



# Advancing Implementing Science with a Health Equity Perspective

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SOPHE 2020-2021 President

# Presentation Topics

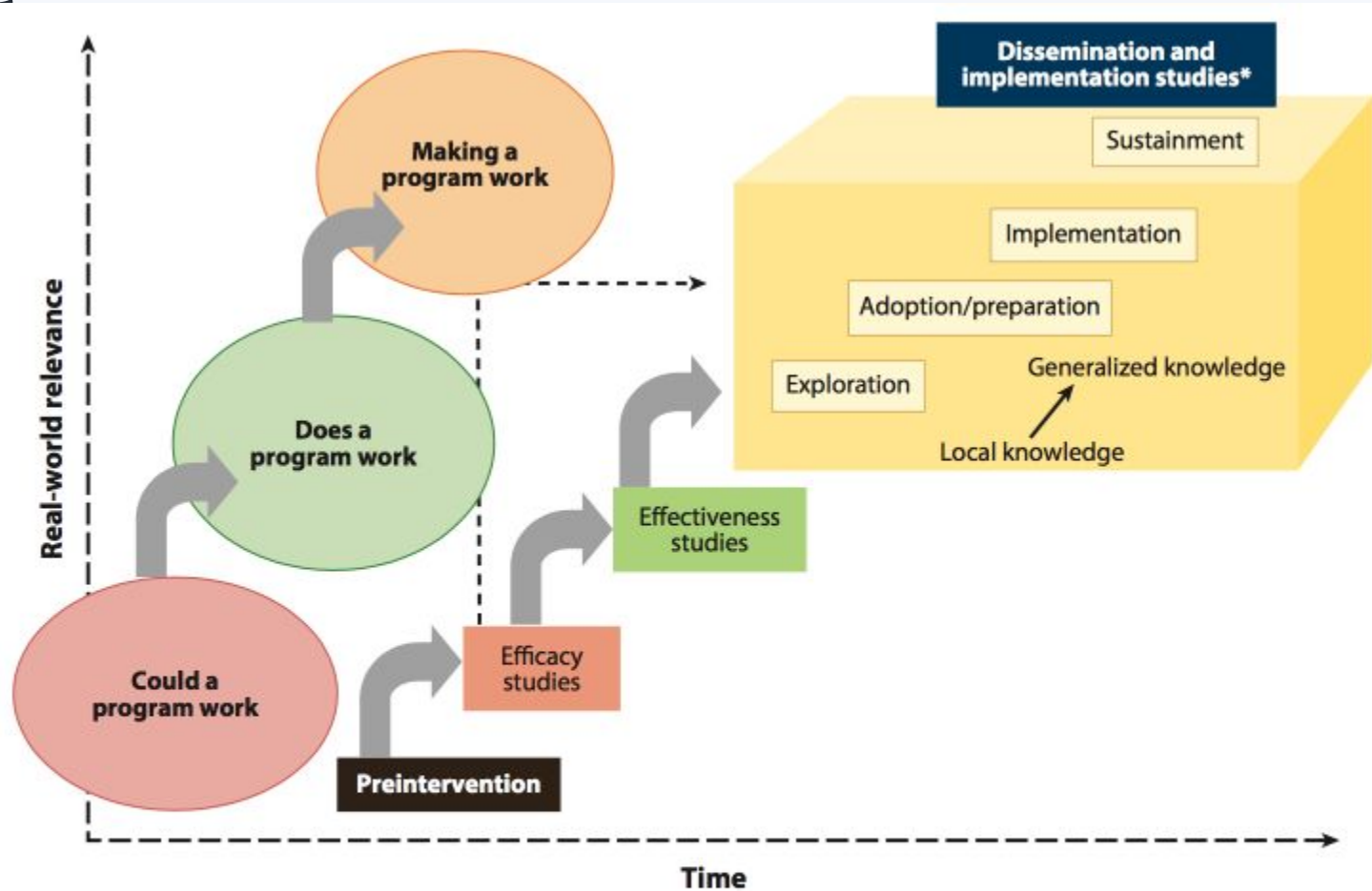
- Implementation Science (IS)
- Health Equity
- Commonalities between IS and Health Equity
- Research and Practice Challenges with Implementation Science
- Recommendations for Advancing IS with a Health Equity Lens



# Implementation Science

Implementation science seeks to understand and influence how scientific evidence is put into practice for health improvement

-Brownson



\*These dissemination and implementation stages include systematic monitoring, evaluation, and adaptation as required.

**Figure 1**

Traditional translational pipeline from preintervention, efficacy, effectiveness, and dissemination and implementation studies.

# What is health equity?

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

-RWJF





# Health Equity and [COVID-19]

## Racial and Ethnic Disparities in COVID-19 Incidence Among Persons Aged 18 and Over – December 31, 2020

Weekly / March 19, 2021 / 70(11):382–388

On March 10, 2021, this report was posted online.

Miriam E. Van Dyke, PhD<sup>1,2,\*</sup>; Maria C.B. Mendonça Aguiar, PhD<sup>3</sup>; Kristie E.N. Clarke, MD<sup>2,4</sup> ([View a](#)

[View suggested citation](#)

### Summary

#### What is already known about this topic?

U.S. racial and ethnic minority groups have been disproportionately affected by COVID-19.

#### What is added by this report?

Racial and ethnic disparities in COVID-19 incidence were substantial during the pandemic. Disparities were substantial during the pandemic because of a greater increase in incidence among white persons, rather than a decline among racial and ethnic minority groups. The largest persistent disparities involved Native Hawaiian and Pacific Islander, American Indian or Alaska Native, and Hispanic persons.



