An illustration featuring the silhouettes of several people's heads in profile, facing right. The silhouettes are filled with various colors: red, blue, orange, and dark blue. The background is a stylized city skyline with various building shapes in shades of light blue and teal. A white rectangular box is overlaid on the bottom left of the image, containing text.

Social Determinants of Health: Definitions & Frameworks

Mia T. Chandler, MD, MPH

1/22/2023

Presentation Overview

- **Definition and History** of Health Equity and Social Determinants of Health Research
- Health Equity and Social Determinants of Health **Frameworks**
- **Application** of Health Equity/SDoH Frameworks



Health Equity

“The absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically”



The History

Authors of Foundational Works



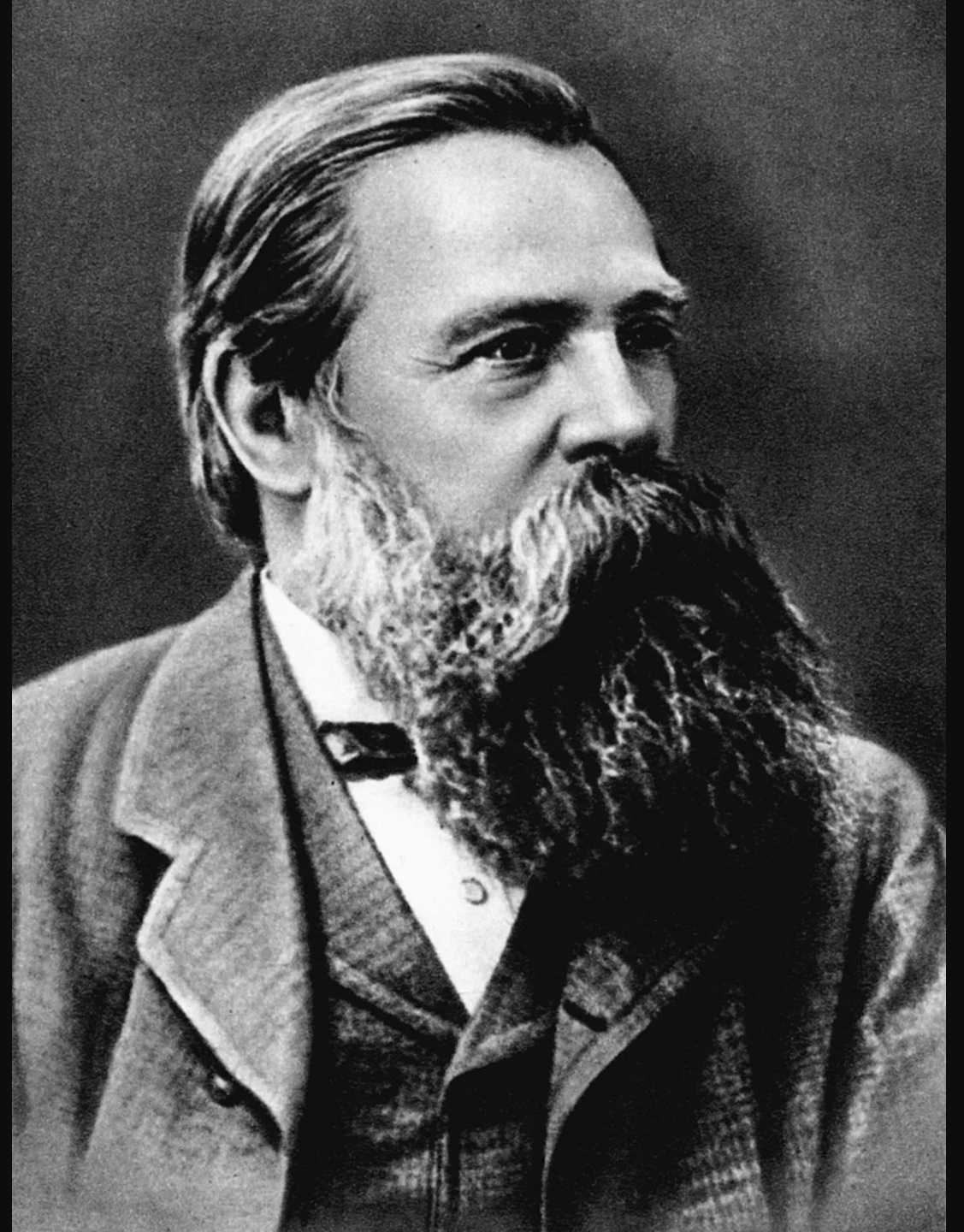
Foundational Works

- 1842 **Edwin Chadwick** Report on the Sanitary Condition of the Labouring Population of Great Britain: supplementary report on the results of special inquiry into the practice of interment in towns
-



