

How Pediatric Cardiologists Will Win the Fight for Equity in Child Health

O. N. Ray Bignall II, MD, FAAP, FASN

Chief Health Equity Officer, Nationwide Children's Hospital
Associate Clinical Professor,
The Ohio State University College of Medicine



NATIONWIDE
CHILDREN'S



Objectives

- **Define Health Equity** and affirm its immutable connection to excellence in child heart health.
- **Summarize the current landscape** of health equity in pediatric cardiology and discuss mechanisms by which health equity focused work can **improve clinical outcomes**.
- Identify opportunities to use **national data registries** to measure, monitor, and reduce health disparities.
- Consider **where gaps exist** in our pursuit of equitable child heart health.

Disclosures

- I have no relevant financial relationships to disclose

Disclosures

Whitney and Liam (3)



Health Equity

Health Equity:

Ensuring every child has a fair and just opportunity to be as healthy as possible.

Equality



Equity



Equality

Equity

“Equity is not about what’s free...”

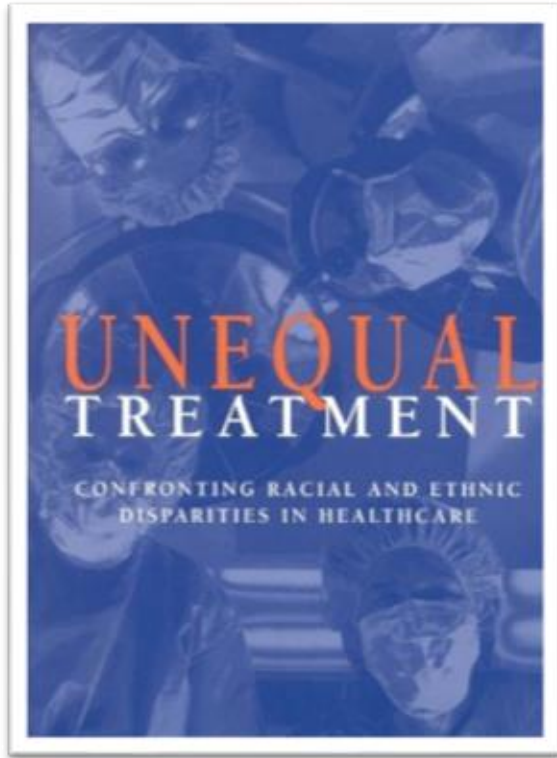
Equality

Equity

*“Equity is not about what’s free...
equity is about what fits...”*

Unequal Treatment: Two Decades of Discourse

Ray Bignall, MD
@DrRayMD



Unequal Treatment

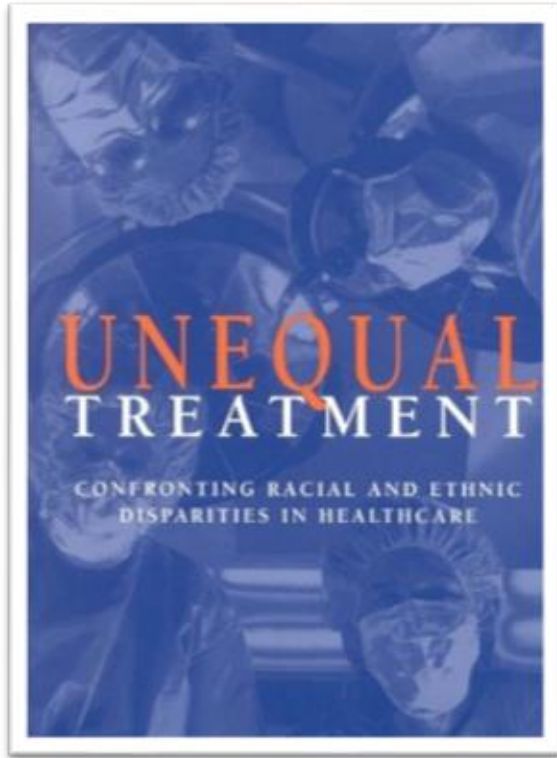
Institute of Medicine (National
Academy of Medicine), 2003

The groundbreaking 2003 report published by the Institute of Medicine (now the National Academy of Medicine) launched a new era in health equity scholarship.

- Disparities in care: significant racial and ethnic disparities in outcomes, **despite controlling for socioeconomic status and access to care**
- Highlighted both individual **patient- and system-level factors** as the sources of disparities
- Clinical encounters: role of **provider bias, stereotypes and communication barriers**
- Recommendations: improving medical care **financing, community-based care, and cross-cultural education** in health professions

Unequal Treatment: Two Decades of Discourse

Ray Bignall, MD
@DrRayMD



Unequal Treatment

Institute of Medicine (National
Academy of Medicine), 2003

The groundbreaking 2003 report published by the Institute of Medicine (now the National Academy of Medicine) launched a new era in health equity scholarship.

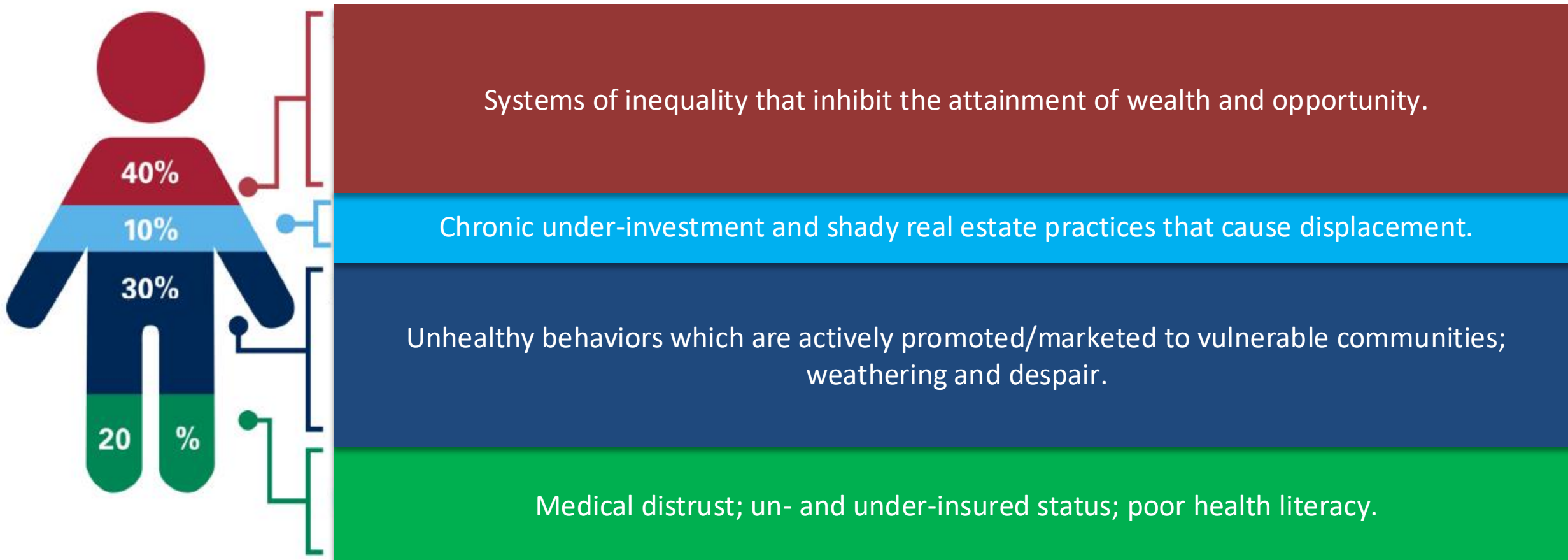
- Disparities in care: significant racial and ethnic disparities in outcomes, **despite controlling for socioeconomic status and access to care**
- Highlighted both individual **patient-** and **system-level factors** as the sources of disparities
- Clinical encounters: role of **provider bias, stereotypes and communication barriers**
- Recommendations: improving medical care **financing, community-based care, and cross-cultural education** in health professions

IMPACT OF SOCIAL DETERMINANTS OF HEALTH

Ray Bignall, MD
@DrRayMD



Social determinants of health have tremendous affect on an individual's health regardless of age, race, or ethnicity.



