

# What is ACCORDS?

ACCORDS conducts pragmatic research in real-world settings to improve health care and outcomes, by providing:

- A multi-disciplinary, collaborative research environment to catalyze innovative and impactful research
- Strong methodological cores and programs, led by national experts
- Consultations & team-building for grant proposals
- Mentorship, training & support for junior faculty
- Extensive educational offerings, both locally and nationally



# ACCORDS Upcoming Events

October 3-4, 2022 8:00-5:00 PM MT	<b>Introduction to Qualitative Research Workshop</b>  Facilitated by: Brooke Dorsey Holliman, PhD, MA; Juliana Barnard, MA; Caroline Tietbohl, PhD; and others
October 19, 2022 12:00-1:00 PM MT	<b>ACCORDS/CCTSI Community Engagement Forum</b>  Understanding and Appreciating the Capacities of the Community
October 24, 2022 12:00-1:00 PM MT	<b>Methods and Challenges in Conducting Health Equity Research</b>  Co-Creation: A Community Engagement Lens for Health Equity Research Presented by: Mónica Pérez Jolles, PhD, MA (CU Anschutz)
June 5-7, 2023 10:00 -3:00 PM MT	<b>COPRH Con 2023</b>  Save the date! More info coming soon!



# Health Equity Research: What it is and Why it is so Hard to do Well

Presented by:

**Romana Hasnain-Wynia, PhD**

Chief Research Officer, Office of Research  
Denver Health



# **Health Equity Research: What it is and why it is so hard to do well?**

**Romana Hasnain-Wynia, PhD  
Chief Research Officer  
Denver Health  
September 19, 2022**



# Objectives

- What is health equity
- How best to assess evidence gaps in health equity research
- Challenges of conducting health equity research
- How to advance health equity



# Health Equity

Health equity is achieved when every person has the opportunity to “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.” Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment. **(CDC)**

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. **(Robert Wood Johnson Foundation)**

# What is Health Equity Research

- Shift the language and emphasis away from health disparities solely (i.e., a focus on problem identification) to a focus on health equity, the highest level of health possible (i.e., a focus on solutions).
- Overwhelming evidence that health disparities are real, but there is limited research that supports the development of effective and sustainable strategies to reduce or eliminate these disparities.
- A shift in language also means shifting the research agenda toward population-level solutions. The shift to health equity involves developing and implementing interventions at the neighborhood, local, community, state, and national levels.

# EQUITY: How are we doing?

“The U.S. ranks a clear last on measures of equity. Americans with below-average incomes were much more likely than their counterparts in other countries to report not visiting a physician when sick; not getting a recommended test, treatment, or follow-up care; or not filling a prescription or skipping doses when needed because of costs.”

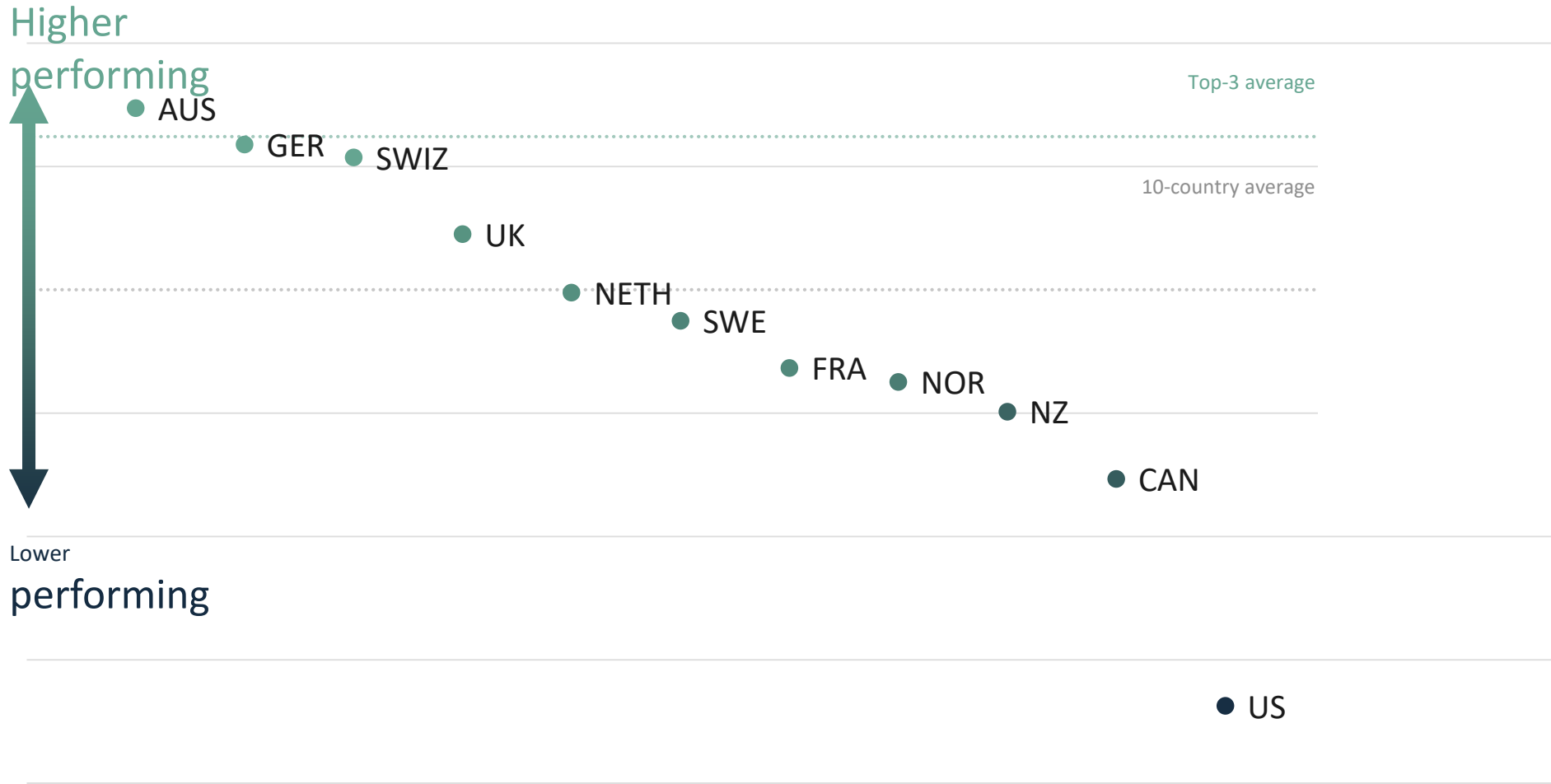
## Mirror, Mirror 2021: Reflecting Poorly

