Highlighting Disparities in A/I and How to Implement this Awareness into Fellowship Training

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Learning objectives

• Understand that health care disparities are pervasive in all medical specialties highlighting systemic etiology
• Understand proactive and concerted medical education intervention can help increase knowledge in terms of issues and provide more culturally competent care
• Provide framework for addressing topics in curricula
• Goal is to how to practically implement teaching yourselves and fellows/learners
Cause of inequities is systemic

- Patients who are poor and ethnic/racial minoritized receive unequal care and have worse outcomes
- Health disparities pervasive in every field
- Differences remain after controlling for income and SES factors
- MOST DISPARITIES FROM HEALTH CARE SYSTEM ITSELF

Social Determinants of Health Framework

Racism as a Root Cause Approach: A New Framework

CHILDREN’S HEALTH ADVOCATES ARE OVERDUE IN ADDRESSING RACISM AS A ROOT CAUSE OF RACIAL HEALTH DISPARITIES
Institute of Medicine/ National Academy of Medicine Recommendations

• Use evidence based medicine
• Perform continuous quality improvement
• Provide education regarding cause of health disparities/inequities
• Incorporate cross-cultural training into medical curricula
• Continue to create diverse workforce

Mandates for addressing health disparities in graduate medical education

• Because of pervasive nature of health disparities, ACGME through Clinical Learning Environment Review initiative has mandated that any ACGME accredited program must perform the following

Background and Intent: The mission of institutions participating in graduate medical education is to improve the health of the public. Each community has health needs that vary based upon location and demographics. Programs must understand the structural and social determinants of health of the populations they serve and incorporate them in the design and implementation of the program curriculum, with the ultimate goal of addressing these needs and eliminating health disparities.
Allergy and Immunology Milestones

Version 2  Allergy and Immunology Milestones, ACGME Report Worksheet

<table>
<thead>
<tr>
<th>Systems-Based Practice 4: Community and Population Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
</tr>
<tr>
<td>Demonstrates knowledge of population or community health needs and disparities</td>
</tr>
</tbody>
</table>

Comments: Not Yet Completed Level 1

Performance Gap in Implementation

Theme 2
In general, clinical learning environments do not appear to engage all their residents and fellows in their organization’s efforts to design, evaluate, and improve patient safety and health care quality, including health care disparities.

B12. Percentage of Residents and Fellows Who Reported Receiving Cultural Competency Training Specific to Populations at Risk for Health Care Disparities at Their Clinical Site

PERCENT OF TOTAL SURVEYED (n = 11,106) 31.2

https://www.acgme.org/what-we-do/initiatives/clinical-learning-environment-review-cler/
### Eliminating Inequities in Health Care

New and Emerging Areas in Medicine Series

**Diversity, Equity, and Inclusion Competencies Across the Learning Continuum**

<table>
<thead>
<tr>
<th>Entering Residency (Recent Medical School Graduate) or New to DEI Journey</th>
<th>Entering Practice (Recent Residency Graduate) or Advancing Along DEI Journey</th>
<th>Faculty Physician Teaching and Leading or Continuing DEI Journey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eliminating Inequities in Health Care</strong> Practices that measurably reduce population-level differences in health outcomes, disease burden, and the distribution or allocation of resources between majority and marginalized groups based on race, ethnicity, sex, sexual orientation, gender identity, intellectual and developmental ability, socioeconomic status, the physical (built) environment, geographic location, and psychosocial, behavioral, and health care-related factors.</td>
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</tr>
<tr>
<td>3a. Describes the value of working in an interprofessional team, including patients, to identify and address social risk factors influencing health (e.g., food security, housing, utilities, transportation)</td>
<td>3b. Works collaboratively with an interprofessional team, including patients, to screen and refer patients for appropriate resources to address social determinants of health</td>
<td>3c. Role models interprofessional practices for working with an interprofessional team to address social determinants of health affecting patients and communities.</td>
</tr>
<tr>
<td>4a. Identifies systems of power, privilege, and oppression and their impacts on health outcomes (e.g., White privilege, racism, sexism, heterosexism, ableism, religious oppression)</td>
<td>4b. Makes collaborative care decisions based on an understanding of how systems of power, privilege, and oppression influence health care policies and patient health outcomes</td>
<td>4c. Teaches how systems of power, privilege, and oppression inform policies and practices and how to engage with systems to disrupt oppressive practices.</td>
</tr>
<tr>
<td>5a. Describes how stratification (e.g., by race, ethnicity, primary language, socioeconomic status, LGBTQ identification) of quality measures can allow identification of health care disparities</td>
<td>5b. Explores stratified quality improvement (QI) data for their patient population and uses these data to identify health care disparities</td>
<td>5c. Describes how monitoring stratified QI data can help assess the risk of unintended consequences (e.g., widening the disparity gap) and uses stratified QI data to guide and monitor QI interventions.</td>
</tr>
<tr>
<td>6a. Explains the role of the health care system in identifying and addressing the local needs of the community (e.g., the role of the community health needs assessment or the community health improvement plan)</td>
<td>6b. Collaborates with a diverse interprofessional team within their system and with community members to meet identified community health needs</td>
<td>6c. Leads, formulates, and/or participates in interprofessional partnerships designed to improve community health needs.</td>
</tr>
</tbody>
</table>