Source: Institute for Clinical Systems Improvement; Going Beyond Clinical Walls: Solving Complex Problems, 2014 Graphic designed by ProMedica.

©2018 American Hospital Association

The Landscape of Health Equity in Pediatric Cardiology

What We've Learned



JAHA

Journal of the American Heart Association

Ray Bignall, MD
@DrRayMD

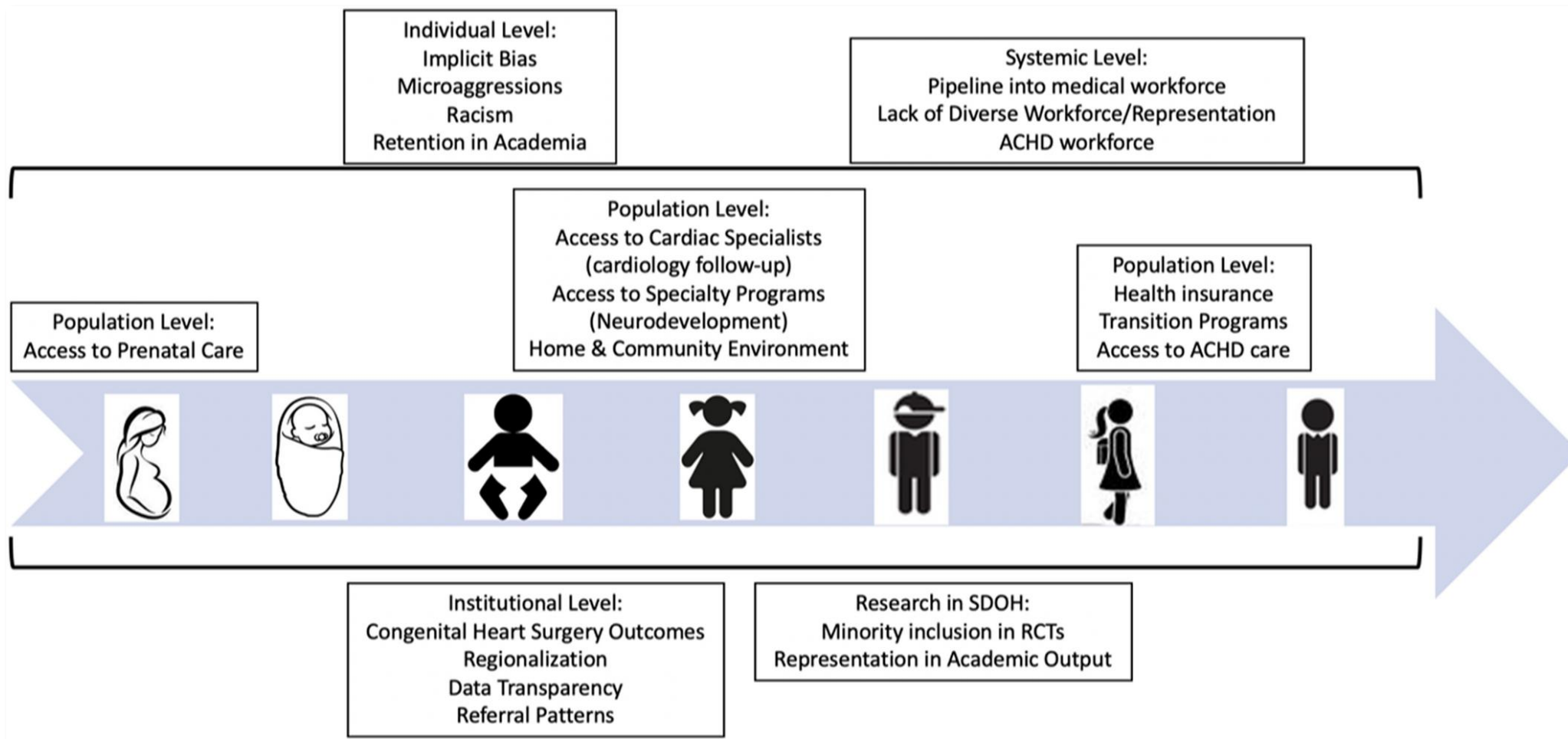


AHA SCIENTIFIC STATEMENT

Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease: A Scientific Statement From the American Heart Association

Keila N. Lopez, MD, MPH, Chair; Carissa Baker-Smith, MD, MPH, FAHA; Glenn Flores, MD; Michelle Gurvitz, MD, MS; Tara Karamlou, MD, MSc; Flora Nunez Gallegos, MD, MPH; Sara Pasquali, MD, MHS, FAHA; Angira Patel, MD, MPH; Jennifer K. Peterson, PhD, APRN-CNS; Jason L. Salemi, PhD, MPH; Clyde Yancy, MD, MSc, FAHA; Shabnam Peyvandi, MD, MAS, FAHA, Vice Chair; on behalf of the American Heart Association Congenital Cardiac Defects Committee of the Council on Lifelong Congenital Heart Disease and Heart Health in the Young; Council on Epidemiology and Prevention; and Council on Lifestyle and Cardiometabolic Health





Lopez KN, Baker-Smith C, Flores G, Gurvitz M, Karamlou T, Nunez Gallegos F, Pasquali S, Patel A, Peterson JK, Salemi JL, Yancy C, Peyvandi S; American Heart Association Congenital Cardiac Defects Committee of the Council on Lifelong Congenital Heart Disease and Heart Health in the Young; Council on Epidemiology and Prevention; and Council on Lifestyle and Cardiometabolic Health. Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease: A Scientific Statement From the American Heart Association. J Am Heart Assoc. 2022



JAHA

Journal of the American Heart Association

CONTEMPORARY REVIEW

Ray Bignall, MD
@DrRayMD



Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care

Devyani Chowdhury, MD, MHA ; Pietro A. Elliott, BS ; S. Yukiko Asaki, MD ; Shahnawaz Amdani, MD ; Quang-Tuyen Nguyen, MD ; Christina Ronai, MD ; Seda Tierney, MD ; Victor Y. Levy, MD, MSPH ; Kriti Puri, MBBS ; Carolyn A. Altman, MD; Jonathan N. Johnson, MD ; Julie S. Glickstein, MD

- Disparities in pediatric congenital heart disease are as diverse as the populations you care for:
 - Mortality rate due to CHD for Whites, Hispanics, and Blacks are 26.89, 33.66 and 40.26, respectively
 - Prenatal diagnosis of CHD: 62% in higher SES vs 35% in lower SES
 - Patients with private insurance had lower mortality than those with public insurance
 - Rurality decreased chances for pediatric cardiology specialty access
 - Black and Hispanic children have lower graft survival and higher death rates post-transplant

Chowdhury D, Elliott PA, Asaki SY, Amdani S, Nguyen QT, Ronai C, Tierney S, Levy VY, Puri K, Altman CA, Johnson JN, Glickstein JS. Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care. J Am Heart Assoc. 2024



Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease



JACC
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY

Ray Bignall, MD
@DrRayMD

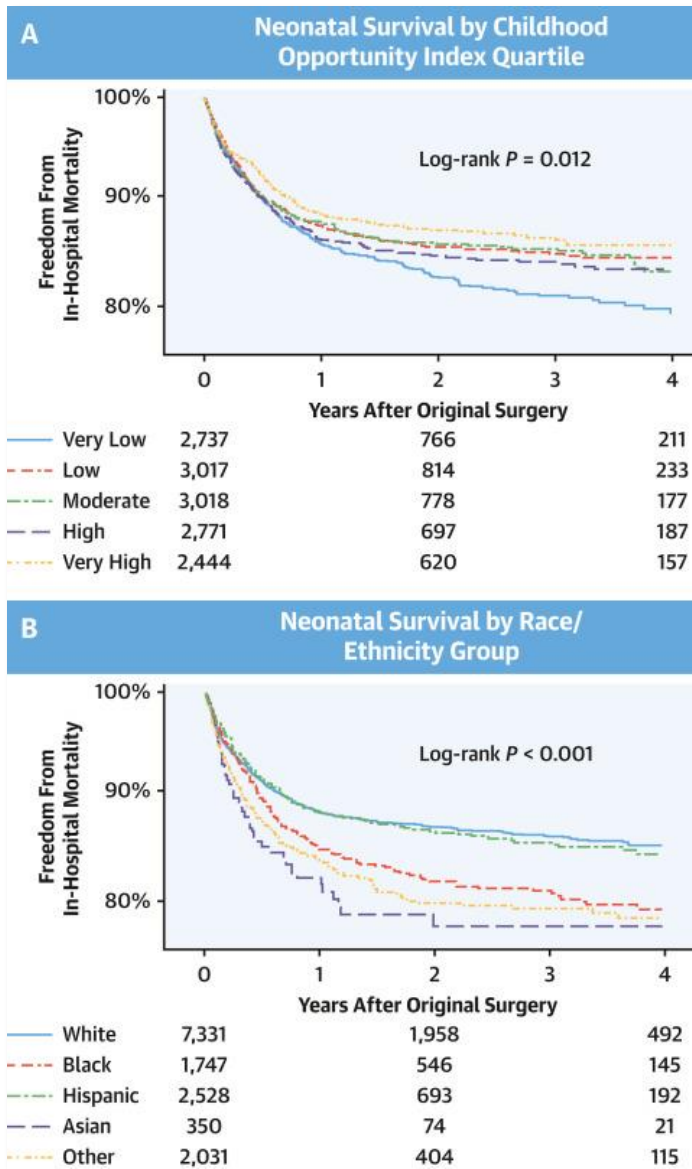


Son Q. Duong, MD, MS,^{a,b} Mahmud O. Elfituri, MBBCH,^c Isabella Zaniletti, PhD,^d Robert W. Ressler, PhD,^e Clemens Noelke, PhD,^e Bruce D. Gelb, MD,^{a,b,f} Robert H. Pass, MD,^a Carol R. Horowitz, MD, MPH,^{g,h} Howard S. Seiden, MD,^a Brett R. Anderson, MD, MBA, MSⁱ

- Use of Pediatric Health information System (PHIS) data linked to Childhood Opportunity Index (COI) to understand surgical outcome disparities in CHD
 - Non-Hispanic Black, Asian, and Other categorized racial groups had increased adjusted mortality compared to non-Hispanic White children
- **Neighborhood deprivation** (as measured by the Childhood Opportunity Index) **explains some, but not all**, of the racial/ethnic disparities we see in CHD surgical outcomes
 - Explains only 3-17% of the effect

Duong SQ, Elfituri MO, Zaniletti I, Ressler RW, Noelke C, Gelb BD, Pass RH, Horowitz CR, Seiden HS, Anderson BR. Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease. J Am Coll Cardiol. 2023





- Racial disparity is **only partially mediated** by COI
- This is consistent with data from across pediatrics: **socioeconomic advancement does not equally benefit all demographic groups**, and does not serve as a proxy for racial/ethnic differences
 - Willer et al. (JAMA Net Open, 2022): **Black children in the highest income quartile** have post-operative mortality rates comparable to **White children in the lowest income quartile**.
- Recommend investing in **specific interventions within these communities** to improve post-discharge outcomes

Duong SQ, Elfituri MO, Zaniletti I, Ressler RW, Noelke C, Gelb BD, Pass RH, Horowitz CR, Seiden HS, Anderson BR. Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease. J Am Coll Cardiol. 2023

Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease



JACC
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY

Ray Bignall, MD
@DrRayMD



Son Q. Duong, MD, MS,^{a,b} Mahmud O. Elfituri, MBBCH,^c Isabella Zaniletti, PhD,^d Robert W. Ressler, PhD,^e Clemens Noelke, PhD,^e Bruce D. Gelb, MD,^{a,b,f} Robert H. Pass, MD,^a Carol R. Horowitz, MD, MPH,^{g,h} Howard S. Seiden, MD,^a Brett R. Anderson, MD, MBA, MSⁱ

- Use of Pediatric Health information System (PHIS) data linked to Childhood Opportunity Index (COI) to understand surgical outcome disparities in CHD
 - Non-Hispanic Black, Asian, and Other categorized racial groups had increased adjusted mortality compared to non-Hispanic White children
- **Neighborhood deprivation** (as measured by the Childhood Opportunity Index) **explains some, but not all**, of the racial/ethnic disparities we see in CHD surgical outcomes
 - Explains only 3-17% of the effect

Duong SQ, Elfituri MO, Zaniletti I, Ressler RW, Noelke C, Gelb BD, Pass RH, Horowitz CR, Seiden HS, Anderson BR. Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease. J Am Coll Cardiol. 2023



“And the beat goes on...”

Ray Bignall, MD
@DrRayMD



Child Opportunity Index and Pediatric Extracorporeal Membrane Oxygenation Outcomes; the Role of Diagnostic Category

Alizadeh, Faraz MD^{1,2}; Gauvreau, Kimberlee ScD^{1,2}; Barreto, Jessica A. MD, MS^{1,2}; Hall, Matt PhD³; Bucholz, Emily MD, MPH, PhD^{1,2}; Nathan, Meena MD, MPH^{4,5}; Newburger, Jane W. MD, MPH^{1,2}; Vitali, Sally MD^{6,7}; Thiagarajan, Ravi R. MBBS, MPH^{1,2}; Chan, Titus MD, MS, MPP^{8,9};  Moynihan, Katie M. MBBS^{1,2,10}

Critical Care Medicine

- Social determinants of health are associated with worse pediatric ECMO outcomes



Unplanned Readmissions in Pediatric Cardiac Disease: Impacts of Social Determinants of Health

Miriam T. Fox , Patrice Melvin, Faraz Alizadeh, Jessica A. Barreto, Ravi R. Thiagarajan, Jane W. Newburger, Sarah D. de Ferranti, Susan F. Saleeb, Mia Umali, Valerie L. Ward & Katie M. Moynihan

- 90-day and 365-day all-cause readmission rates were higher in Black and Latino children, and not responsive to COI

Lopez KN, Baker-Smith C, Flores G, Gurvitz M, Karamlou T, Nunez Gallegos F, Pasquali S, Patel A, Peterson JK, Salemi JL, Yancy C, Peyvandi S; American Heart Association Congenital Cardiac Defects Committee of the Council on Lifelong Congenital Heart Disease and Heart Health in the Young; Council on Epidemiology and Prevention; and Council on Lifestyle and Cardiometabolic Health. Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease: A Scientific Statement From the American Heart Association. J Am Heart Assoc. 2022



Linking Equity Interventions to Improved Outcomes

What Is Being Done Today?

