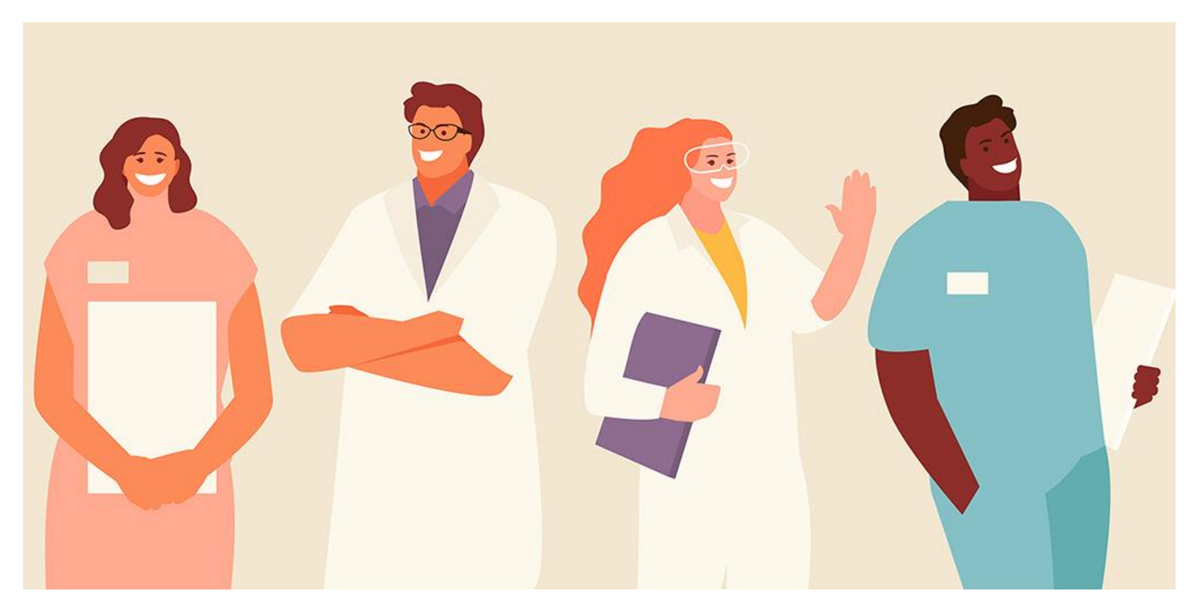
Structural Competency Training for Kidney Healthcare Professionals

The End Stage Renal Disease National Coordinating Center (ESRD NCC)

Using a structurally proficient approach in the field of kidney care plays a significant role in ***enhancing patient outcomes*** *and aiding kidney healthcare professionals in gaining a* ***deeper understanding of their patients.***

Facebook: @ESRD.NCC | Instagram: @ESRD_NCC | X: @ESRDNCC



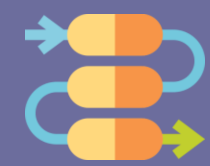
Module 3

Imagining and Implementing Structural Interventions to Advance Health Equity in the Kidney Community

Learning Objectives

Describe historical or contemporary examples of an intervention that addressed structural violence and vulnerability in care

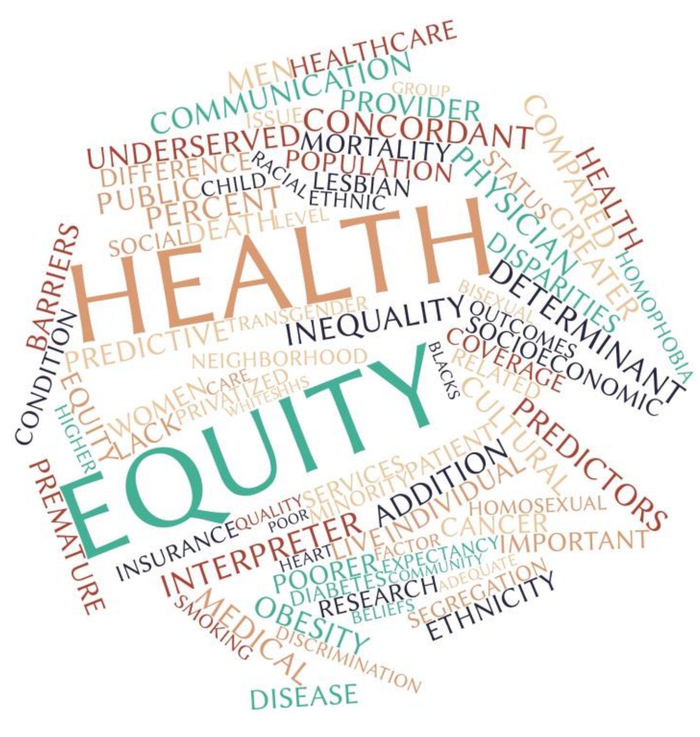
Define and understand the six levels of intervention for addressing harmful social structures in kidney care



Identify interventions and strategies that address structural causes of kidney disease and kidney care inequities

Describe interventions that addressed structural violence and vulnerability in care

Equity Curriculum In Action



- Immersion training for residents (e.g., taking public transportation to a clinic)
  - Yale University School of Medicine
- Special webinars and reading groups among medical students (e.g., inequities in health)
  - University of California, Riverside School of Medicine

Hansen, H. , Braslow, J. & Rohrbaugh, R. M. From Cultural to Structural Competency—Training Psychiatry Residents to Act on Social Determinants of Health and Institutional Racism. *JAMA Psychiatry (2018), 75* (2), 117-118.
Structural Competency Working Group. Retrieved from www.structcomp.org.
University of California, Riverside. Center for Health Disparities Research. 2023. Retrieved from https://healthdisparities.ucr.edu/ - .
Yale School of Medicine. Social Justice and Health Equity Curriculum. 2023. Retrieved from https://medicine.yale.edu/psychiatry/education/social/justice/ - .

Strategies for Increasing Structural Competency

Knowledge

- Build vocabulary for dialogue and awareness.

Davis, S. & O'Brien, A. Let's Talk About Racism: Strategies for Building Structural Competency in Nursing. *Academic Medicine. 2020. 95* (12S); S58-S65.
Structural Competency Working Group. Retrieved from www.structcomp.org.

Strategies for Increasing Structural Competency

Knowledge

- Build vocabulary for dialogue and awareness.

Attitudes

- Combat implicit biases. Engage in critical self-examination.

Davis, S. & O'Brien, A. Let's Talk About Racism: Strategies for Building Structural Competency in Nursing. *Academic Medicine. 2020. 95* (12S); S58-S65.
Structural Competency Working Group. Retrieved from www.structcomp.org.

Strategies for Increasing Structural Competency

Knowledge

- Build vocabulary for dialogue and awareness.

Attitudes

- Combat implicit biases. Engage in critical self-examination.

Skills

- Lead difficult conversations. Maintain mutual trust, respect, and a shared vision.

Davis, S. & O'Brien, A. Let's Talk About Racism: Strategies for Building Structural Competency in Nursing. *Academic Medicine. 2020. 95* (12S); S58-S65.
Structural Competency Working Group. Retrieved from www.structcomp.org.

SCWG
Structural Competency Working Group

Define and understand the six levels of intervention in kidney care

Opportunities to Improve Equitable Care

Individual

- Combat implicit biases
- Gain knowledge of structures and health

Interpersonal

- Use person-first language
- Connect patients with resources

Clinic/Cooperation

- Ensure inclusive policy and procedures
- Increase staff trainings

Community

- Create partners (e.g., Area Agency of Aging, food pantries)
- Engage with patient professional orgs. (e.g., American Association of Kidney Patients)

Structural Competency Working Group (www.structcomp.org)

SCWG
Structural Competency Working Group

Clinic Intervention: CLAS* Standards

*CLAS = Culturally and Linguistically Appropriate Services

AETC-NMC AIDS Education and Training Center (n.d.). Understanding and Implementing the CLAS Standards. Retrieved from https://www.aetcnmc.org/curricula/CLAS/index.html - .
Structural Competency Working Group (www.structcomp.org)
U.S. Office of Minority Health (n.d.). Enhanced CLAS Standards Checklist. Retrieved from https://www.sfdph.org/dph/files/CLASdocs/SFDPH-Enhanced-CLAS-Standards-Checklist.pdf - .

Identify interventions and strategies that address kidney care inequities

The Patient Voice: Barriers and Solutions

Barriers	Solutions
Access to dialysis facilities	• Collaborate with transportation service providers • Increase telemedicine services • Evaluate for home dialysis
Financial constraints and healthcare coverage	• Provide information about insurance options, financial aid programs • Provide easy-to-understand resources about Medicaid and Medicare

Gee, P. Expert review needed: Structural competency training. *Microsoft Outlook. 2023.*

The Patient Voice: Barriers and Solutions (Cont.)

Barriers	Solutions
Social isolation/mental health challenges	• Establish support groups or facilitate access to counseling services • Engage the community to raise awareness about ESRD • Using a multidisciplinary team approach to engage with and empower patients
Insufficient patient educational information	• Improve access to patient education programs • Use multimedia resources, support groups, and trained educators ▪ NCC patient mobile tool, audio recordings, podcasts

Gee, P. Expert review needed: Structural competency training. *Microsoft Outlook*. 2023.

What Is Your Level of Proficiency in Structural Competency?

Level 1	Level 2	Level 3	Level 4
Ability to connect health problems to social risk factor domains	Knowledge of resources that can help patients	Ability to address unconscious biases within ourselves	Ability to become thought leaders and actively contribute

Action

- Obtain a list of resources to address patients' unmet health related social needs
- Gain awareness and combat implicit biases
- Engage in dialogues to dismantle structural factors that harm patients

Andress, L., & Purtill, M. Shifting the gaze of the physician from the body to the body in a place: A qualitative analysis of a community-based photovoice approach to teaching place-health concepts to medical students. *PLOS ONE. 2020. 15*(2), e0228640.

Structural Competency Working Group. Retrieved from www.structcomp.org.

SCWG Structural Competency Working Group

How Can Kidney Professionals Become More Structurally Competent?

- Use person-first language.
- Create alliances between kidney professionals who serve the same vulnerable patients.
- Address clinical structural problems by investigating the details when patient-provider conflicts occur.

Capel, A. (n.d). Do patients care about the cultural competence of healthcare providers? *Medical Bag.* Retrieved from https://www.medicalbag.com/home/news/do-patients-care-about-the-cultural-competence-of-healthcare-providers/
Metzl, J., & Roberts, D. Structural competency meets structural racism: Race, politics, and the structure of medical knowledge. *American Medical Association Journal of Ethics.* September 2014.16(9), 674-690.

Examples of Impact on Health Systems

Unstable Housing

Food Insecurity

Community Partners in Care and the Health Neighborhoods Initiative (Los Angeles, CA)

- Address mental health disparities using a broadened definition of mental health "treatment."
- Include structural factors that can be intervened upon (e.g., unstable housing, unemployment, safety concern, school dropout, incarceration).
- Goals: To improve mental wellness, increase housing stability, and reduce hospitalizations for adults with depression.

Brown, A. F., Ma, G. X., Miranda, J., Eng, E., Castille, D., Brockie, T., Jones, P., Airhihenbuwa, C. O., Farhat, T., Zhu, L., & Trinh-Shevrin, C.(2019). Structural Interventions to Reduce and Eliminate Health Disparities. *American Journal of Public Health. 109*(S1). January 2019. S72–S78. https://doi.org/10.2105/AJPH.2018.304844.

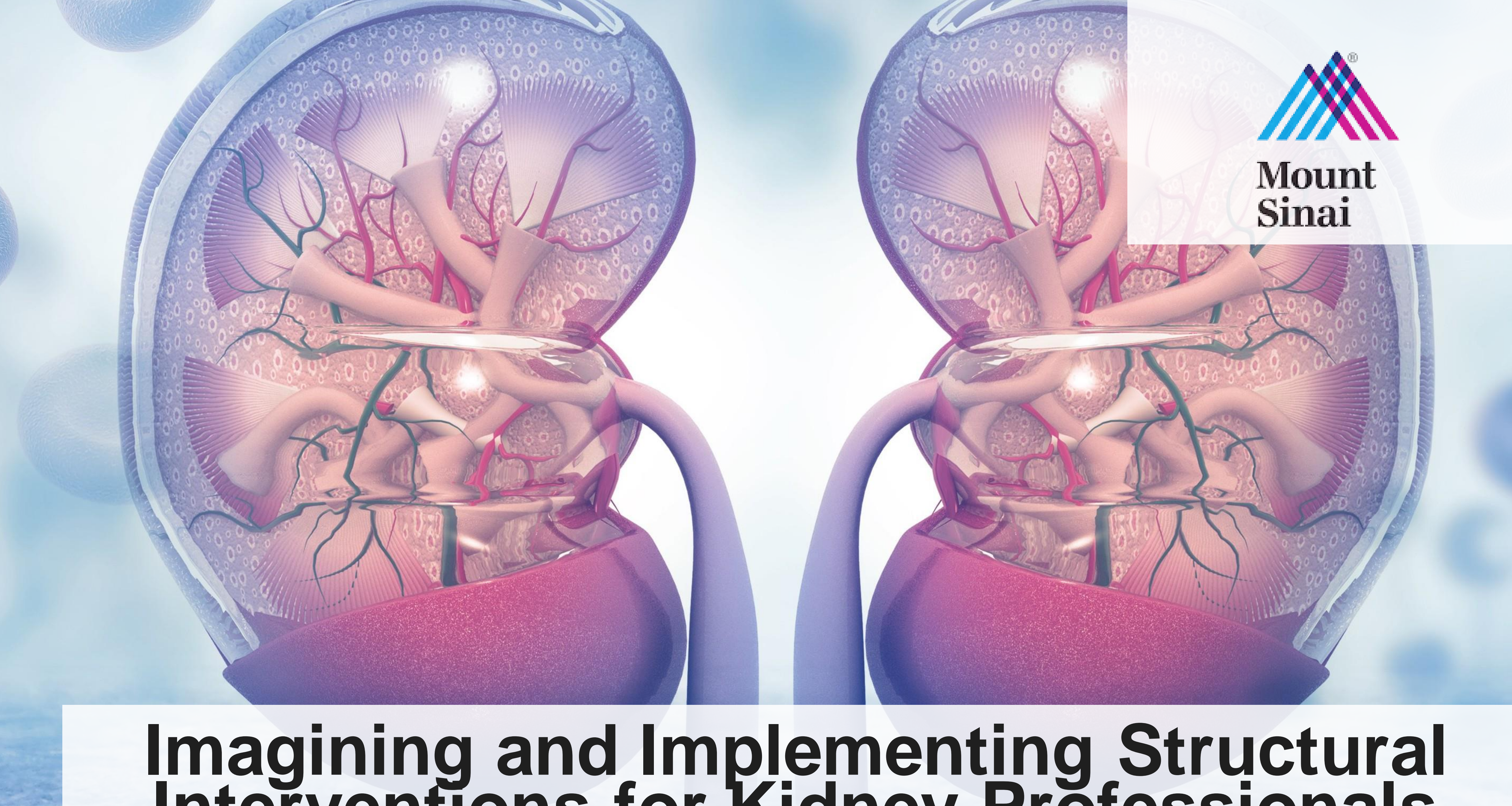
Castillo, E. G., Ijadi-Maghsoodi, R., Shadravan, S., Moore, E., Mensah, M. O., Docherty, M., ... & Wells, K. B. (2019). Community interventions to promote mental health and social equity. *Current Psychiatry Reports*, *21*, 1-14, 2019. https://doi.org/10.1176/appi.focus.18102

Creating Beloved Community

- Responsibility
- Shared power
- Deep respect for all people, places, and things

Lewis, J. (2021). What is beloved community? *Community Matters*. Retrieved from https://jonelewis.substack.com/p/what-is-beloved-community - .

SCWG
Structural Competency Working Group



Imagining and Implementing Structural Interventions for Kidney Professionals

DINUSHIKA MOHOTTIGE, MD, MPH

DISCLOSURES

Member: ESRD National Coordinating Center Health Equity Taskforce, National Kidney Foundation Health Equity Advisory Committee, National Kidney Foundation Transplant Advisory Committee, NKF Greater NY Medical Advisory Board, Healio Nephrology Board

Funding: National Kidney Foundation Young Investigator Award, Mario Family Foundation Award, Reach Equity Career Development Award, Supported by NIMHD U54MD012530, NHGRI Award under HG010248, NIDDK Award under DK137259.

THE WHY?

Dismantling structural racism as a root cause of racial disparities in COVID-19 and transplantation

Tanjala S. Purnell, Dinee C. Simpson, Clive O. Callender, L. Ebony Boulware

SOCIAL AND ETHICAL ISSUES IN 2020

Stony the road we trod: towards racial justice in kidney care

O. N. Ray Bignall II and Deidra C. Crews

POLICY FORUM PERSPECTIVE | VOLUME 77, ISSUE 6, P951-962, JUNE 01, 2021

Racism and Kidney Health: Turning Equity Into a Reality

Dinushika Mohottige • Clarissa J. Diamantidis • Keith C. Norris • L. Ebony Boulware

June 6, 2022

Race-Free Estimation of Kidney Function
Clearing the Path Toward Kidney Health Equity

L. Ebony Boulware, MD, MPH[1]; Dinushika Mohottige, MD, MPH[2]; Matthew L. Maciejewski, PhD[1,3,4]

Author Affiliations

JAMA. 2022;327(23):2289-2291. doi:10.1001/jama.2022.7310

Year in Review | Published: 07 December 2021

SOCIAL AND ETHICAL ISSUES IN 2021

Staying on track to achieve racial justice in kidney care

Dinushika Mohottige & Keisha Gibson

Nature Reviews Nephrology **18**, 72–73 (2022) | Cite this article

Social Determinants of Racial Disparities in CKD

Jenna M. Norton,*† Marva M. Moxey-Mims,*† Paul W. Eggers,*† Andrew S. Narva,*†
Robert A. Star,*† Paul L. Kimmel,*† and Griffin P. Rodgers†‡

Adjusted ESKD incident rate by race in U.S.