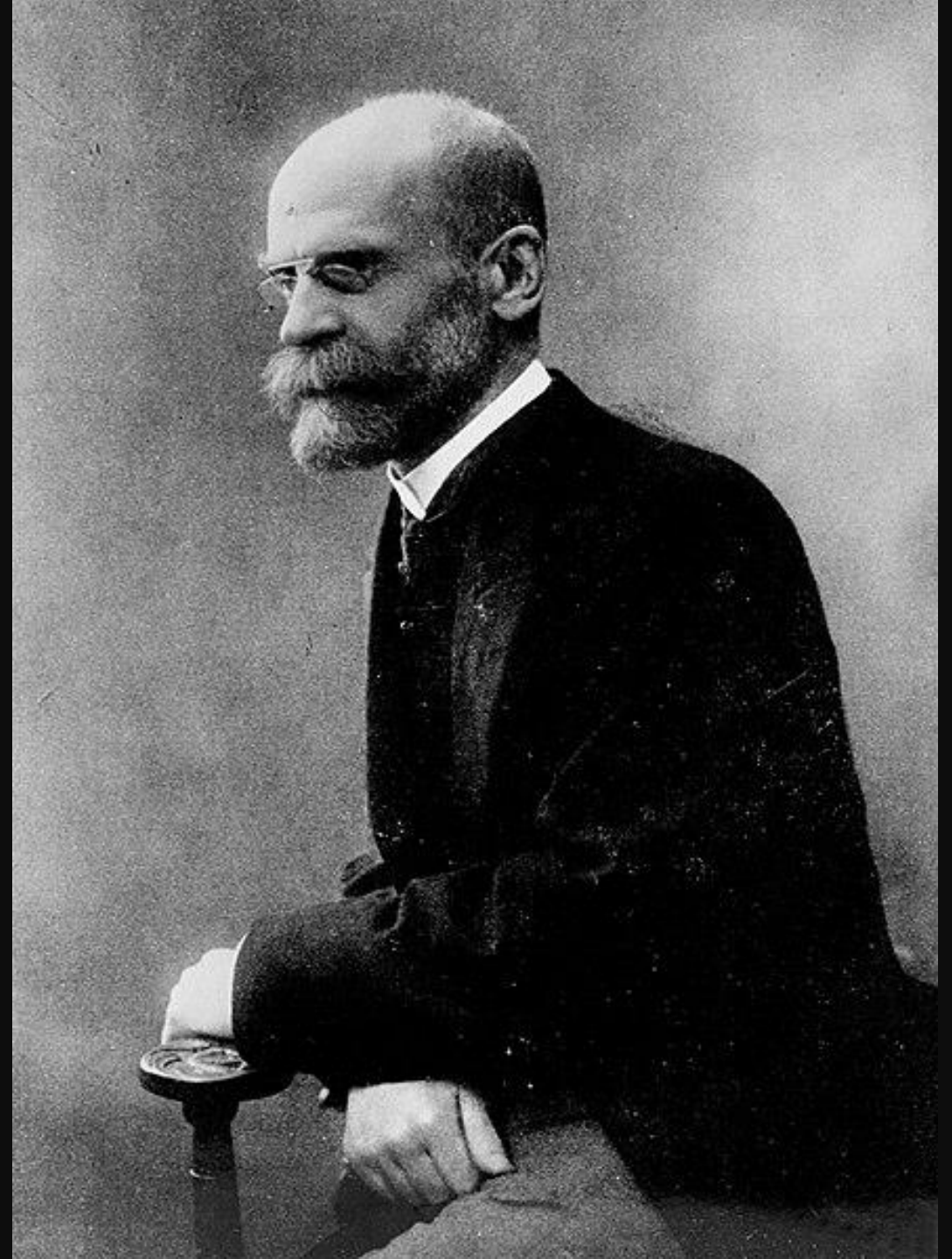
Foundational Works

- 1845 **Friedrich Engels** The condition of the working class in England.