What Have We Learned:

Methodologies

- Our tactics for measuring, evaluating, and intervening on these disparities is beginning to evolve
 - Advanced quantitative methods
 - Advanced mediation analyses
 - Acyclic diagrams – reflect complex relationships, interactions, and pathways to avoid analytical errors
 - Qualitative methods
 - **Focus groups** and in-depth interviews
 - Valuable for capturing **nuance and bias**
 - Community-based approaches
 - Especially valuable for addressing gaps within **historically excluded populations**

Lopez KN, Baker-Smith C, Flores G, Gurvitz M, Karamlou T, Nunez Gallegos F, Pasquali S, Patel A, Peterson JK, Salemi JL, Yancy C, Peyvandi S; American Heart Association Congenital Cardiac Defects Committee of the Council on Lifelong Congenital Heart Disease and Heart Health in the Young; Council on Epidemiology and Prevention; and Council on Lifestyle and Cardiometabolic Health. Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease: A Scientific Statement From the American Heart Association. J Am Heart Assoc. 2022

What Have We Learned:

A Lesson from Pediatric Nephrology

Ray Bignall, MD
@DrRayMD



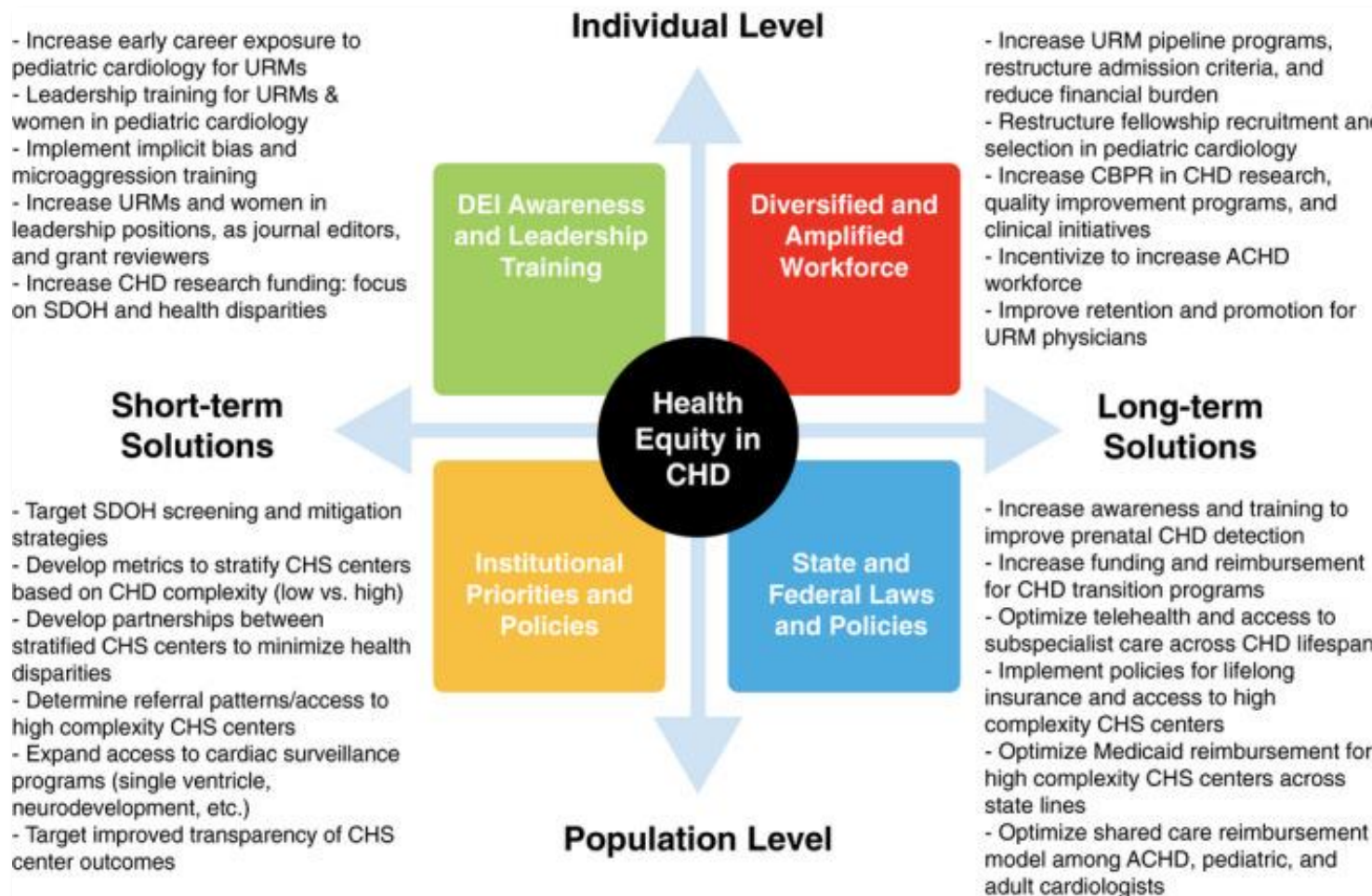
Racial Disparities in Pediatric Kidney Transplantation under the new Kidney Allocation System in the United States

CJASN
Clinical Journal of the American Society of Nephrology

Methods and Cohort		Results					
	Retrospective cohort using SRTR data		Time from Activation to DDKT (Adjusted time ratio)		Time on dialysis to DDKT (Adjusted time ratio)		Delayed graft function (Adjusted odds ratio)
	Children <18y active on DDKT list from 2008-2019	Pre-KAS	White	reference			
			Black	1.14 (1.00-1.29)	1.20 (1.09-1.32)	1.17 (0.85-1.60)	
			Hispanic	1.12 (0.99-1.28)	1.13 (1.02-1.24)	0.84 (0.61-1.17)	
	Exposures of interest: KAS era Race and ethnicity		Other	1.08 (0.87-1.33)	1.17 (1.01-1.36)	0.84 (0.47-1.49)	
	Outcomes: Time from activation to transplant Time on dialysis to transplant Delayed graft function Short-term graft loss	Post-KAS	White	reference			
			Black	1.16 (1.01-1.32)	1.10 (0.99-1.24)	0.73 (0.42-1.27)	
			Hispanic	1.13 (1.00-1.28)	1.03 (0.93-1.15)	0.71 (0.42-1.20)	
			Other	1.17 (0.96-1.41)	1.10 (0.94-1.29)	0.76 (0.34-1.72)	

Conclusion: No racial and ethnic disparities from activation to deceased donor transplantation were seen before or after implementation of KAS, while time on dialysis to transplantation and odds of short-term graft loss improved in equity after KAS, without compromising disparities in delayed graft function.