Coronavirus (15 Videos)

#### Views:

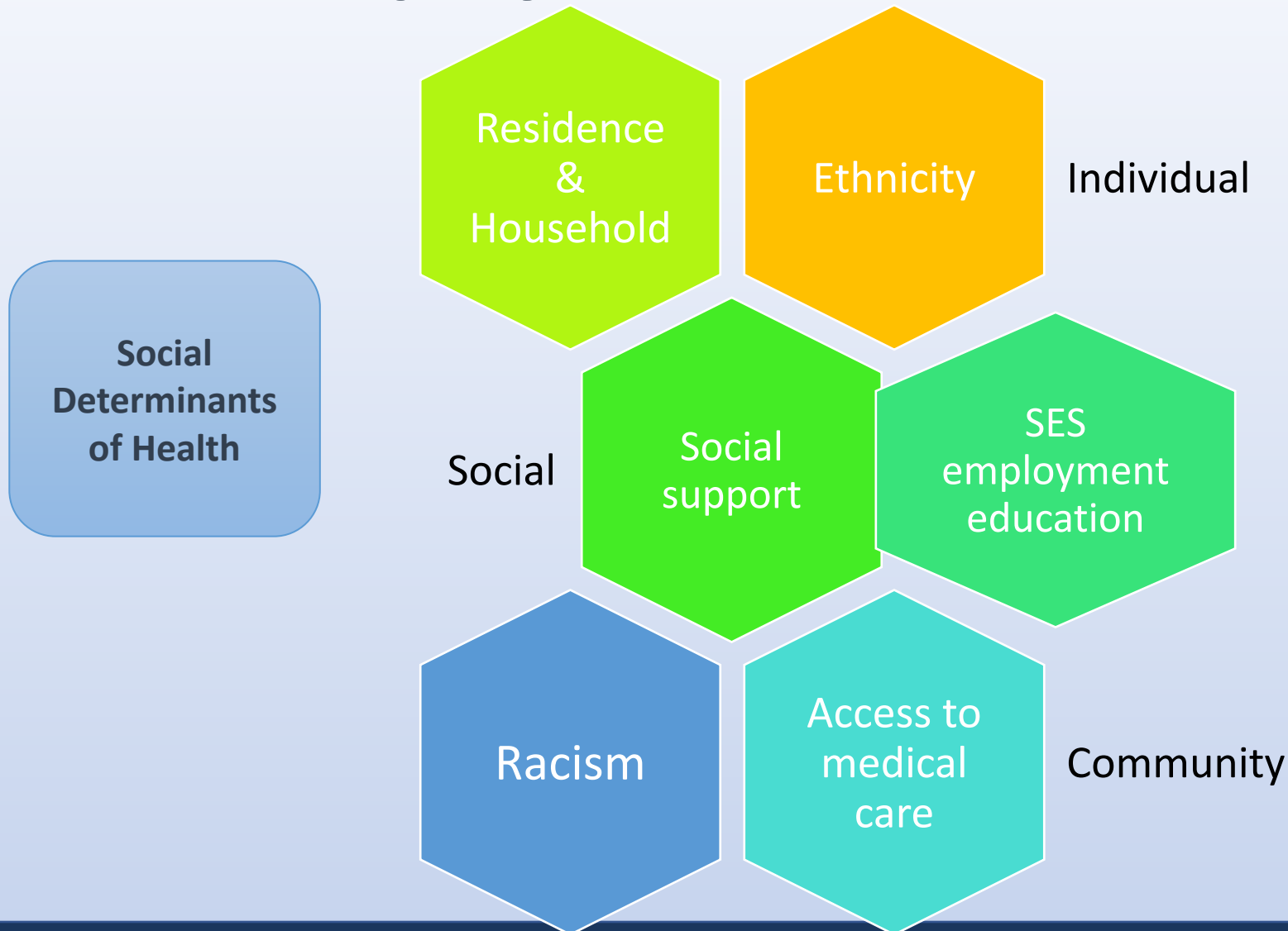
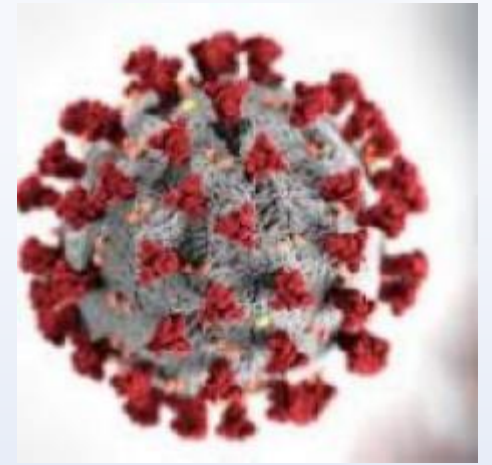
Views equals page views plus PDF downloads

## Why coronavirus is devastating for the Navajo Nation

### The Lead

The Navajo Nation has surpassed New York and New Jersey for the highest per-capita coronavirus infection rate in the US -- another sign of Covid-19's disproportionate impact on minority communities. [Source: CNN](#)

# Health Equity and [COVID-19]



# Commonalities of Implementation Science & Health Equity

- Shared goals of striving to improve quality of programs and services for multiple communities
- Both fields emphasize the importance of contextual factors in shaping these inequities and value multi-level approaches to address inequities



# Challenges in Implementation Science (Health Equity)





# Some Challenges in Implementation Science related to Equity

Limited Evidence Base	Underdeveloped Measures and Methods	Expand Attention to Context	Examine Implementation outcomes with an Equity Len
<ul style="list-style-type: none"><li>• Evidence-based interventions are limited and do not address all populations or context (lack of diversity)</li><li>• EBI generally focus on risks or diseases instead of upstream factors (i.e., social determinants of health)</li><li>• Limited understanding of policy implementation</li></ul>	<ul style="list-style-type: none"><li>• Limited measures with a focus on equity</li><li>• Designs: RCTs do not work for all types of interventions such as policies</li></ul>	<ul style="list-style-type: none"><li>• Focused more on micro and mezzo (organization) factors</li><li>• Limited assessment of macro-level factors related to implementation (history, culture, economics and policy)</li></ul>	<ul style="list-style-type: none"><li>• Examination of health equity in health care delivery has focused on services outcomes (effectiveness) and patient-level outcome(e.g., satisfaction, functioning,)</li><li>• Need to focus on other implementation outcomes (Procter et al, 2011) such as feasibility, fidelity, penetration, acceptability, sustainability, uptake, and cost of EBIs with a health equity lens</li></ul>

