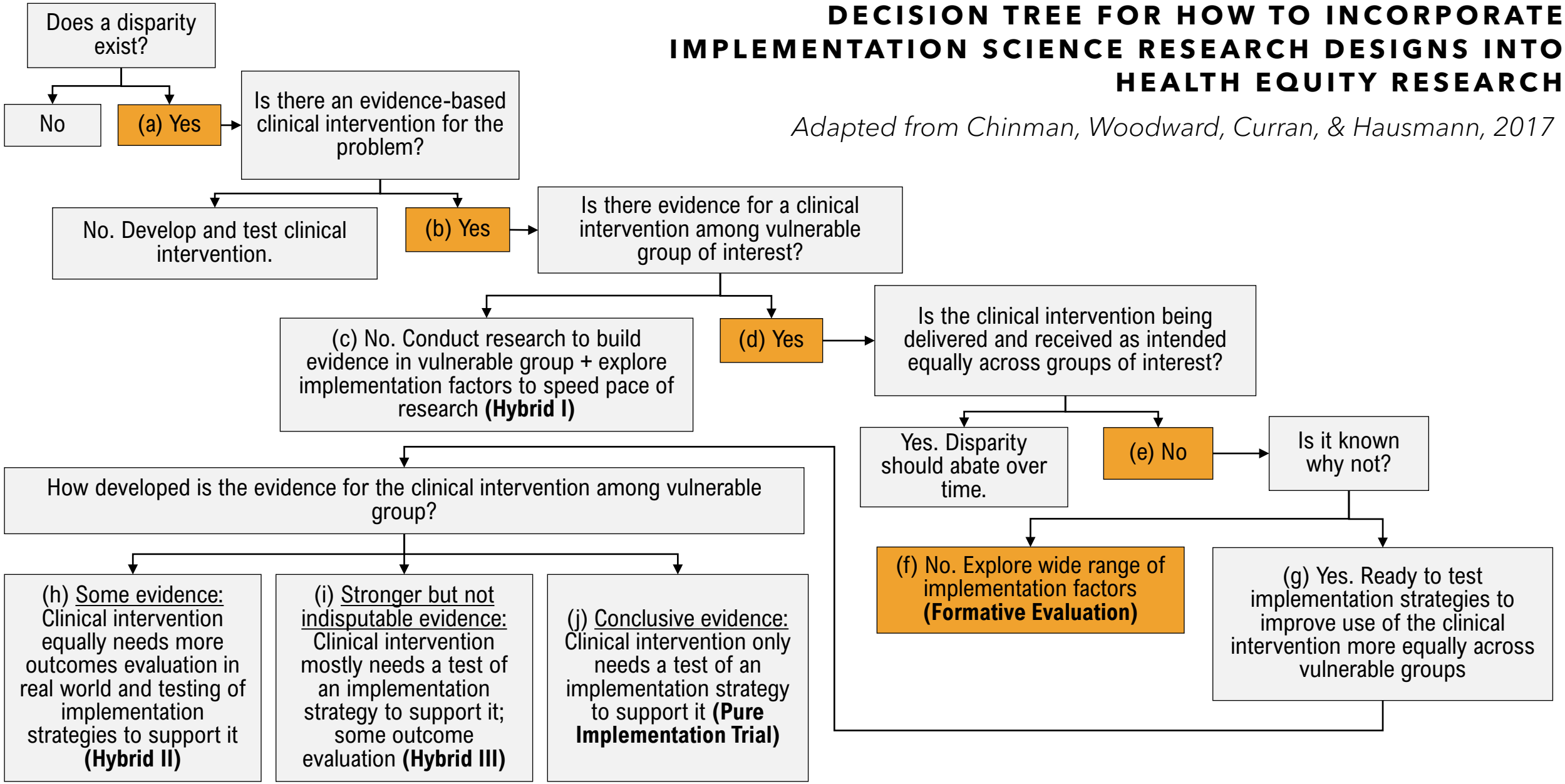


NON-PHARMACOLOGICAL PAIN TREATMENTS

- A VA Health Services Research & Development State-of-the-Art conference established **four types of NPTs** w/ evidence for reducing and/or managing pain (Kligler et al., 2018):
  1. psychological/behavioral therapy
  2. exercise/movement therapy
  3. manual therapy
  4. multimodal pain care
- Veterans of color are **less likely** to use evidence-based NPTs than White Veterans, with Black women **least likely of all** to use NPTs (Evans et al., 2018)
- Complementary and integrative health (e.g., chiropractic, acupuncture) use increased among **all** Veterans from FY17-19, but increases driven by community care (Taylor et al., 2020)

