## ACCORDS Health Equity Seminar Series

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<th>Date</th>
<th>Topic</th>
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<td>9/16/2019</td>
<td>Reducing Disparities and Advancing Equity: Where the Research Has Been and Where It Needs to Go</td>
<td>Romana Hasnain-Wynia, PhD, MS</td>
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<td>11/4/2019</td>
<td>Population and Resources: Patient Level Equity</td>
<td>Panel moderated by Larry Green, MD</td>
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<td>1/21/2020</td>
<td>Stereotypes in the Patient Provider Encounter</td>
<td>Stacie Daugherty, MD MSPH</td>
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<td>2/XX/2020</td>
<td>D&amp;I &amp; Health Equity - intervention mapping (mini-workshop along with talk)</td>
<td>National Distinguished Lecturer</td>
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Recorded seminars can be found on our website [https://goo.gl/1q9nUX](https://goo.gl/1q9nUX)

Request a Planning or Support Consultation with the Education Program
Reducing Disparities and Advancing Equity
Where the research has been and where it needs to go

Romana Hasnain-Wynia, PhD
Chief Research Officer, Denver Health
September 16, 2019
Objectives

• Briefly anchor us in **definitions and concepts of difference**

• Discuss measurement challenges

• Where we’ve been and where we’re going
  ▪ From description...
  ▪ To detection: Using tools of the quality movement
  ▪ Understanding and addressing the implications of complex interventions
  ▪ Funding for dissemination and implementation science
What Are Health and Health Care Disparities

Health and health care disparities refer to differences in health and health care between population groups.

Disparities occur across many dimensions, including race/ethnicity, socioeconomic status, age, location, gender, disability status, and sexual orientation.

- **Health disparity**: refers to a higher burden of illness, injury, disability, or mortality experienced by one group relative to another.

- **Health care disparity**: refers to differences between groups in health insurance coverage, access to and use of care, and quality of care
Four Concepts of Difference

- Disparity
- Inequity
- Inequality

Source: National Center for Health Statistics, Centers for Disease Control and Prevention
Equality vs. Equity vs. Social Justice
Equality vs. Equity vs. Social Justice
Challenges of measuring equity

- **DATA!** (Race, ethnicity, disability, social risks etc...)

- *Substantive equity* (lack of disparities in health services or outcomes across groups) and *Procedural equity* (fair processes and the fairness of care delivery)

  - Factors outside the health care system have an impact on equity (e.g., socioeconomic, demographic, genetic, environmental)

  - Factors within the health care system (e.g., workforce, financing, structural arrangements)

  - How these sets of factors interact/blend

References:
Research: Where we’ve been
Quality and Disparities

High quality care:

- Safe
- Timely
- Effective
- Efficient
- Patient-Centered
- Equitable

Disparities are markers of poor quality

Institute of Medicine (IOM) defined equity as one of six key dimensions of quality
Using a Quality of Care Framework To Address Disparities in Care

Health care disparities should be brought into mainstream quality assurance and continuous quality improvement discussions

Intersection of Quality and Disparities

Disparities in care are problems of “inequality in quality”

– Integrating disparities reduction with quality improvement is a coherent and efficient approach to redesigning the U.S. health care system

• **In theory**, when quality improves across the board, minority communities that suffer from poorer quality care at the outset have the most to gain

• **However**, interventions designed to improve quality do not always reduce disparities
Desired effect of programs

Quality

Time

Slide courtesy of Alyna Chien, MD, MS, Harvard Medical School
Unknown effect on disparities

Quality

Time

Slide courtesy of Alyna Chien, MD, MS, Harvard Medical School
Quality improvement literature

NEUTRAL

One-size-fits-all
- ESRD patients
- ~40% ↑ in adequate hemodialysis dosing
- White-black disparity persisted

Seghal, JAMA 2003

NARROWING

Culturally sensitive
- Depression
- ~20% ↑ in depression care
- White-minority disparity eliminated

Arean, Medical Care 2005

WIDENING

One-size does not fit all
- Induces cherry-picking
- Widens resource gaps / “rich get richer”

Werner, Circulation 2005

Slide courtesy of Alyna Chien, MD, MS
Advancing Health Disparities Research Within the Health Care System: A Conceptual Framework

Detecting
- Define health disparities
- Define vulnerable populations
- Measure disparities in vulnerable populations
- Consider selection effects and confounding factors

Understanding
- Identifying determinants of health disparities at the following levels:
  - Patient/individual
  - Provider
  - Clinical encounter
  - Health care system

Reducing
- Intervene
- Evaluate
- Translate and disseminate
- Change policy

Research: Where we need to go
Moving Beyond Describing to Understanding the Drivers and What Works

Is it who you are?