#### Practicing Anti-racism and Critical Consciousness in Health Care

Educational and clinical practices that seek to revise and correct local, state, and national policies, institutional practices, and cultural misrepresentations that enable and perpetuate racial bias and race-based health care inequities.

| 7a. Describes past and current examples of racism and oppression (internalized, interpersonal, institutional, and structural) and their impact on trust, health, and health care | 7b. Engages with the health care team and patients to identify the impacts of racism and oppression and challenges these behaviors and practices in the local setting | 7c. Role models anti-racism in medicine and teaching, including strategies grounded in critical understanding of unjust systems of oppression. |
| 8a. Articulates race as a social construct that is a cause of health and health care inequities, not a risk factor for disease | 8b. Identifies and corrects misuse of clinical tools and practices that substantiate race-based medicine | 8c. Supports and participates in system-level solutions to end racist practices in education and clinical delivery that substantiate race-based medicine. |
| 9a. Describes the impact of various systems of oppression on health and health care (e.g., colonization, White supremacy, acculturation, assimilation) | 9b. Collaborates to identify and act on system-level strategies to reduce the effects of various systems of oppression on health and health care | 9c. Teaches and examines system-level strategies to remedy the impact of systems of oppression on health and health care. |

#### Advocating for Equity in Health and Health Care

Practices that influence decision-makers and other vested groups and individuals to support or implement system-level policies and practices that contribute to realizing health equity.

| 10a. Describes public policy that promotes social justice and addresses social determinants of health | 10b. Promotes social justice and engages in efforts to eliminate health care disparities | 10c. Leads or participates in organizational and public policy approaches to promote social justice, eliminate health care disparities, and address social determinants of health. |
Overview of competencies

1. Residents/fellows and faculty members receive education on identifying and reducing health care disparities relevant to the patient population served by the clinical site.

2. Residents/fellows and faculty members receive training in cultural competency relevant to the patient population served by the clinical site.

3. Residents/fellows and faculty members know the clinical site’s priorities for addressing health care disparities.

4. Resident/fellows are engaged in QI activities addressing health care disparities for vulnerable populations served by the clinical site.

Get Proximate

“When people get proximate to the problems and the things they care most deeply about, not only does it help them do better work, and be better problem solvers - it changes them...We all have to get closer to the problems that burden us.”

- Bryan Stevenson, JD
Antiracist pedagogy

- An intentional and strategic organizing effort in which:
  - Incorporating anti-racist approaches into our teaching
  - Apply anti-racist values into our various spheres of influence (didactics/clinical care)
• Step 1: Prepare to talk about racism and race

• Step 2: Definitions and Frameworks

• Step 3: Understanding race in the historical context of health care and medicine

• Step 4. Implement anti-racism in medical education
Mechanisms through which racism operates in medical education

- Support and opportunity
  - Psychological safety
  - Representation
  - Values alignment
  - Belongingness

- Environment
  - Conditions for cognitive engagement
  - Microaggressions, racism, sexism
  - Stereotype threat
  - Hidden curriculum
  - National events