DECISION TREE FOR HOW TO INCORPORATE IMPLEMENTATION SCIENCE RESEARCH DESIGNS INTO HEALTH EQUITY RESEARCH

Adapted from Chinman, Woodward, Curran, & Hausmann, 2017



“There seems to be a high standard for developing interventions to impact health outcomes but less rigor and thoughtfulness in developing the implementation strategies needed to deliver the intervention.”

Maria Fernandez

IMPLEMENTATION MAPPING

Implementation mapping: Five-task method that can guide development of an implementation blueprint

	Implementation Mapping Tasks in Pre-Implementation Formative Evaluation
1	Conduct a needs assessment
2	State adoption & implementation outcomes & change objectives
3	Design implementation strategies
4	Produce implementation protocols & materials
5	Pilot blueprint and measure pre-implementation outcomes

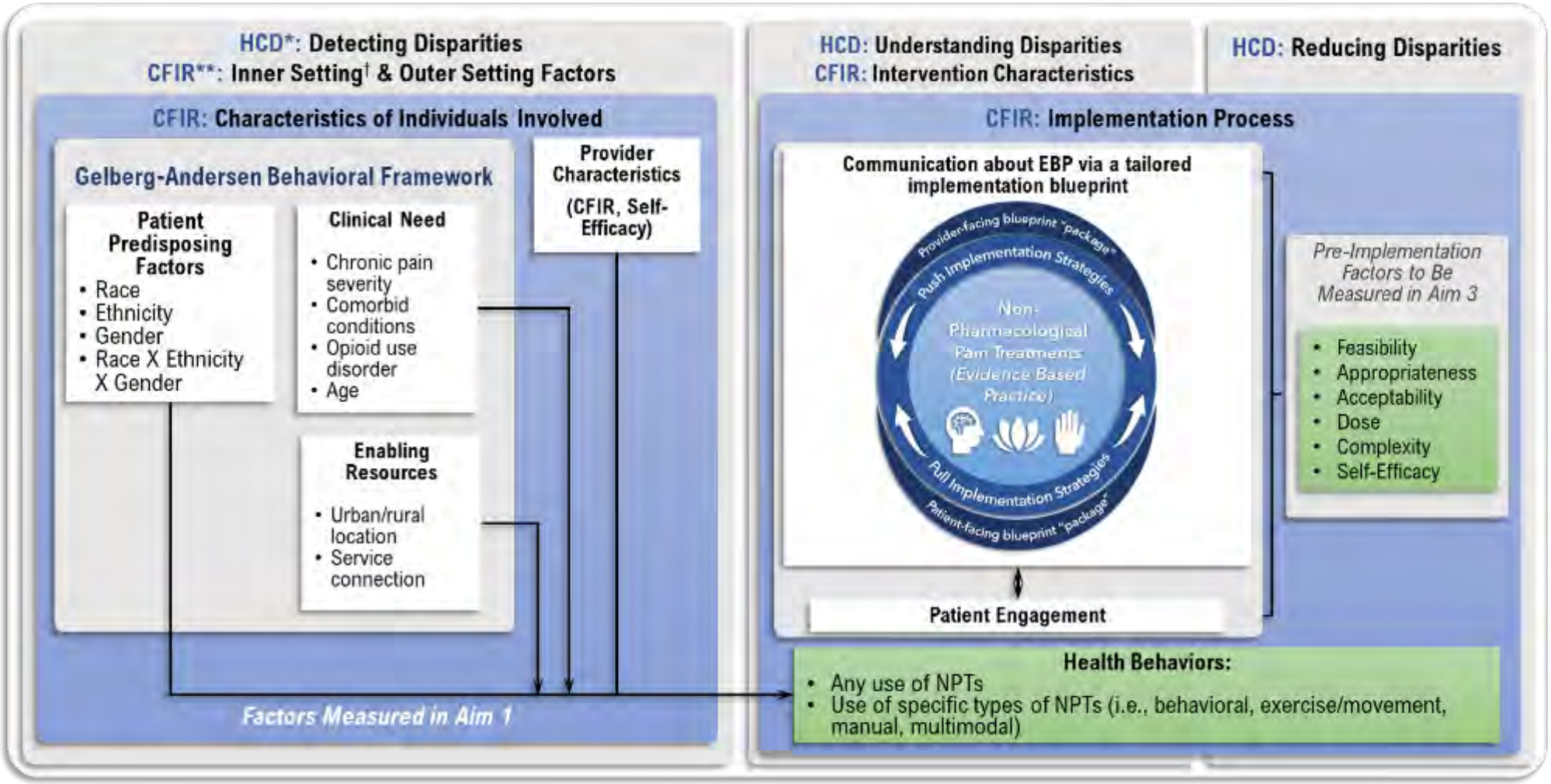
Fernandez ME, Ten Hoor GA, van Lieshout S, Rodriguez SA, Beidas RS, Parcel G, Ruiter RAC, Markham CM, Kok G. Implementation Mapping: Using Intervention Mapping to Develop Implementation Strategies. *Front Public Health*. 2019 Jun 18;7:158. doi: 10.3389/fpubh.2019.00158. PMID: 31275915; PMCID: PMC6592155.