4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0

4.1
2.9
1.7
2.9
1.4
1.3

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Black/Af Am
Native American
Asian
White

A CALL TO ACTION

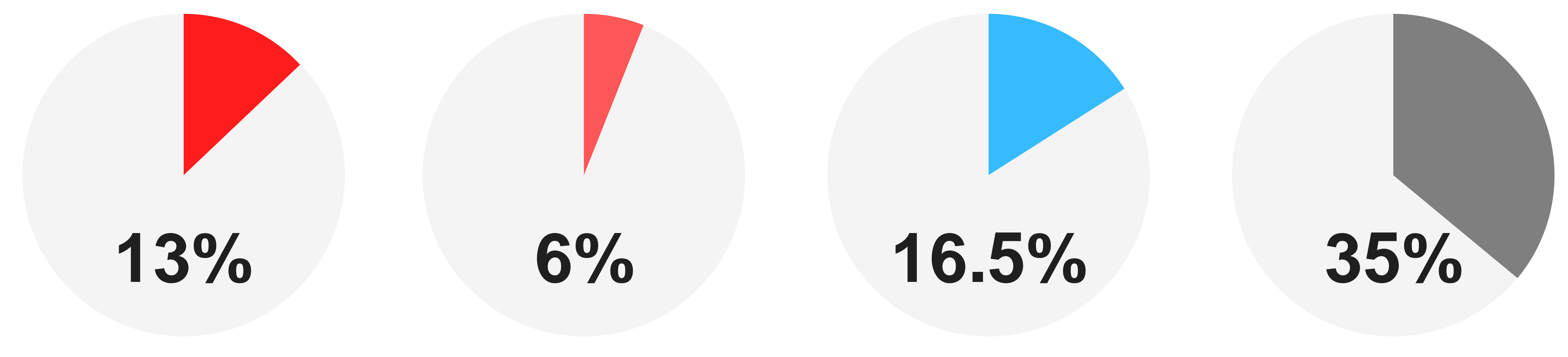
Black % of U.S. population

CKD III in Black vs. 11.5% Whites (VA)

CKD I-IV in Black vs. 13% Whites (NHANES)

% Black of U.S. on dialysis

A CALL TO ACTION



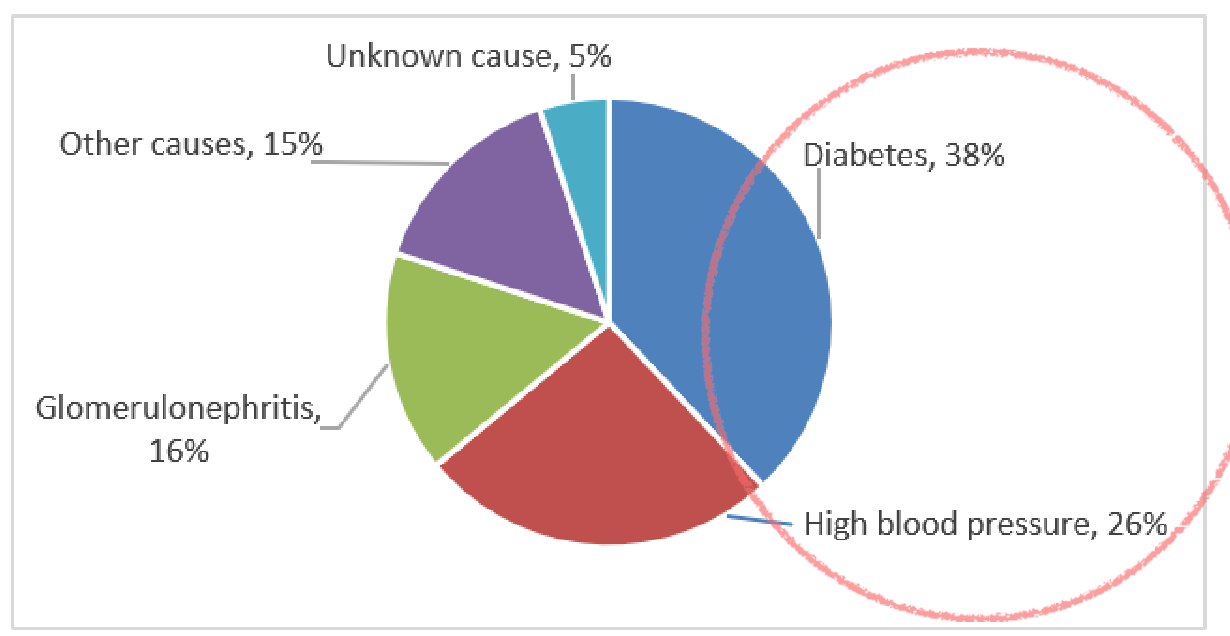
Black % of U.S. population

CKD III in Black vs. 11.5% Whites (VA)

CKD I-IV in Black vs. 13% Whites (NHANES)

% Black of U.S. on dialysis

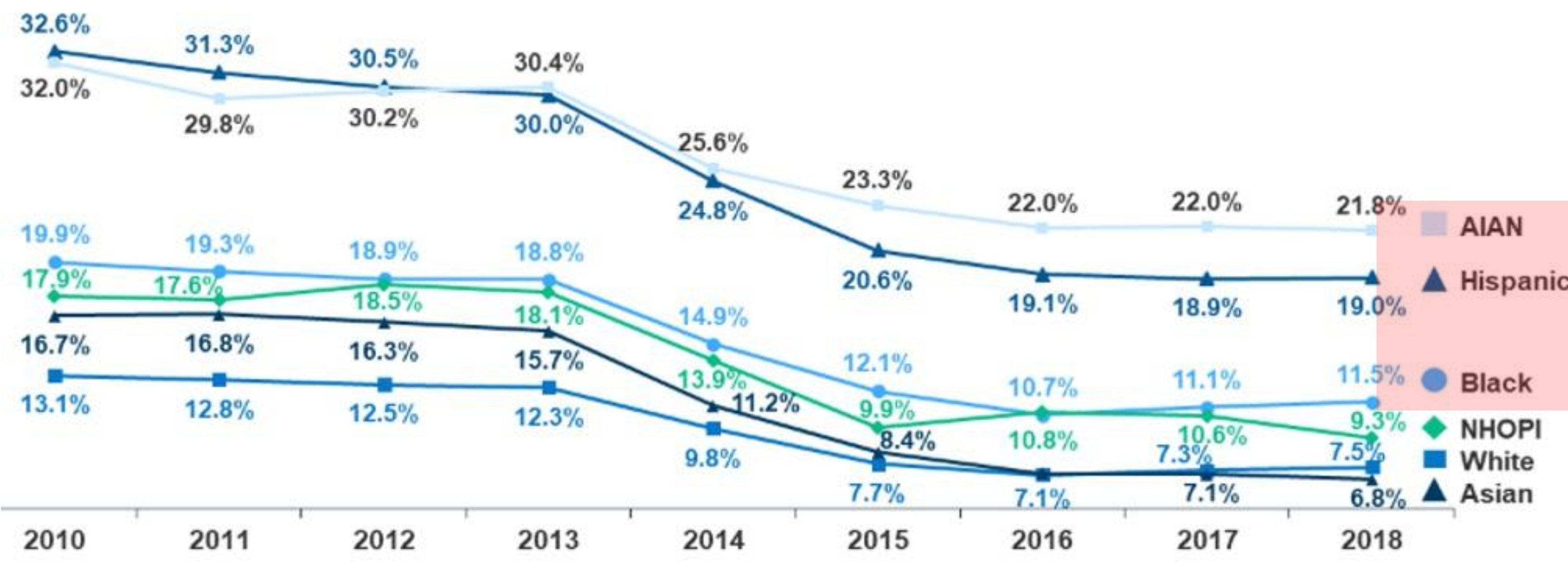
CKD "RISKS": NOT RACE



Is race the driver of risk?

BRFSS 2015; CDC NIDDK
Hill-Briggs, Felicia, Nancy E. Adler, Seth A. Berkowitz, Marshall H. Chin, Tiffany L. Gary-Webb, Ana Navas-Acien, Pamela L. Thornton, and Debra Haire-Joshu. 2021. "Social Determinants of Health and Diabetes: Scientific Review." *Diabetes Care* 44 (1):258-279. doi: 10.2337/dci20-0053.

U.S. CKD "RISKS"

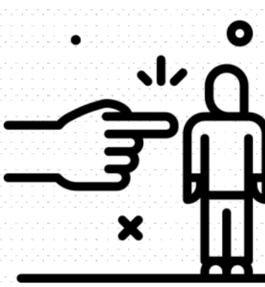


Where do social contexts and social drivers including racism fit in our understanding of risk?

BRFSS 2015; CDC NIDDK
Hill-Briggs, Felicia, Nancy E. Adler, Seth A. Berkowitz, Marshall H. Chin, Tiffany L. Gary-Webb, Ana Navas-Acien, Pamela L. Thornton, and Debra Haire-Joshu. 2021. "Social Determinants of Health and Diabetes: Scientific Review." *Diabetes Care* 44 (1):258-279. doi: 10.2337/dci20-0053.

Implicating cultural "differences"

Blaming a behavior (e.g. med non-adherence") for all the problems



Inequality is often "neutralized" or "naturalized" without naming structural harm: this allows for the status quo of structural inequalities to persist unchecked

Racial categories and implied genetic differences

Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. Soc Sci Med. 2014;103:126-33. Epub 2014/02/11. doi: 10.1016/j.socscimed.2013.06.032. PubMed PMID: 24507917; PMCID: PMC4269606.

STRUCTURAL COMP.

Individual behaviors (medication adherence) are a product of an individual's sociopolitical context

Avoid a lens which places blame or full responsibility on the individual

Kidney Health Disparities

SDOH inequalities

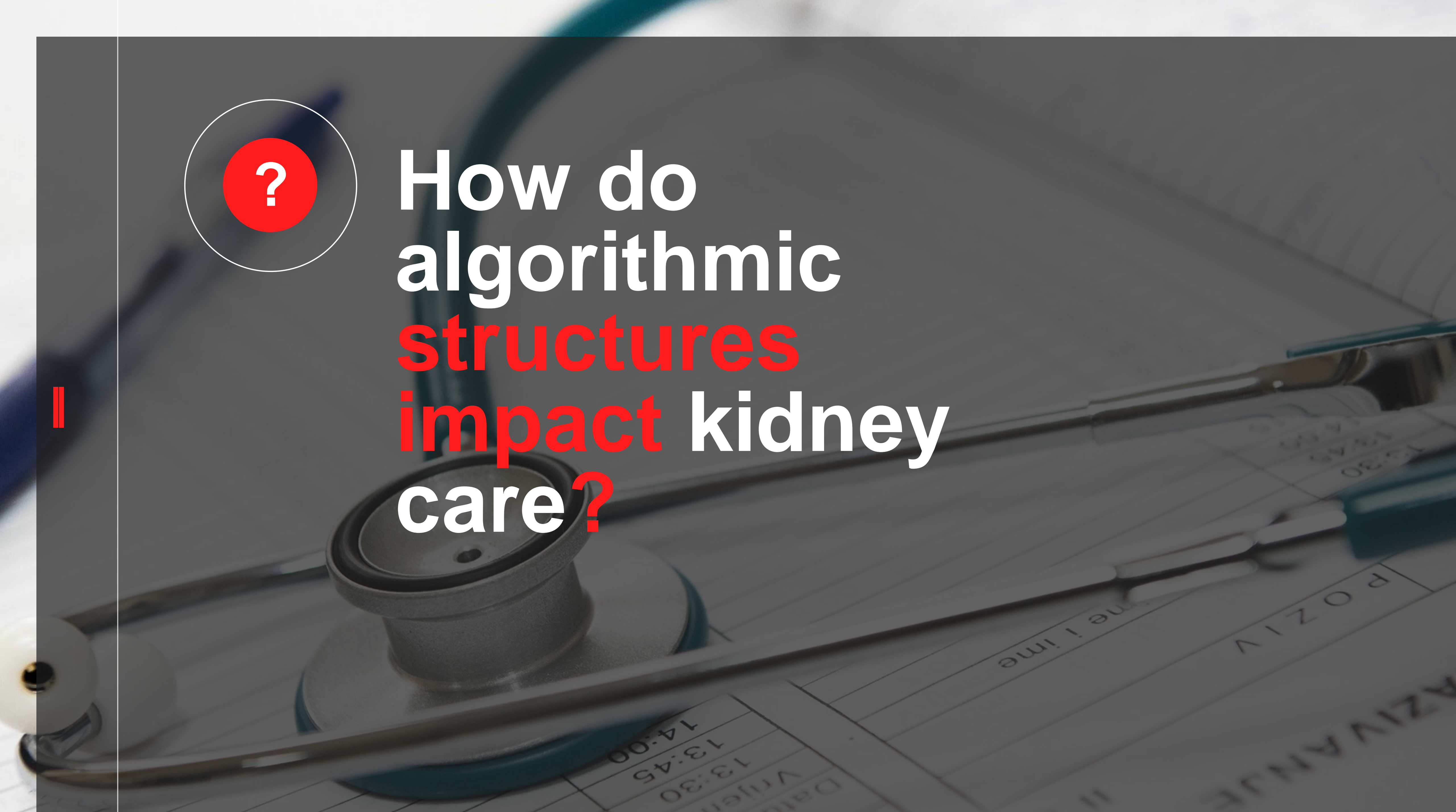
(Poverty, housing education inequality)

Social Structures

Policies, Economic Systems and Social hierarchies

(racism, sexism, ableism, religious and political persecution, transphobia…)

Metzl, J. M., and H. Hansen. 2014. "Structural competency: theorizing a new medical engagement with stigma and inequality." *Soc Sci Med* 103:126-133. doi: 10.1016/j.socscimed.2013.06.032.


?
How do algorithmic structures impact kidney care?

RACE AND "RISK"

Race, sex, and age related differences in estimated GFR are components of prior patient-facing educational materials which previously reinforced the idea that **race confers fundamental biological difference in kidney function**

THE SAME SERUM CREATININE: VERY DIFFERENT eGFR			
	22-YR-OLD BLACK MAN	58-YR-OLD WHITE MAN	80-YR-OLD WHITE WOMAN
Serum creatinine	1.2 mg/dL	1.2 mg/dL	1.2 mg/dL
GFR as estimated by the MDRD equation	98 mL/min/1.73 m²	66 mL/min/1.73 m²	46 mL/min/1.73 m²
Kidney function	Normal GFR *or* stage 1 CKD if kidney damage is also present	Stage 2 CKD if kidney damage is also present	Stage 3 CKD

RACIALIZED HARMS

981,038 new individuals with GFR 30-59 (RAS-I, SGLT2-inhibitor use)

67,957 with new GFR <30 who need KRT education and discussion re: LDKT

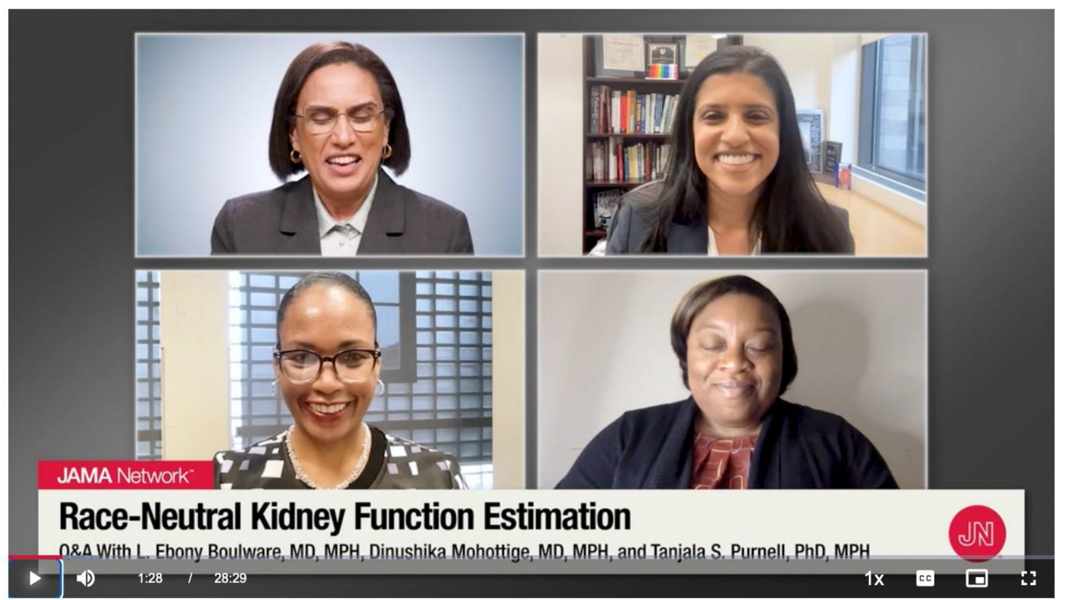
Removal of Black race coefficient resulted in reduction by **1.9** years in median wait time for transplant eligibility (eGFR <20)

CKD is classified based on: · Cause (C) · GFR (G) · Albuminuria (A)				Albuminuria categories Description and range		
				A1	A2	A3
				Normal to mildly increased	Moderately increased	Severely increased
				<30 mg/g <3 mg/mmol	30-299 mg/g 3-29 mg/mmol	≥300 mg/g ≥30 mg/mmol
GFR categories (ml/min/1.73 m²) Description and range	G1	Normal or high	≥90	1 if CKD	Treat 1	Refer* 2
	G2	Mildly decreased	60-89	1 if CKD	Treat 1	Refer* 2
	G3a	Mildly to moderately decreased	45-59	Treat 1	Treat 2	Refer 3
	G3b	Moderately to severely decreased	30-44	Treat 2	Treat 3	Refer 3
	G4	Severely decreased	15-29	Refer* 3	Refer* 3	Refer 4+
	G5	Kidney failure	<15	Refer 4+	Refer 4+	Refer 4+

Bragg-Gresham J, Zhang X, Le D, et al. Prevalence of Chronic Kidney Disease Among Black Individuals in the US After Removal of the Black Race Coefficient From a Glomerular Filtration Rate Estimating Equation. JAMA Netw Open. 2021;4(1):e2035636. doi:10.1001/jamanetworkopen.2020.35636 Diao JA, Wu GJ, Taylor HA, et al. Clinical Implications of Removing Race From Estimates of Kidney Function. Jama. 2020.
Zelnick LR, Leca N, Young B, Bansal N. Association of the estimated glomerular filtration rate with vs without a coefficient for race with time to eligibility for kidney transplant. JAMA Netw Open. 2021;4(1):e2034004. Vassalotti, Joseph A., et al. "Practical approach to detection and management of chronic kidney disease for the primary care clinician." *The American journal of medicine* 129.2 (2016): 153-162.
Norris KC, Eneanya ND, Boulware LE. Removal of Race From Estimates of Kidney Function: First, Do No Harm. Jama. 2020
Hoenig, M. P., et al. (2022). "Removal of the Black race coefficient from the estimated glomerular filtration equation improves transplant eligibility for Black patients at a single center." Clin Transplant **36**(2): e14467. Inker, L. A., et al. (2021). "New Creatinine- and Cystatin C–Based Equations to Estimate GFR without Race." New England Journal of Medicine **385**(19): 1737-1749.
Boulware LE, Purnell TS, Mohottige D. Systemic Kidney Transplant Inequities for Black Individuals: Examining the Contribution of Racialized Kidney Function Estimating Equations. *JAMA Netw Open.* 2021;4(1):e2034630.