Health Care in the U.S. Compared to Other High-Income Countries





# Health Care System Performance Scores: Equity

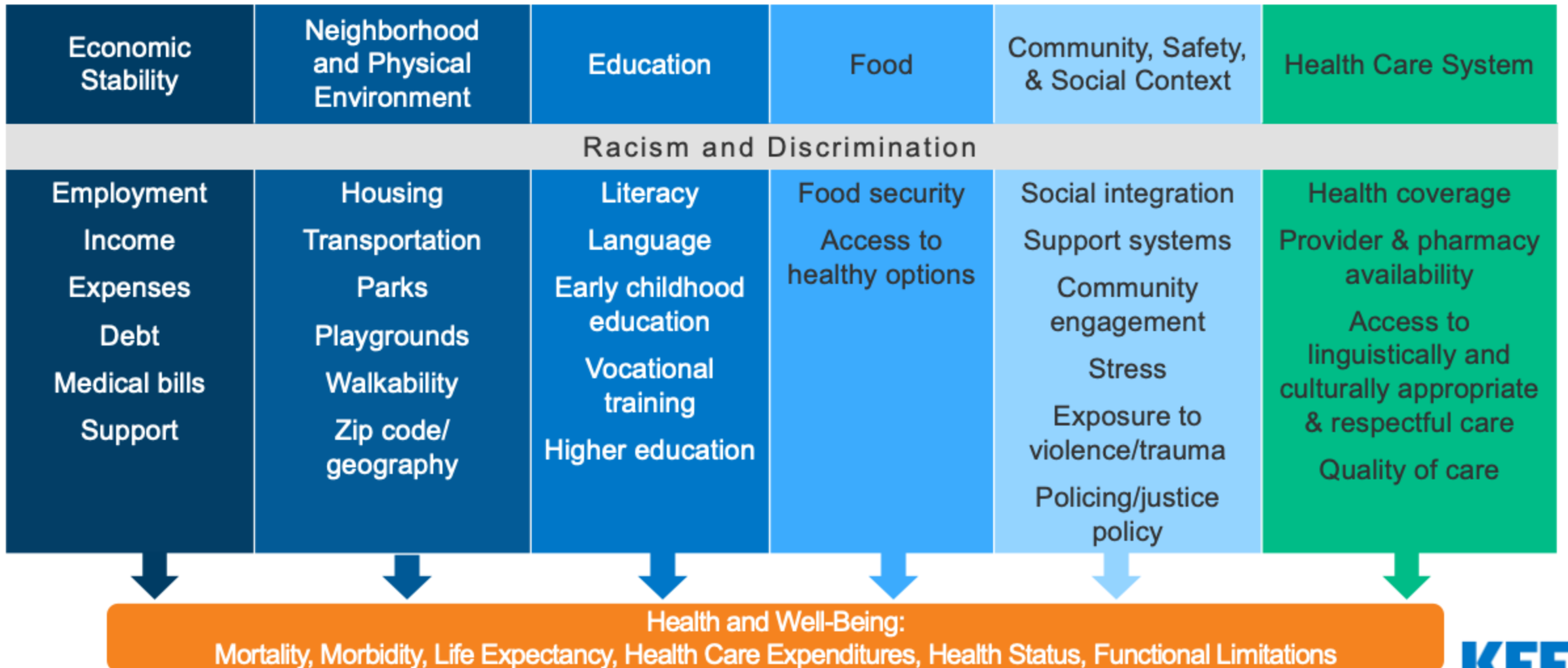


Note: To normalize performance scores across countries, each score is the calculated standard deviation from a 10-country average that excludes the US. See How We Conducted This Study for more detail.

Data: Commonwealth Fund analysis.