- Curriculum
  - Content choice
  - Mission and values
  - Norms
  - Available evidence
  - Structure
  - Pedagogy

Existing knowledge, experience, skills, attitudes

MEDICINE AND SOCIETY

Dana Shaffer, MD, Editor
Misrepresenting Race — The Role of Medical Schools in Propagating Physician Bias
Christina Arruda, BA, Greg Garrett, MD, MBA, Michelle Muroki, MD
Sanya L. Sanyo, BA, Sue Weisberg, M.D., David G. Jones, M.D., PhD, Rina Lavo-Mosney, MD, MBA, Dorothy Roberts, JD, Jennifer Tsai, MD, MSc, and John Arndt, MD, D.M.H.A., M.P.H.

PEDiATRICS PERSPECTIVES

Going Public

Levels of Racism: A Theoretic Framework and a Gardener’s Tale
Cameron Phelps Jones, MD, MPH, PhD

History of Racism in U.S. Health Care
Root Causes of Today’s Hierarchy and Systems of Power

Learning Objectives
1. Explain how past historical practices have fueled current structural inequities in health care
2. Describe the role health care professionals have in advancing equity
3. Identify opportunities to advance equity in medicine through individual, institutional, and structural solutions

An Antiracist Framework for Racial and Ethnic Health Disparities Research

PRIORITYING EQUITY video series
The Prioritying Equity video series explores the disproportionate impacts of COVID-19 on marginalized communities in the United States. These videos shed light on the root causes of health inequities and offer educational lessons for racial justice and health equity from leading voices in health care.

MEDICINE AND SOCIETY

Debra Mohs, Ph.D., Editor
How Structural Racism Works — Racist Policies as a Root Cause of U.S. Racial Health Inequities
## Health Equity Definitions

**Culture of Health:** a culture in which good health and well-being flourish across geographic, demographic, and social sectors; fostering healthy, equitable communities guides public and private decision-making, and everyone has the opportunity to make choices that lead to healthy lifestyles.

**Health Disparities:** differences that exist among specific population groups in the U.S. in their opportunities to reach their full health potential.

**Health Equity:** the state in which everyone has the opportunity to attain full health potential and no one is disadvantaged from achieving this potential because of social position or any other socially defined circumstance.

**Structural Racism:** the complex structures and systems by which racism is developed, maintained, and protected.

The Culture of Health Program recognizes these terms reflect current understanding of the terms but should remain dynamic based on further evidence and learnings, including use by community and grassroots organizations leading the way in these conversations. We do not intend for our language choices to be exclusionary and aim to be inclusive of the experiences of Black, Indigenous, and people of color, including the Latinx/Latino/Hispanic communities and Asian Americans and Pacific Islanders (AAPI) and everyone affected by inequality in the U.S., while acknowledging and addressing structural racism and unequal allocation of power and resources as root causes of health inequity.

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### Table 1. Glossary of terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Access to care</td>
<td>The timely use of personal health services to achieve the best health outcomes</td>
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<tr>
<td>Antiracism</td>
<td>Encompasses a range of ideas and political actions that are meant to counter racial prejudice, systemic racism, and the oppression of specific racial groups</td>
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<tr>
<td>Cultural competence</td>
<td>Ability to understand and interact effectively with people from other cultures</td>
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<tr>
<td>Cultural humility</td>
<td>Process of reflection and lifelong inquiry, involves self-awareness of personal and cultural biases as well as awareness, and sensitivity to significant cultural issues of others</td>
</tr>
<tr>
<td>Equality</td>
<td>The existence of tools or programs that are distributed evenly in any measurable aspects of health of individuals or groups, usually based on specific attributes such as race and income</td>
</tr>
<tr>
<td>Equity</td>
<td>Achieved when every person has the opportunity to &quot;attain his or her full health potential&quot; and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances</td>
</tr>
<tr>
<td>Health disparity</td>
<td>Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups</td>
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<tr>
<td>Health care disparity</td>
<td>Typically refers to differences between groups in health insurance coverage, access to and use of care, and quality of care</td>
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<tr>
<td>Implicit bias</td>
<td>The phenomenon that perceptions, attitudes, and stereotypes can operate before conscious intention or endorsement</td>
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<tr>
<td>Race concordance</td>
<td>When the race of a patient matches the race of his or her physician and discordance occurs when races do not match</td>
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<tr>
<td>Segregation</td>
<td>The systematic separation of people into racial or other ethnic groups in daily life</td>
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<tr>
<td>Social determinants of health</td>
<td>Conditions or circumstances in which people are born, grow, live, work, and age</td>
</tr>
<tr>
<td>Systemic racism</td>
<td>A form of racism that is embedded in the laws and regulations of a society or an organization that manifests as discrimination in areas such as criminal justice, employment, housing, health care, education, and political representation</td>
</tr>
</tbody>
</table>
Disparities in Asthma and Allergy Care: What Can We Do?
Princess U. Ogboyjo, MD, MBBS, Quin Capers IV, MD, and Andrea J. Apter, MD, MSc, MA
Cleveland and Columbus, Ohio
and Pennsylvania, Pa