RESTORATIVE POLICY

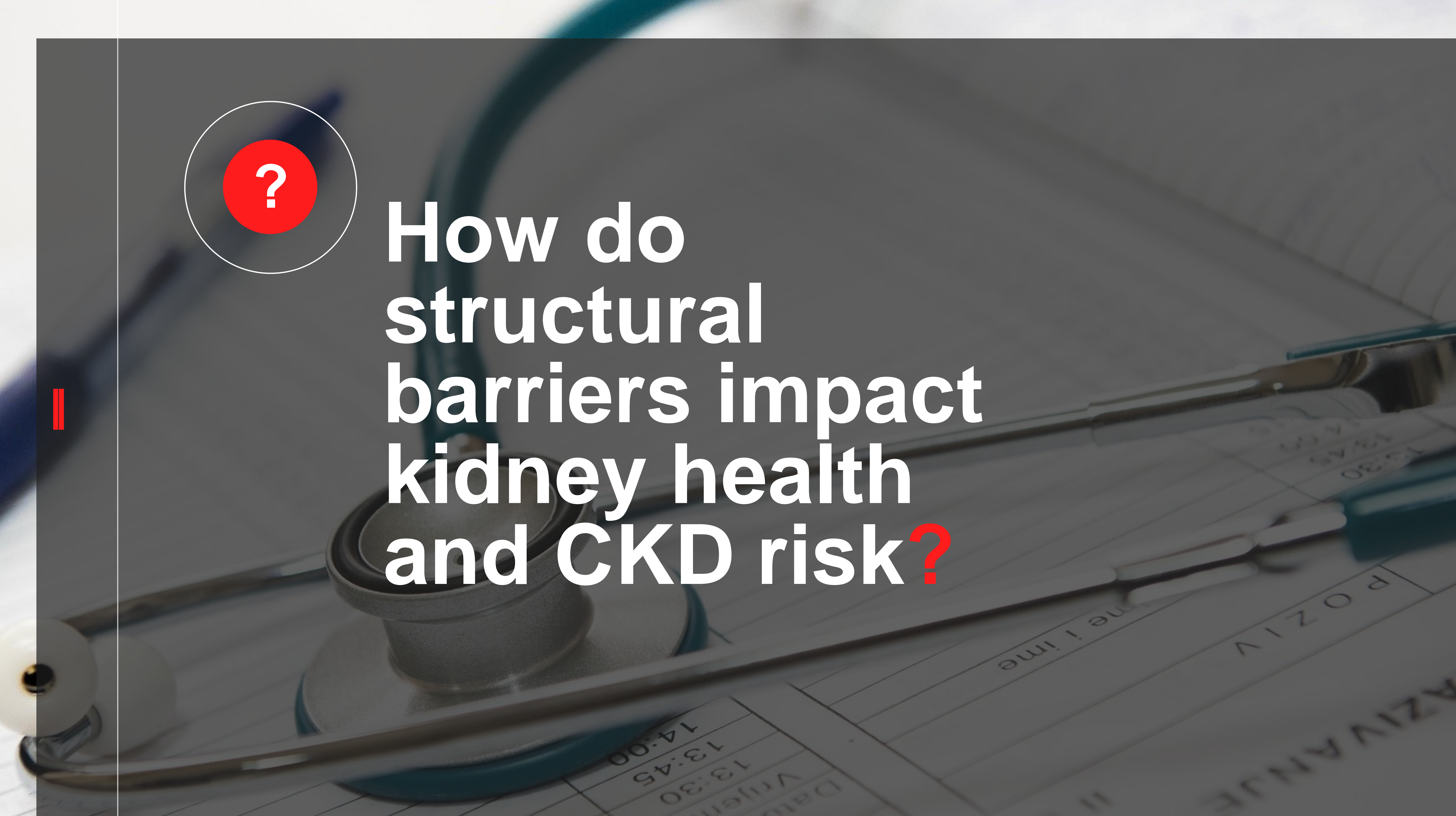
Race-Neutral Estimates of Kidney Function: Enhancing Equity



In January 2023, the US Organ Procurement & Transplantation Network (OPTN) required transplant centers to modify transplant list wait times for Black patients. JAMA Editor in Chief Kirsten Bibbins-Domingo, PhD, MD, MAS, and L. Ebony Boulware, MD, MPH, Dinushika Mohottige, MD, MPH, and Tanjala S. Purnell, PhD, MPH, discuss why the OPTN mandate is a valuable model for reforming race-based practices.

January 11, 2023 | 1 min read SAVE

Black patients impacted by eGFR race coefficient can modify transplant waitlist time


?
How do structural barriers impact kidney health and CKD risk?

Structural Violence

> Structural violence is one way of describing social arrangements that put individuals and populations in harms' way…The arrangements are structural because they are embedded in the political and economic organization of our social world; they are violent because they cause injury to people

Farmer et al.

STRUCTURAL INEQUITY

Bailey ZD, Krueger N, Agénor M Graves J, Laos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. The Lancet 2017; 389(10077): 1453-1463.
Mohottige, D., et al. (2021). "Time to Repair the Effects of Racism on Kidney Health Inequity." American Journal of Kidney Diseases.
Purnell, T. S., et al. (2021). "Dismantling structural racism as a root cause of racial disparities in COVID-19 and transplantation." American Journal of Transplantation **n/a**(n/a).

STRUCTURAL INEQUITY

Economic inequity, job discrimination, job segregation, wage inequity

Voter disenfranchisement/ gerrymandering/lack of political representation

: NIDDK

VOTE

EVICTION NOTICE

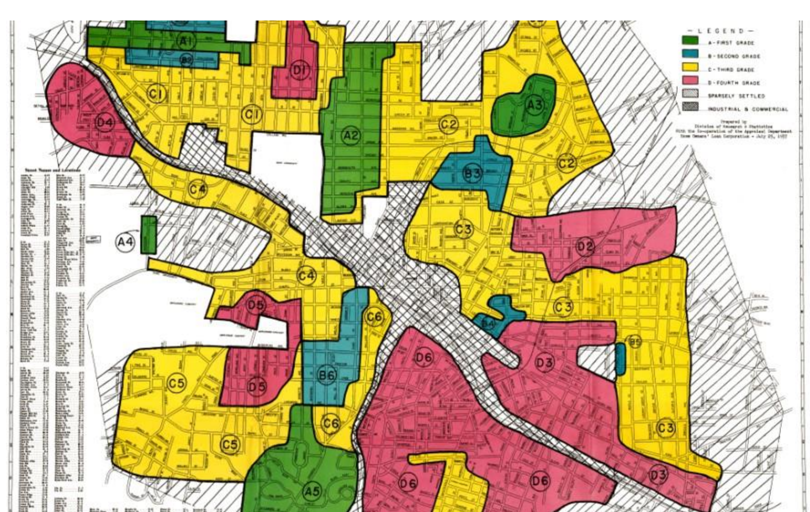
Criminalization, policing and neighborhood safety

Housing insecurity/ unregulated gentrification and racialized disinvestment

Educational inequity

Mohottige, D., et al. (2021). "Time to Repair the Effects of Racism on Kidney Health Inequity." American Journal of Kidney Diseases.
Purnell, T. S., et al. (2021). "Dismantling structural racism as a root cause of racial disparities in COVID-19 and transplantation." American Journal of Transplantation **n/a**(n/a).
Alson JG, Robinson WR, Pittman L, Doll KM. Incorporating Measures of Structural Racism into Population Studies of Reproductive Health in the United States: A Narrative Review. Health EquBailey ZD, Krueger N, Agénor M Graves J, Laos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. The Lancet 2017; 389(10077): 1453-1463.

HOUSING: STRATIFIED

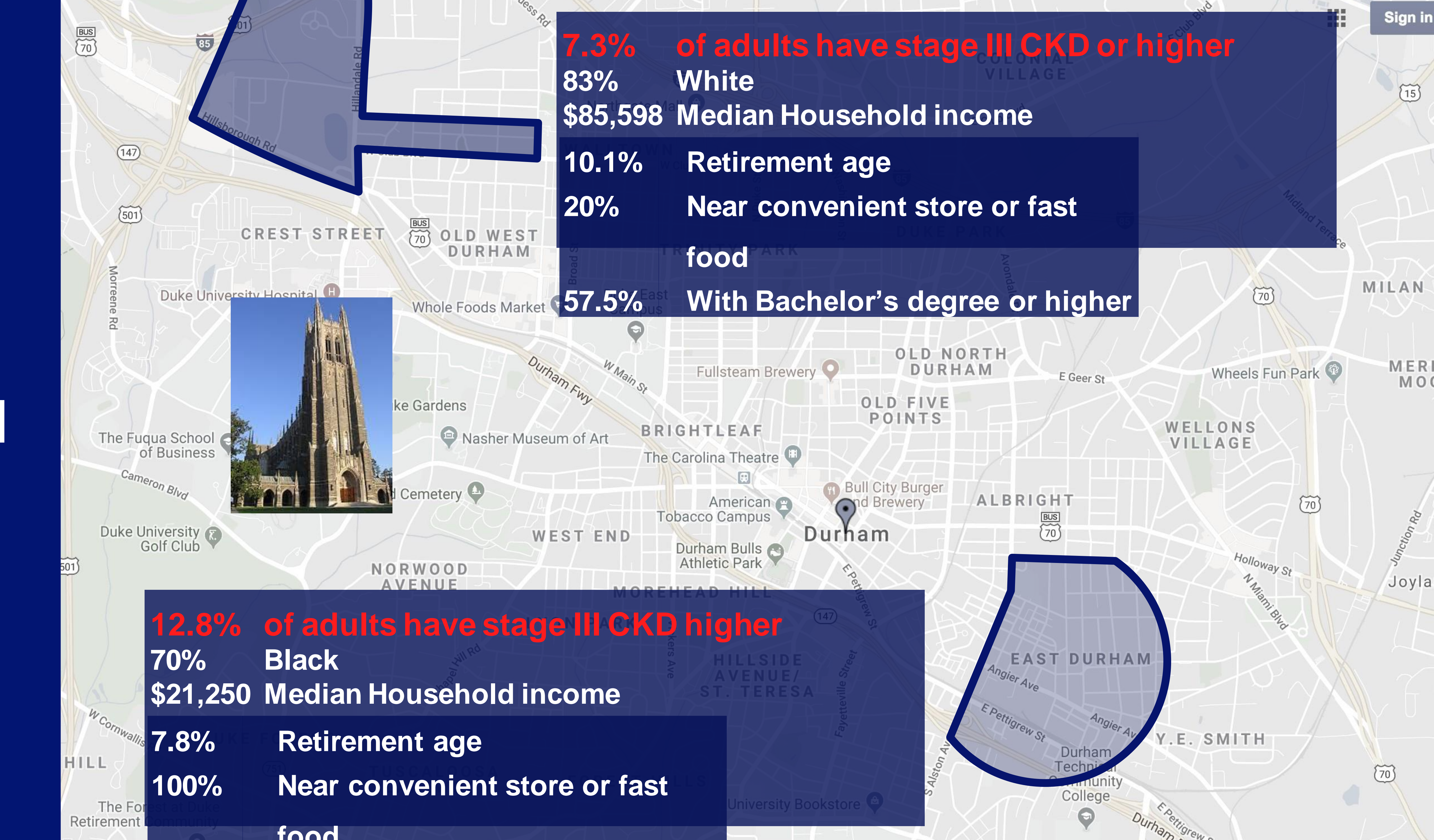


14. *RACIAL RESTRICTIONS*...No property in said add[illegible] tion shall at any time be sold, conveyed, rented or leased in whole or in part to any person or persons not of the White or Caucasian race. No person other than one of the White or Caucasian race shall be permitted to occupy any pro[illegible] in [illegible] or portion thereof or buildin[illegible] except a domestic servant actually employed by a person of the White or Caucasian race where the latter is an occupant of such property.

1937 Federal HOLC red-lining in Durham (segregation and disinvestment persists today)

Racialized disinvestment in infrastructure and racialized resources including health care

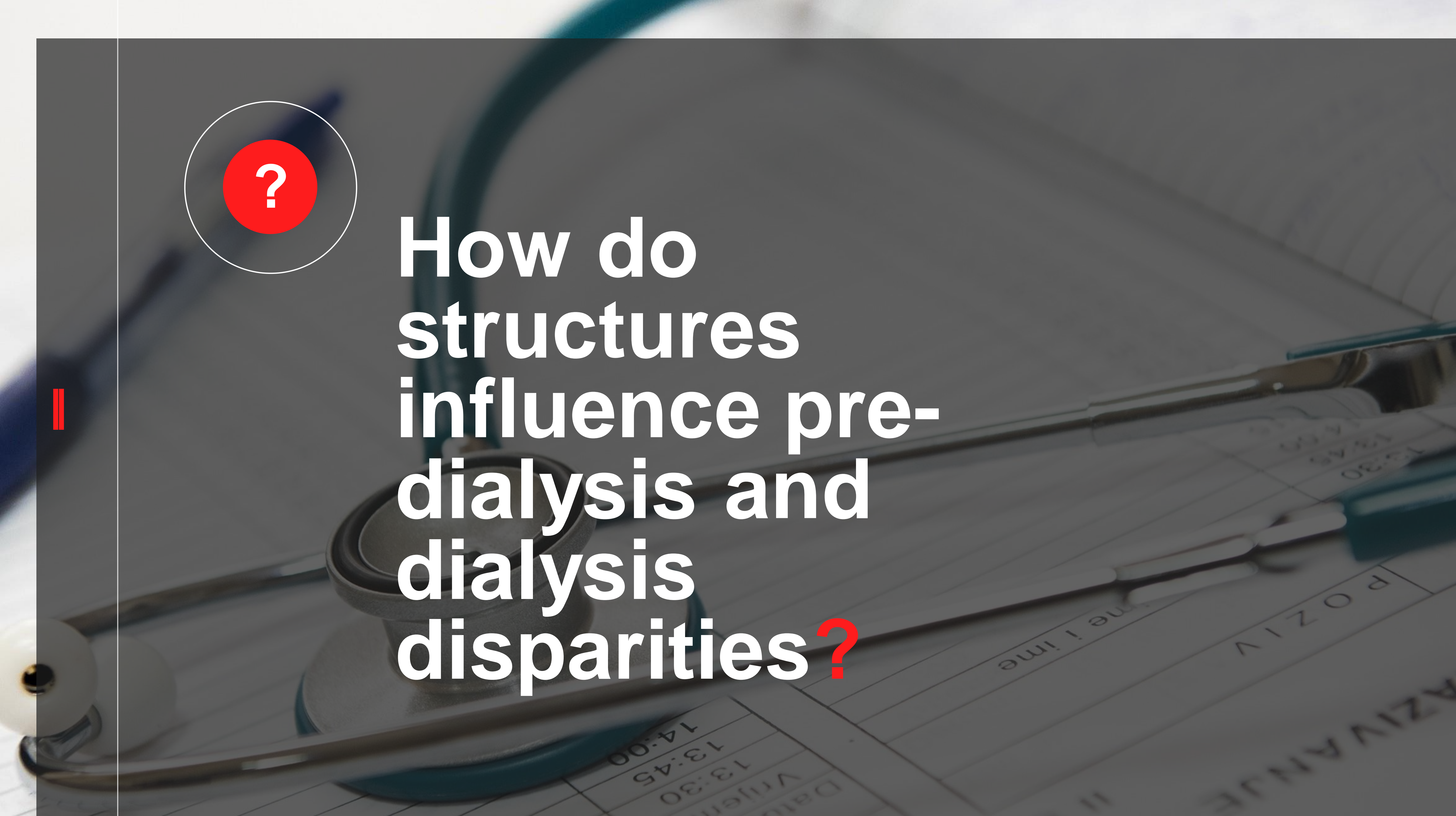
Junia Howell, Elizabeth Korver-Glenn, The Increasing Effect of Neighborhood Racial Composition on Housing Values, 1980–2015, *Social Problems*, 2020