Foundational Works

- 1897 **Émile Durkheim** *Le suicide*



Foundational Works

- 1899 **WEB Du Bois** The Philadelphia Negro: a social study
-





Key Terms

Health Disparity

Health Inequality

Health Inequity

Disparity vs Inequity

Equality



Equity



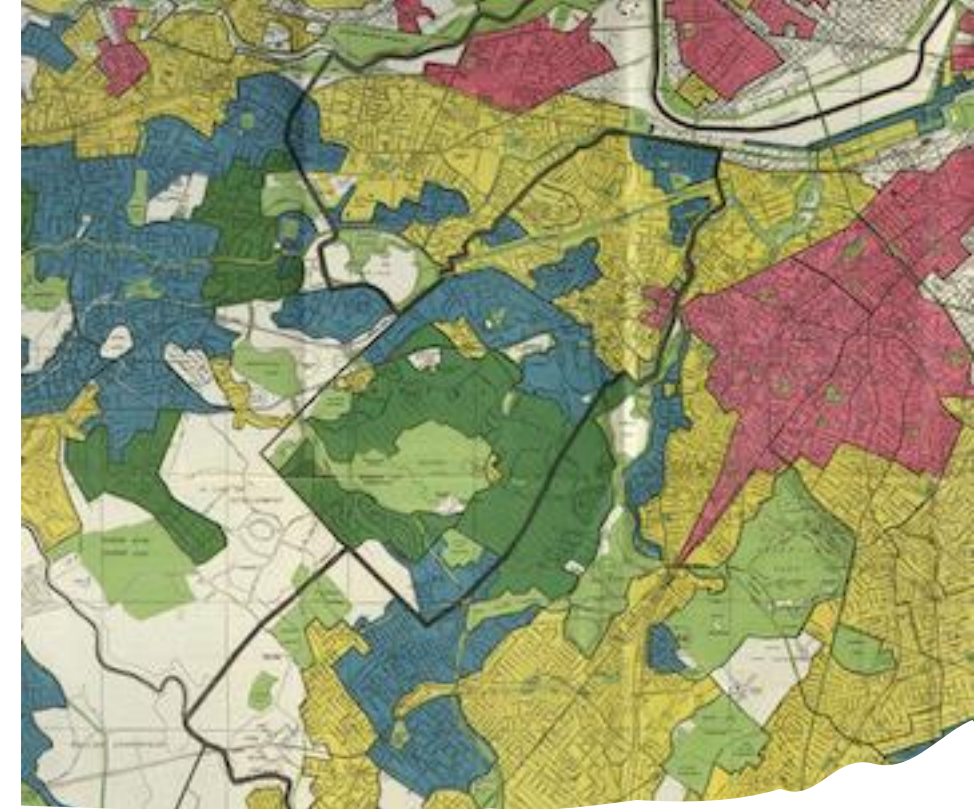
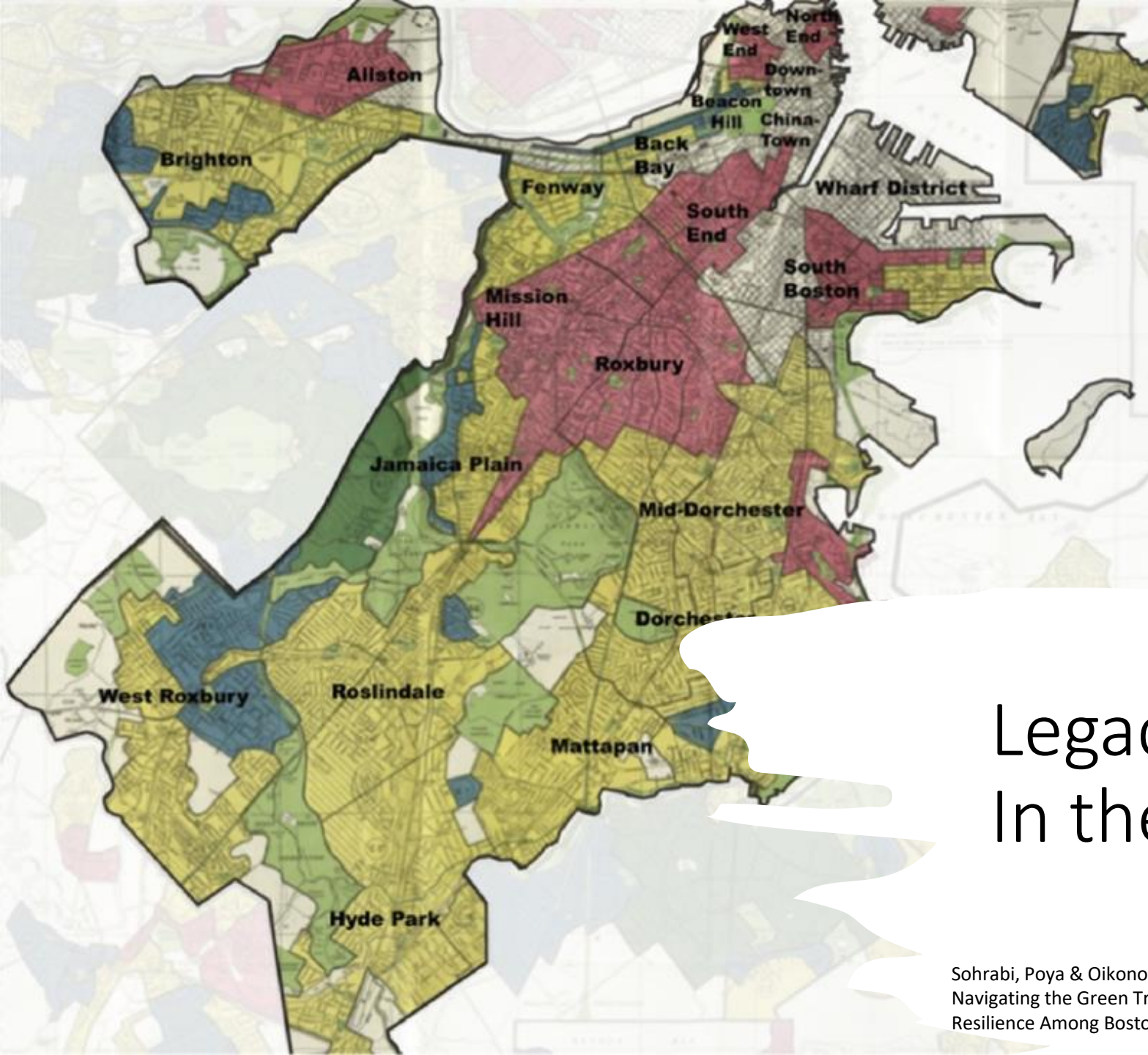
© 2017 Robert Wood-Johnson Foundation. May be reproduced with attribution.

<p>REALITY One gets more than is needed, while the other gets less than is needed. Thus, a huge disparity is created.</p>	<p>EQUALITY The assumption is that everyone benefits from the same supports. This is considered to be equal treatment.</p>	<p>EQUITY Everyone gets the support they need, which produces equity.</p>	<p>JUSTICE All 3 can see the game without supports or accommodations because the cause(s) of the inequity was addressed. The systemic barrier has been removed.</p>