# Reframing IS in Healthcare Delivery Recommendations

1

- Focus on reach from the beginning

2

- Design and select intervention for vulnerable populations with implementation in mind

3

- Implement what works and develop implementation strategies that can help reduce inequities in care

4

- Develop the science of program adaptation

5

- Use an equity lens for implementation outcomes

# Recommendations for Advancing IS to achieve Health Equity

## The Next Frontier and Imperative



# 5 Recommendations to Advancing IS to achieve Health Equity

1

Practice Co-creation and Community Engagement in IS work

2

Infuse Health Equity into our Theories and Frameworks

3

Design IS Research that focuses exclusively on Populations experiencing Disparities

4

Embrace Practice-based Evidence

5

Train our Workforce and Foster Professional Development in IS and Health Equity





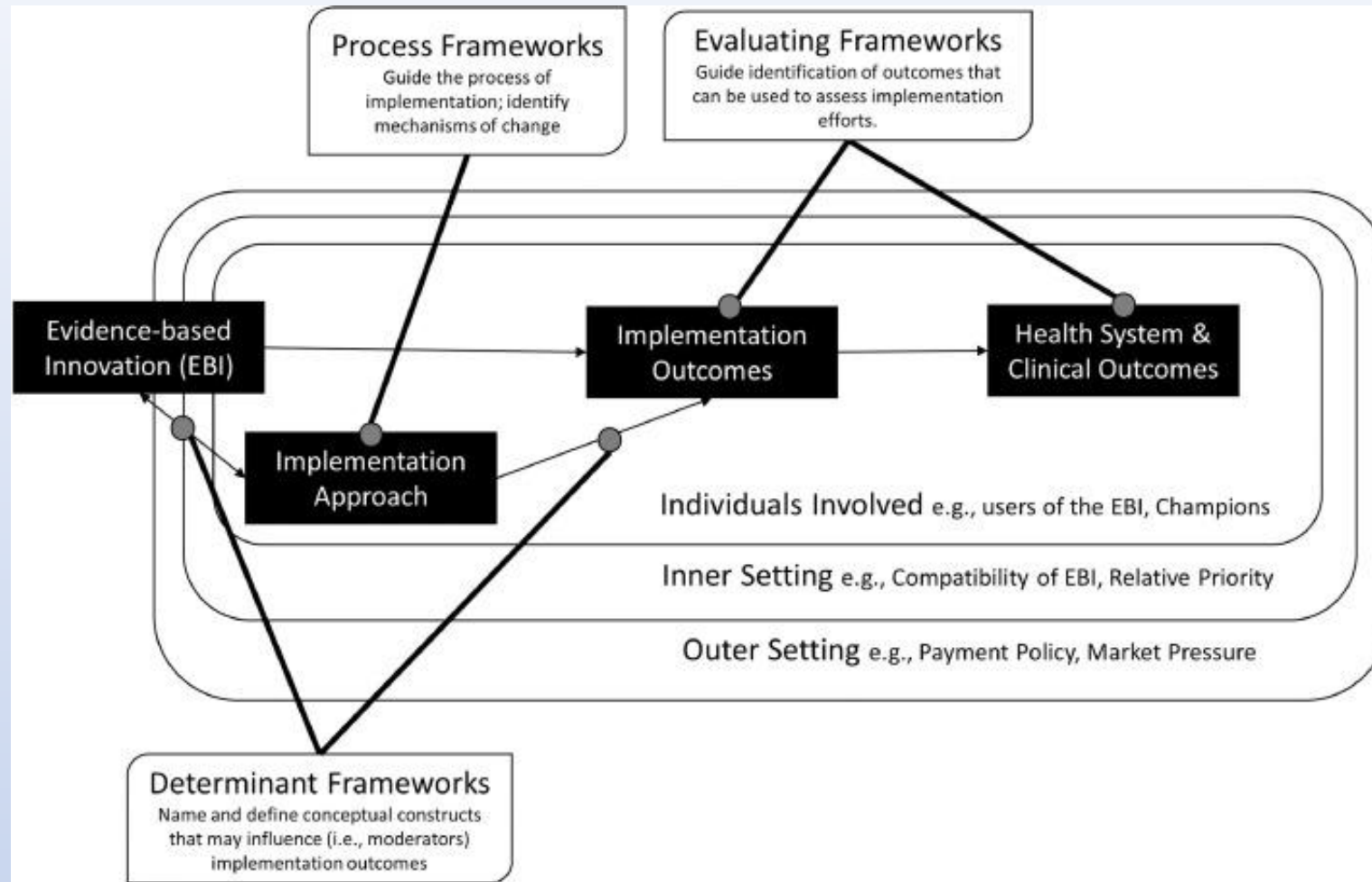
# 1) Practice Co-creation and Community Engagement in IS work

- Shift from research **for** communities and changes **to** practices to **with**
- Co-create the research agenda, research process, relationships, and implementation with stakeholders to achieve more equitable outcomes
- Create the infrastructure and conditions needed for the sustainable use of evidence
- Use participatory strategies:
  - Stakeholder engagement and advisory boards
  - Community-based participatory/engaged research
  - Qualitative data collection
  - Mixed methods approaches

Co-creation is the development of a “shared body of usable knowledge” across scientific, governance, and local practice boundaries (Kerkhoff & Lebel, 2015)