7.3% of adults have stage III CKD or higher
83% White
$85,598 Median Household income
10.1% Retirement age
20% Near convenient store or fast food
57.5% With Bachelor's degree or higher
12.8% of adults have stage III CKD higher
70% Black
$21,250 Median Household income
7.8% Retirement age
100% Near convenient store or fast food
CREST STREET
OLD WEST DURHAM
Duke University Hospital
Whole Foods Market
The Fuqua School of Business
Nasher Museum of Art
Duke University Golf Club
OLD NORTH DURHAM
Fullsteam Brewery
OLD FIVE POINTS
BRIGHTLEAF
The Carolina Theatre
Bull City Burger and Brewery
American Tobacco Campus
Durham
WEST END
Durham Bulls Athletic Park
ALBRIGHT
WELLONS VILLAGE
Wheels Fun Park
EAST DURHAM
Angier Ave
E Pettigrew St
Durham Technical Community College
Y.E. SMITH
NORWOOD AVENUE
MOREHEAD HILL
HILLSIDE AVENUE/ ST. TERESA
University Bookstore
MILAN W
Joyland
Holloway St
N Miami Blvd
Hillsborough Rd
Hillandale Rd
Durham Fwy
W Main St
E Geer St
Cameron Blvd
Morreene Rd
Sign in

Structural racism is associated with CKD, Diabetes, and Hypertension prevalence in a study of 150 Durham, NC neighborhoods

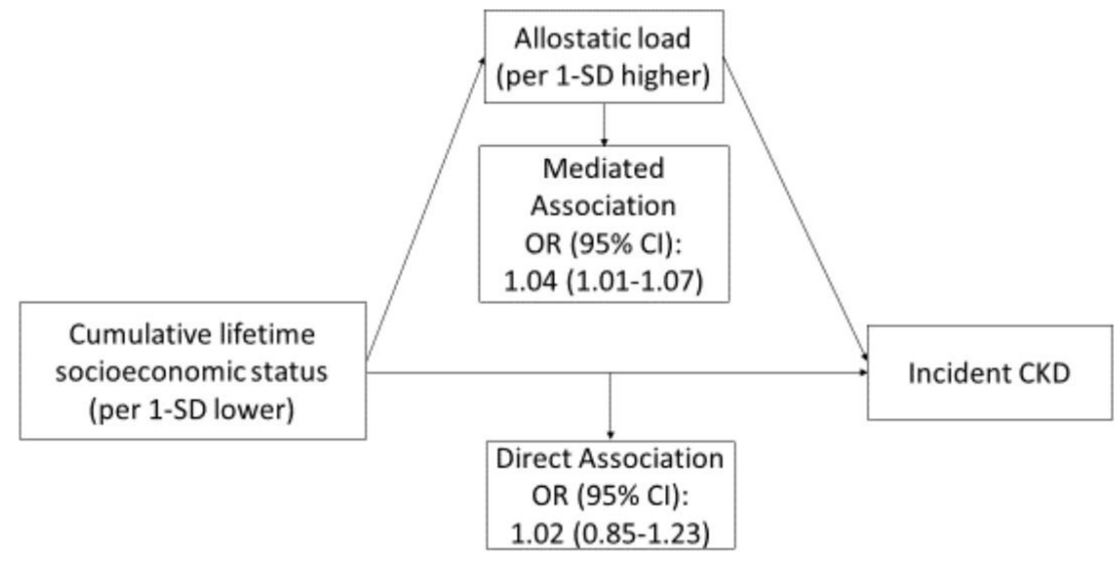
Table 3. Association of Composite and Discrete Structural Racism Constructs With Neighborhood Chronic Kidney Disease, Diabetes, and Hypertension Prevalence, Adjusted for Median Age of Residential Neighborhood Population and Spatial Correlation

	Estimated adjusted prevalence ratio (95% highest density interval)[a]		
Measure	Chronic kidney disease	Diabetes	Hypertension
Composite measures of structural racism			
Percentage of White population, per 1-SD decrease	1.27 (1.18-1.35)	1.43 (1.37-1.52)	1.19 (1.14-1.25)
White ≥$100 000 ICE-RI, per 1-SD decrease	1.27 (1.20-1.35)	1.35 (1.28-1.43)	1.14 (1.09-1.19)
ADI	1.25 (1.18-1.32)	1.35 (1.30-1.43)	1.15 (1.10-1.19)
Discrete measures of structural racism			
Child care centers	1.10 (1.03-1.17)	1.14 (1.07-1.22)	1.08 (1.03-1.13)
Homes near bus stops	1.05 (0.97-1.14)	1.08 (0.99-1.17)	0.97 (0.92-1.03)
Tree cover, per 1-SD decrease	1.04 (0.96-1.12)	1.04 (0.96-1.12)	0.96 (0.92-1.01)
Violent crimes	1.15 (1.07-1.23)	1.20 (1.13-1.28)	1.08 (1.02-1.14)
Impervious area	1.01 (0.94-1.09)	0.99 (0.92-1.07)	0.93 (0.88-0.98)
Eviction rate	1.09 (1.02-1.17)	1.14 (1.07-1.22)	1.07 (1.02-1.12)
Primary election participation, per 1-SD decrease	1.15 (1.06-1.23)	1.32 (1.23-1.41)	1.06 (1.01-1.14)
Median household income, per 1-SD decrease	1.19 (1.12-1.28)	1.25 (1.18-1.33)	1.08 (1.03-1.14)
Poverty rate	1.14 (1.06-1.22)	1.23 (1.15-1.31)	1.07 (1.02-1.13)
Percentage with Bachelor's degree, per 1-SD decrease	1.22 (1.15-1.3)	1.3 (1.23-1.37)	1.16 (1.12-1.22)
Percentage unemployed	1.09 (1.02-1.16)	1.15 (1.08-1.22)	1.06 (1.01-1.11)
Percentage uninsured	1.13 (1.05-1.21)	1.24 (1.17-1.32)	1.10 (1.05-1.16)
Police shootings	1.01 (0.95-1.08)	1.06 (0.99-1.13)	1.02 (0.98-1.07)


?
How do structures influence pre-dialysis and dialysis disparities?

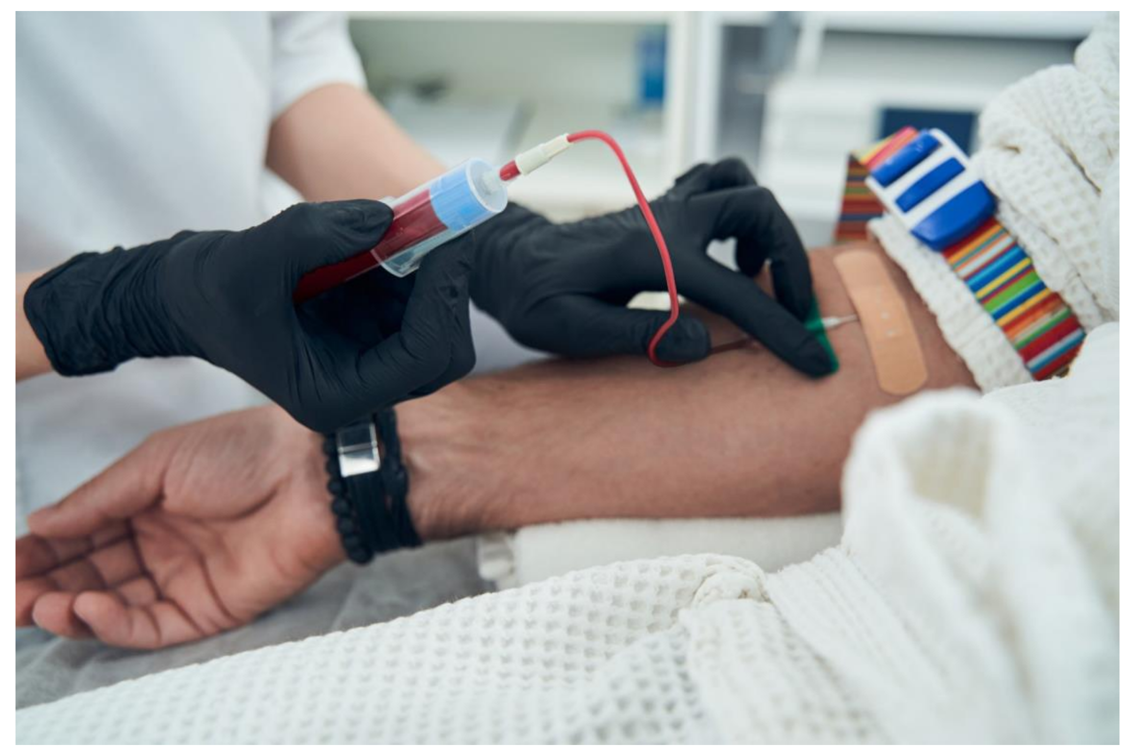
CKD: WEATHERING

Lower cumulative lifetime SES was **associated with CKD prevalence** and modestly with CKD incidence and eGFR decline via baseline allostatic load



Lunyera, J., J. W. Stanifer, C. A. Davenport, D. Mohottige, N. A. Bhavsar, J. J. Scialla, J. Pendergast, L. E. Boulware, and C. J. Diamantidis. 2020. "Life Course Socioeconomic Status, Allostatic Load, and Kidney Health in Black Americans." *Clin J Am Soc Nephrol* 15 (3):341-348. doi: 10.2215/cjn.08430719.

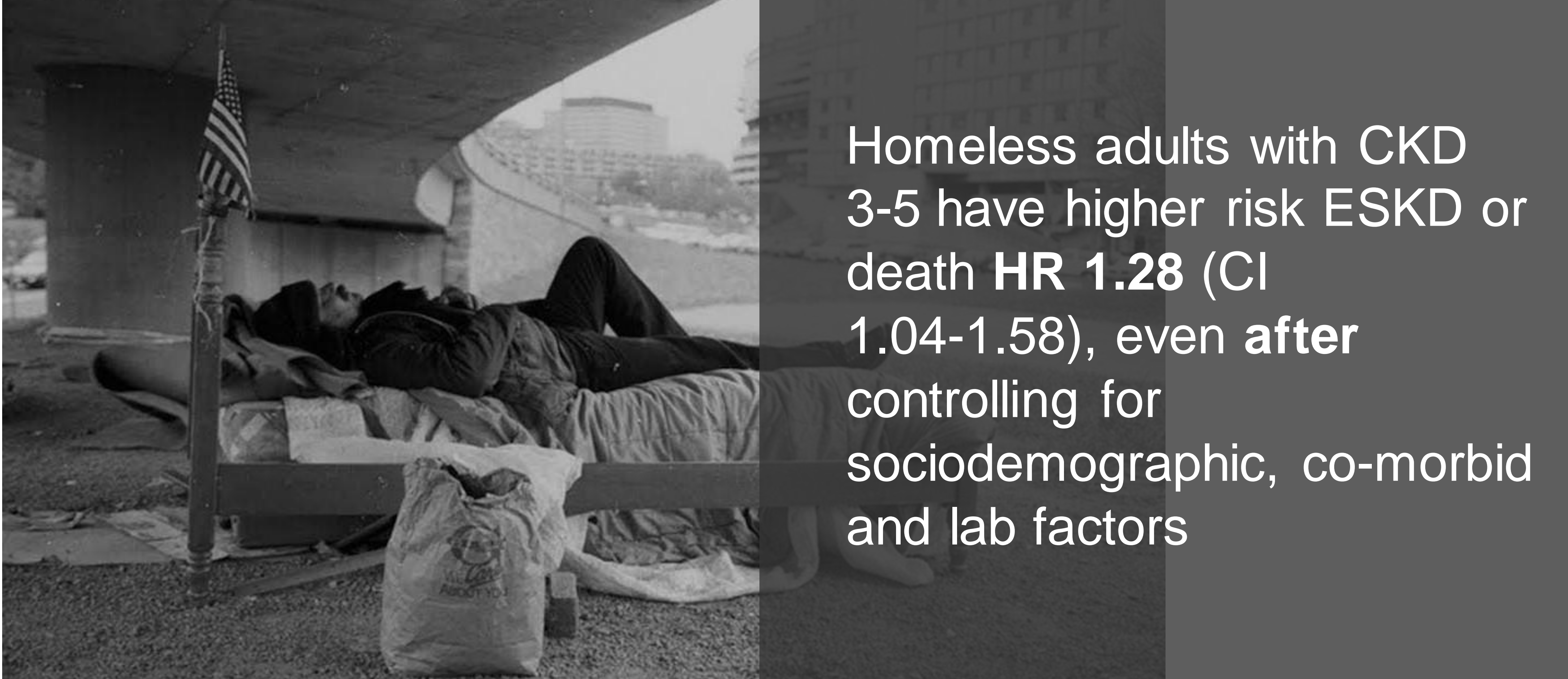
PRE-DIALYSIS CARE



Racial and ethnic disparities in receipt of 12 months of nephrology care did not improve between 2005-2015 among individuals with ESKD

Purnell TS, Bae S, Luo X, Johnson M, Crews DC, Cooper LA, Henderson ML, Greer RC, Rosas SE, Boulware LE, Segev DL. National Trends in the Association of racial and ethnic disparities in receipt of at least 12 months of predialysis nephrology care did not improve from 2005 to 2015, suggesting that national strategies to address these disparities are needed. 2020

HOUSING STABILITY



Homeless adults with CKD 3-5 have higher risk ESKD or death **HR 1.28** (CI 1.04-1.58), even **after** controlling for sociodemographic, co-morbid and lab factors

Hall, Y.N.. et al. Homelessness and CKD: A cohort study. CJASN 2012; 7:1094-1102

UNEQUAL PRESCRIBING

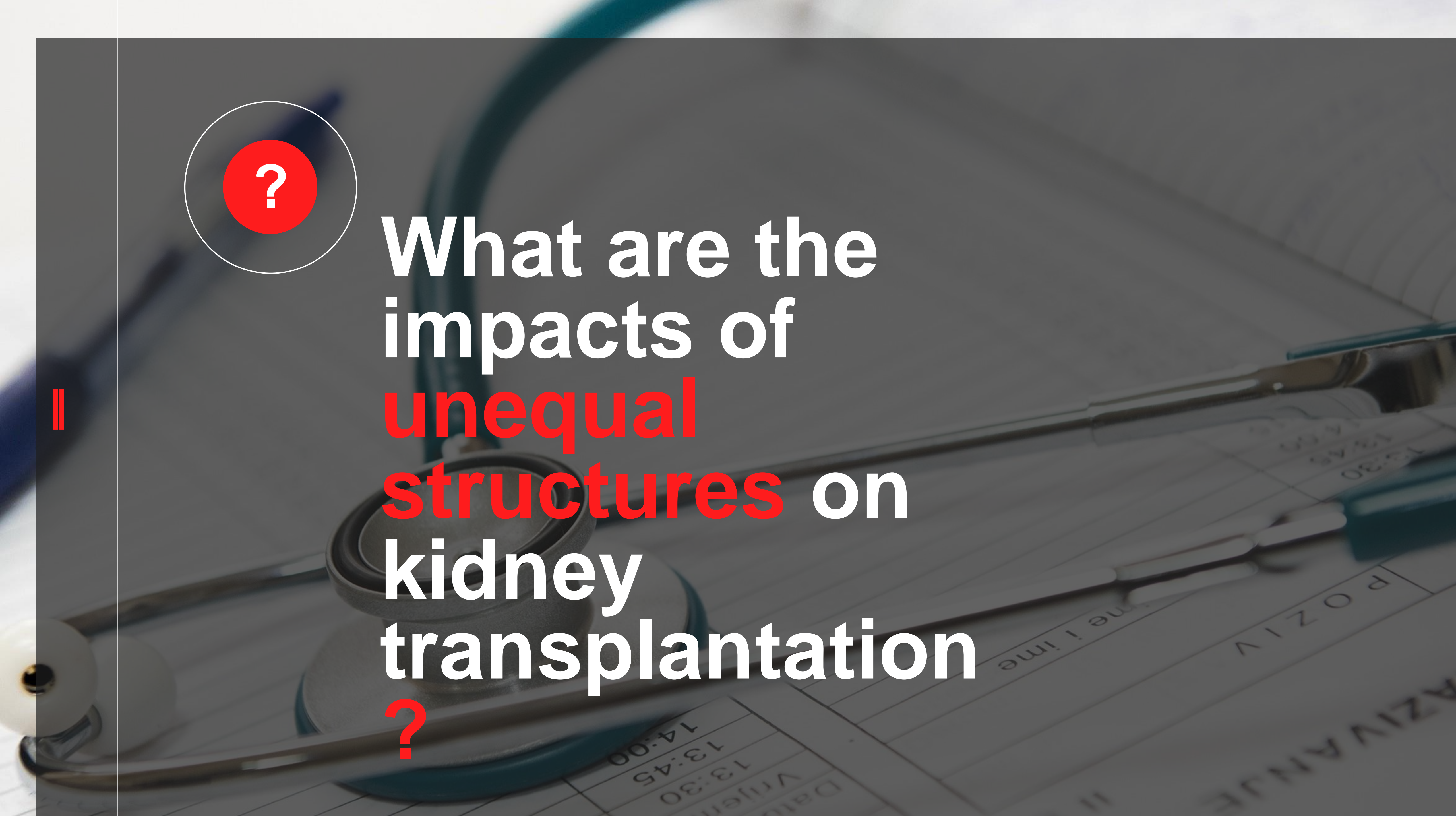
Predictors, Disparities, and Facility-Level Variation: SGLT2 Inhibitor Prescription Among US Veterans With CKD