@restoringracialjustice

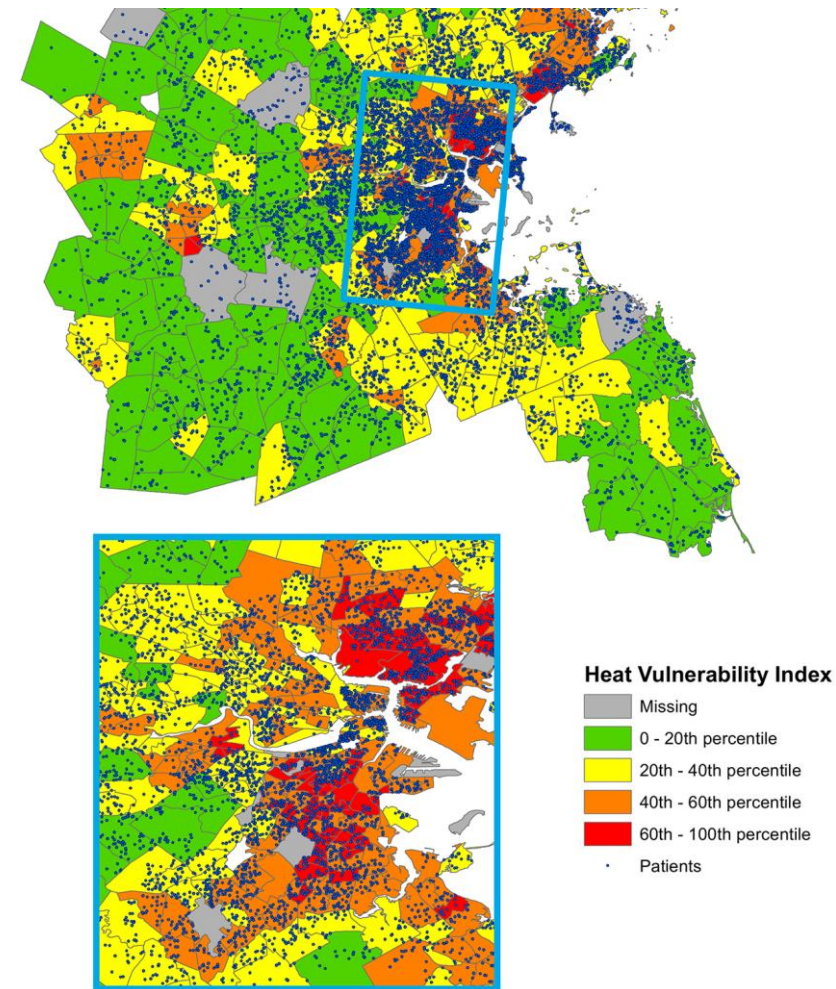
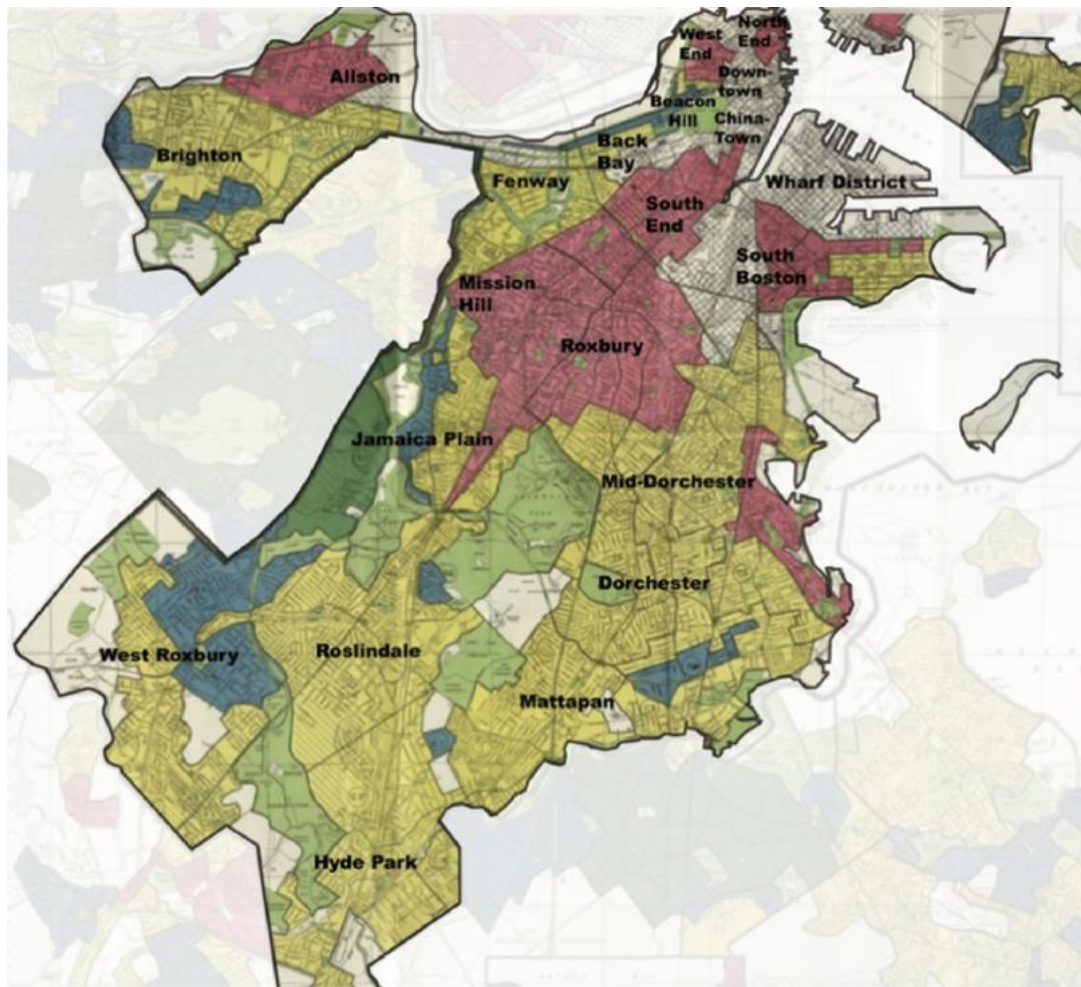
Social Determinants of Health

“The social determinants of health (SDH) are the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.”