Clinical Commentary Review
Reducing Health Disparities in Asthma: How Can Progress be Made
Alan P. Baptist, MD, MPH, Andrea J. Apter, MD, MSc, MA, Peter J. Gergen, MD, MPH, and Bridgette L. Jones, MD

Implementation of Stock Epinephrine in Chartered Versus Unchartered Public-School Districts

Racial and Ethnic Disparities in Allergen Immunotherapy Prescription for Allergic Rhinitis
Surbhi Bahl, MD, FHAI, Matthew R. Ramey, MD, Varista Noyoyo, DO, Robert Ravner, MD, Timothy J. Craig, DO, and Carlos de Sa-Disability, MARCOM

Table 1: Overview of the train the trainer guide: health disparities education program from the Society of General Internal Medicine Disparities Task Force

<table>
<thead>
<tr>
<th>Modules</th>
<th>Content Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1. Disparities foundations</td>
<td>Review of disparities data</td>
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<td>Role of social determinants</td>
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<td></td>
<td>Role of health care</td>
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<td></td>
<td>Role of provider-patient encounter</td>
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<td>Resources for updating disparities information</td>
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<tr>
<td>Module 2. Teaching disparities in the clinical setting</td>
<td>Challenges to teaching in the clinical setting (hidden curriculum, institutional dynamics)</td>
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<td></td>
<td>Suggestions for working with skeptical learners (eg, reasons for resistance, model and recognize good behavior, demonstrate knowledge and skills)</td>
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<tr>
<td></td>
<td>Five cases (limited English proficiency, medical mistakes, limited literacy, stereotyping, informed consent)</td>
</tr>
<tr>
<td>Module 3. Disparities beyond the clinical setting</td>
<td>Sample exercises: increasing awareness of self and others</td>
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<td>Small group teaching triggers</td>
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<td>Large group lectures: trust, disparities</td>
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<td>Addressing bias</td>
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<td>Sample cases, vignettes, and video resources</td>
</tr>
<tr>
<td>Module 4. Teaching about disparities through community involvement</td>
<td>Description and overview of the US health care system</td>
</tr>
<tr>
<td></td>
<td>Introduction to community</td>
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<td>Worlds apart: discussion of mistrust of health care and racism and</td>
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<td></td>
<td>how they contribute to health care disparities, particularly in some</td>
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<td></td>
<td>African American communities</td>
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<tr>
<td></td>
<td>Community as a positive force</td>
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<tr>
<td>Module 5. Curriculum evaluation</td>
<td>Program evaluation, design features of an evaluation study that allow</td>
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<td></td>
<td>investigator to: draw conclusions about specific instance, and</td>
</tr>
<tr>
<td></td>
<td>identify threats to reliability and validity</td>
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</tbody>
</table>