Jill Krissberg, Matthew Kaufmann, Anshal Gupta, et al. *Racial Disparities in Pediatric Kidney Transplantation under the New Kidney Allocation System in the United States*. CJASN doi: 10.2215/CJN.06740521. Visual Abstract by Beatrice Concepcion, MD



Lopez KN, Baker-Smith C, Flores G, Gurvitz M, Karamlou T, Nunez Gallegos F, Pasquali S, Patel A, Peterson JK, Salemi JL, Yancy C, Peyvandi S; American Heart Association Congenital Cardiac Defects Committee of the Council on Lifelong Congenital Heart Disease and Heart Health in the Young; Council on Epidemiology and Prevention; and Council on Lifestyle and Cardiometabolic Health. Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease: A Scientific Statement From the American Heart Association. J Am Heart Assoc. 2022



JAHA

Journal of the American Heart Association



Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care

<u>Common themes</u>	<u>Interventions</u>	<u>Call to action</u>
Race and ethnicity	• NIMHD and CDC programming • Improved provider-patient ethnic concordance • Loan forgiveness programs	• Increasing representation from historically excluded groups • (Improved measurement and stratification of CHD outcomes)
Insurance status	• ACA Medicaid expansion/CHIP • FQHCs	• Expanding Medicaid • Improved reimbursement
Socioeconomic status	• ACA Medicaid expansion/CHIP • EITC and Child Tax Credit	• Improved public education spending • Health literacy interventions
Rurality	• Telehealth • Value-based care • Loan forgiveness programs	• Expand use of telehealth, CHWs • Increasing representation from historically excluded groups

Chowdhury D, Elliott PA, Asaki SY, Amdani S, Nguyen QT, Ronai C, Tierney S, Levy VY, Puri K, Altman CA, Johnson JN, Glickstein JS. Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care. J Am Heart Assoc. 2024



Dereck Paul, MD
CEO & Co-Founder, Glass Health
@dereckwpaul



Chowdhury D, Elliott PA, Asaki SY, Amdani S, Nguyen QT, Ronai C, Tierney S, Levy VY, Puri K, Altman CA, Johnson JN, Glickstein JS. Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care. J Am Heart Assoc. 2024

Use of National Registries to Improve Health Equity

And How Does PC4 Measure Up to Its Peers?

Comparing Popular Pediatric Cardiology Registries and Their Utility for Equity Research

References: JAMA Network Open.

2025. O'Halloran AJ, Keim G, Gathers CA, et al.; The Lancet. Child & Adolescent Health. 2025. Mitchell HK, Seaton SE, Mustafa K, et al.; Journal of the American College of Cardiology. 2023. Duong SQ, Elfituri MO, Zaniletti I, et al.; Critical Care Medicine. 2024. Alizadeh F, Gauvreau K, Barreto JA, et al.; Pediatric Cardiology. 2025. Fox MT, Melvin P, Alizadeh F, et al.; Frontiers in Public Health. 2024. Xu J, Li Q, Xiong J, Cheng Z, Deng L.; JACC. Heart Failure. 2025. Yuan Y, Li C, Lei S, et al.; Critical Care Medicine. 2021. Muttalib F, González-Dambrauskas S, Lee JH, et al.

Registry	Data Type/Scope	Strengths for Equity Research	Limitations for Equity Research	References
PHIS	Administrative, national (49+ hospitals)	Large sample, broad scope, includes race/ethnicity, insurance, geocoded SDOH indices	Limited clinical detail, variable race/ethnicity data quality, lacks granular SDOH	 JAMA + 2
PC4	Clinical, CICU-focused (60+ hospitals)	Granular clinical data, robust risk adjustment, standardized data collection, regular audits	Smaller sample, limited SDOH variables, variable sociodemographic completeness	Critical Care M... + 2
STS-CHSD	Clinical, surgical, national	Detailed perioperative data, national scope, linkable to PHIS	Incomplete SDOH, variable race/ethnicity data	 Lancet
ELSO	Clinical, ECMO-focused, international	Captures ECMO-specific outcomes, includes race/ethnicity	Incomplete sociodemographic data, inconsistent SDOH, limited race-conscious analysis	JACC
ACTION	Clinical, heart failure/VAD	Focus on rare high-risk populations, supports QI, linkable to other registries	Limited SDOH, variable sociodemographic data	Critical Care M...

Comparing Popular Pediatric Cardiology Registries and Their Utility for Equity Research

References: JAMA Network Open.

2025. O'Halloran AJ, Keim G, Gathers CA, et al.; The Lancet. Child & Adolescent Health.
2025. Mitchell HK, Seaton SE, Mustafa K, et al.; Journal of the American College of Cardiology.
2023. Duong SQ, Elfituri MO, Zaniletti I, et al.; Critical Care Medicine. 2024. Alizadeh F, Gauvreau K, Barreto JA, et al.; Pediatric Cardiology. 2025. Fox MT, Melvin P, Alizadeh F, et al.; Frontiers in Public Health. 2024. Xu J, Li Q, Xiong J, Cheng Z, Deng L.; JACC. Heart Failure. 2025. Yuan Y, Li C, Lei S, et al.; Critical Care Medicine. 2021. Muttalib F, González-Dambrauskas S, Lee JH, et al.

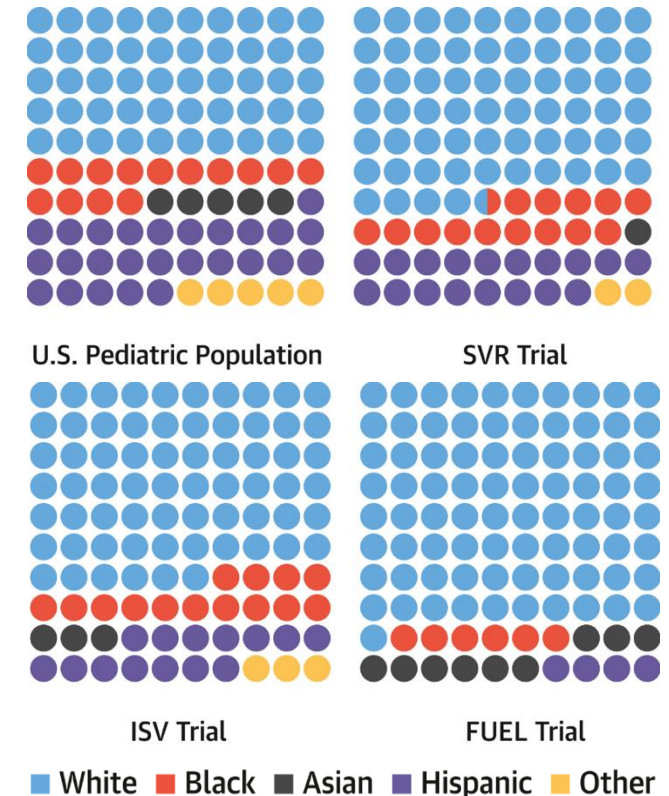
- Ray's "take-aways" and best techniques:
 - Consistent approaches to categorizing race, ethnicity, SES, and location
 - Avoiding relying on insurance status as the sole indicate of SES
 - Collaborating not only across investigators, but data managers and CRC teams as well
 - Engaging patient- and community-advisory boards to evaluate data collection and analysis strategies

Where Gaps Remain

Challenges and Opportunities

Where gaps remain...