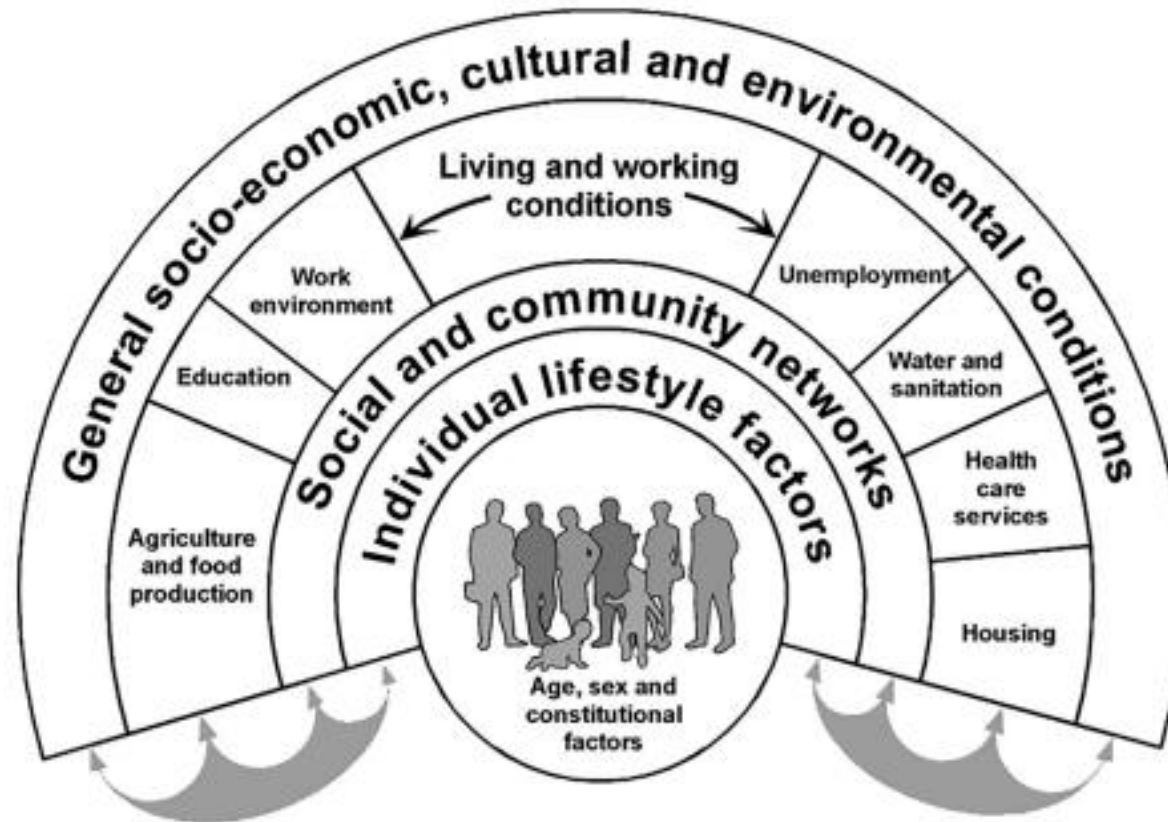
Legacy of Discrimination In the United States

Sohrabi, Poya & Oikonomaki, Eleni & Hamdy, Nourhan & Kakderi, Christina & Bevilacqua, Carmelina. (2023). Navigating the Green Transition During the Pandemic Equitably: A New Perspective on Technological Resilience Among Boston Neighborhoods Facing the Shock. 10.1007/978-3-031-34211-0_14.



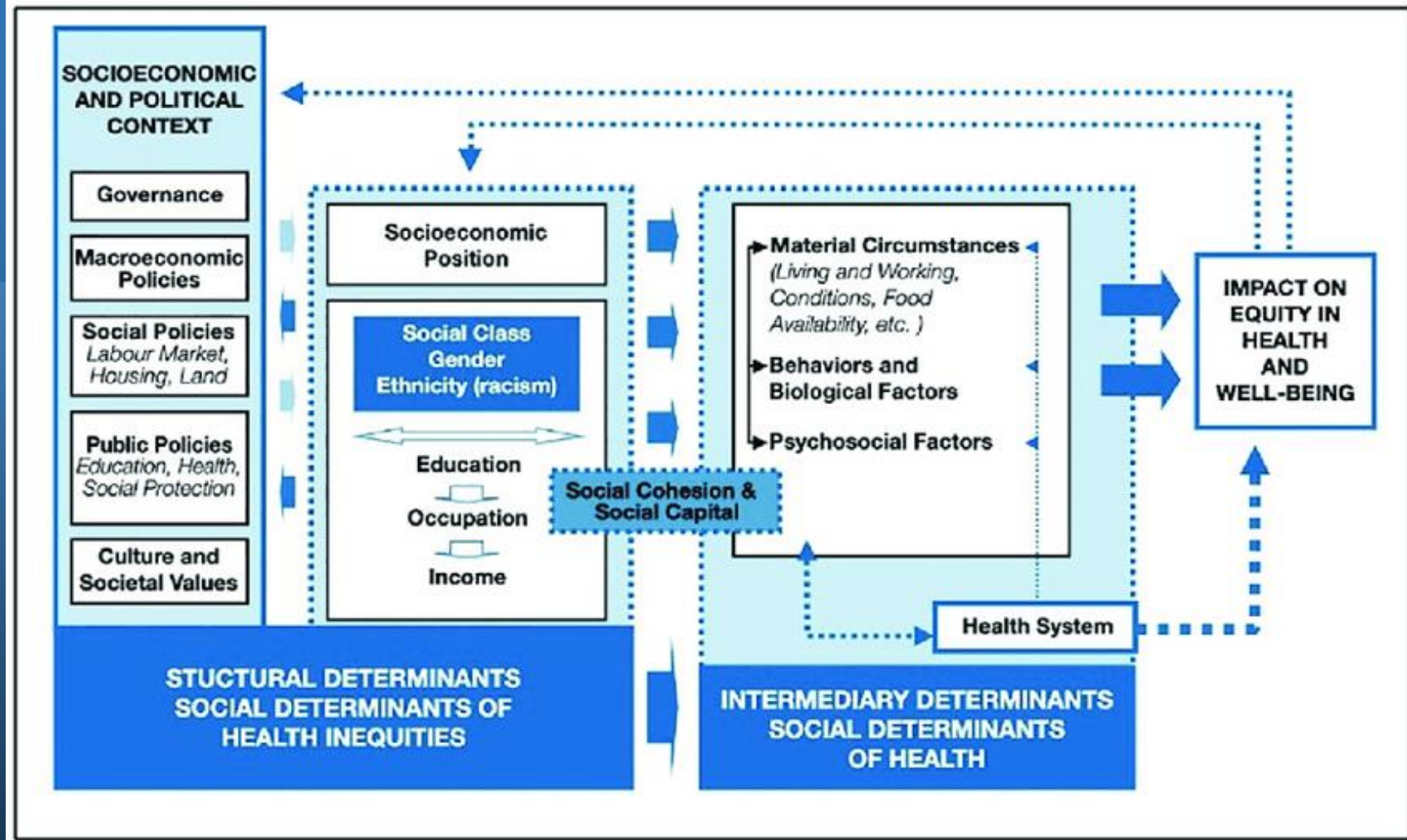
Santacroce L, Dellaripa PF, Costenbader KH, Collins J, Feldman CH. Association of Area-Level Heat and Social Vulnerability With Recurrent Hospitalizations Among Individuals With Rheumatic Conditions. *Arthritis Care Res (Hoboken)*. 2023 Jan;75(1):22-33. doi: 10.1002/acr.25015. Epub 2022 Oct 12. PMID: 36071609; PMCID: PMC9947700.