### Table 2
Overview of quality improvement framework to address health disparities proposed by Aysola and Myers

<table>
<thead>
<tr>
<th>Step</th>
<th>Content Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1. Define terms and concepts</td>
<td>Review of the basic terms and concepts related to health equity Explaining distinction between HCDs and HDs Reducing HCD: should be initial focus within QI efforts</td>
</tr>
<tr>
<td>Step 2. Understand and disseminate the current knowledge of HCDs in field</td>
<td>Set of strategies that medical educators can use to engage residents/fellows to address HCDs, using a two-step method: (1) raising faculty awareness of HD/HCD relevant in their clinical field; (2) develop a plan of dissemination of this information to colleagues and trainees</td>
</tr>
<tr>
<td>Step 3. Identify HCDs locally and apply QI methods to address them</td>
<td>Reviewing potential sources and methods for obtaining/analyzing data to determine whether and if so, why an equity gap may exist in an institution Review strategies for and share examples of applying classic QI methods to address identified disparities</td>
</tr>
<tr>
<td>Step 4. Evaluate every QI effort for the potential equity angle</td>
<td>Addressing how every QI effort provides an opportunity to consider health equity</td>
</tr>
</tbody>
</table>

Abbreviations: HCD, health care disparity; HD, health disparity; QI, quality improvement.

*Data from Aysola J, Myers JS. Integrating Training in Quality Improvement and Health Equity in Graduate Medical Education: Two Curricula for the Price of One. Acad Med 2018;93(1):31-34.*

Blanco et al. 2020

### Table 3
Overview of several educational methods and interventions in health disparity education

<table>
<thead>
<tr>
<th>Reference</th>
<th>Educational Method/Model</th>
<th>Brief Description</th>
<th>Topics Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potox et al.2016</td>
<td>Experiential education</td>
<td>Educational models developed for residents, fellows, and faculty with goal to improve understanding of cultural diversity and health care disparity</td>
<td>Ethic and cultural diversity Cultural competence in health care Community advocacy Social determinants of health Ethnic foods, cultural goods, and traditional remedies</td>
</tr>
<tr>
<td>Paul et al.2009</td>
<td>Medical-legal partnerships</td>
<td>Education of medical students and residents, by lawyers, how to address patients' legal needs Promotes physician role in advocating for housing and government benefits for their patients</td>
<td>Family advocacy Legal assistance for medical patients Medical-legal partnership</td>
</tr>
<tr>
<td>Benson et al.2018</td>
<td>Quality Improvement health disparity initiative</td>
<td>Educational initiative designed to increase resident awareness of prevalent health disparities in the community delivered through PDSA framework, divided into 2 cycles Cycles were organized through either didactic sessions (PDSA cycle I) or small group discussion format (PDSA cycle II)</td>
<td>General health disparity Diabetes-related health disparity, diabetes self-management and education</td>
</tr>
<tr>
<td>Ross et al.2010</td>
<td>&quot;Train the Trainer&quot; curricula</td>
<td>A 5-module curriculum on health disparity in various settings and social determinants of health, designed to educate faculty through didactic sessions, small group sessions, case-based lectures, and so forth</td>
<td>Disparity foundations Teaching disparities in the clinical setting Disparities beyond the clinical setting Teaching about disparity through community involvement Curriculum evaluation</td>
</tr>
<tr>
<td>Noriea et al.2017</td>
<td>Lecture-based curricula</td>
<td>General health disparity 2-3 curricula for internal medicine residents, delivered through didactic sessions and experiential learning (assigned videos) and case discussions</td>
<td>Social determinants of health Environmental determinants of health Patient-provider interaction Patient advocacy Disparities in research Language, acculturation, and immigrant health</td>
</tr>
</tbody>
</table>

Abbreviation: PDSA, plan-do-study-act.

Blanco et al. 2020
Toolkit for Developing Structural Competency in Health Disparities in Allergy and Immunology Training and Research

Chioma Udemgba, MD, Akiah A. Jefferson, MD, MS, Jessica Sten, MD, MS, and Pawan Khoury, MD, MPH

Baylor, MD, Little Rock, Ark; and Rochester, NY

Provider Representation (Race, Sex, Gender, Ability)
Patient Identity (Race, Sex, Gender, Ability)
Institutional Barriers
Historic exclusion
Staff Diversity
Intersectionality
Cultural and Societal Values
Language
Literacy (general and health)
Stress or Aculturative stress
Environmental hazards
Environmental disasters
Pollution proximity
Water quality
Housing
Rural vs. Urban
Climate change
Environmental Impact
Social Context
Guiding Principles
Racism & Bias
Economic Context
Advocacy & Social Justice
Barriers to Research Participation

FIGURE 1. Guiding principles for developing a framework of core competencies for disparities training in Allergy and Immunology, including: (1) racism and bias; (2) economic context; (3) barriers to research participation; (4) advocacy and social justice; (5) social context; and (6) environmental impact.