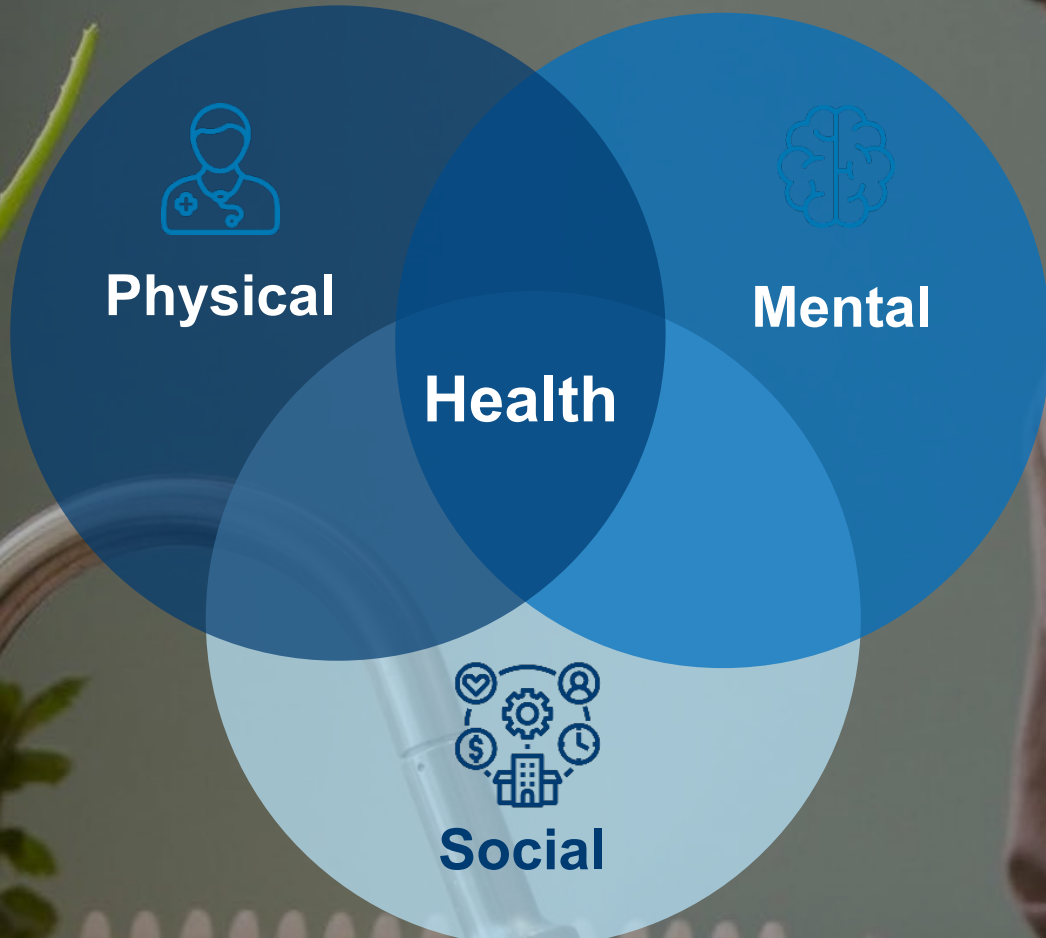
Figure 1

# Health Disparities are Driven by Social and Economic Inequities



# Social health is equally important as physical and mental health

Slide from  
Bechara Choucair, MD  
Sept 2022



# Where Should Our Focus Be ?

- Cultural Competence
- Implicit Bias Training
- Structural Racism
- System-level approaches
- Equity measurement
  - Alternative Payment Models
  - Integration into Delivery Models

Clyde Yancy, MD, JAMA, 2020 “Budgets, as authenticated and established by leadership, represent a moral contract with the communities that institutions serve.”



# Systemic and Structural Racism in Health Care



# Systemic and Structural Racism : Where you go matters

- Between 1994-1995, MOST US hospitals did not admit ANY Black Medicare beneficiaries
- Black AMI patients were admitted to only 1000 of the 4690 acute care hospitals nationwide
- 80% of all primary care visits by black patients were made to 22% of physicians



By Jan Blustein, Joel S. Weissman, Andrew M. Ryan, Tim Doran, and Romana Hasnain-Wynia

# Analysis Raises Questions On Whether Pay-For-Performance In Medicaid Can Efficiently Reduce Racial And Ethnic Disparities

**ABSTRACT** In 2006 Massachusetts took the novel approach of using pay-for-performance—a payment mechanism typically used to improve the quality of care—to specifically target racial and ethnic disparities in hospital care for Medicaid patients. We describe the challenges of implementing such an ambitious effort in a short time frame, with limited resources. The early years of the program have yielded little evidence of racial or ethnic disparity in hospital care in Massachusetts, and raise questions about whether pay-for-performance as it is now practiced is a suitable tool for addressing disparities in hospital care.

SPECIAL ARTICLE

# Separate And Unequal: Racial Segregation And Disparities In Quality Across U.S. Nursing Homes

Residential segregation in U.S. cities disproportionately places blacks in poorer-performing nursing homes.

by David Barton Smith, Zhanlian Feng, Mary L. Fennel, Jacqueline S. Zhan, and Vincent Mor

## Do Hospitals Provide Lower-Quality Care To Minorities Than To Whites?

When minority patients receive hospital care, they receive the same standard of care that white patients receive.

by Darrell J. Gaskin, Christine S. Spencer, Patrick Richard, Gerard F. Anderson, Neil R. Powe, and Thomas A. LaVeist

## Primary Care Physicians Who Treat Blacks and Whites

Peter B. Bach, M.D., M.A.P.P., Hoangmai H. Pham, M.D., M.P.H., Deborah Schrag, M.D., M.P.H., Ramsey C. Tate, B.S., and J. Lee Hargraves, Ph.D.

ORIGINAL INVESTIGATION

## Disparities in Health Care Are Driven by Where Minority Patients Seek Care

*Examination of the Hospital Quality Alliance Measures*

Romana Hasnain-Wynia, PhD; David W. Baker, MD, MPH; David Nerenz, PhD; Joe Fringlass, PhD; Anne C. Beal, MD, MPH; Mary Beth Landrum, PhD; Raj Behal, MD, MPH; Joel S. Weissman, PhD

## Do Primary Care Physicians Treating Minority Patients Report Problems Delivering High-Quality Care?

Practice resources appear to be a determining factor in whether or not physicians treating predominantly minority patients deliver care of adequate quality.