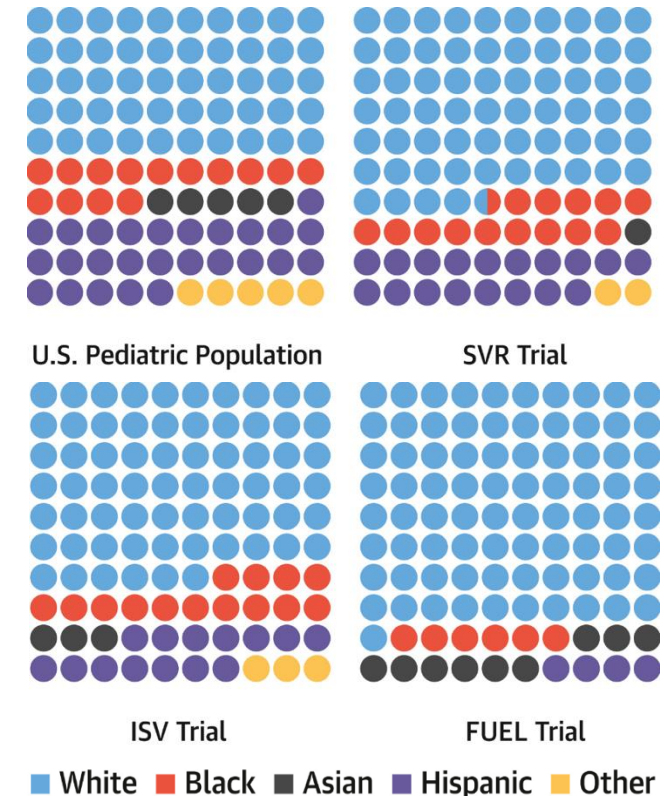
- Incomplete **understanding of mechanisms**
 - Disentangling the relationship between demographic factors (e.g. race, ethnicity, SES), biological factors (e.g. ancestry and genetics), and systemic factors (e.g. patient care patterns and provider bias)
- **Structural and institutional factors**
 - Access to care
- Failure to approach research on individuals **with CHD across the lifespan**
 - Neurocognitive and psychosocial outcomes



Chowdhury D, Elliott PA, Asaki SY, Amdani S, Nguyen QT, Ronai C, Tierney S, Levy VY, Puri K, Altman CA, Johnson JN, Glickstein JS. Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care. J Am Heart Assoc. 2024; Opatowsky AR, Allen KY, Bucholz EM, Burns KM, Del Nido P, Fenton KN, Gelb BD, Kirkpatrick JN, Kutty S, Lambert LM, Lopez KN, Olivieri LJ, Pajor NM, Pasquali SK, Petit CJ, Sood E, VanBuren JM, Pearson GD, Miyamoto SD. Pediatric and Congenital Cardiovascular Disease Research Challenges and Opportunities: JACC Review Topic of the Week. J Am Coll Cardiol. 2022

Where gaps remain...

- **Reducing data-sharing barriers** by streamlining agreements and funding
 - Esp. adequately funding administrative research needs
- Use of **community-based research** and **learning health networks**
 - Leveraging patient- and community-centered resources to address complex pediatric care questions
- **Limited diversity** of study participants and investigators



Chowdhury D, Elliott PA, Asaki SY, Amdani S, Nguyen QT, Ronai C, Tierney S, Levy VY, Puri K, Altman CA, Johnson JN, Glickstein JS. Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care. J Am Heart Assoc. 2024; Opatowsky AR, Allen KY, Bucholz EM, Burns KM, Del Nido P, Fenton KN, Gelb BD, Kirkpatrick JN, Kutty S, Lambert LM, Lopez KN, Olivieri LJ, Pajor NM, Pasquali SK, Petit CJ, Sood E, VanBuren JM, Pearson GD, Miyamoto SD. Pediatric and Congenital Cardiovascular Disease Research Challenges and Opportunities: JACC Review Topic of the Week. J Am Coll Cardiol. 2022

Unequal Representation in Pediatric Cardiology

The More Things Change, The More They Stay the Same?*

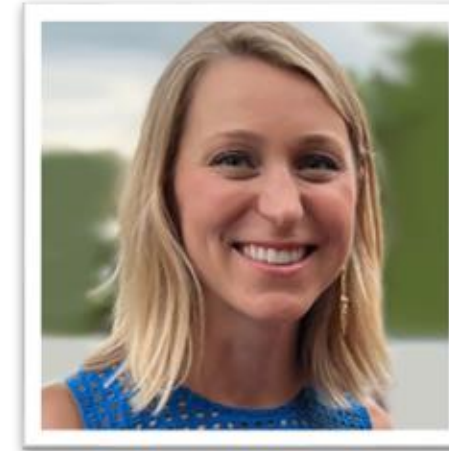
Elizabeth DeWitt, MD,^a Roberta Williams, MD^b

- Underrepresented minorities in medicine (URMM) in pediatric cardiology represent 7% of faculty
- Roughly 25% of programs have no URMM faculty
- Female faculty were a median of 42% per program, but only 16% of division directors and only 27% of faculty at academic rank of professor or professor emeritus
- URMM students are less likely to place in GME programs even after adjusting for sex, identity, and USMLE scores



JACC
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY

Ray Bignall, MD
@DrRayMD



Elizabeth DeWitt, MD

Assistant Professor of Pediatrics
Harvard Medical School

Roberta Williams, MD, MACC

Professor and Past Chair of Pediatrics
Keck School of Medicine of USC

DeWitt E, Williams R. Unequal Representation in Pediatric Cardiology: The More Things Change, The More They Stay the Same? J Am Coll Cardiol. 2023

Unequal Representation in Pediatric Cardiology

The More Things Change, The More They Stay the Same?*

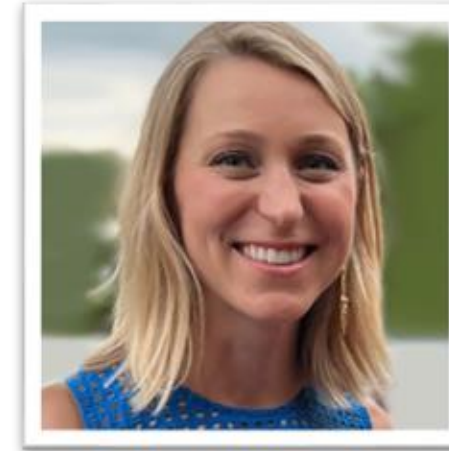
Elizabeth DeWitt, MD,^a Roberta Williams, MD^b

- Underrepresented minorities in medicine (URMM) in pediatric cardiology represent 7% of faculty
- Roughly 25% of programs have no URMM faculty
- Female faculty were a median of 42% per program, but only 16% of division directors and only 27% of faculty at academic rank of professor or professor emeritus
- URMM students are less likely to place in GME programs even after adjusting for sex, identity, and USMLE scores



JACC
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY

Ray Bignall, MD
@DrRayMD



Elizabeth DeWitt, MD

Assistant Professor of Pediatrics
Harvard Medical School

Roberta Williams, MD, MACC

Professor and Past Chair of Pediatrics
Keck School of Medicine of USC

DeWitt E, Williams R. Unequal Representation in Pediatric Cardiology: The More Things Change, The More They Stay the Same? J Am Coll Cardiol. 2023

Why diversity is needed at every level of clinical trials, from participants to leaders

nature
medicine

Ray Bignall, MD
@DrRayMD



“All of society benefits by achieving ... diversity in clinical trials ... and creating a more trustworthy healthcare system.”

How is this achieved?

- Inclusion of **underrepresented scientists, community partners, and community advisory boards** in study design
- **Community partner education** on fair compensation and trial negotiations
- **Removing barriers to benefits**, so those who participate in the trial benefit from the results
- Higher risk trials should be **evaluated for risk of exploitation**
- Use of **targets and budgetary plans** to enroll underrepresented populations
- **Diversifying clinical trialists**: women, minorities, historically excluded groups



**Khadijah Breathett, MD, MS,
FACC, FAHA, FHFSA**

Associate Professor of Medicine
Indiana University School of Medicine

Breathett, K. Why diversity is needed at every level of clinical trials, from participants to leaders. *Nat Med* 30, 929 (2024)

Why diversity is needed at every level of clinical trials, from participants to leaders

nature
medicine

Ray Bignall, MD
@DrRayMD



“All of society benefits by achieving ... diversity in clinical trials ... and creating a more trustworthy healthcare system.”