Special Article

Toolkit for Developing Structural Competency in Health Disparities in Allergy and Immunology Training and Research

Chioma Udemgba, MD, Akiah A. Jefferson, MD, MS, Jessica Sten, MD, MS, and Pawan Khoury, MD, MPH

Baylor, MD, Little Rock, Ark; and Rochester, NY

Developing effective models for addressing structural competency

Pre-Planning
- Define clear objectives for your session
- Identify the target audience
- Identify the best facilitators and session leaders available for the session
- Review the resources (e.g., tools, funding, space, technologies, and people) available to you

Planning
- Create interactive sessions using the adult learning theory
  - Motivational and self-efficacious
  - Relevant and Succinct
  - Facilitated experiences
- Develop a mechanism for evaluating the curriculum and obtaining useful feedback

Feedback
- Assess whether curricula met the session goal and objective
- Assess participants’ willingness to attend future sessions associated with the curriculum
- Provide opportunities for open feedback
- Implement and adjust curricula based on feedback provided

Curriculum design requires careful considerations of the target audience, available resources, background understanding of health disparities of participants and session leaders. It is important to transmit high-yield, evidence-based information in a format that engages participants. Disseminating practical tools, resources, and information is critical.

• Structured education based on disparities literature
• 3 session teaching resource
• Adult learning theory
• Background health disparities and structural racism
• Experiential learning workshop
<table>
<thead>
<tr>
<th>Domain</th>
<th>Barrier</th>
<th>Action</th>
<th>Structural Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Allergy</td>
<td>Financial barriers in care of patients with food allergy</td>
<td>Multidisciplinary approach incorporating social workers, dieticians, and community health workers.</td>
<td>Recognize the influence of structures on patient health.</td>
</tr>
<tr>
<td></td>
<td>Socioeconomic status</td>
<td>Implement screeners to assess barriers to care.</td>
<td>Recognize and respond to influences of structures on the clinical encounter.</td>
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<td></td>
<td>Nutritional support</td>
<td>Partner with community members to provide needed resources (e.g., food pantries, support groups,</td>
<td>Engage in structural humility.</td>
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<td></td>
<td>Food insecurity</td>
<td>food vouchers with local grocery stores/farmers markets, drug assistance programs, food policy</td>
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<td></td>
<td>Access to epinephrine auto-injectors</td>
<td>council</td>
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<td></td>
<td>Access to sub-specialist</td>
<td>Engage with primary care providers to educate and provide resources on food allergy.</td>
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<td></td>
<td>Structural barriers to attending appointments</td>
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Clinical Commentary Review

Advancing Food Allergy Through Epidemiology: Understanding and Addressing Disparities in Food Allergy Management and Outcomes

Social disparities in early childhood prevention and management of food allergy

Review article

Structural racism and its pathways to asthma and atopic dermatitis

The impact of environmental injustice and social determinants of health on the role of air pollution in asthma and allergic disease in the United States