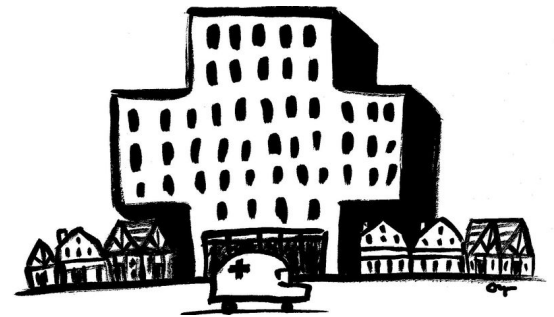
by James D. Reschovsky and Ann S. O'Malley

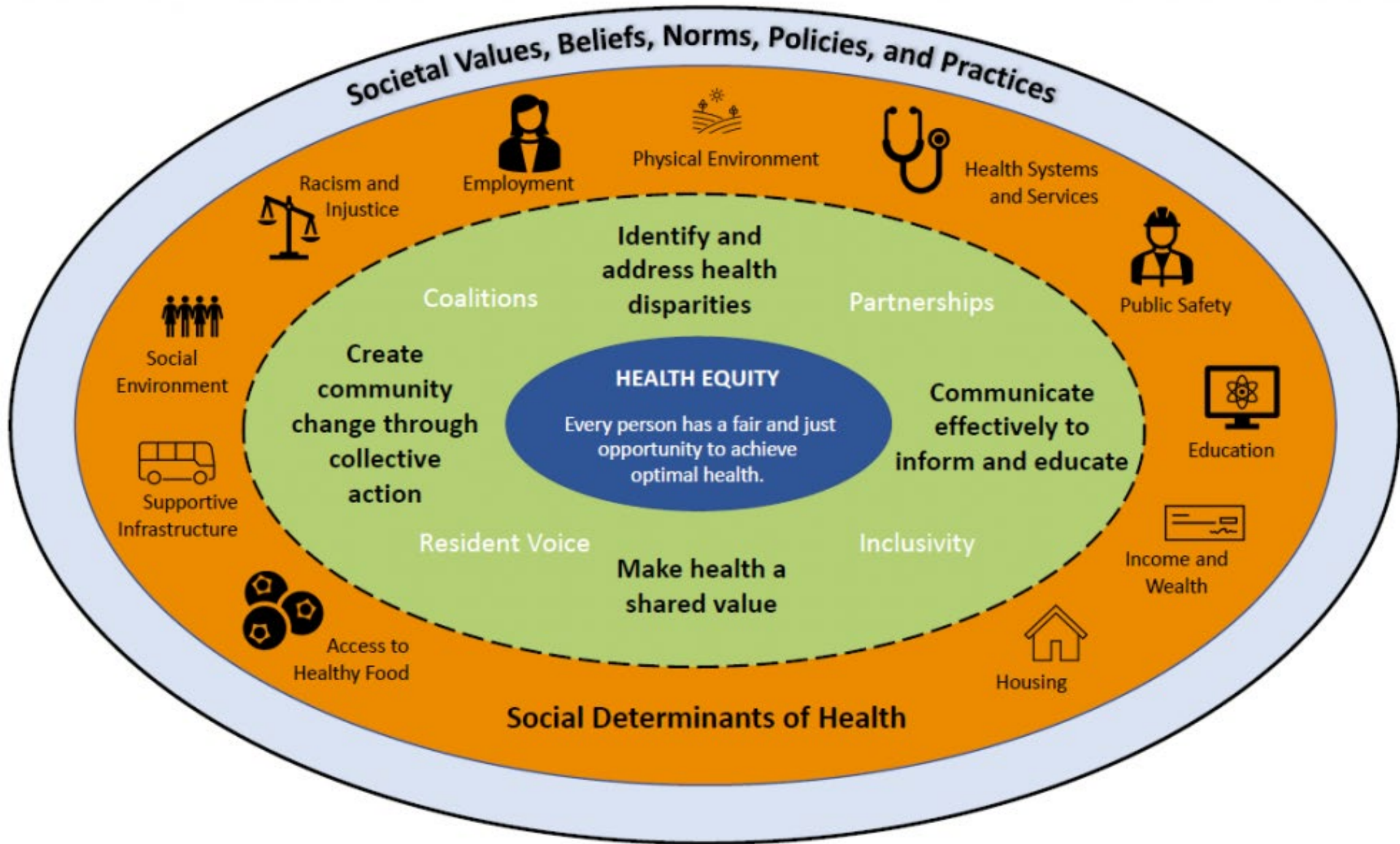


# Where you go matters

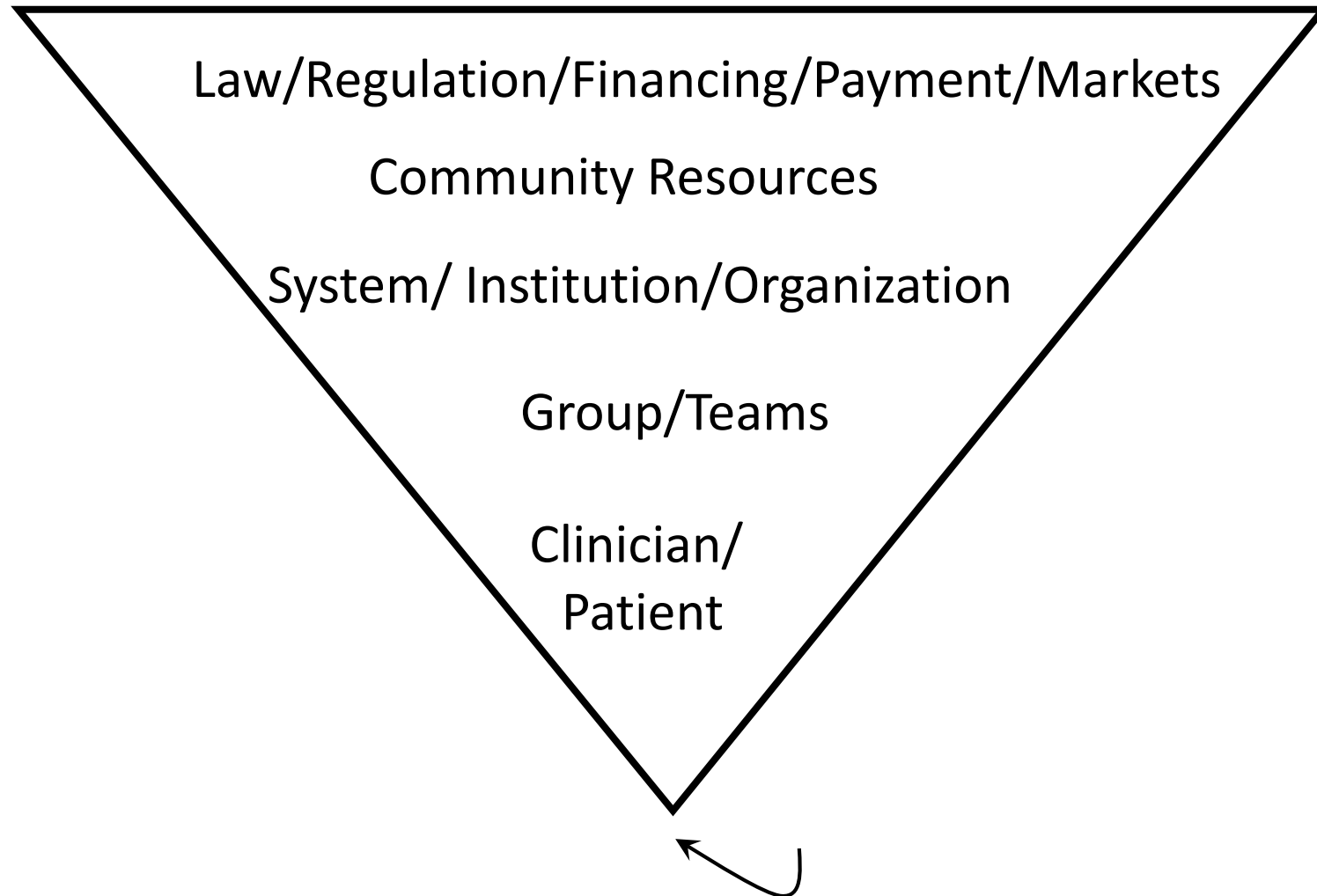
**Care for poor patients is concentrated  
among a few providers**

**Challenge: Within any given hospital or health system, it's rare to be able to document disparities at a statistically significant level**





# Advancing Equity Requires Input at Multiple Levels



# Assessing Evidence Gaps in Equity Research

The evidence landscape:  
looking for the big picture



Where can I get a quick snapshot of available evidence?



Where are the gaps in evidence?



# Why Do Gaps in Evidence Exist for Underserved Groups?

- Insufficient information