Is it where you go?

Is it both?

Is it even more complicated than that?

YES!
Drivers of Disparities

• Patient-Level
  ▪ Patient preferences, including treatment refusal, clinical presentation of symptoms
  ▪ Communication barriers

• Provider-Level
  ▪ Beliefs/stereotypes about behavior or health of patients
  ▪ Bias/Prejudice
  ▪ Communication barriers

• Structural (and resource)
  ▪ differences in where different groups receive care

• Family, Community, Neighborhood, genetics, environment, history and so much more
# Social Determinants of Health

<table>
<thead>
<tr>
<th>Economic Stability</th>
<th>Neighborhood and Physical Environment</th>
<th>Education</th>
<th>Food</th>
<th>Community and Social Context</th>
<th>Health Care System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Housing</td>
<td>Literacy</td>
<td>Hunger</td>
<td>Social integration</td>
<td>Health coverage</td>
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<tr>
<td>Income</td>
<td>Transportation</td>
<td>Language</td>
<td>Access to healthy options</td>
<td>Support systems</td>
<td>Provider availability</td>
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<tr>
<td>Expenses</td>
<td>Safety</td>
<td>Early childhood education</td>
<td></td>
<td>Community engagement</td>
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<td>Debt</td>
<td>Parks</td>
<td>Vocational training</td>
<td></td>
<td>Discrimination</td>
<td>Provider linguistic and cultural competency</td>
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<tr>
<td>Medical bills</td>
<td>Playgrounds</td>
<td>Higher education</td>
<td></td>
<td>Stress</td>
<td>Quality of care</td>
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<tr>
<td>Support</td>
<td>Walkability</td>
<td></td>
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<td></td>
<td>Zip code / geography</td>
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**Health Outcomes**
- Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations
Social ecological model
Source: McLeroy, et al., 1988
Multilevel

Figure adapted from: Taplin, SH; Clauser, S., et al. (2012). Introduction: Understanding and Influencing Multilevel Factors across the Cancer Care Continuum. Journal of the National Cancer Institute, 44, 2-10.

Listed numbers indicate the count of funded studies of interventions targeted at each level in the IHS portfolio (total n = 64)

- Medicare reimbursement, federal health reform, accreditations, health information exchanges
- Medicaid reimbursement, public health data, statewide data, health information exchanges, hospital performance data
- Community-based resources, local hospital services, local professional norms
- Socio-demographics, insurance coverage, comorbidities, patient care preferences, behavioral factors, cultural perspectives
- Organizational leadership, delivery system design, clinical decision support
- Communication skills, cultural competency, staffing mix, team culture, role definition
- Caregivers, friends, network support, spiritual support, social media

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE
PCORI: Addressing Disparities Program

PCORI’s Vision, Mission, Strategic Plan

Program’s Mission Statement
To reduce disparities in healthcare outcomes and advance equity in health and healthcare

Program’s Guiding Principle
To support comparative effectiveness research that will identify best options for reducing and eliminating disparities
Addressing Disparities: Program Goals

**Identify Research Questions**
- Identify high-priority research questions relevant to reducing and eliminating disparities in healthcare outcomes

**Fund Research**
- Fund comparative effectiveness research with the highest potential to reduce and eliminate healthcare disparities

**Disseminate Promising Practices**
- Disseminate and facilitate the adoption of promising/best practices to reduce and eliminate healthcare disparities
Equity Research

• Study design

• Powering the study

• Disparities definition is a hindrance in study design and uses resources that are not well spent

• Target the population
Real World Comparative Effectiveness Research

- Trials that seek to compare the effectiveness of two or more interventions in real-world settings.

- Closely integrated with clinical practice, incorporate outcomes that are relevant to patients and other stakeholders.

- Include a broad range of clinical settings and few exclusion criteria, so participants reflect patients receiving care outside of the trial.

- Seek clinically applicable evidence about relative advantages and disadvantages of interventions to inform real-world decisions made by clinicians, patients, caretakers, and others.

Prioritizing Research: There may be an evidence base but not for specific groups

Burden of disease

Health services

Evidence gap
Population of interest

Important question
Multi-Level Interventions to Address Asthma Disparities

From PCORI funding announcement:
......only interested in supporting and extending highly innovative studies that push beyond traditional concepts to move the scientific field forward and that show great promise for accelerating opportunities for improving asthma outcomes and reducing disparities.