Participation is a health equity **driver**

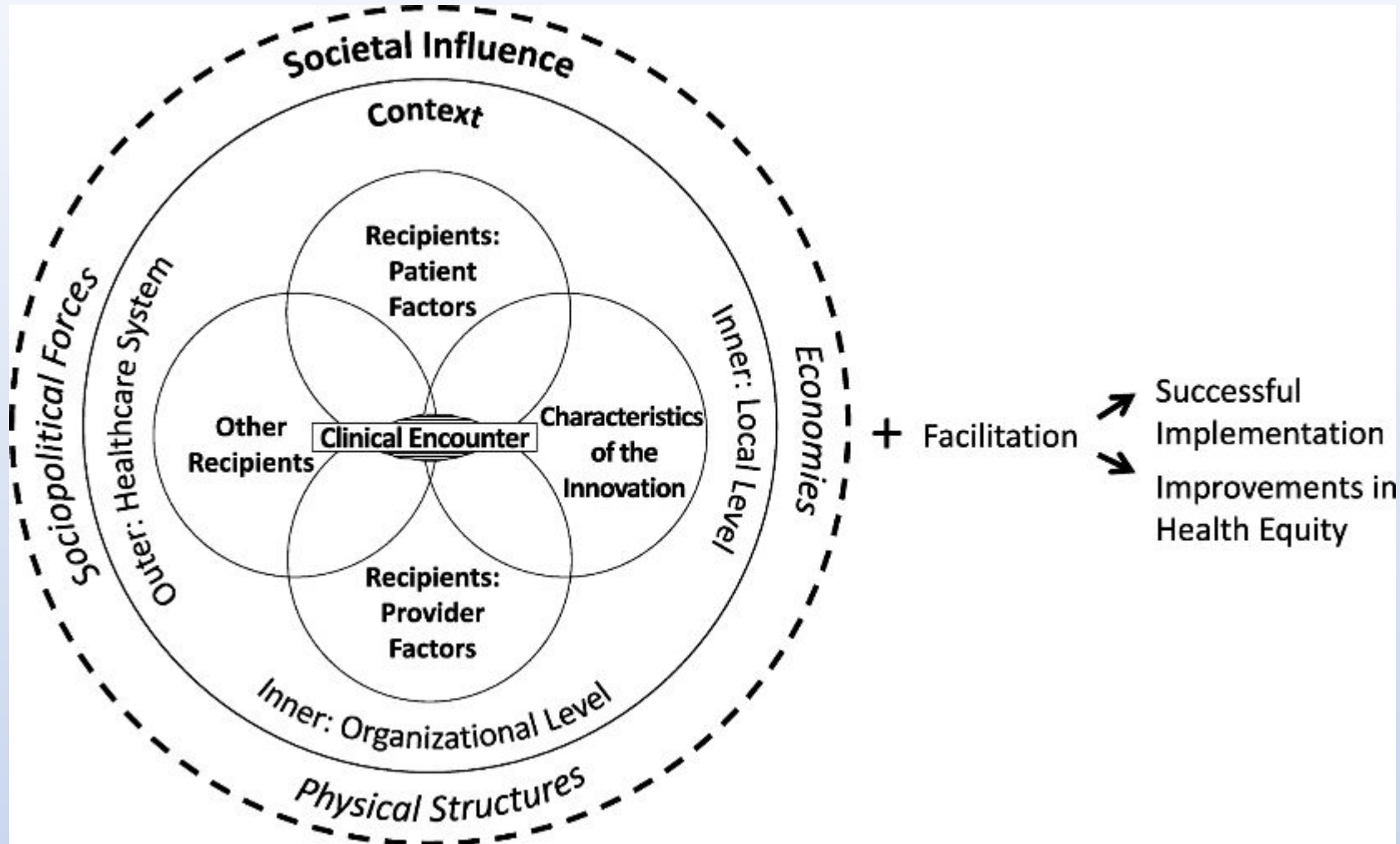
## 2) Infuse Health Equity into our IS Theories and Frameworks



Tabak et al (2012)  
reviewed over 61 D&I  
Frameworks  
(dissemination-imple  
mentation.org)

Few (~4) address  
health equity as a  
construct

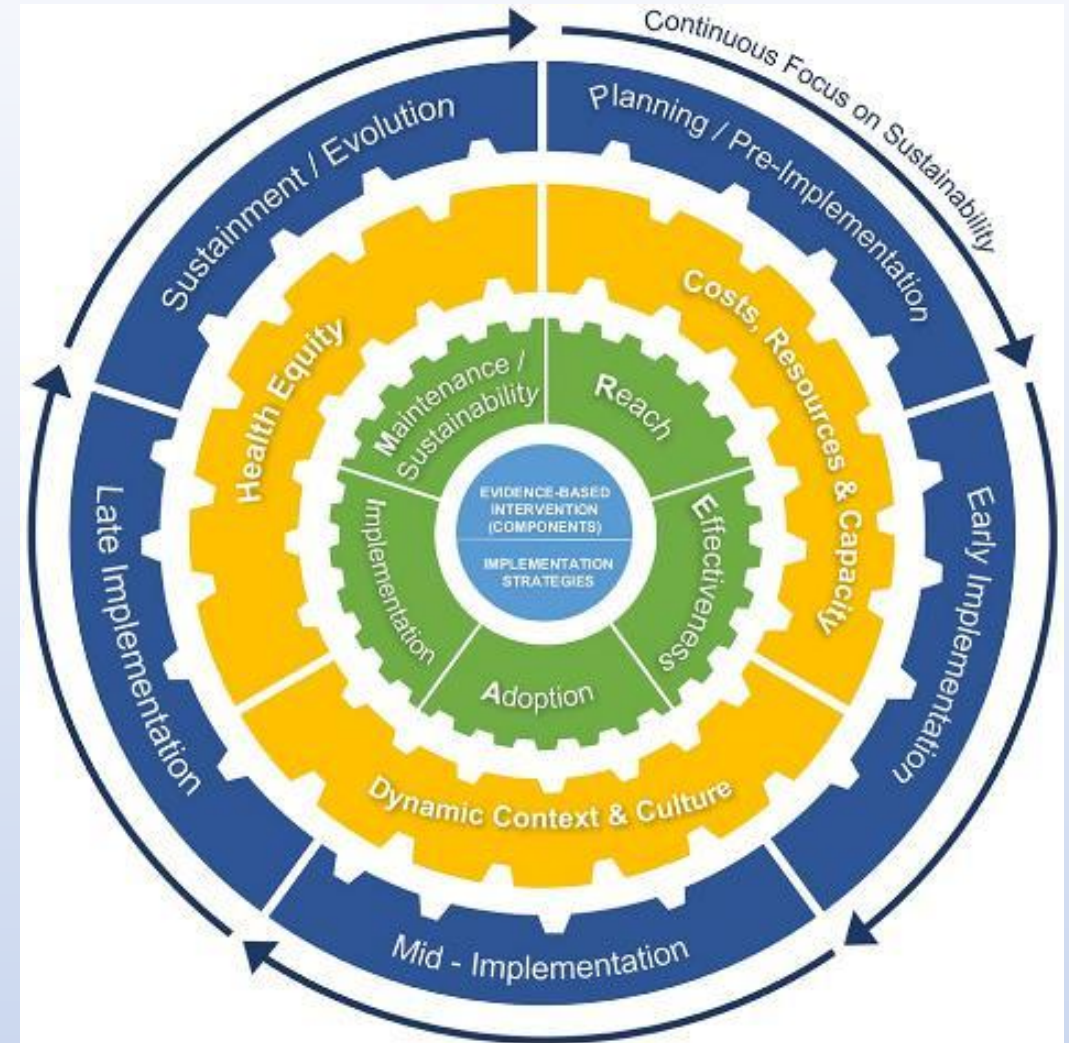
# Health Equity Implementation Framework