PROJECT PURPOSE

To inform the development of a tailored implementation blueprint designed to increase diverse patients' engagement with non-pharmacological pain treatments

INTEGRATED THEORETICAL FRAMEWORK

Figure. **Integrated Conceptual Framework for "Addressing Disparities in Pain Management" Project**



*HCD = Health Care Disparities Framework; **CFIR = Consolidated Framework for Implementation Research
†Inner setting factors are referred to as "organizational factors" in project

PROJECT SPECIFIC AIMS

SPECIFIC AIMS

Aim 1

Understand and identify factors driving NPT use among diverse patients using mixed methods

Aim 2

Design an implementation blueprint for NPT uptake that is tailored to the needs and preferences of prescribers and diverse patients

Aim 3

Measure pre-implementation outcomes of the tailored blueprint, including feasibility, acceptability, appropriateness, dose, complexity, and self-efficacy among target end-users

AIM 1: Identify and understand factors driving NPT use among diverse patients using mixed methods

1.1. Identify potential implementation sites based on low NPT usage among diverse Veterans despite high NPT availability

1.2. Evaluate multi-level stakeholder perspectives necessary for designing an implementation blueprint tailored for diverse patients

- Qualitative interviews with diverse patients, providers of pain care, and NPT practitioners

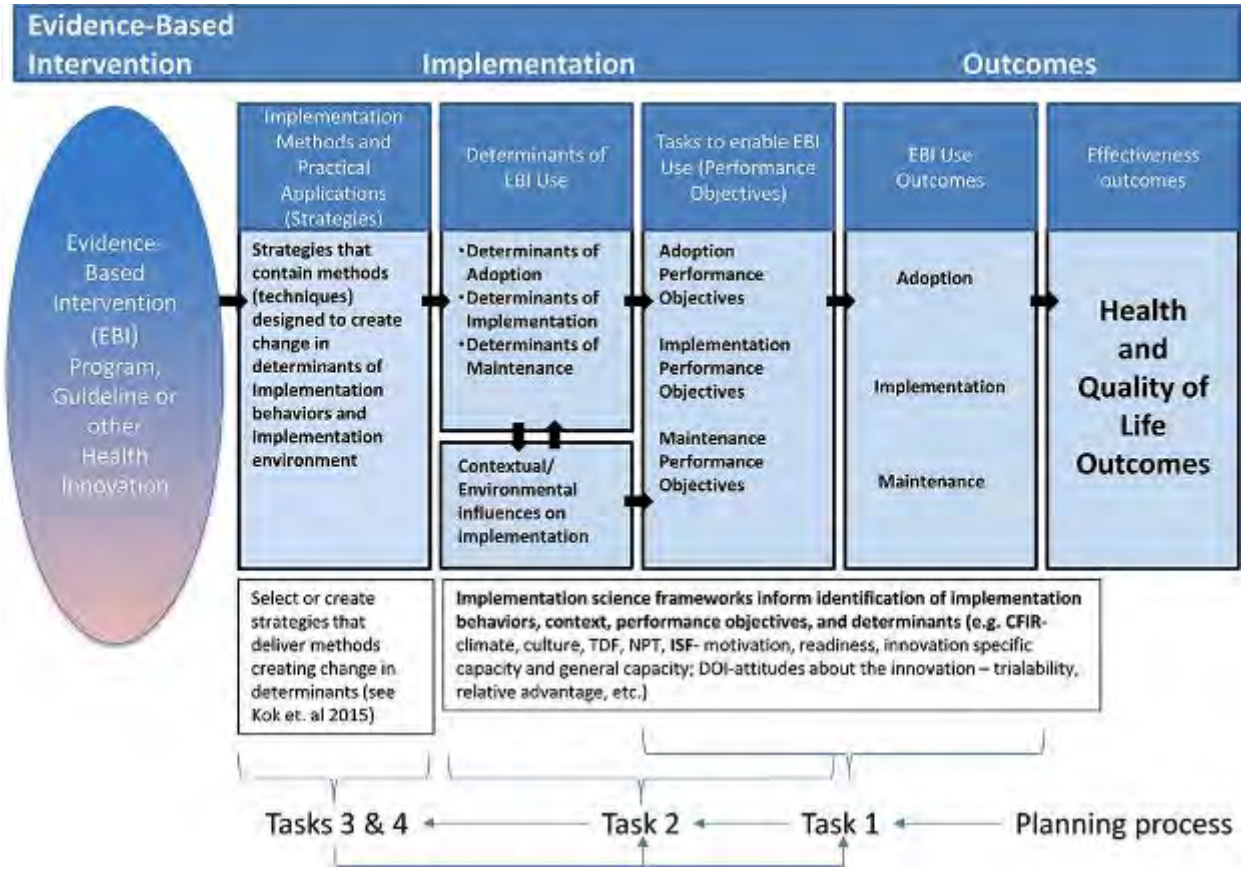
1.3. Assess disparities in NPT use using administrative health data

- Confirm disparities for any NPT use
- Explore disparities in use of any type of NPT

AIM 2: Design an implementation blueprint for NPT uptake that is tailored to the needs and preferences of prescribers and diverse patients

2.1. Generate a matrix of change outcomes resulting from use of a tailored implementation blueprint

2.2. Develop protocols and materials comprising the tailored implementation blueprint



Fernandez ME, Ten Hoor GA, van Lieshout S, Rodriguez SA, Beidas RS, Parcel G, Ruiter RAC, Markham CM, Kok G. Implementation Mapping: Using Intervention Mapping to Develop Implementation Strategies. *Front Public Health*. 2019 Jun 18;7:158. doi: 10.3389/fpubh.2019.00158. PMID: 31275915; PMCID: PMC6592155.