  - how many studies have been conducted? How large are the studies?
  - Who did the studies include?
- Biased information
  - Are existing studies of high quality?
  - Do they measure effectiveness for specific groups? What works?
- Inconsistence findings



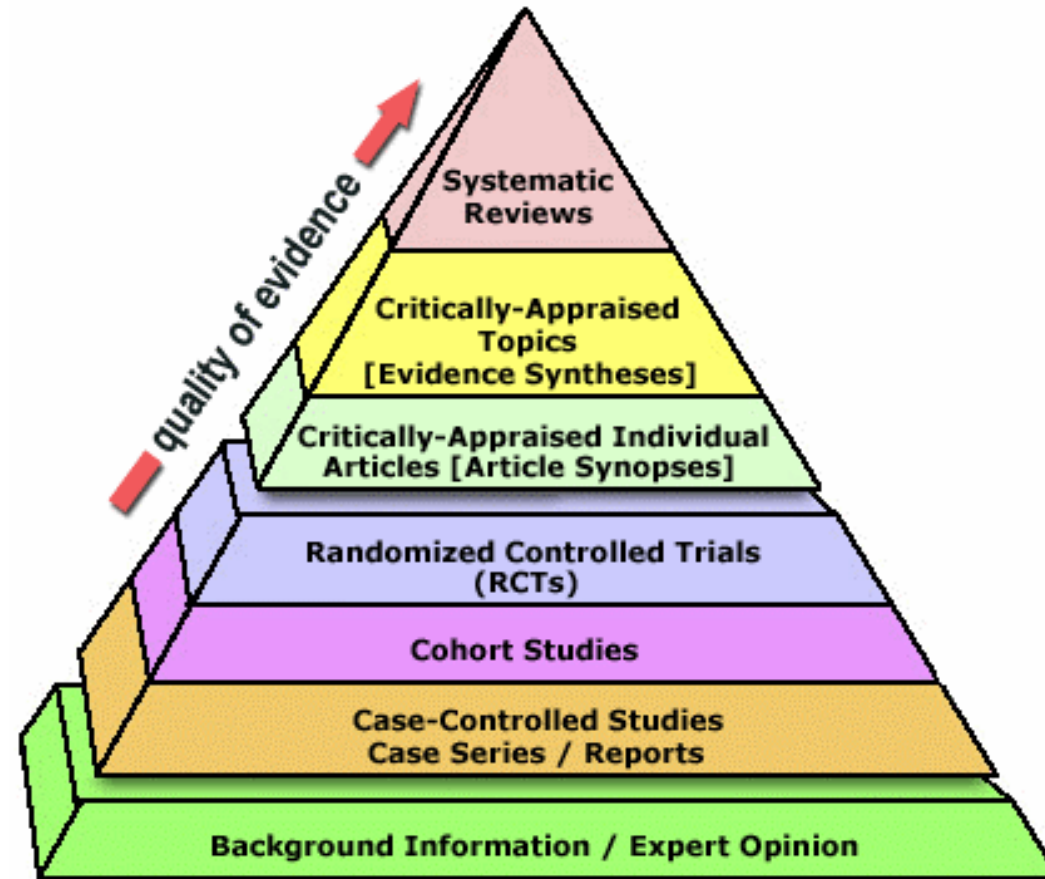
# How to Identify Evidence Gaps

- The need for a new study must be rigorously justified. What does the study contribute? What is not known? Did a policy/practice get ahead of the evidence?
- Identify gaps in the evidence? Is there representation?
- Find and evaluate the content of a relevant systematic review, evidence synthesis, or a narrative review
- Tradeoffs between breadth, feasibility, and generalizability  
A systematic review may not be appropriate if few high quality studies exist.