Health Care  
Disparities  
Framework  
+  
i-PARIHS  
(Integrated-Promot  
ing Action on  
Research  
Implementation in  
Health Services)

# RE-AIM Extension

- RE-AIM is an evaluation IS framework that measures 5 implementation outcomes of interventions
- Developed in 1999 and employed in many EBI evaluations
- Recent article expanding the framework to consider health equity and costs related to evidence-based interventions





# Frame Indicators around Health Equity

## Reach

*Indicators:* Number, proportion, representativeness of individuals who participate in EBI.

*Key Questions:* Who was the intended audience and who actually participated? Why or why not? How can we better reach them and engage with them?

*Health Equity Considerations:* Are all populations equitably reached by the EBI? Who is not reached by the EBI (in terms of a range of social dimensions and social determinants of health) and why? How can we better reach those who are not receiving the EBI and ensure we are reaching those who experience inequities related to social dimensions and social/structural determinants of health?

*Sustainability Considerations:* Who is/isn't reached by the EBI at various time points over time? (e.g., iterative measurement of Reach). Why or why not?

## Effectiveness

*Indicators:* The impact of an intervention on important health behaviors or outcomes, including quality of life (QOL) and unintended negative consequences; consider heterogeneity of effects.

*Key Questions:* Is the EBI effective? For whom? Are there any negative and/or unintended effects?

*Health Equity Considerations:* Are the health impacts experienced equitable across all groups on the basis of various social dimensions and social/structural determinants of health- why or why not? Do certain groups experience higher levels of negative effects or burdens?

*Sustainability Considerations:* Does the EBI continue to be effective at various time points over time? Among whom?

## Adoption

*Indicators:* The number, proportion, and representativeness of: (a) settings; and (b) staff/interventionists who deliver the program, including reasons for adoption or non-adoption across settings and interventionists.

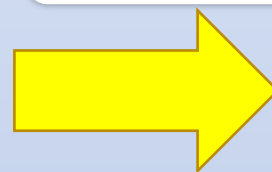
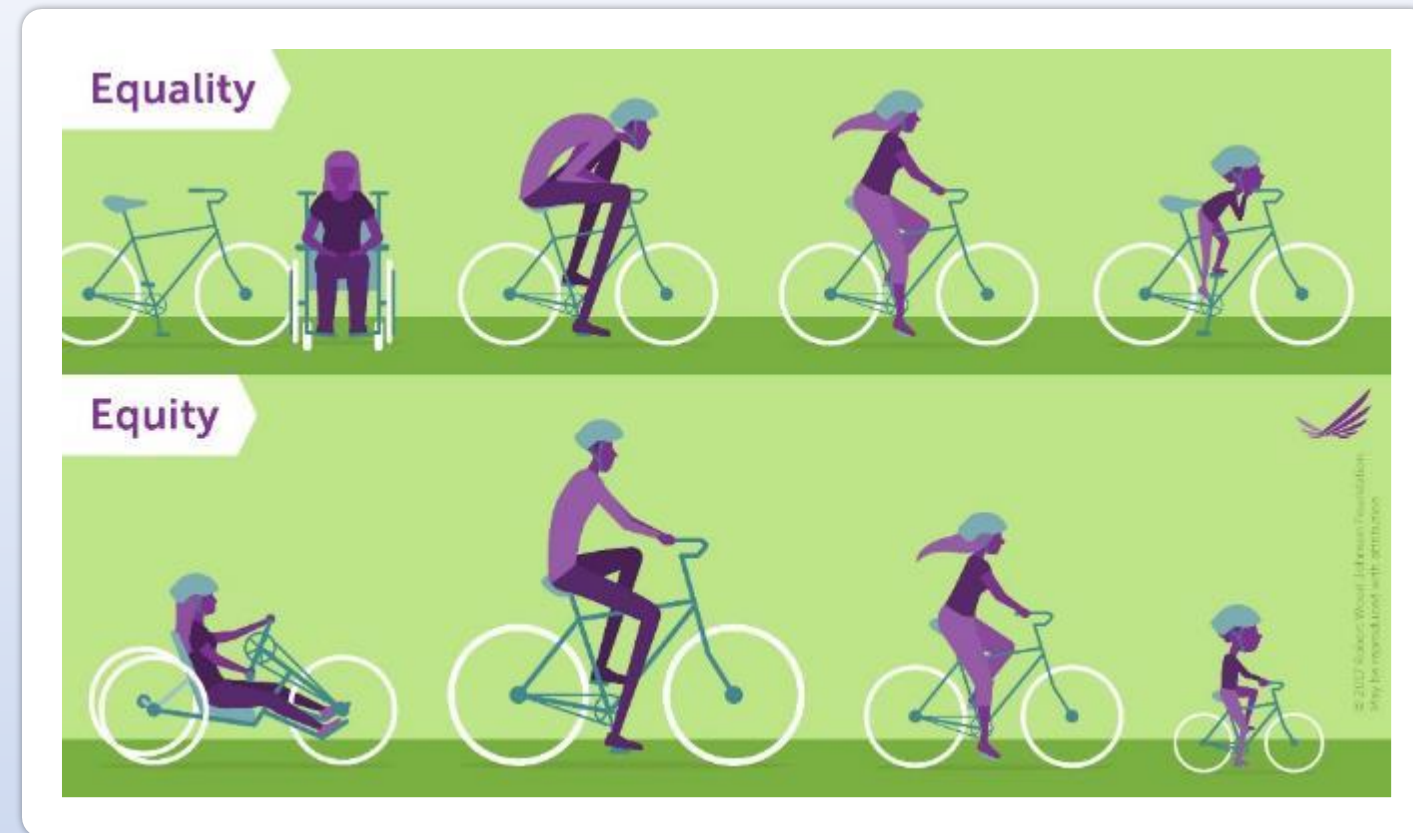
*Key Questions:* Where was the EBI applied and by who? Which sites/staff were invited and which excluded? Which participated and not? Why? How can the setting/context/staff be better supported to deliver the EBI?