Review article

Areas and barriers for addressing structural competencies – Food Allergy

Areas and barriers for addressing structural competencies – Asthma

Asthma

Structural Competency

<table>
<thead>
<tr>
<th>Domain</th>
<th>Barrier</th>
<th>Action</th>
<th>Structural Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>Incorporate home or telemedicine visits into assessment of patients with</td>
<td>Recognise and utilise extra clinical resources to enhance patient care and outcomes in diverse</td>
<td>Recognise and utilise extra clinical resources to enhance patient care and outcomes in</td>
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<td></td>
<td>poor clinical management, difficulty attending appointments</td>
<td>cultural and socioeconomic settings</td>
<td>diverse cultural and socioeconomic settings</td>
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<td></td>
<td>Co-create with social worker to assist with health care</td>
<td>Recognise and utilise the specialty specific role of intercultural learners in addressing health</td>
<td>Recognise and utilise the specialty specific role of intercultural learners in</td>
</tr>
<tr>
<td></td>
<td>health care workers to perform home visits, adherence to</td>
<td>health equity</td>
<td>addressing health equity</td>
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<td></td>
<td>medications, and health assessments</td>
<td>Assess or design quality improvement interventions to improve diverse patient’s experience of</td>
<td>Assess or design quality improvement interventions to improve diverse patient’s</td>
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<td></td>
<td>Improve assessment of social determinants of health (e.g., access to</td>
<td>health equity</td>
<td>experience of healthcare</td>
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<td>patients’/patients in-home, residence status, access to medications,</td>
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<td></td>
<td>transportation)</td>
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<td></td>
<td>Improve recruitment practices and protocol</td>
<td>Identify and incorporate clinical practices that promote health equity in clinical practice</td>
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<td>design in clinical trials by recruiting clinical staff from diverse</td>
<td>and/or medical research</td>
<td></td>
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<tr>
<td></td>
<td>backgrounds</td>
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<tr>
<td></td>
<td>Improve efforts to build trust in communities that experienced systemic</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>oppression</td>
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</table>
### Even where tools available, disparities remain

- Example: Patients with primary antibody deficiency
- BMC > higher proportions Black/Latinx vs USIDNET, 30.1% IVIG vs 86.8% USIDNET

### Formalize education: ASCEND (Addressing Socioeconomic and Cultural Education in ImmunoDeficiency)

- A/I fellows met twice monthly for didactic and workshop based sessions
- Multi-perspective sessions, 1-5. Offered every 2 years
New considerations of health disparities within allergy and immunology

Supplementary Figure 1:
Outcomes of an educational program in the care of underserved immunodeficiency patients

<table>
<thead>
<tr>
<th>Pre-Program</th>
<th>Post-Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric First Year</td>
<td>Pediatric Second Year</td>
</tr>
<tr>
<td>Adult First Year</td>
<td>Adult Second Year</td>
</tr>
</tbody>
</table>

My comfort level with instructing a patient on using their subcutaneous immunoglobulin replacement products (%/100)

If a patient inquires about the direct and indirect costs of immunoglobulin replacement therapy, I feel prepared to discuss this.

I know how to utilize resources to interact with an immune deficiency patient who is non-English speaking.

Review article

Structural inequities
Research and institutional barriers
Built environment and exposures
Structural barriers for care delivery in A&I
Adverse health outcomes

UPSTREAM

Race and ethnicity
Language barriers
Immigration status
Psychosocial stress

Insurance status
Medication coverage
Diverse research personnel

Housing insecurity
Housing quality
Exposures to allergens at school or work

Diagnosis and treatment
Access to specialists
Attention to psychosocial needs

Prevalence
Morbidity & mortality
Medication adherence
Therapeutic hesitancy

DOWNSTREAM

Equity training
Participatory empowerment and education of at-risk communities
Awareness of how social determinants impact health
Use appropriate cultural interactions
Use translator services to enhance care experiences

Active enrollment of diverse patient cohorts
Involve patients in study design and evaluation of interventions
Health disparities focused interventional studies
Enhance recruitment of staff from diverse backgrounds

Advocacy & partnerships to address housing hardship and discrimination
Access to clean and safe housing
Initiative and research to mitigate household exposures
Enhanced efforts to educate patients on trigger remediation

Sponsorship & reimbursement of services
Universal screenings
Broadband access and telehealth services
Use standardized diagnostic tools to aid management decisions

PROPOSED INTERVENTIONS

Track care gap data in the EHR for at-risk populations
Incentivize enhanced care and outcomes for disadvantaged patients
Avoid findings that affirm biologic determinism
Knowledge, Empathy and Equity

The KEE Curriculum Framework for Teaching Health Equity

**Phase 1**
- **FOUNDATIONAL LEARNING**
  - **Basic Concepts KNOWLEDGE**
  - LO1: Recognize important social determinants of health in their patient population and articulate potential pathways from those upstream drivers to disparities in health care outcomes