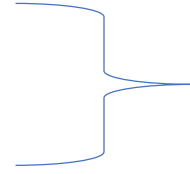
# Hierarchy of Evidence-Based Medicine

The higher you come in the evidence-base hierarchy, the better the inferential powers of your study, supposedly



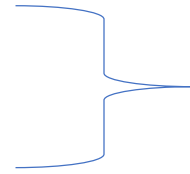
# Types of Evidence Syntheses

- Classic systematic review
- Meta-analysis



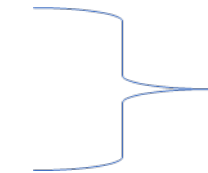
- Resource intensive, rigorous and take time

- Rapid reviews
- Landscape reviews
- Technical briefs and topic briefs



- Cater to more urgent deadlines, not as rigorous

- Scoping Reviews
- Evidence mapping



- Set out to map the literature





# Types of Evidence Reports



Topic Brief  
(2-3 months)

- Brief literature search



Technical Brief  
(7-9 months)

- Systematic literature search
- Stakeholder input



Rapid Review  
(4-8 months)

- Similar to systematic review, but methods may differ
- Balance of quality/rigor with timeliness



Systematic Review  
(12-18 months)

- Systematic literature search
- Stakeholder input
- Assess evidence strength and study quality

General Understanding  
of Evidence

Detailed Understanding of  
Evidence

# Examples of EPC Evidence Reports

Technical Brief  
Number 31

## Mobile Applications for Self-Management of Diabetes



Comparative Effectiveness Review  
Number 209

## Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review



Technical Brief  
Number 28

## Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings



Comparative Effectiveness Review  
Number 172

## Early Diagnosis, Prevention, and Treatment of *Clostridium difficile*: Update



# Advancing Equity



# Equity Focused Studies

- Clearly describe patient populations (and subpopulations)
- Clearly describe intervention group and any enhancements
- Pay attention to heterogeneity of treatment effects (rural vs urban, race/ethnicity, gender differences, types of illness, etc..) and ensure study is powered to measure effects on subgroups
  - An equity focused study that is not powered to the target population is not an equity study. Equity should not be an add-on.

# What is the Health Equity Research Impact

## Box 1 Health Equity Research Impact Assessment for Researchers and Research Reviewers

### Community Engagement and Research Partnerships<sup>21-23</sup>

- How will this study engage with diverse, under-resourced, and/or vulnerable communities, especially addressing histories of mistrust and/or research abuses?
- How will the study engage community leaders, community-based organizations, and other stakeholders?
- How will community partners be engaged in the following research activities: needs assessment, study design, development of research questions and hypotheses, recruitment, data collection, data analysis and interpretation, and dissemination of findings in academic, community, policy, media, and other venues?
- For basic and translational science: What are the investigators' plans for translation of their research to address health disparities via transdisciplinary research partnerships or other mechanisms?

### Recruitment, Representativeness, and Generalizability<sup>24-26</sup>

- Who are included in this study? Who are excluded?
- Are there recruitment processes in place to ensure the study sample is representative of the local community (or communities, if multi-site)?
- Note, this may be different than the populations typically served by the research institution
- Consider representation not just by race, ethnicity, and gender, but also by (including, but not limited to) sexual orientation, income, immigration status, health insurance coverage
- Language access: Are non-English speakers included in the study and with adequate supports? Are study materials accessible in multiple languages?

How does the study support the recruitment of non-English language speaking participants?

### Intervention Design<sup>15,22,27</sup>

- Will the intervention be conducted in generalizable settings with representative community samples?
- To what extent will the population of focus be engaged in the development or tailoring of the intervention (e.g., needs assessment, collaborative design of intervention) to ensure it is appropriate for that population?
- Taking into account the complexity of health, healthcare, and social inequities, will the intervention act at multiple social-ecological levels (i.e., individual, interpersonal, institutional, community, public policy)? Will the intervention involve multi-disciplinary teams and/or multi-sector systems and services?

### Interpretation and Contextualization<sup>15,22,27</sup>

- Does the study's data collection occur solely at the biological to individual-behavioral levels, which has been shown to increase the potential for misinterpretations of study results due to the absence of contextualizing data? Some research design elements have been shown to decrease potential misinterpretations of study findings, including mixed methods designs, data collection at multiple social-ecological levels, collection of data across the lifespan, and data on sociocultural constructs and physical environments.
- Will this study employ adequate methods to facilitate accurate interpretations of research findings, particularly from the perspective of racial and ethnic minority and other vulnerable communities?
- If the study will collect data only at the biological to individual-behavioral levels, what explicit safeguards will be in place to prevent potential misinterpretation of study results?
- How will the study's results affect the population of focus? Is there the potential for unintended negative consequences for a minority population or under-resourced community?
- How will community stakeholders be engaged in the analysis and interpretation of research findings, to contextualize and help prevent misinterpretations? If such stakeholders are not included, what other relevant safeguards are in place?