*Health Equity Considerations:* Did all settings equitably adopt the EBI? Which settings and staff adopted and applied the EBI? Which did not and why? Were low-resource settings able to adopt the EBI to the same extent as higher-resource settings? What adaptations might be needed to facilitate adoption?

*Sustainability Considerations:* Which settings/staff continue to deliver the EBI over time? Which do not and why?

### 3) Design IS research that focuses exclusively on populations experiencing disparities

- Equal access is not equity; Interventions should **be tailored** to needs of specific population
- Addressing equity requires the **twin approach**
  - Population level strategies +
  - Targeted and culturally tailored interventions designed to address subpopulations with the highest disease rates



Federally qualified health centers,  
rural areas/organizations, local  
public health departments

# Seek to answer Questions and Measure Indices related to Equity in addition to Implementation

Do policies that reduce exposure for a disadvantaged community to health damaging factors work?

Do multi-level interventions increase knowledge, motivation and vaccination?

Do mobile vans increase access to screening? For which communities?

## STRUCTURAL DRIVERS

1. Neighborhood Disinvestment Index (index)
2. Gini Index<sup>6</sup> (index)
3. Index of Dissimilarity<sup>7</sup> (indicator)
4. Rates of incarceration by race/ethnicity (indicator)
5. Percent of residents from traditionally marginalized communities in positions of influence (indicator)
6. Geographic distribution of health: life expectancy by zip code (indicator)
7. Community Trauma (composite measure)
8. Community Readiness (composite measure)
9. Number of communities with indicator projects (indicator)

## COMMUNITY DETERMINANTS

### *Social-cultural environment*

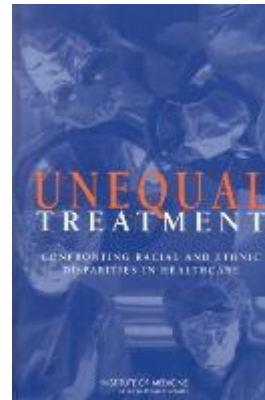
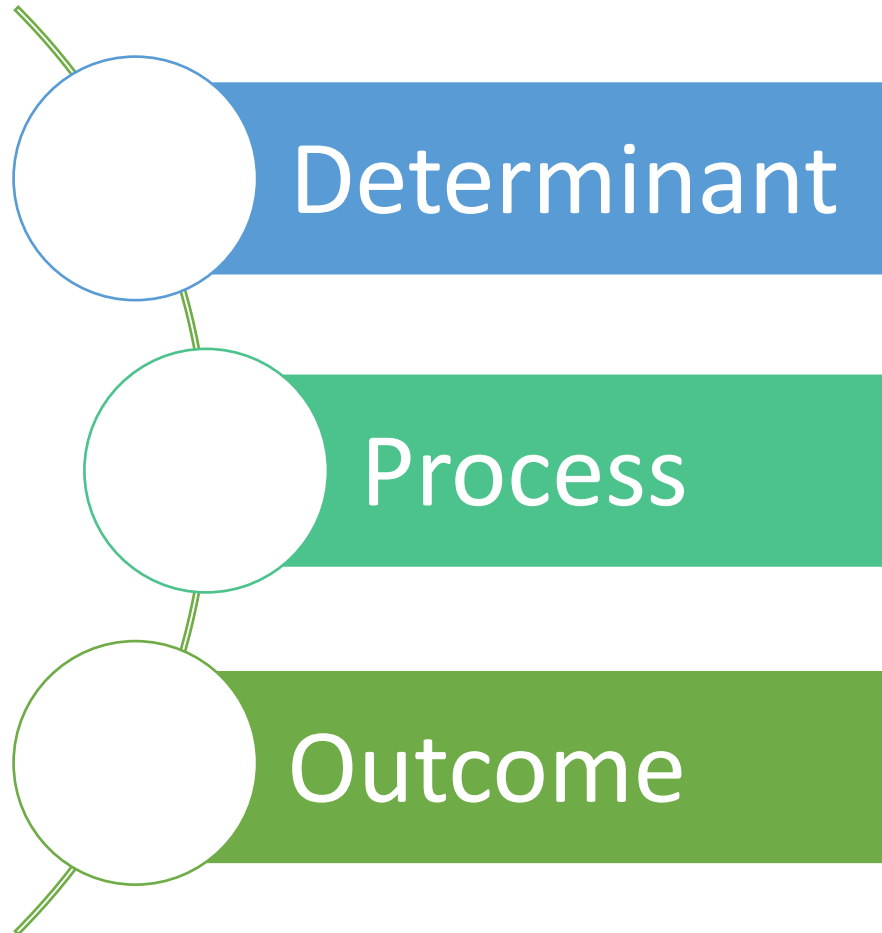
10. Collective efficacy<sup>8</sup> (index)
11. Civic engagement (composite measure)