**Phase 2**
- **APPLIED LEARNING – INDIVIDUAL HEALTH**
  - **Clinical Care of Patients EMPATHY**
  - LO2: Apply concepts of health equity in the day-to-day care of patients

**Phase 3**
- **APPLIED LEARNING – POPULATION HEALTH**
  - **Quality Improvement Project EQUITY**
  - LO3: Participate in the design, implementation and/or evaluation of a health equity strategy based on an assessment of a patient population and using quality improvement methodologies

**Health Equity Education**
- Steering Committee
- Provide evaluation, accountability, tracking and a forum for inter- and extra-departmental collaboration
- Create modular toolkits and resources to share for each phase

---

**Objective 1:** Learners should recognize important social determinants of health in their patient population and address potential pathways from those upstream drivers to disparities in health care outcomes

**Section 1 of 3**

**Does your program:**

<table>
<thead>
<tr>
<th>Not Sure</th>
<th>Not Yet</th>
<th>Planned</th>
<th>Partially Met</th>
<th>Met</th>
<th>Exemplar</th>
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</table>

**Discuss social determinants of health as important contributors to health disparities.**

<table>
<thead>
<tr>
<th>Not Sure</th>
<th>Not Yet</th>
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</table>

**Define the difference between health equity and health care equity?**

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**Discuss the historical and other racist policies leading to inequity in social determinants of health and therefore health disparities?**

<table>
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**Explore pathways from underlying reasons to health outcomes of particular importance to the discipline of the residency program?**

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**Review the social landscape and health disparities for our community (Elections, Racism, etc.) to understand the context of diversity important to the residency discipline?**

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**Tips to advance health equity in residency training**

- Be flexible and adaptable
- Emphasize the basics
- Provide pathways for learners to become contributors to health equity

---

**Please upload any Health Equity curriculum materials that you would like to share with other programs.**

- File 1: [Upload file]
- File 2: [Upload file]
- File 3: [Upload file]

**How would you characterize the material you uploaded?**

<table>
<thead>
<tr>
<th>Not Sure</th>
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**When in the residency is this content taught?**

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**Please enter any links to online information that you recommend to other programs.**

- Link 1
- Link 2
- Link 3

**How would you characterize the material you uploaded?**

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</thead>
</table>
What is your Health Equity Action Plan?

- Use a Social Justice Lens & Growth Mindset
- Embrace the journey, it will be arduous at times
- Get proximal, self reflect, check bias
- Center lived experiences
- Be learner centered and co-create
- Learn from each other
- Hold each other accountable
- Place your curriculum in the larger context of society
- Affirm your students
- Avoid calling on your equity deserving students to be the gatekeepers in this knowledge
What is your Health Equity Action Plan?

**Individual changes**
1. Diversify curriculum and course content
2. Encourage student/educator reflexivity on intersecting identities
3. Explore implications of microaggressions
4. Make connections between everyday racism and systems of oppression
5. Interrogate claims of race neutrality

**Systemic/Institutional changes**
1. Leadership commitment to Anti-racism/Organizational cultures
2. Value Lived experiences
3. Faculty Development
4. Representation in those delivering the curriculum
5. Prioritization throughout all instruction
6. Fair and equitable evaluation of students
7. Safe, Transparent Reporting system with Accountability

**Resources**
- JACI in Practice articles
- AAAAI DEI website resources
- AAAAI Teaching slides
- Leadership Institute project slides
- AAAAI Webinars

The Impact of Implicit Bias on Health Outcomes and Strategies for Reducing Bias
References

- Sotto-Santiago, Sylk EdD, MBA, MPS1; Poll-Hunter, Norma PhD2; Trice, Traci MD3; Buenconsejo-Lum, Lee MD4; Golden, Shertza MD, MHSS5; Howell, Joy MD6; Jacobs, Nicole PhD7; Lee, Winona MD8; Mason, Hyacinth PhD9; Ogunyemi, Dotun MD10; Crespo, Waleska PhD11; Lamba, Sangeeta MD, MS-HP5812. A Framework for Developing Antiracist Medical Educators and Practitioner–Scholars. Academic Medicine 97(1):p 41-47, January 2022. | DOI: 10.1097/ACM.0000000000004385