BLUEPRINT COMPONENTS (PROVIDER-FACING)

Components	Project Approach
Protocol for identifying patients of color and women who would be good candidates for multimodal NPT treatment but who are not engaged	• Aim 1.1 site identification • Aim 1.3 quantitative analysis
Clinical encounter scripts for having conversations with patients of color and women about preferences for NPTs for chronic pain (initial encounter and follow-up scripts)	• Aim 1.2 qualitative interviews
Information sheet describing NPT logistics with columns to indicate if any services tailored to diverse patients are available	• Aim 1.2 and 1.3 • Aim 2 matrix (Task 2) • VA reports, billing codes
External facilitation/training on how to identify patients eligible for NPTs using protocol and how to talk to them about it using the decision aid and scripts	• Aim 2 needs assessment (Task 1) • Aim 2 matrix to identify actors (Task 2)

BLUEPRINT COMPONENTS (PATIENT-FACING)

Components	Project Approach
Outreach materials, including individualized letters	• Draw on patient outreach letters developed in prior work • Aim 1.2 qualitative interviews with patients of color and women to identify preferences
Educational decision aid describing NPTs	• Aim 1.2 qualitative interviews with patients of color and women • Aim 1.3 quantitative analysis • Feedback from patient engagement boards for initial refinement & from targeted patients on content and usability
Discussion prompts and/or questions for patients to ask providers about NPTs	• Feedback from patient engagement panels on wording of discussion prompts and questions

AIM 3: Measure pre-implementation outcomes of the tailored blueprint developed in Aim 2, including feasibility, acceptability, appropriateness, dose, complexity, and self-efficacy among target users

Data on pre-implementation outcomes will be gathered using evaluation surveys and brief qualitative interviews with 30-40 Veterans and 15-20 providers across four sites.

FROM PRE-IMPLEMENTATION TO SUSTAINMENT

Current study: Outcomes will set me up for a more rigorous implementation trial in the future

Pre-Implementation Formative Evaluation

Is gender-responsive care, as measured by receipt of primary care from a Women's Health primary care provider within and/or outside of a women's clinic **associated with NPT use?**

Hybrid Type I Trial

Test implementation blueprint at multiple additional sites; check implementation progress at set timepoints & **adjust implementation strategy** for "non-responsive" sites (Kilbourne et al., 2014)

Adaptive Implementation-Effectiveness Trial

SUMMARY

- Both intervention development and implementation strategy development can be tailored and attuned to health equity
- There are many synergies between health equity and implementation science research
- Implementation science is a conduit for achieving health equity

RESOURCES

- Health Equity Implementation Science Frameworks
  - Health Equity Implementation Framework (Woodward et al., 2019)
  - Transcreation Framework (Nápoles & Stewart, 2018)
  - EQ-DI Framework (Nooraie et al., 2020)

- Training and Webinars
  - NIH Training Institute in D&I Research in Cancer – "Exploring Health Equity in Implementation Science"
  - UCSF Research in Implementation Science for Equity (RISE)

ACKNOWLEDGEMENTS

The first study was supported by the Agency for Healthcare Research & Quality R36 dissertation award (1 R36 HS023731-01-A1; PI: Javier). EQUIPT is a Career Development Award funded by VA HSR&D (award number pending; PI: Javier)

Dissertation Committee: Faye Belgrave, PhD, Rosalie Corona, PhD, and Suzanne Mazzeo, PhD

EQUIPT Mentorship Team:
- Amanda Midboe, PhD
- Diana Burgess, PhD
- Susan Frayne, MD, MPH
- Rachel Kimerling, PhD

Consultants:
- Carrie Gray, PhD
- Stephanie Taylor, PhD

EQUIPT Operational Partners:
- Office of Health Equity (OHE)
- Office of Patient-Centered Care and Cultural Transformation (OPCC&CT)
- Office of Women's Health (OWH)
- Pain Management, Opioid Safety, and Prescription Drug Monitoring Program (PMOP)
- Pharmacy Benefits Management – Academic Detailing Service (PBM-ADS)
- VA Palo Alto Veteran and Family Council
- Women's Health Research Network (WHRN)

THANK YOU!

Sarah Javier, PhD (she/her)
Sarah.Javier@va.gov
sjavier@stanford.edu

@ sarahjjavier

@ sjavier

Questions?