Dahlgren-Whitehead Model



Dahlgren G, Whitehead M. The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows. *Public Health*. 2021 Oct;199:20-24. doi: 10.1016/j.puhe.2021.08.009. Epub 2021 Sep 14. PMID: 34534885.

WHO Conceptual Framework for Action on the Social Determinants of Health 2010



Healthy People 2030

Social Determinants of Health

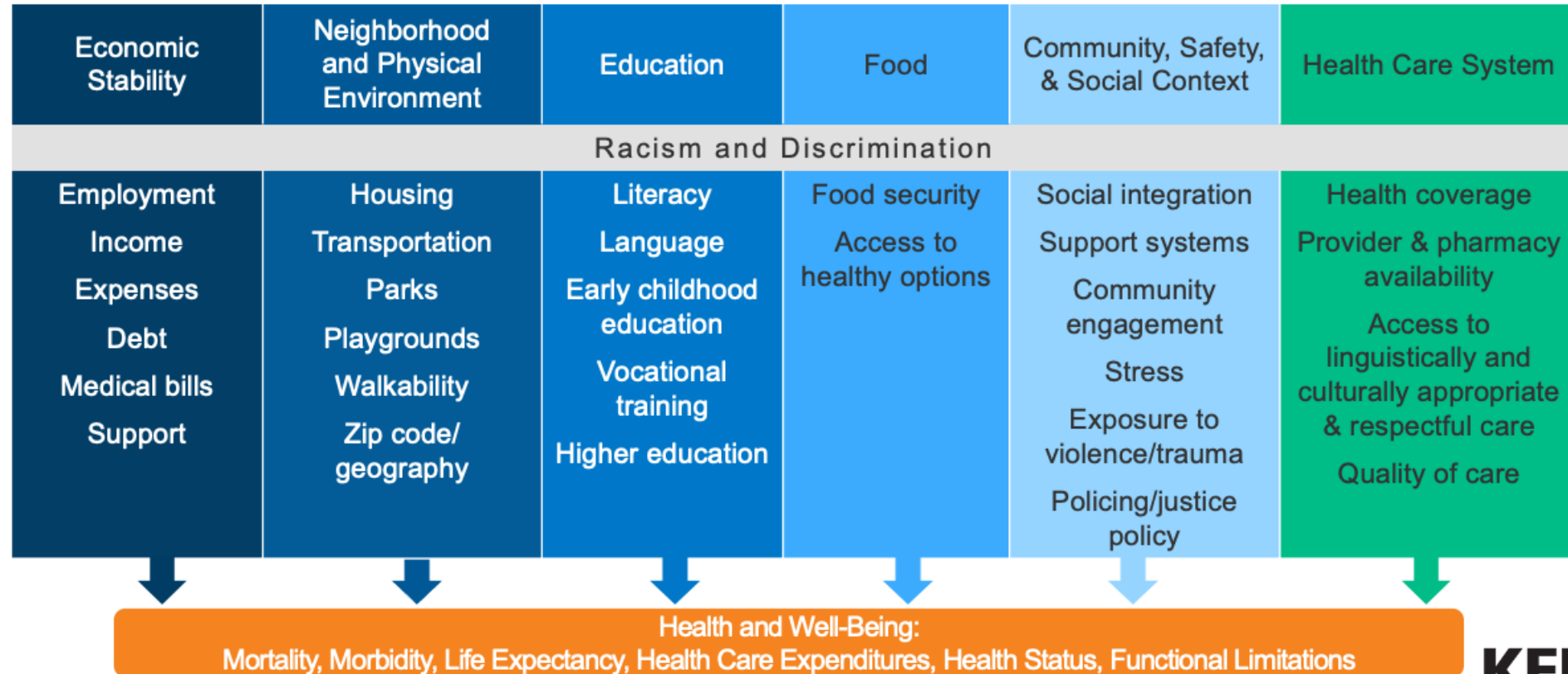


Social Determinants of Health

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 Healthy People 2030

Kaiser Family Foundation Framework of Social and Economic Drivers of Inequity (Disparities)