### *Physical/built environment*

12. Physical activity environment<sup>9</sup> (index)
13. Retail Food Environment Index (index)
14. Food Marketing to Kids Group (index)
15. Housing Index<sup>10</sup> (index)
16. Affordability of Transportation and Housing<sup>11</sup> (index)
17. Pollution Burden Score<sup>12</sup> (index)
18. Mobility and Transportation<sup>13</sup> (index)
19. Opportunities for engagement with arts, music and culture<sup>14</sup> (index)
20. Per capita dollars spent for park space per city/neighborhood (indicator)



# Where does Health Equity fit in our IS work?





## 4) Embrace Practice-based Evidence and Practice Stakeholders

- Value tacit knowledge or qualitative narrative from the field that a program or approach works □ assist in its evaluation (i.e., evaluability assessments)
- Share power so that voices are equal: those who implement practice, those who evaluate practice and those who benefit from practice □ equitable implementation
- Understand their context and realities in IS work (e.g., low resource settings, types of implementers)
- Build the community's capacity in IS and health equity

If we want more  
**evidence-based practice,**  
we need more  
**practice-based evidence.**

**-Larry Green, DrPH**

## 5) Train our Health Education Workforce and Foster Professional Development in IS and Health Equity

Evidence-based public health into workforce

- New NCHEC 2020 competencies with focus on EB practice
- Integration of them into our professional development programs

Health departments and agencies

- In-service training on evidence-based practices and implementation science practices
- Seek Public Health Accreditation Board (PHAB) or employ their standards related to EB practices



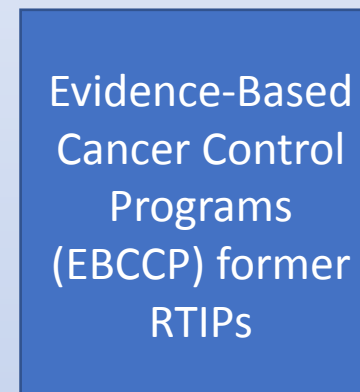
# Training Programs: Paradigm shift in Program Planning Approach

- Infuse evidence-based or evidence-informed strategies into courses
- Add program adoption (replication) and adaptation as part of the program planning options
- Shift from only behavior or disease focus to SDOH (i.e., literacy, transportation)
- Move toward interventions at the outer levels of social ecological model (e.g., policy, environmental changes) vs individual level



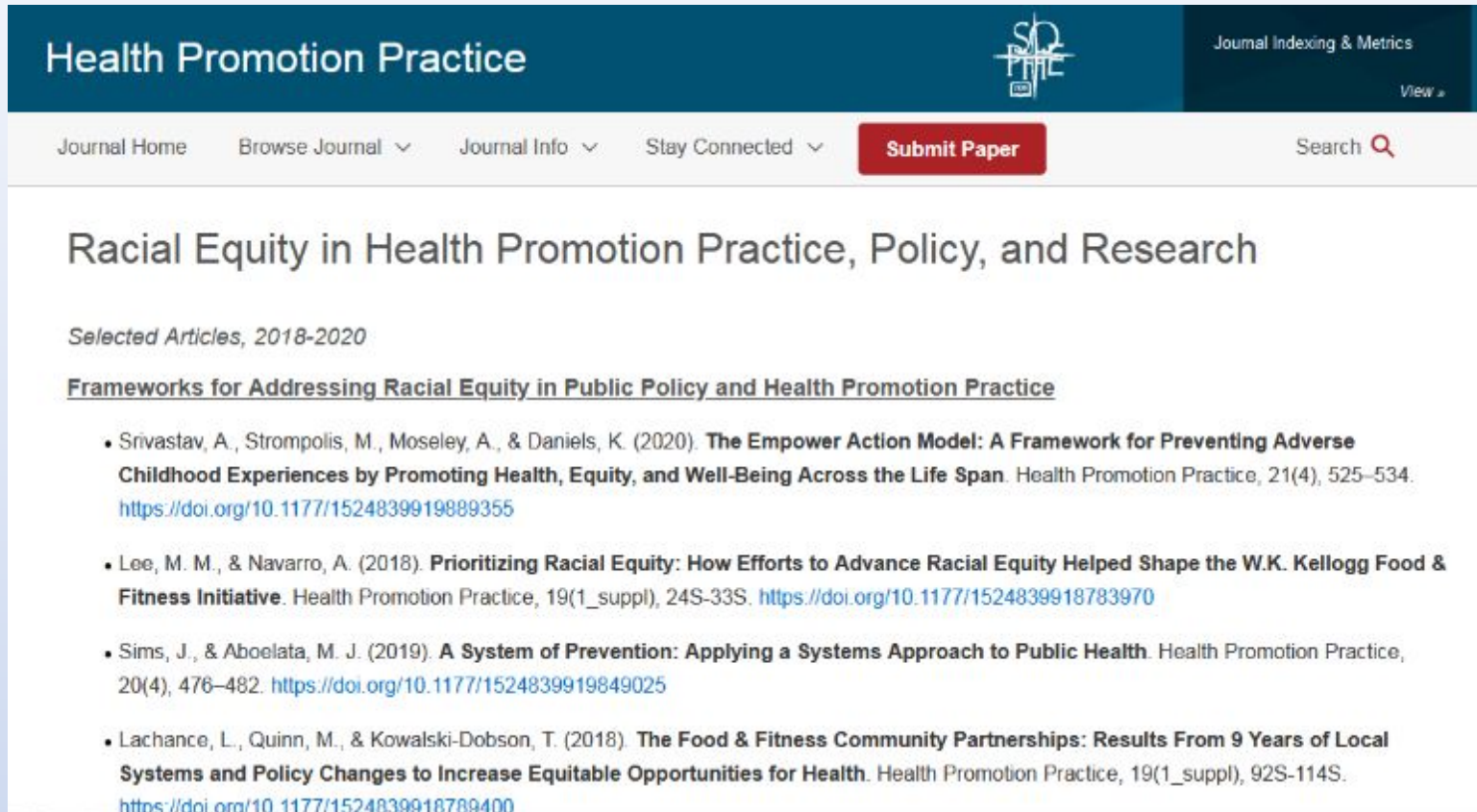
# Examples of EB CHES/MCHES Competencies