### Dissemination of Research Findings and Community Benefit<sup>21,23,25,28</sup>

- What are investigators' plans to disseminate study results to minority populations and under-resourced communities, either directly or through translational research partnerships?
- What are the investigators' plans to translate research findings to recommendations for specific policy reforms and/or engagement with policymakers and relevant healthcare or other systems?
- Will the research create or support clinical or other services that will continue sustainably beyond the proposed period of study to serve minority and other under-resourced communities?

### Overall Impact on Health Equity

- If successful, how and to what extent will this research address health, healthcare, and/or social inequities and outcomes for racial and ethnic minority populations and under-resourced communities?
- Is there the potential for this research to inadvertently worsen inequities?

*Directing Research Toward Health Equity: a Health Equity Research Impact Assessment*  
Enrico G. Castillo, MD MSHPM and Christina Harris, MD. **Journal of General Internal Medicine, 2021**

ADDRESSING DISPARITIES

By Electra Paskett, Beti Thompson, Alice S. Ammerman, Alexander N. Ortega, Jill Marsteller, and DeJuran Richardson

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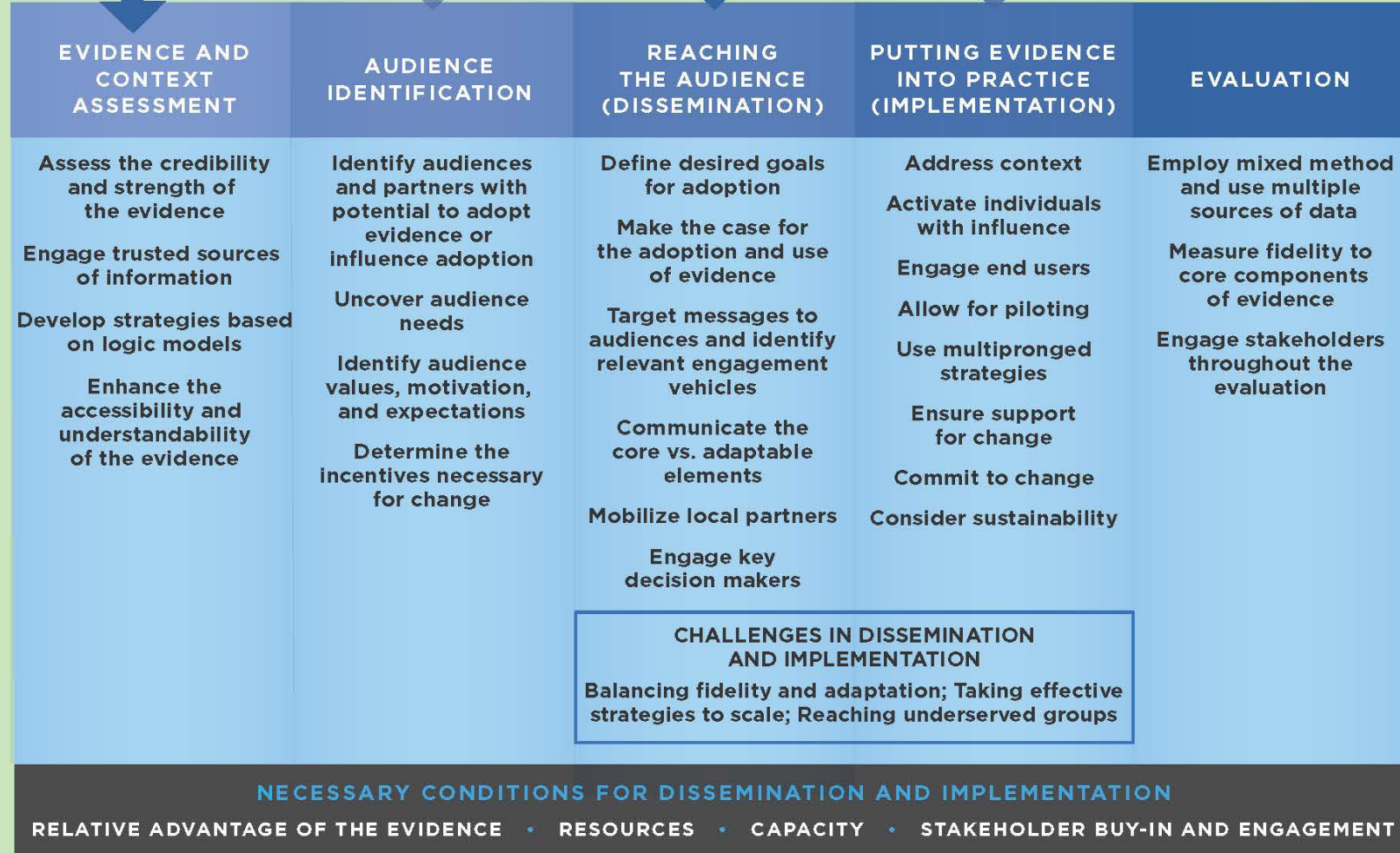
# Multilevel Interventions To Address Health Disparities Show Promise In Improving Population Health

DOI: 10.1377/hlthaff.2015.1360  
HEALTH AFFAIRS 35,  
NO. 8 (2016): 1429-1434  
©2016 Project HOPE—  
The People-to-People Health  
Foundation, Inc.