• **Interventions:** Are diverse, tailored, and test multi-component interventions at the community, home, and health system levels with proven efficacy

• **Outcomes:** Asthma control, asthma-related QOL, missed days of work or school, medication adherence, lung function, exacerbations
Asthma Trial to Reduce Disparities

Patient Empowered Strategy to Reduce Asthma Morbidity in Highly Impacted Populations: RCT to examine the benefit of using an ICS inhaler and a reliever inhaler at the same time

- Compare use of ICS inhaler and reliever inhaler at the same time when asthma symptoms occur compared to usual guideline-based care.

- 1200 African-American and Latino/Hispanic adults age 18-75
  Principal Investigator: Elliot Israel, MD
  Harvard Medical School/ Brigham and Women’s Hosp

- $14 million
Hypertension Trials to Reduce Disparities

Of particular concern are disparities in the prevalence, diagnosis, and treatment of hypertension for high-risk groups, including racial and ethnic minorities and low-income and rural populations.

“...its disproportional impact on particular populations, makes it a perfect...”

- **Announcement:** Testing Multi-Level Interventions to Improve Blood Pressure Control in Minority Racial/Ethnic, Low Socioeconomic Status, and/or Rural Populations in collaboration with the National Institute for Health (NIH).

- **Partnership:** The Hypertension Disparities Reduction Program Partnership (HDRPP) is a research partnership with NHLBI, NINDS, and PCORI with funds provided by PCORI to NIH.
  - HDRPP funded two comparative effectiveness trials for $23.5 million (2015).
# Hypertension Trials

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Org.</th>
<th>Target Population(s)</th>
<th>No. of Study Pts. (No. of Sites)</th>
<th>Primary Outcome</th>
</tr>
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<tr>
<td><strong>Collaboration to Improve Blood Pressure in the US Black Belt – Addressing the Triple Threat</strong></td>
<td>University of Alabama</td>
<td>Rural populations; African Americans; low socio-economic individuals</td>
<td>2,000 (80 practices)</td>
<td>Blood pressure control</td>
</tr>
<tr>
<td><strong>Comparative Effectiveness of Health System vs. Multi-level Interventions to Reduce Hypertension Disparities</strong></td>
<td>Johns Hopkins University</td>
<td>African Americans and Hispanics/Latinos; low socio-economic individuals</td>
<td>1,890 (30 primary care clinics including FQHCs)</td>
<td>Percent of patients with blood pressure under control</td>
</tr>
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Multicomponent Interventions: A Cautionary Tale

Counseling African Americans to Control Hypertension (CAATCH): Cluster Randomized Clinical Trial Main Effects

Gbenga Ogedegbe, M.D.1, Jonathan N. Tobin, Ph.D.2,3,4, Senaida Fernandez, Ph.D.1, Andrea Cassells, M.P.H.2, Marleny Diaz-Gloster, M.P.H.2, Chamanara Khalida, M.D., M.P.H.2, Thomas Pickering, M.D., D.Phil.5, and Joseph E. Schwartz, Ph.D.5,6

1059 patients (mean age 56 years; 28% men, 59% obese and 36% with diabetes) were enrolled.

Editorial

The Counseling African Americans to Control Hypertension Study and Ways to Enhance the Next Wave of Behavioral Interventions

Kevin G. Volpp, MD, PhD

Circulation. 2014 (May)

- Funded rigorous interventions of 33 clinical interventions
Translating Research into Practice: Ask These Questions During Proposal Development

Criteria used for determining the likelihood of future research findings being implemented into practice:

- **Adaptability.**
  - The extent to which the intervention can be modified to suit local needs.

- **Trialability.**
  - Whether the intervention can be tested and measured.

- **Complexity.**
  - The difficulty of implementation.

- **External policies.**
  - Incentives, mandates, and insurance-related issues that may affect translation.

- **Readiness for implementation.**
  - Commitment and involvement of staff, level of resources, and accessibility of information.
Dissemination and Implementation Framework

1. Evidence Assessment
   - Is the evidence ready for use? Does it respond to stakeholders’ concerns?

2. Audience and Partner Identification
   - Who will benefit from this evidence? Who can help reach that audience?

3. Dissemination
   - How can we make the evidence available? What information about the evidence will people need?

4. Implementation
   - How can we support adoption? What strategies will lead to widespread implementation?

5. Evaluation
   - How will the effectiveness of our strategies be assessed? What data do we need?
Thank you!