Setting & Participants	Variables & Outcomes	Results
Retrospective cohort	**Race:** Black vs White	**SGLT2i prescription was low** N = 20,024 (11.5%)
N = 174,443 US veterans	**Sex:** Women vs Men	**Lower odds of prescription was seen in Black vs White patients** OR = 0.87 (0.83-0.91)
Comorbidities: T2DM, CKD, ASCVD	**Individual VA location:** Median rate ratios (MRR) *(likelihood that 2 randomly selected VA facilities differ in SGLT2i use among similar patients)*	**Lower odds of prescription among women vs men** OR = 0.59 (0.52-0.67)
Primary care visit between Jan-Dec 2020		**Large variations exist between VA facilities** MRR = 1.58 (1.48-1.67)

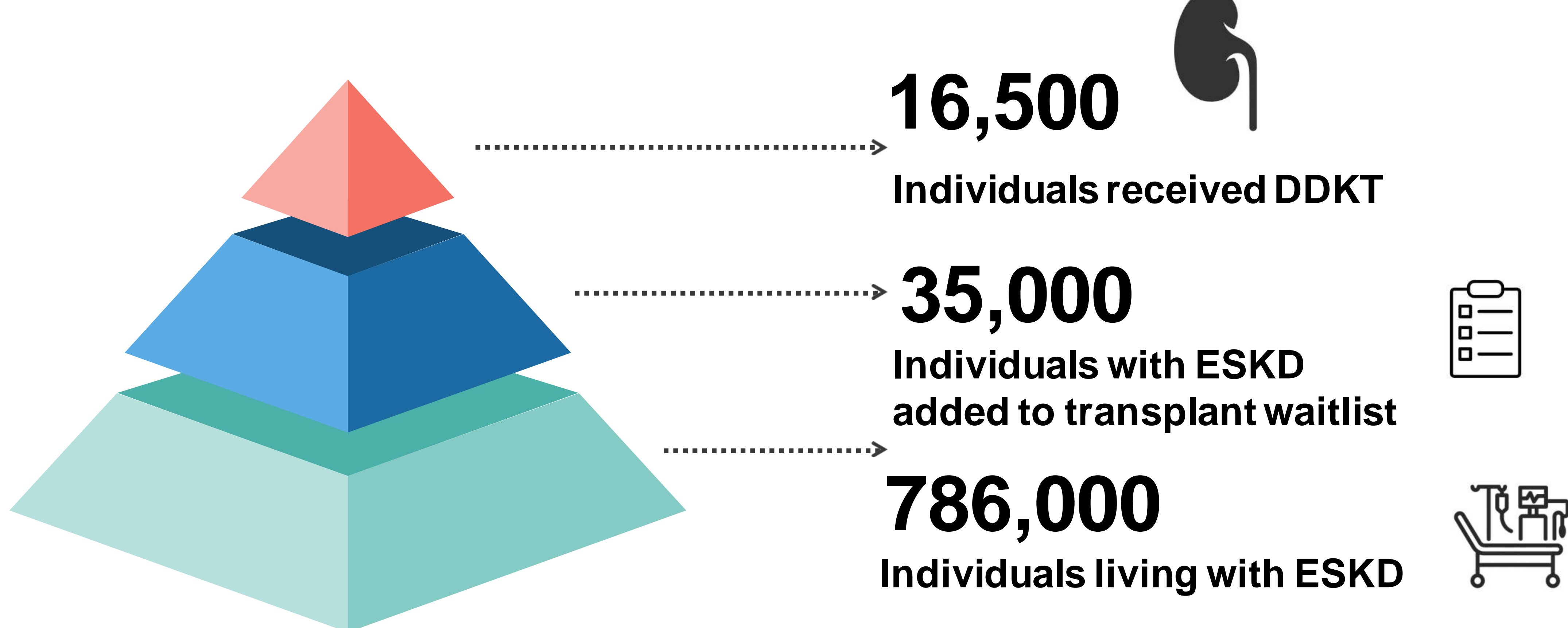
CONCLUSION: Prescription for SGLT2 inhibitors was low among likely eligible patients, with evident disparities by sex and race and between individual VA facilities.

L. Parker Gregg, David J. Ramsey, Julia M. Akeroyd, et al

@AJKDonline | DOI: 10.1053/j.ajkd.2022.11.017


?
What are the impacts of unequal structures on kidney transplantation ?

High demand for the optimal treatment



7,500 Individuals died or became too sick to transplant while on the waitlist

OPTN 2019
USRDS 2020

CASCADING BARRIERS

Pre-transplant care

* Disparate co-morbidities
* Poorer access to care
* Poorer CKD awareness
* Suboptimal CKD discussions

Referral for transplant

* Racialized eGFR equations
* Structured inequities in insurance, housing
* Disparate referral patterns and transplant education

Evaluation

* Prior discrimination
* Bias in evaluation process including implementation of key criteria (e.g. adherence, substance use)

Waitlisting

* Longer time to waitlist and completion of key elements for evaluation
* Disparities in reasons for waitlist inactivation
* Structured inequities impede evaluation steps

Pre-txp care

Referral

Evaluate

Waitlist

Reese PP, Mohan S, King KL, Williams WW, Potluri VS, Harhay MN, Eneanya ND. Racial disparities in preemptive waitlisting and deceased donor kidney transplantation: Ethics and solutions. Am J Transplant. 2021 Mar;21(3):958-967

Purrnell TS, Simpson DC, Callender CO, Boulware LE. Dismantling structural racism as a root cause of racial disparities in COVID-19 and transplantation. *American Journal of Transplantation.* 2021;n/a(n/a).

Mohottige, D., McElroy, L., and Boulware LE. (2021). "A Cascade of Structural Barriers Contributing to Racial Kidney Transplant Inequities." Advances in chronic kidney disease **28**(6): 517-527.

How can access to kidney transplantation be improved in the Southeastern United States?

Network 6:
GA, NC, SC

91 Transplant Staff
and
421 Dialysis Staff

Descriptive analysis of multiple choice survey responses; qualitative analysis of open-ended survey responses

Barriers to Transplantation:

Transportation 63.7%

Low health literacy 50.5%

Lack understanding about the process 37.4%

Distance to center 29.7%

Low socioeconomic status 28.6%

54% Education

35% Assistance with process steps

15% Communication with transplant centers

How to Improve the Wait-List Rate:

55% Education materials (staff and patients)

12% Communication

9% Transportation and financial assistance

Conclusion: Dialysis units, transplant centers, and ESRD Networks can work together to help patients address key barriers to transplantation to improve the transplantation rate in the US.

Reference: Browne T, McPherson L, Retzloff S, et al. Improving access to kidney transplantation: perspectives from dialysis and transplant staff in the Southeastern United States. *Kidney Medicine*, 2021.

Visual Abstract by Brian Rifkin MD

brian_rifkin

ROOT CAUSES: RACISM

Demographics
Comprehensiveness of health insurance coverage
Etiology of ESRD
Medical comorbidities
Perceived health status
Time on dialysis before presenting for transplant
Psychological health
Medical mistrust
Burden of kidney disease

Transplant education received prior to evaluation onset
Transplant knowledge
Perceived benefits and disadvantages of transplant
Attitudinal willingness to get a transplant
Number of living donors coming forward for patient

Harding. et al. Health Disparities in Kidney Transplantation for African Americans. American Journal of Nephrology 2017; 46(2):165-175 And Waterman. et al. CJASN 2013.

EVERY DAY RACISM

HEALTH EQUITY

By Michael Sun, Tomasz Oliwa, Monica E. Peek, and Elizabeth L. Tung

Negative Patient Descriptors: Documenting Racial Bias In The Electronic Health Record

Compared with White patients, Black patients had **2.54 times** the odds of having at least one negative descriptor in the history and physical notes

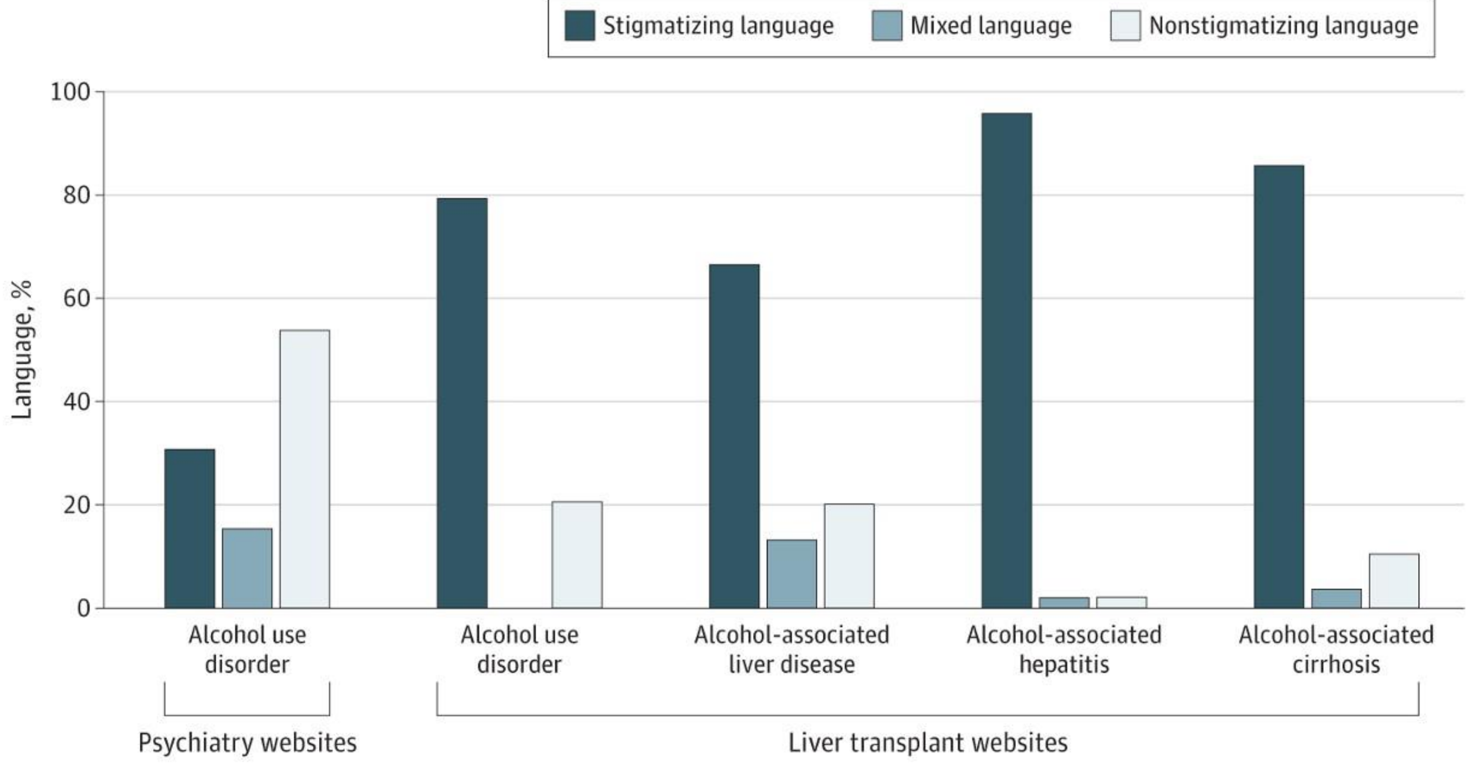
Sun, M., et al. (2022). "Negative Patient Descriptors: Documenting Racial Bias In The Electronic Health Record." Health Affairs **41**(2): 203-211.
A, P. Goddu, K. J. O'Conor, S. Lanzkron, M. O. Saheed, S. Saha, M. E. Peek, C. Haywood, Jr., and M. C. Beach. 2018. "Do Words Matter? Stigmatizing Language and the Transmission of Bias in the Medical Record." *J Gen Intern Med* 33 (5):685-691. doi: 10.1007/s11606-017-4289-2.
Illustration Mike Casal, Johns Hopkins University

ADDRESS LANGUAGE

From: **Stigmatizing Language for Alcohol Use Disorder and Liver Disease on Liver Transplant Center Websites**

JAMA Netw Open. 2024;7(2):e2355320. doi:10.1001/jamanetworkopen.2023.55320

Stigmatizing language impacts patient-facing resources and may impact access to and perceptions of care opportunities



UNEQUAL DISCUSSIONS

Black individuals, women and people who made less than $20,000 a year were less likely to have a transplant discussion than dialysis

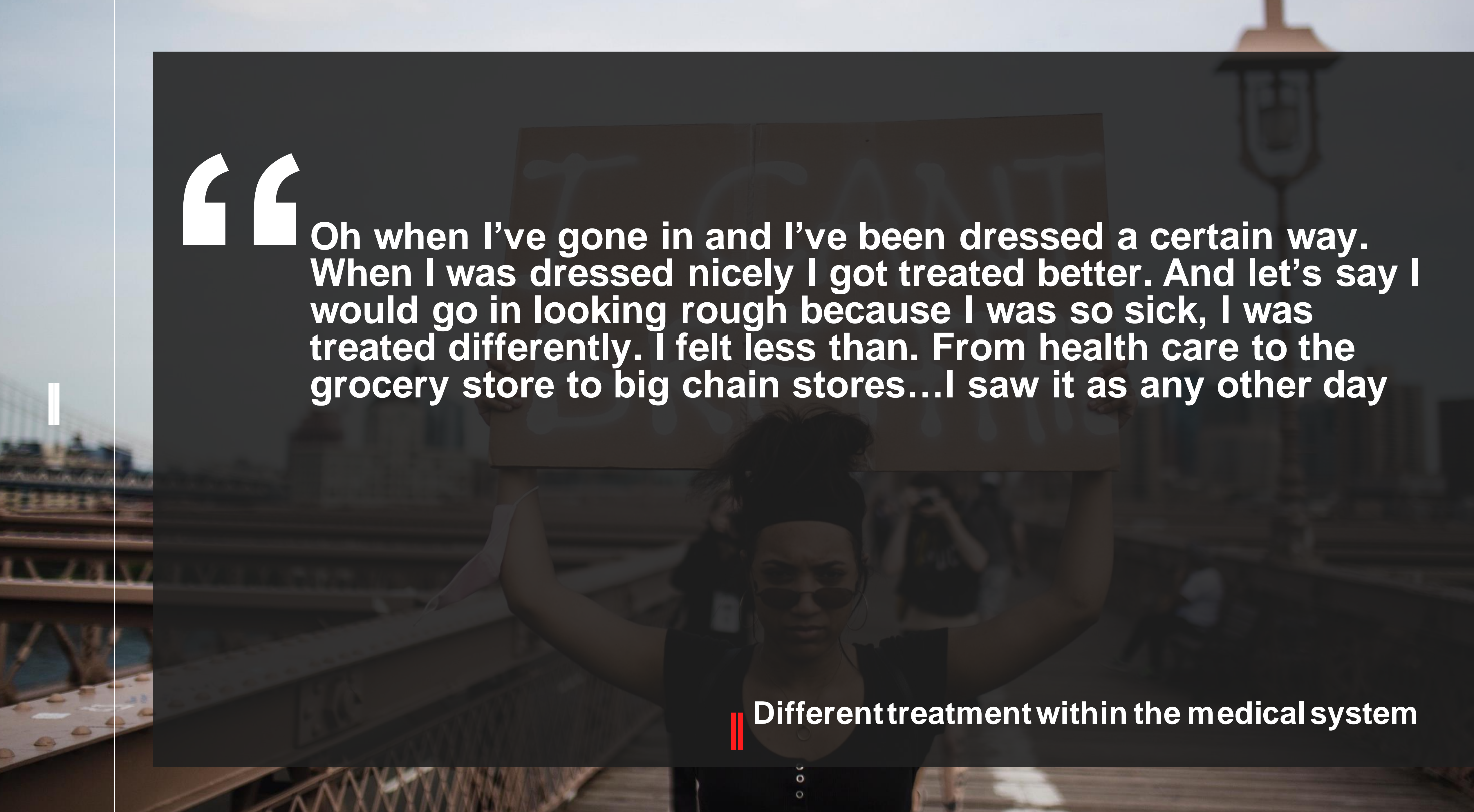
Tyler M. Barrett, Clemontina A. Davenport, Patti L. Ephraim, Sarah Peskoe, Dinushika Mohottige, Nicole DePasquale, Lisa McElroy, L. Ebony Boulware Disparities in Discussions about Kidney Replacement Therapy in CKD Care Kidney360 Jan 2022,