BROAD SOCIAL, POLITICAL, AND ECONOMIC ENVIRONMENT

LOCAL ENVIRONMENT

ITERATIVE PROCESS OF DISSEMINATION AND IMPLEMENTATION,  
INCLUDING SCALE UP OF SUCCESSFUL INTERVENTIONS



A FRAMEWORK FOR THE DISSEMINATION AND IMPLEMENTATION  
OF PATIENT-CENTERED OUTCOMES RESEARCH

# Equity Research and Current and Future Data Challenges





# Data :

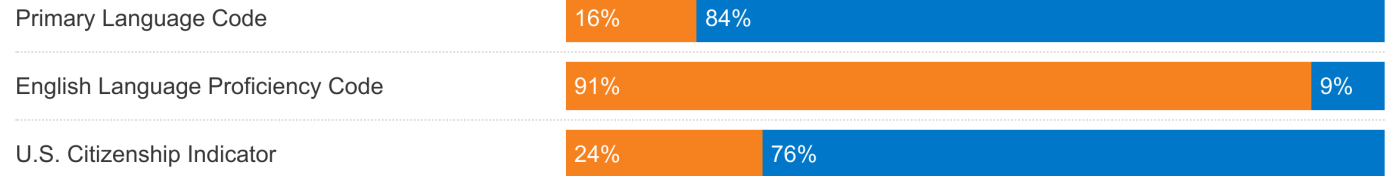
- Medicaid can play a significant role in advancing equity.
- Prioritizing comprehensive and high-quality data on race /ethnicity and language is a high priority.
- Failure to invest in data may reinforce structural racism and inequities across the health care

Figure 3

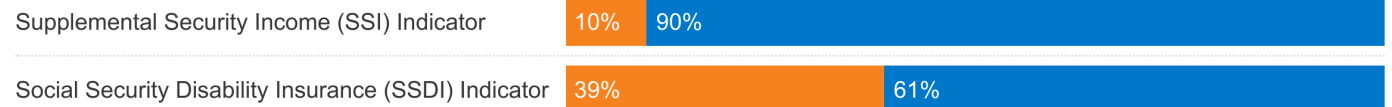
## Missingness of Key Indicators in CY 2019 T-MSIS Analytic Files

■ Share of Beneficiaries Missing Valid Value for Variable in CY 2019 ■ Share of Beneficiaries Reporting Valid Value for Variable in CY 2019

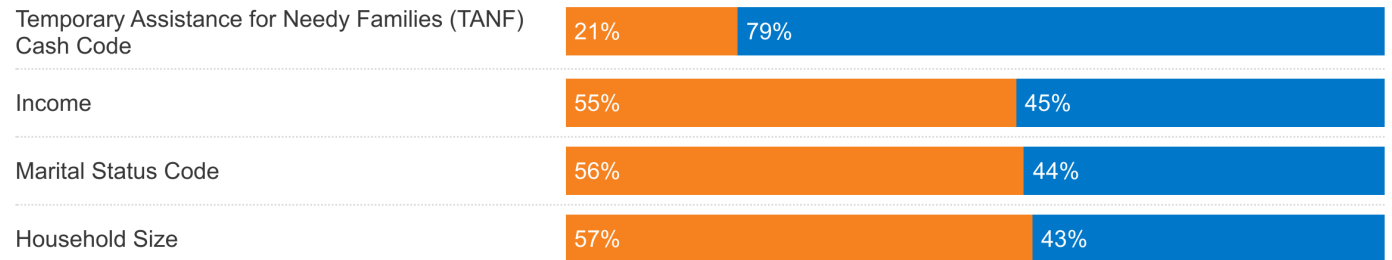
### Language and U.S. Citizenship Status Indicators



### Disability Indicators



### Income and Household Indicators



### Other Indicators



NOTE: These values are calculated as a share of all Medicaid beneficiaries across 50 states and D.C. reporting at least one month of Medicaid eligibility in the T-MSIS analytic files. Valid values include any non-missing, valid values for a variable designed as such, as per the Chronic Condition Warehouse T-MSIS analytic file Codebook.

SOURCE: KFF Analysis of CY 2019 T-MSIS Analytic Files



# Data Poverty and the Digital Divide, AI, and Machine Learning

- Increasing awareness within data and digital health communities, and beyond
- There is an opportunity for the health data research and digital health communities to be advocates for data-deprived individuals, groups, and populations, so as to ensure that they are not left behind
- Ultimately, researchers, funders, regulators, policy makers, and politicians need to make it a requirement for creators of digital health solutions to provide assurance that these technologies will be able to perform across different populations and settings.



DENVER HEALTH



# R.E.A.L Initiative (launched May 2021)



**DENVER HEALTH™**  
est. 1860  
FOR LIFE'S JOURNEY

## Awareness and Promotion

- Defining WHY we ask
- Importance of Self-Report
- Educational Flyers



## Tools & Training

- Trans-created Scripting with Patients
- Documentation
- Training all Staff, Ongoing

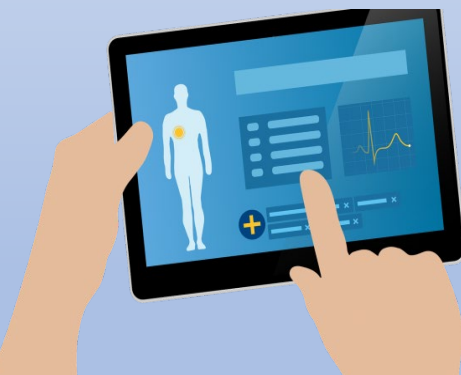
## Data Capture

- Adaptations to Epic EHR
- Expansion in MyChart Patient Portal



## Evaluation

- Ongoing QI efforts
- Completeness
- Understanding patient population and needs (e.g. interpreter services)



# R.E.A.L Data – Our Diverse Patients



**DENVER HEALTH™**

est. 1860

FOR LIFE'S JOURNEY

- **Post-launch:**
  - **Race: decreased unknown/missing (7.9% -> 0.5%) and “other” responses**
- **284 Different Ethnic Backgrounds**
- **117 Different Primary Languages**
- **183 Different Countries of Birth**



“Evidence may be the cornerstone of a high-performing health system.

The irony is this: For those who wish to see evidence-based medicine implemented, more and better medical evidence might not be the answer. Rather, we need better evidence about how to implement what we already know.”



Romana Hasnain-Wynia  
Health Affairs, 2018