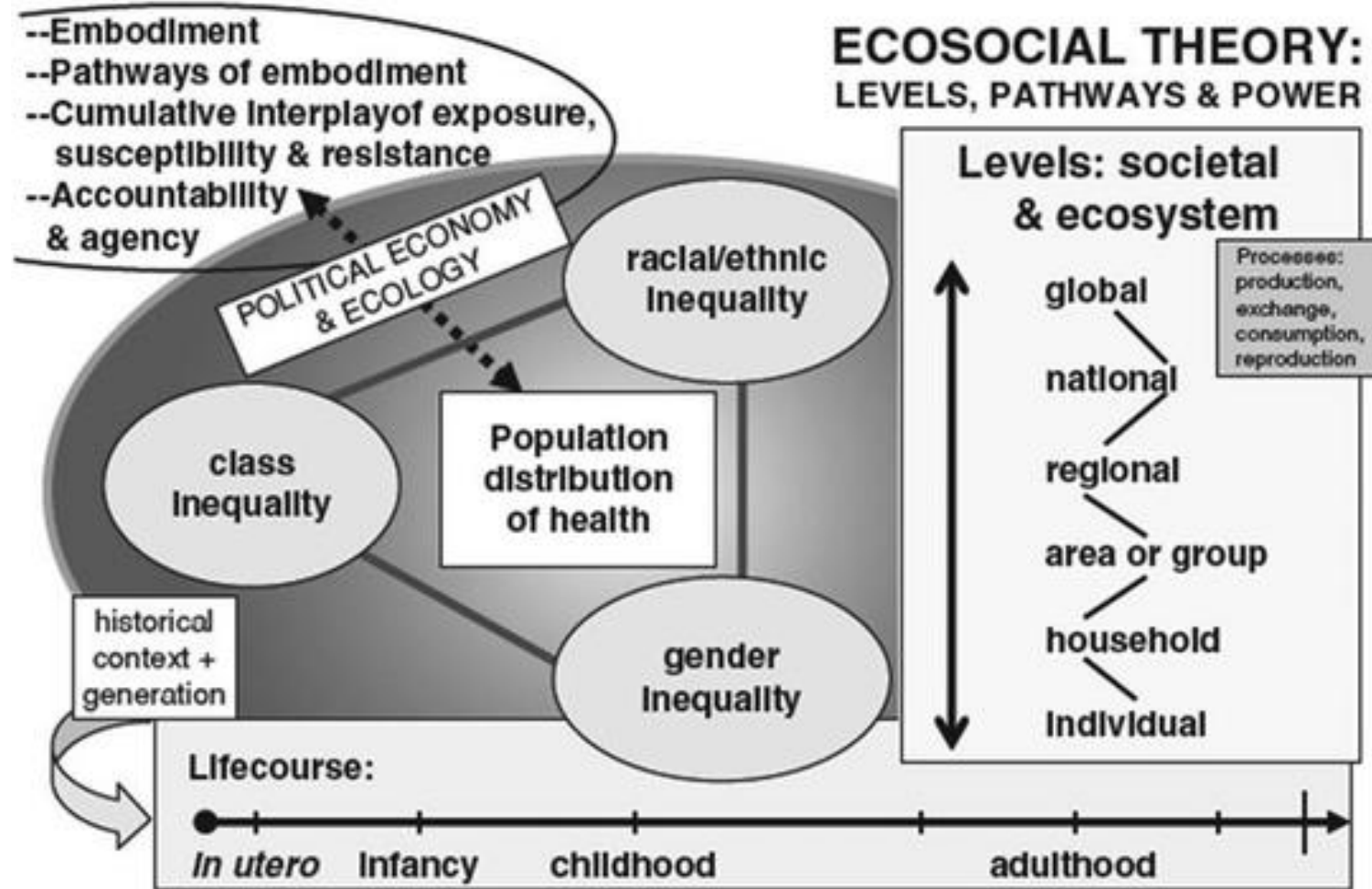


KFF

National Institute on Minority Health and Health Disparities Research Framework

		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence <i>(Over the Lifecourse)</i>	Biological	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		 Individual Health	 Family/ Organizational Health	 Community Health	 Population Health

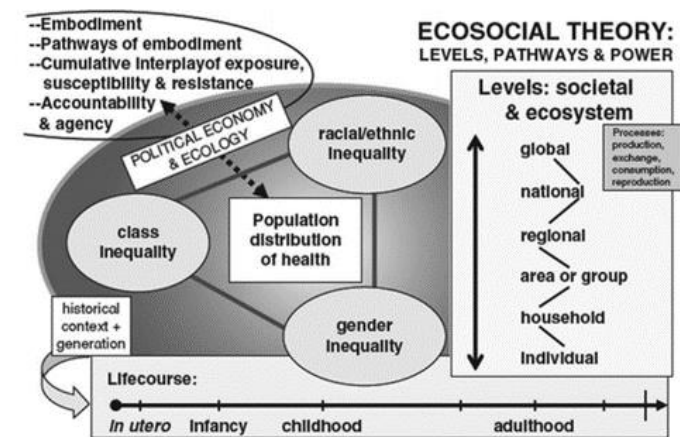
Kreiger's Ecosocial Theory of Disease



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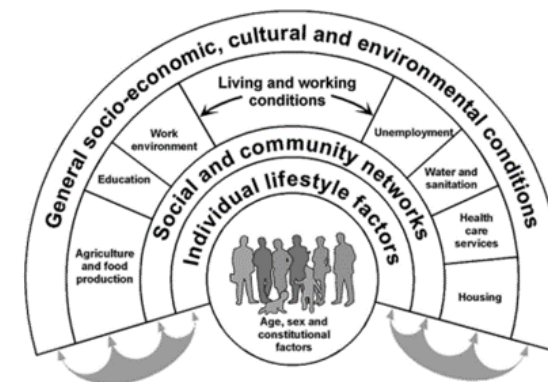
Kreiger's Ecosocial Theory of Disease