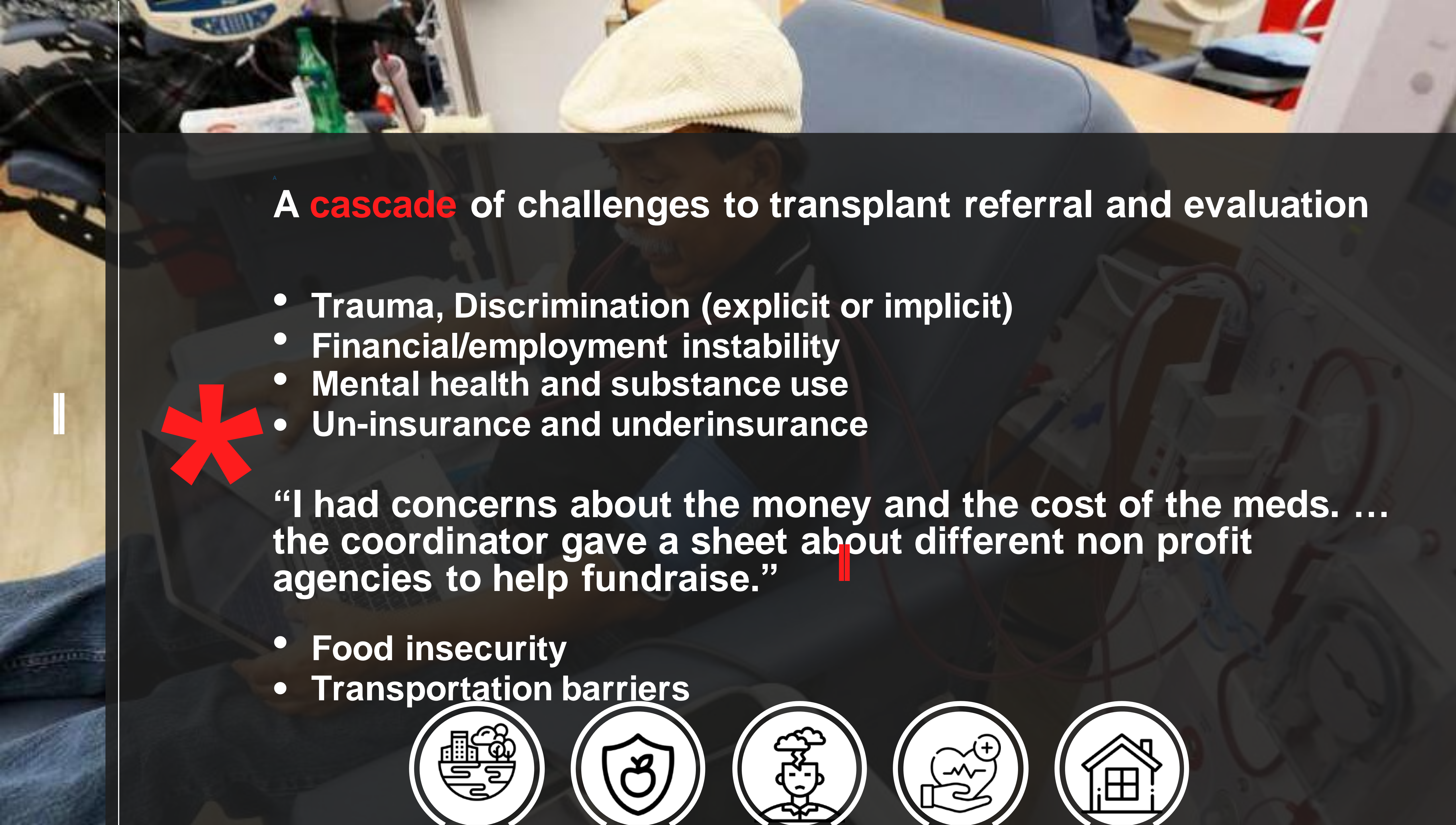
PROVIDER EQUITY CONCERNS

"Those who have less resources are suffering the most; it's not fair that you can't get transplanted if you don't have a caregiver or can't take a day off work, no money to show up in the right outfit

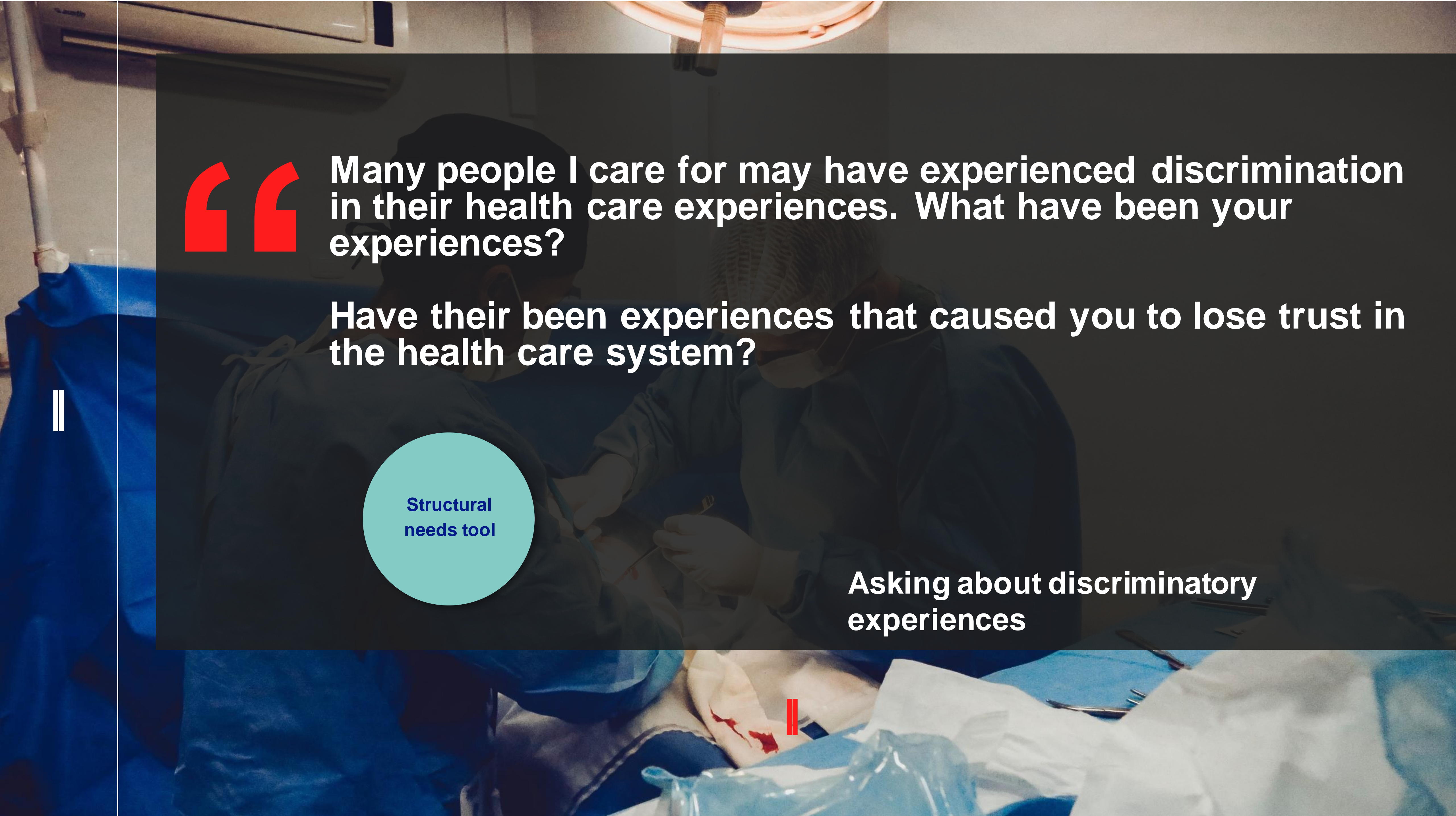
I coach them {candidates} before the eval to be early, to take notes, what to wear, what to say. I always do that because I want them to succeed and I know how hard it is sometimes to get through the process

Semi structured interviews with general nephrologists about transplant equity 2022; unpublished


“
Oh when I’ve gone in and I’ve been dressed a certain way. When I was dressed nicely I got treated better. And let’s say I would go in looking rough because I was so sick, I was treated differently. I felt less than. From health care to the grocery store to big chain stores…I saw it as any other day
Different treatment within the medical system


A cascade of challenges to transplant referral and evaluation
• Trauma, Discrimination (explicit or implicit)
• Financial/employment instability
• Mental health and substance use
• Un-insurance and underinsurance
"I had concerns about the money and the cost of the meds. … the coordinator gave a sheet about different non profit agencies to help fundraise."
• Food insecurity
• Transportation barriers

Key Structural Interventions

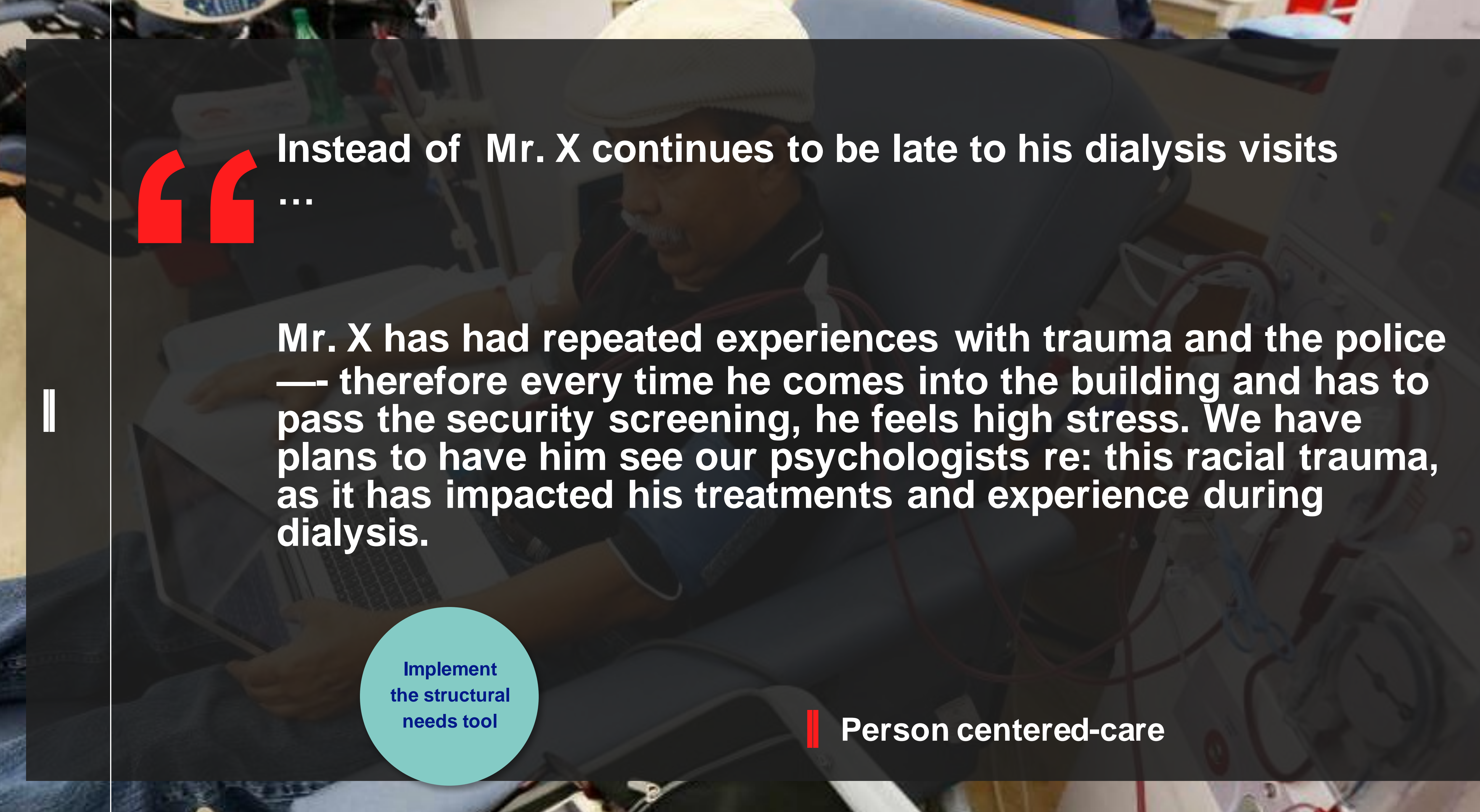

“
Many people I care for may have experienced discrimination in their health care experiences. What have been your experiences?
Have their been experiences that caused you to lose trust in the health care system?
Structural needs tool
Asking about discriminatory experiences

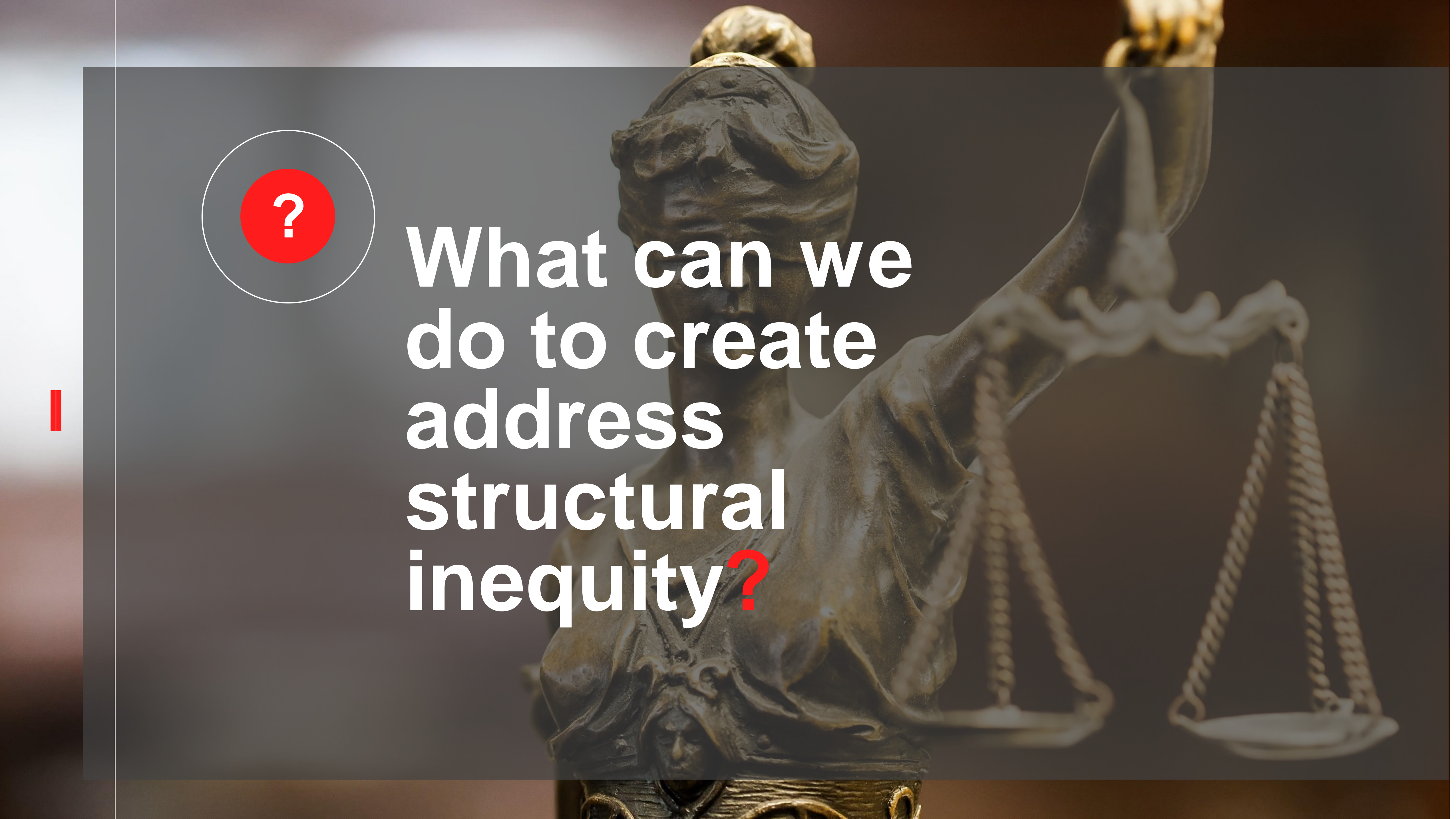
Race based trauma and empowerment groups.