How is this achieved?

- Inclusion of **underrepresented scientists, community partners, and community advisory boards** in study design
- **Community partner education** on fair compensation and trial negotiations
- **Removing barriers to benefits**, so those who participate in the trial benefit from the results
- Higher risk trials should be **evaluated for risk of exploitation**
- Use of **targets and budgetary plans** to enroll underrepresented populations
- **Diversifying clinical trialists**: women, minorities, historically excluded groups



**Khadijah Breathett, MD, MS,
FACC, FAHA, FHFSA**

Associate Professor of Medicine
Indiana University School of Medicine

Breathett, K. Why diversity is needed at every level of clinical trials, from participants to leaders. *Nat Med* 30, 929 (2024)

THE LANCET

"Acknowledging every aspect of the barriers for Black Americans to enrollment in clinical trials is critical to moving forward.

***We are not simply untrusting—
we remember.***

*And there is still far too much evidence of
Black lives not mattering in society."*

Manning, K. D. (2020). More than medical mistrust. *Lancet*, 396(10261), 1481-1482.



Kimberly Manning, MD, MACP, FAAP

Professor of Medicine

Emory University School of Medicine

@gradydoctor

Strategy #1

Health equity is not a personal project for reparations.

Strategy #2

Relentless pursuit of high-quality data is the only path to health equity.

Strategy #3

Inclusive excellence should be broadly representative, unquestionably genuine, routine, and unspectacular.

Strategy #4

Health disparities are not the problem: the choice to ignore them is!

Strategy #5

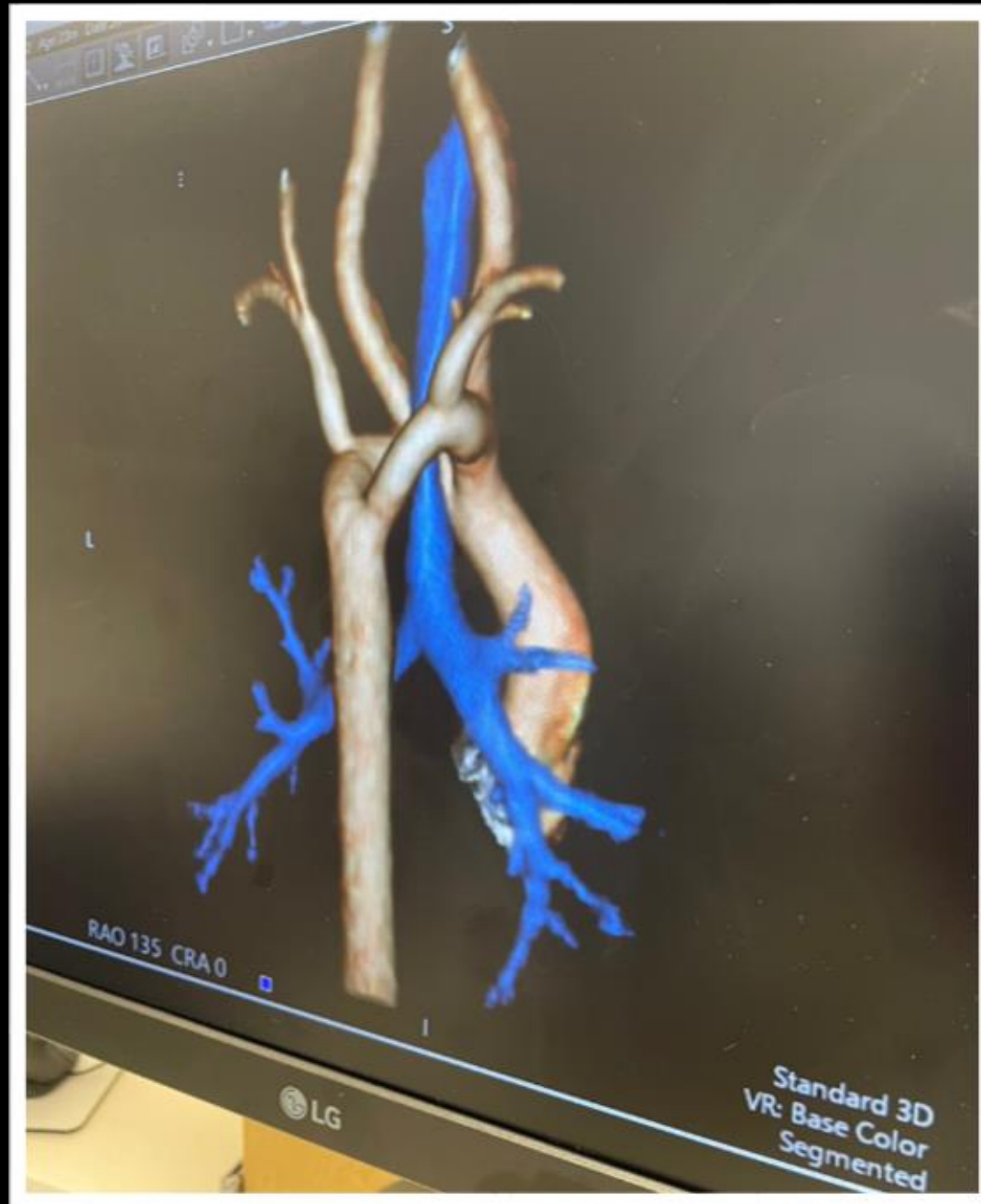
Advocacy is now that standard of care.

Who really cares about “equity” ...?