Sub-competency	
<b>Area II: Planning</b>	
2.3.4	Adopt, adapt, and/or develop tailored intervention(s) for priority population(s) to achieve desired outcomes.
<b>Area V: Advocacy</b>	
5.1.2	Examine evidence-informed findings related to identified health issues and desired changes
<b>Area VIII: Ethics and Professionalism</b>	
8.1.4	Promote health equity
8.1.5	Use evidence-informed theories, models, and strategies





# Resources for Implementation focused on Equity and IS



The screenshot shows the homepage of the journal 'Health Promotion Practice'. The header is dark blue with the journal title on the left, a logo in the center, and 'Journal Indexing & Metrics' on the right. Below the header is a navigation bar with links for 'Journal Home', 'Browse Journal', 'Journal Info', 'Stay Connected', a red 'Submit Paper' button, and a search bar. The main content area features the title 'Racial Equity in Health Promotion Practice, Policy, and Research' and a section for 'Selected Articles, 2018-2020'. A sub-section titled 'Frameworks for Addressing Racial Equity in Public Policy and Health Promotion Practice' lists four articles with their authors, titles, and DOIs.

Health Promotion Practice

Journal Indexing & Metrics

Journal Home Browse Journal Journal Info Stay Connected Submit Paper Search

## Racial Equity in Health Promotion Practice, Policy, and Research

*Selected Articles, 2018-2020*

### Frameworks for Addressing Racial Equity in Public Policy and Health Promotion Practice

- Srivastav, A., Strompolis, M., Moseley, A., & Daniels, K. (2020). **The Empower Action Model: A Framework for Preventing Adverse Childhood Experiences by Promoting Health, Equity, and Well-Being Across the Life Span.** Health Promotion Practice, 21(4), 525–534. <https://doi.org/10.1177/1524839919889355>
- Lee, M. M., & Navarro, A. (2018). **Prioritizing Racial Equity: How Efforts to Advance Racial Equity Helped Shape the W.K. Kellogg Food & Fitness Initiative.** Health Promotion Practice, 19(1\_suppl), 24S–33S. <https://doi.org/10.1177/1524839918783970>
- Sims, J., & Aboelata, M. J. (2019). **A System of Prevention: Applying a Systems Approach to Public Health.** Health Promotion Practice, 20(4), 476–482. <https://doi.org/10.1177/1524839919849025>
- Lachance, L., Quinn, M., & Kowalski-Dobson, T. (2018). **The Food & Fitness Community Partnerships: Results From 9 Years of Local Systems and Policy Changes to Increase Equitable Opportunities for Health.** Health Promotion Practice, 19(1\_suppl), 92S–114S. <https://doi.org/10.1177/1524839918789400>



# Words to Move Health Promotion in the Right Direction

Equity-centered research relies on **meaningful engagement and partnership** with **multiple stakeholders**, builds on existing resources, develops shared goals, and integrates knowledge and action that lead to a **fairer distribution of power and the benefits of an intervention for all partners**.

Brownson et al., 2021

*Equitable implementation* occurs when strong equity components (including explicit attention to the **culture, history, values, and needs of the community**) are integrated into the principles and tools of implementation science to facilitate quality implementation of effective programs for a specific community or group of communities.

Academy Health



# Gateway to the Future

## Path Forward

We need to integrate an equity approach in implementation studies to proactively address healthcare inequities





# My Virtual Presidency



SOPHE Chapter Visits

Midwest SOPHE  
GA SOPHE  
AR SOPHE  
MN SOPHE  
CT SOPHE

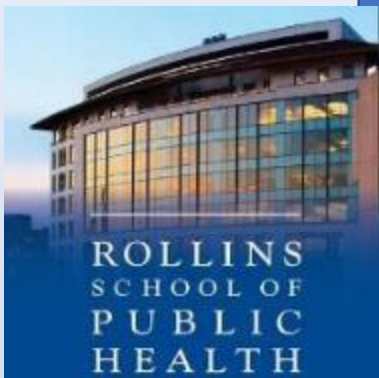
Board of Trustees Meeting



# Thanks!



SOPHE Board of Trustees  
Elaine Auld and SOPHE staff  
SOPHE Chapters &  
Members



GA SOPHE/GFPHE

Rollins School of Public  
Health



My Family

"Give the ones you love  
wings to fly, roots to  
come back and reasons  
to stay."  
Dalai Lama

**Special Heartfelt Gratitude to All!**

# **NPHW 2021**

## **National Public Health Week**

**April 5-11**

**[www.nphw.org](http://www.nphw.org)**



**NATIONAL  
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