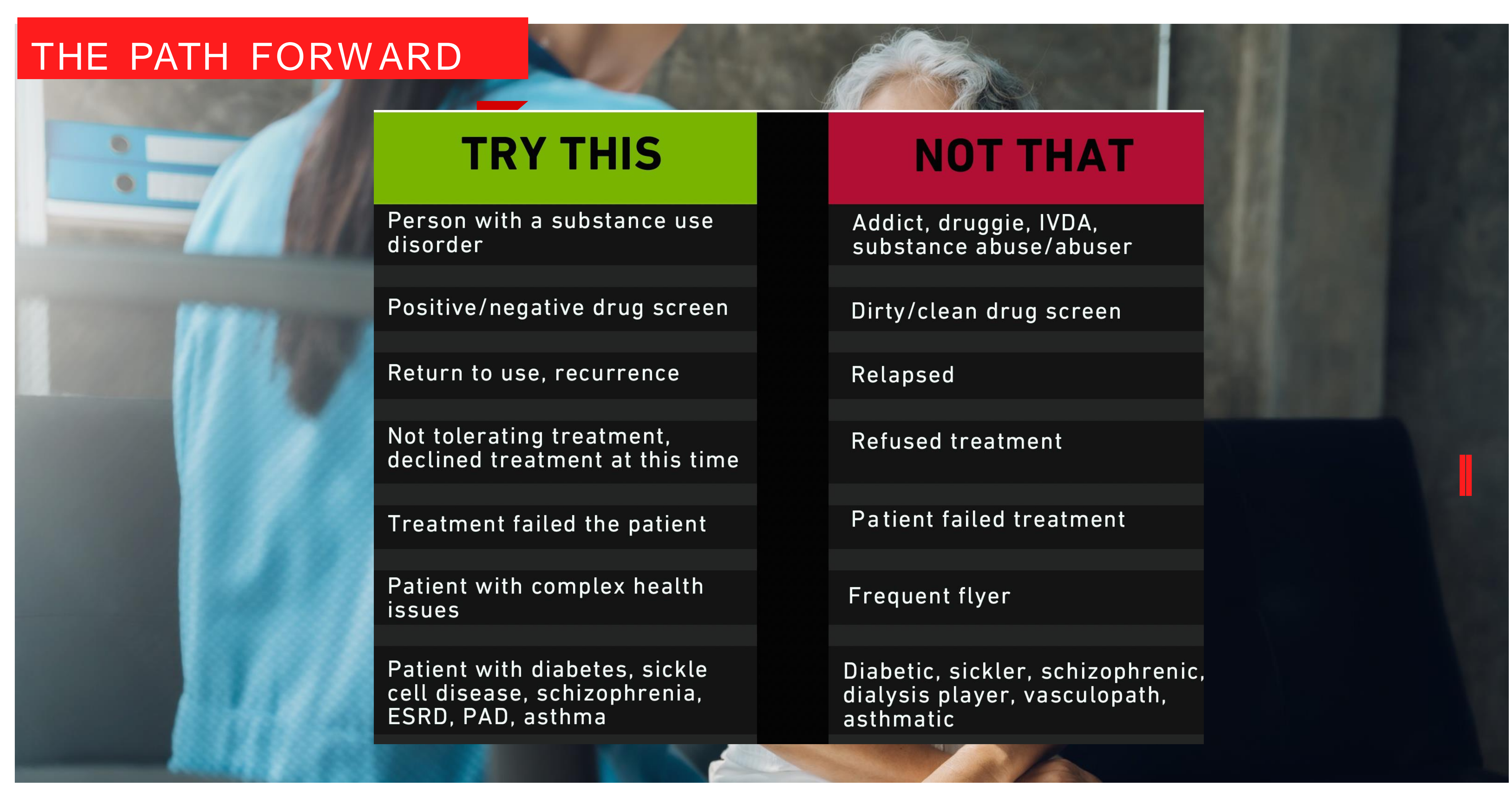
Veterans Health Administration recognition of racial trauma and its impacts on physical mental and

- Empowerment
- Value based goal setting
- Taking charge of emotions
- Social support
- Media balance

VA
U.S. Department of Veterans Affairs


Instead of Mr. X continues to be late to his dialysis visits
…
Mr. X has had repeated experiences with trauma and the police —- therefore every time he comes into the building and has to pass the security screening, he feels high stress. We have plans to have him see our psychologists re: this racial trauma, as it has impacted his treatments and experience during dialysis.
Implement the structural needs tool
Person centered-care


?
What can we do to create address structural inequity?



TRY THIS	NOT THAT
Person with a substance use disorder	Addict, druggie, IVDA, substance abuse/abuser
Positive/negative drug screen	Dirty/clean drug screen
Return to use, recurrence	Relapsed
Not tolerating treatment, declined treatment at this time	Refused treatment
Treatment failed the patient	Patient failed treatment
Patient with complex health issues	Frequent flyer
Patient with diabetes, sickle cell disease, schizophrenia, ESRD, PAD, asthma	Diabetic, sickler, schizophrenic, dialysis player, vasculopath, asthmatic

THE PATH FORWARD

Am I reinforcing stereotypes?

Does this blame the patient?

Does this include extraneous Information?

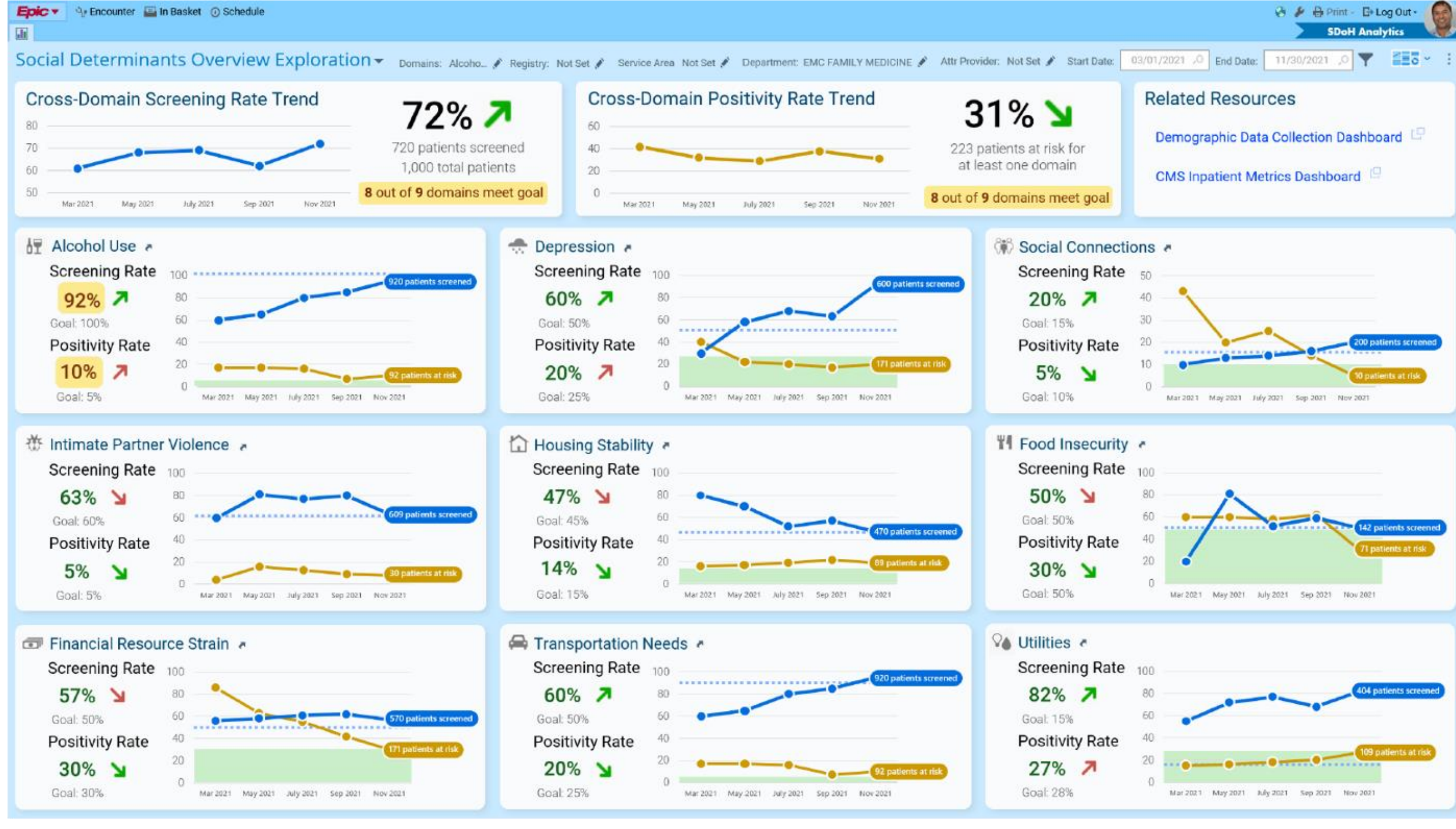
Is the language biased or harmful?

How would my patient or their loved one feel if they read this?

NEEDS SCREENERS

Structural needs tool

Collect data regarding social needs and structural factors impacting care and then link this to actual resources



CHW AS NAVIGATORS

Address Structural needs via CHW

Contributors to Disparities

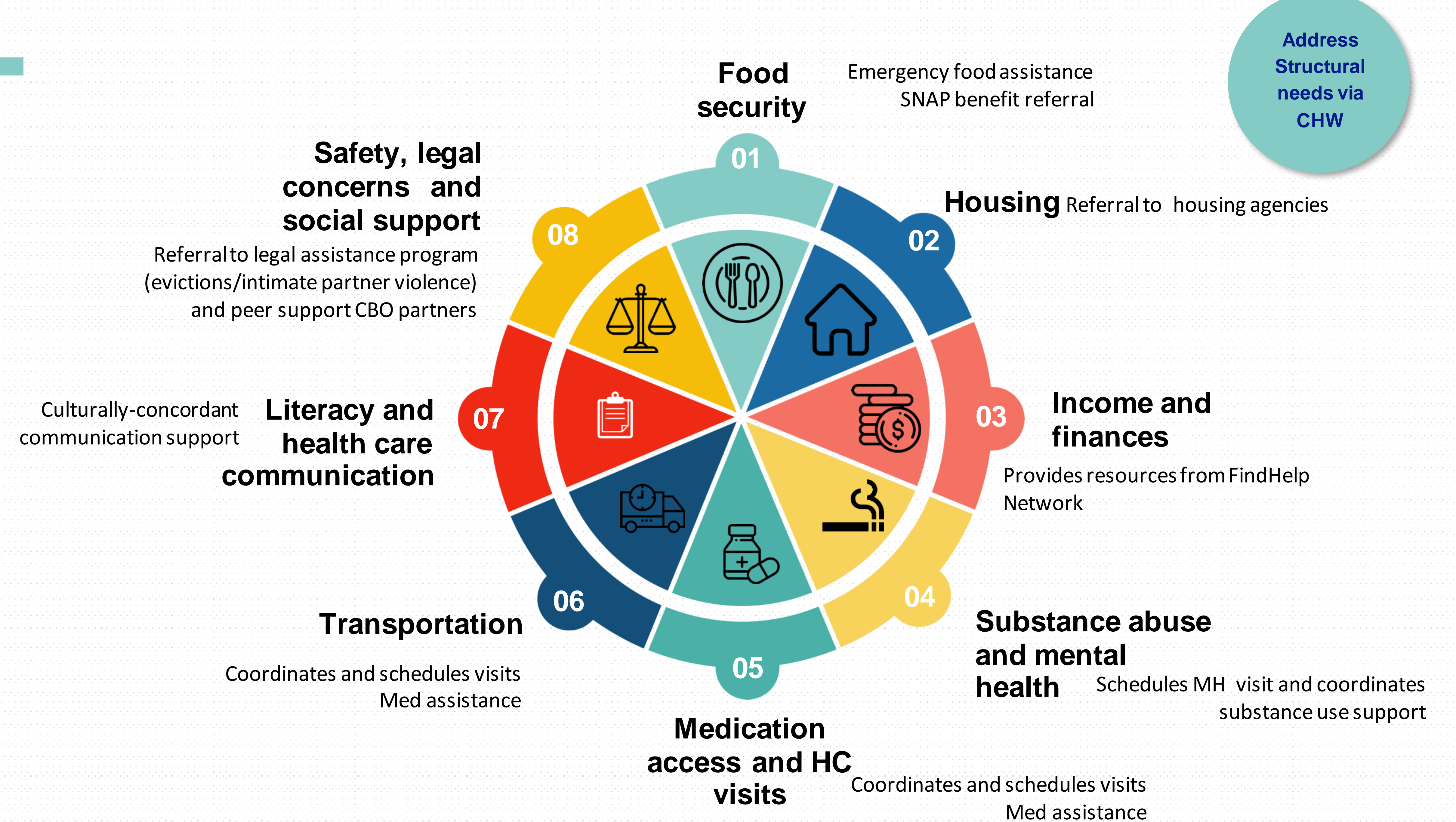
- Kidney disease knowledge (i.e. awareness of risk of kidney disease, of strategies to reduce progression of kidney disease, of kidney replace therapy options)
- Social challenges (e.g. poverty, access to food and housing, chronic toxic stress, immigration status, and caregiver burden)
- Psychosocial challenges
- Medical mistrust and discrimination
- Health literacy
- Primary language
- Health insurance

- Lack of training and comfort in discussing kidney disease, kidney replacement therapy, or patient-centered goals of care
- Patient-provider communication issues (e.g. insufficient time and use of language interpreters)
- Lack of culturally responsive training and care leading to bias and racism
- Lack of diverse healthcare workforce

- Availability of language interpreters
- Availability of comprehensive resources and support
- Complex navigation of health system
- Incentive and reimbursement structures
- Health insurance policies

- Improve kidney disease knowledge and decision-making by providing culturally and language concordant education that is not rushed and meets individuals where they are at with respect to kidney disease-related health literacy
- Address social challenges by assessing for social risks and providing support with social challenges
- Reduce medical mistrust and discrimination by serving as a bridge to healthcare
- Providing support with language interpretation during key kidney-disease related visits
- Connect patients to care by referring to health insurance enrollment specialist and providing support with enrollment
- Improve patient activation and engagement in health by using motivational interviewing and patient activation skills
- Improve navigation of healthcare system

Cervantes, Lilia; Robinson, Bruce M.; Steiner, John F.; Myaskovsky, Larissa. Culturally Concordant Community-Health Workers: Building Sustainable Community-Based Interventions that Eliminate Kidney Health Disparities. JASN 33(7):p 1252-1254, July 2022. | DOI: 10.1681/ASN.2022030319



Address Structural needs via CHW
Food security
Emergency food assistance
SNAP benefit referral
01
Housing
Referral to housing agencies
02
Income and finances
Provides resources from FindHelp Network
03
Substance abuse and mental health
Schedules MH visit and coordinates substance use support
04
Medication access and HC visits
Coordinates and schedules visits
Med assistance
05
Transportation
Coordinates and schedules visits
Med assistance
06
Literacy and health care communication
Culturally-concordant communication support
07
Safety, legal concerns and social support
Referral to legal assistance program (evictions/intimate partner violence) and peer support CBO partners
08

ACCOUNTABILITY TO ACT

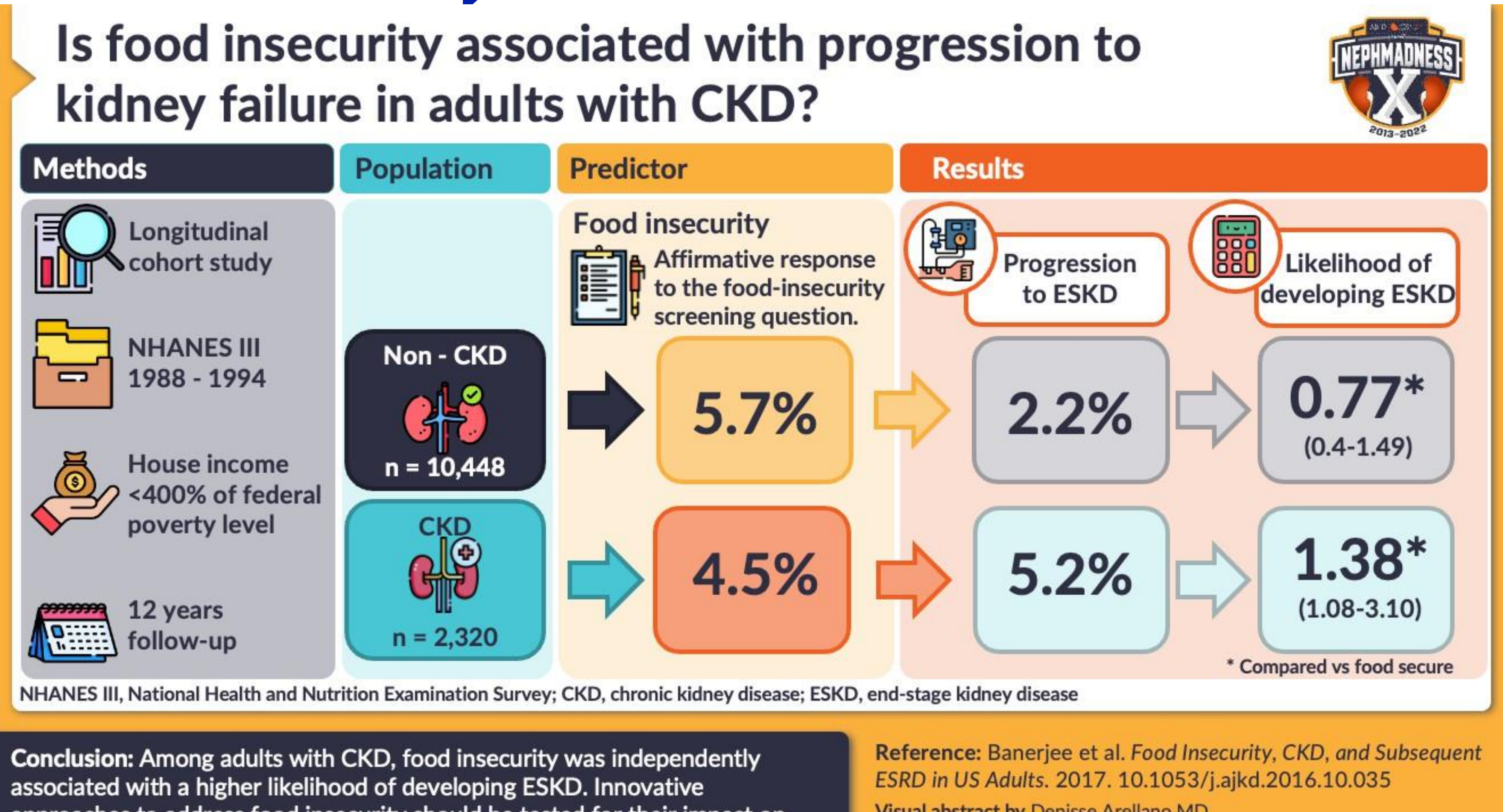
HEDIS moving to assess whether systems were able to both screen and then intervene on a positive social need