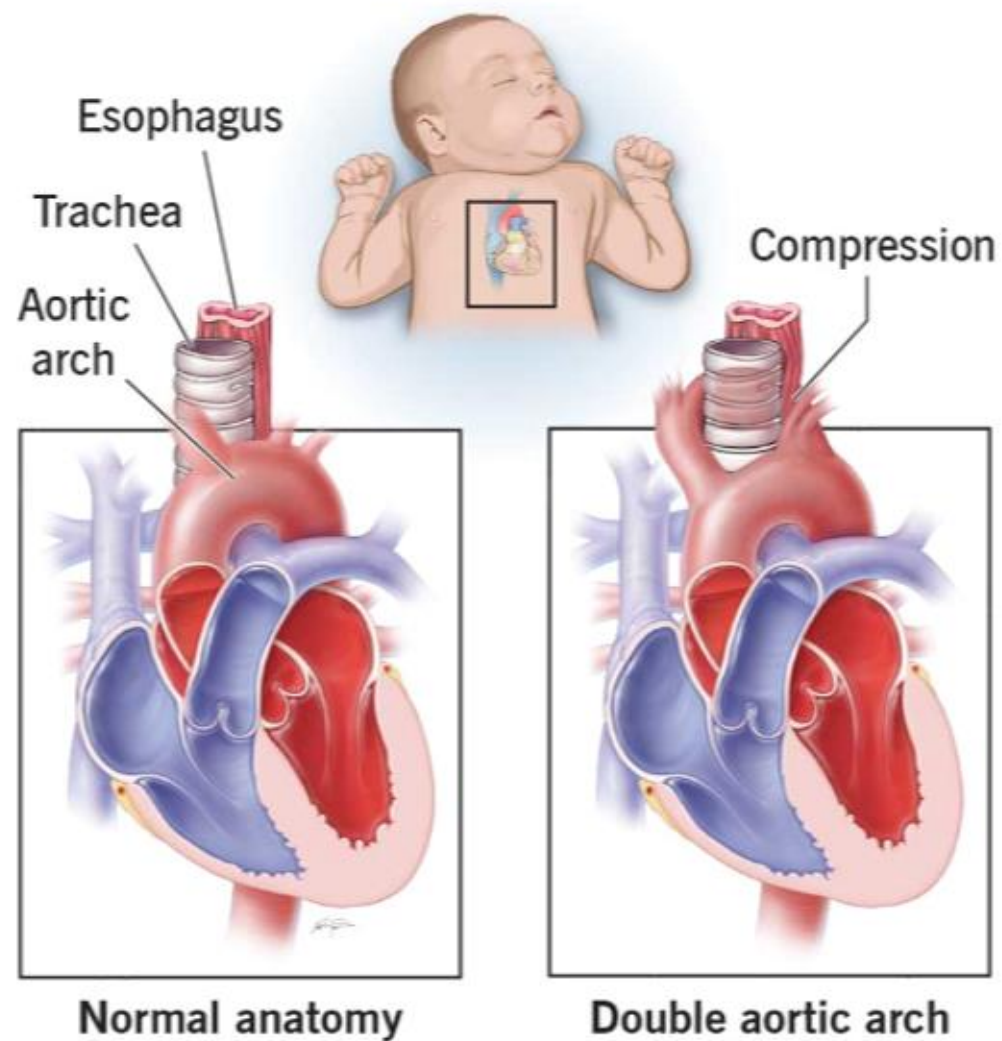








Double Aortic Arch





Disparities in surgical outcomes of neonates with congenital heart disease across regions, centers, and populations

Flora Nuñez Gallegos^a, Joyce L. Woo^b, Brett R. Anderson^c, and Keila N. Lopez^{d,*}

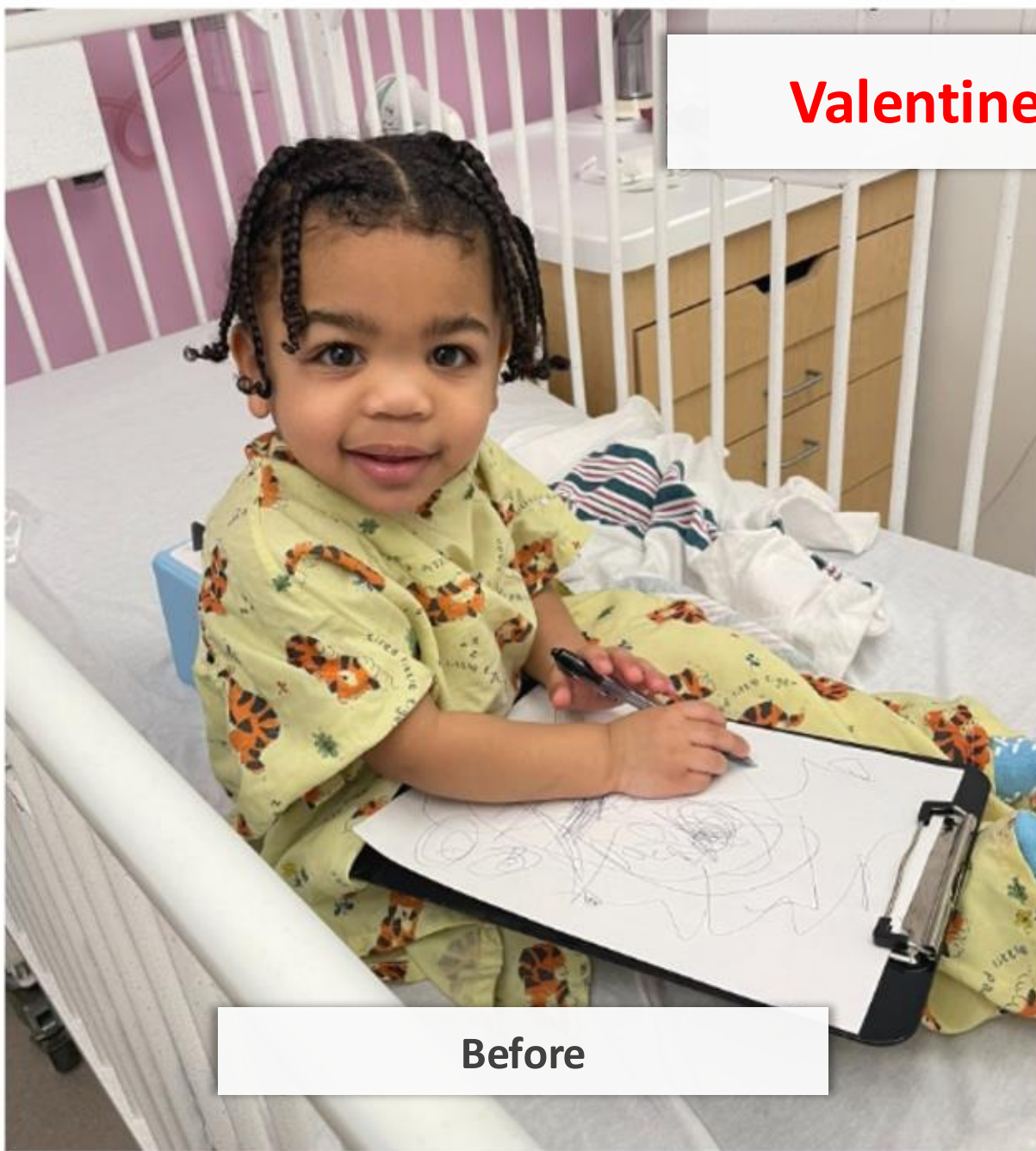
Neighborhood Childhood Opportunity, Race/Ethnicity, and Surgical Outcomes in Children With Congenital Heart Disease

Son Q. Duong, MD, MS,^{a,b} Mahmud O. Elfituri, MBBCH,^c Isabella Zaniletti, PhD,^d Robert W. Ressler, PhD,^e Clemens Noelke, PhD,^e Bruce D. Gelb, MD,^{a,b,f} Robert H. Pass, MD,^a Carol R. Horowitz, MD, MPH,^{g,h} Howard S. Seiden, MD,^a Brett R. Anderson, MD, MBA, MSⁱ

Addressing Disparities in Pediatric Congenital Heart Disease: A Call for Equitable Health Care

Devyani Chowdhury^{ib}, MD, MHA; Pietro A. Elliott^{ib}, BS; S. Yukiko Asaki^{ib}, MD; Shahnawaz Amdani^{ib}, MD; Quang-Tuyen Nguyen^{ib}, MD; Christina Ronai^{ib}, MD; Seda Tierney^{ib}, MD; Victor Y. Levy^{ib}, MD, MSPH; Kriti Puri^{ib}, MBBS; Carolyn A. Altman, MD; Jonathan N. Johnson^{ib}, MD; Julie S. Glickstein^{ib}, MD

Valentine's Day 2025



Before



After



Who really cares about “equity” ...?

Do YOU ~~Who~~ really cares about “equity” ...?

*For my family
– and for all
our families –
health equity
is personal!*





Be encouraged!

Ray.Bignall@nationwidechildrens.org

[@DrRayMD](#)