Members who **received a corresponding intervention with in 30 days** of first positive screen

Members with at least 1 positive result for food, housing, transportation

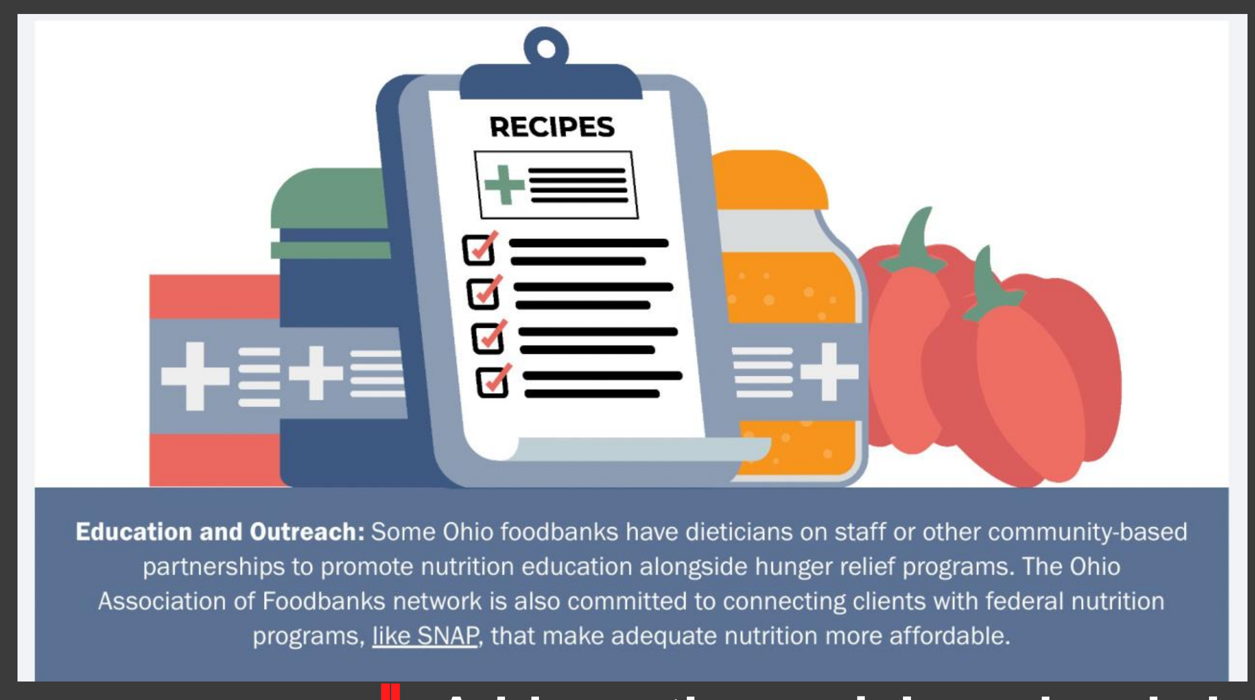
https://www.ncqa.org/wp-content/uploads/2022/02/04.-SNS-E.pdf

FOOD AS MEDICINE



Ms. Y has expressed that she has had ongoing difficulties eating meals in the morning.

We provided her a referral to the food pantry and will follow up with her next visit regarding the provided services



Education and Outreach: Some Ohio foodbanks have dieticians on staff or other community-based partnerships to promote nutrition education alongside hunger relief programs. The Ohio Association of Foodbanks network is also committed to connecting clients with federal nutrition programs, like SNAP, that make adequate nutrition more affordable.

Address the social need and plan for addressing the need in the note

FOOD AS MEDICINE

Move to ensure EHRs and systems are integrated with referral programs that can allow for screening and provide direct referrals

Referrals and Food Pharmacies: Foodbanks can facilitate connections between health care providers and the hunger relief network. Advanced partnerships include the *Food Pharmacy* model, which allows providers to screen patients for food insecurity and refer them directly to a designated community-based food pantry or on-site food pantry.

LANGUAGE + COMM.

“

What language is best to communicate with you in?

Have you had difficulty understanding the documents needed to access services? How about difficulty understanding these documents about your care?

DIGITAL EQUITY KEYS

1. Figueroa CA, Murayama H, Amorim PC, White A, Quiterio A, Luo T, Aguilera A, Smith ADR, Lyles CR, Robinson V, von Vacano C. Applying the Digital Health Social Justice Guide. Frontiers in Digital Health. 2022;4. doi: 10.3389/fdgth.2022.807886.

NATIONAL KIDNEY FOUNDATION®

FIRST STEPS TO TRANSPLANT

6.

Important Things to Consider

There are risks to transplant surgery.

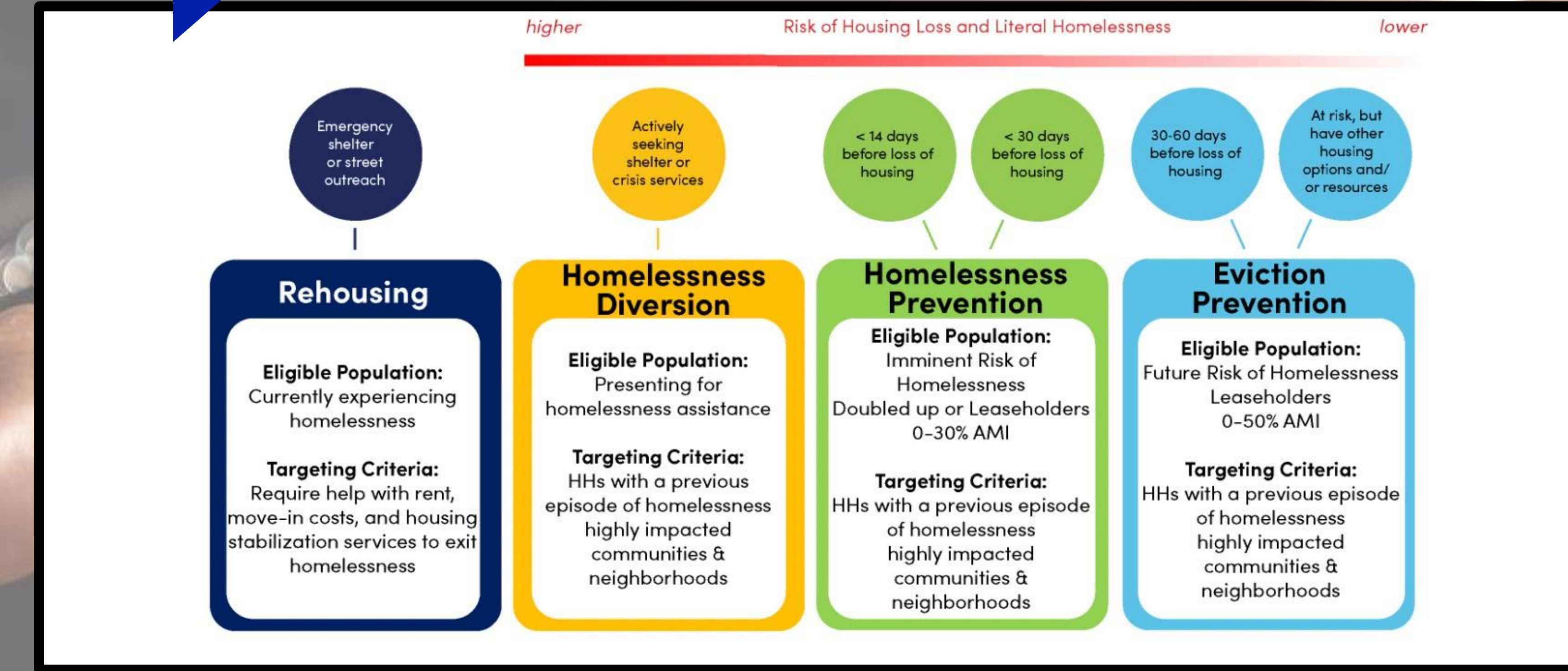
You will have a higher risk for infections and certain types of cancer.

You will need to take anti-rejection medicines for as long as your new kidney is working. The medications may cause side effects.

Although most transplants are successful and last for many years, how long they last can vary.

NATIONAL KIDNEY FOUNDATION.

HOUSING IS MEDICINE



Housing First: A Cost-Effective Strategy

	Daily Cost per person	30 day cost per person
Supportive Housing	$68	$2,040
Shelter	$136	$4,080
Incarceration at Rikers Island	$1,414	$42,420
Hospitalization	$3,609	$108,270[4]

https://nashp.org/health-and-housing-introduction-to-cross-sector-collaboration/

Housing Interventions

LEGAL NEEDS

Some people describe that they have had legal challenges…

Are you concerned about the police or law enforcement?
How can we help access public services?

We referred Ms. Y to our medical legal team given ongoing concerns regarding her safety, and to address her recent job loss. We hop legal services may help address key barriers which have impacted her ability to get to her dialysis treatments.

Assess Legal Needs

LEGAL NEEDS & MLP

Medical Legal Partnerships

Medical legal partnerships can address key structural factors that impair kidney care across multiple dimensions including housing, insurance, etc.

Common Social Determinant of Health	How Legal Services Can Help	Impact of Legal Services on Health / Health Care
INCOME Resources to meet daily basic needs 	• Appeal denials of food stamps, health insurance, cash benefits, and disability benefits	1. Increasing someone's income means s/he makes fewer trade-offs between affording food and health care, including medications. 2. Being able to afford enough healthy food helps people manage chronic diseases and helps children grow and develop.
HOUSING & UTILITIES A healthy physical environment 	• Secure housing subsidies • Improve substandard conditions • Prevent evictions • Protect against utility shut-off	1. A stable, decent, affordable home helps a person avoid costly emergency room visits related to homelessness. 2. Consistent housing, heat and electricity helps people follow their medical treatment plans.
EDUCATION & EMPLOYMENT Quality educational and job opportunities 	• Secure specialized education services • Prevent and remedy employment discrimination • Enforce workplace rights	1. A quality education is the single greatest predictor of a person's adult health. 2. Consistent employment helps provide money for food and safe housing, which also helps avoid costly emergency health care services. 3. Access to health insurance is often linked to employment.
LEGAL STATUS Access to jobs 	• Resolve veteran discharge status • Clear criminal / credit histories • Assist with asylum applications	1. Clearing a person's criminal history or helping a veteran change their discharge status helps make consistent employment and access to public benefits possible. 2. Consistent employment provides money for food and safe housing, which helps people avoid costly emergency health care services.
PERSONAL & FAMILY STABILITY Safe homes and social support 	• Secure restraining orders for domestic violence • Secure adoption, custody and guardianship for children	1. Less violence at home means less need for costly emergency health care services. 2. Stable family relationships significantly reduce stress and allow for better decision-making, including decisions related to health care.

POLICY BARRIERS

Kidney Replacement Therapy Insurance Coverage
- Statewide dialysis and transplant (*n* = 5)
- Statewide dialysis (*n* = 15)
- No statewide program (*n* = 30)

5 States cover kidney transplant for undocumented individuals who account for **8-9% of kidney donors** yet only **< 1%** of kidney transplant recipients

Rizzolo K, Dubey M, Feldman KE, Powe NR, Cervantes L. Access to Kidney Care for Undocumented Immigrants Across the United States. Ann Intern Med. 2023
Cervantes L, Fischer S, Berlinger N, et al. The Illness Experience of Undocumented Immigrants With End-stage Renal Disease. *JAMA Intern Med.* 2017;177(4):529–535. doi:10.1001/jamainternmed.2016.8865

ADVOCACY MATTERS

Engage with multi stakeholder partners to advance equity enhancing policy including 1332 State Innovation Waiver

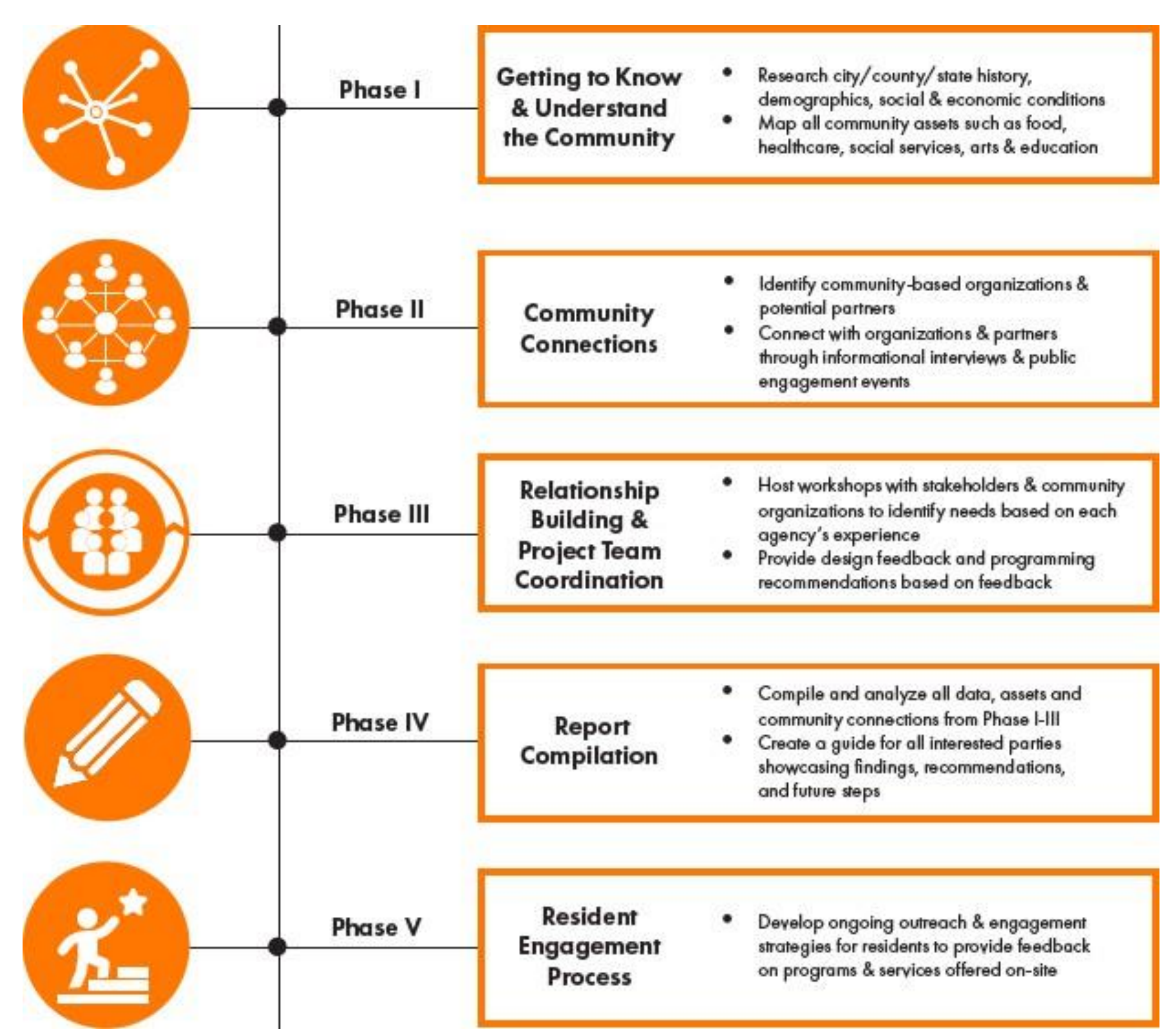
NYLPI RELEASES STATEMENT ON NEW TRANSPLANT EQUITY LEGISLATION INTRODUCED BY NY CITY COUNCIL

November 17, 2023

Disability Justice, Health Justice, Immigrant Justice, Media Coverage, News, Transplant Equity

ABCD

ABCD = Asset based community development can enhance care engagement strategies and is essential for advancing structurally competent care



https://www.centerforpublicinterestdesign.org/abcd-assetbased-community-development

Name structural violence

Carefully distinguish root causes and name structural factors when describing causes of patient behaviors (e.g. missed dialysis, etc)

Center patient-community expertise

Center patient and community stakeholders throughout research with attention to transparency and the use of data

Invest in structural solutions

Invest in sustainable partnerships with CBOs and community facing organizations caring for individuals with kidney disease

Promote Cross-Sector Solutions

Expand funding for collaborative partnerships; cross sector collaborations are essential for rigor innovation and equity

THANK YOU

Our generous patients and caregivers

Person-Centered Care

Michael Mace

Renal Social Worker & Transplant Recipient

Examples of Person-Centered Care

- Could you please share examples and steps kidney professionals can take, to provide equitable care for individuals with ESKD who have unmet health-related social needs?

Person-Centered Care Key Considerations

- Could you please share key considerations how kidney professionals can do, to look beyond the symptoms and diseases that represent the downstream consequences due to upstream factors?

Q & A

Thank you for attending the Structural Competency Training Series for Kidney Professionals!

- Please complete the training evaluation
- Obtain your CE credits via the link on the evaluation form

Recorded presentation and slides for Module 1 and 2 are available at:
esrdncc.org/professional/healthequity

Facebook: @ESRD.NCC | Instagram: @ESRD_NCC | X: @ESRDNCC

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