Social Determinants of Health



Dahlgren-Whitehead Model



Source: adapted from Dahlgren and Whitehead, 1991

Kaiser Family Foundation Framework of Social and Economic Drivers of Inequity (Disparities)

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community, Safety, & Social Context	Health Care System
Employment	Housing	Literacy	Food security	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider & pharmacy availability
Expenses	Parks	Early childhood education		Community engagement	Access to linguistically and culturally appropriate & respectful care
Debt	Playgrounds	Vocational training		Stress	Quality of care
Medical bills	Walkability	Higher education		Exposure to violence/trauma	
Support	Zip code/geography			Policing/justice policy	
<p>Health and Well-Being: Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations</p>					

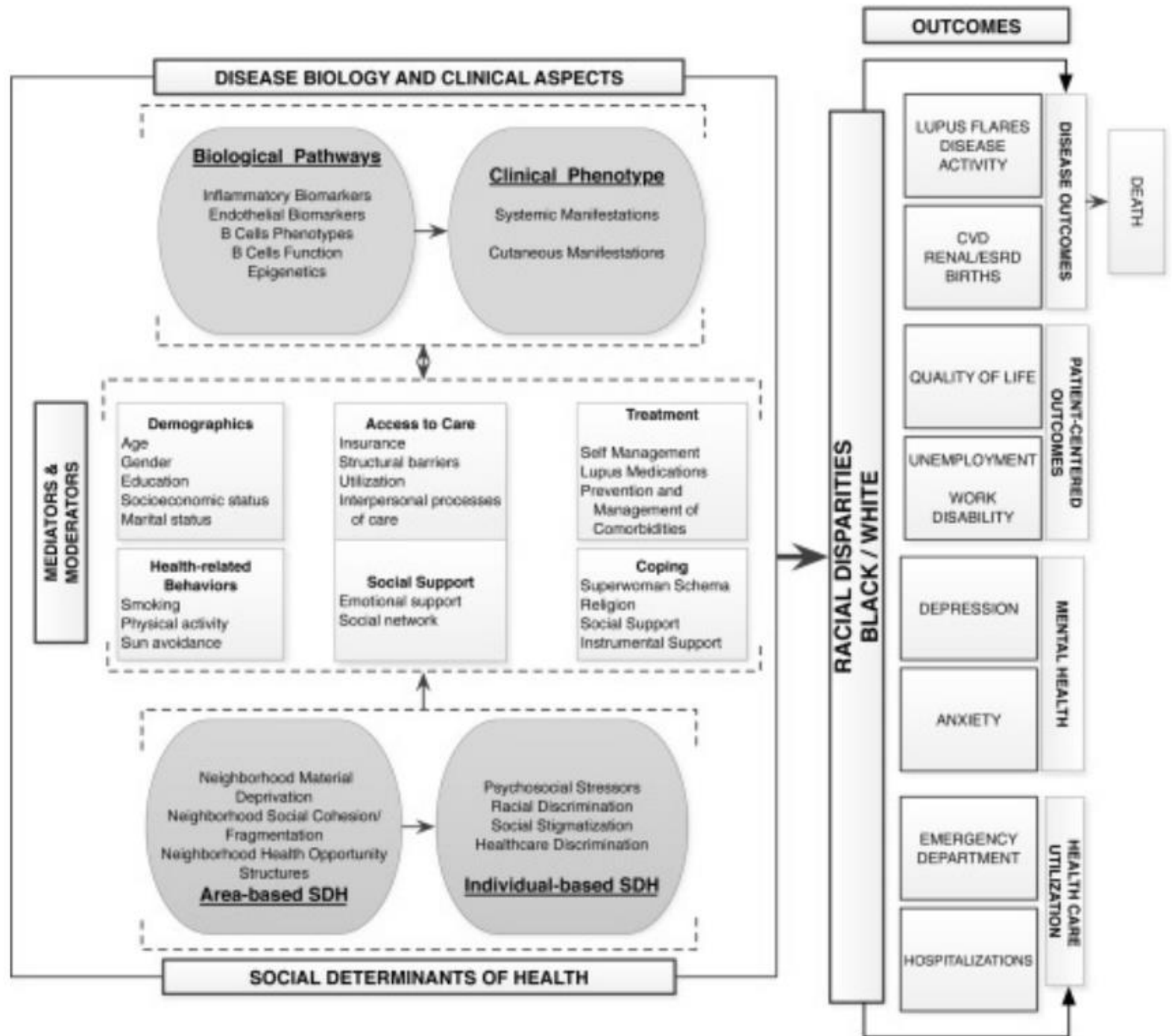
KFF

Social Determinants of Health

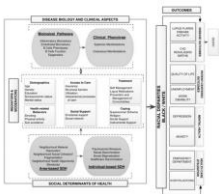
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Healthy People 2030

GOAL Cohort



Lim SS, Drenkard C. Understanding Lupus Disparities Through a Social Determinants of Health Framework: The Georgians Organized Against Lupus Research Cohort. *Rheum Dis Clin North Am*. 2020 Nov;46(4):613-621. doi: 10.1016/j.rdc.2020.07.002. Epub 2020 Sep 9. PMID: 32981639.



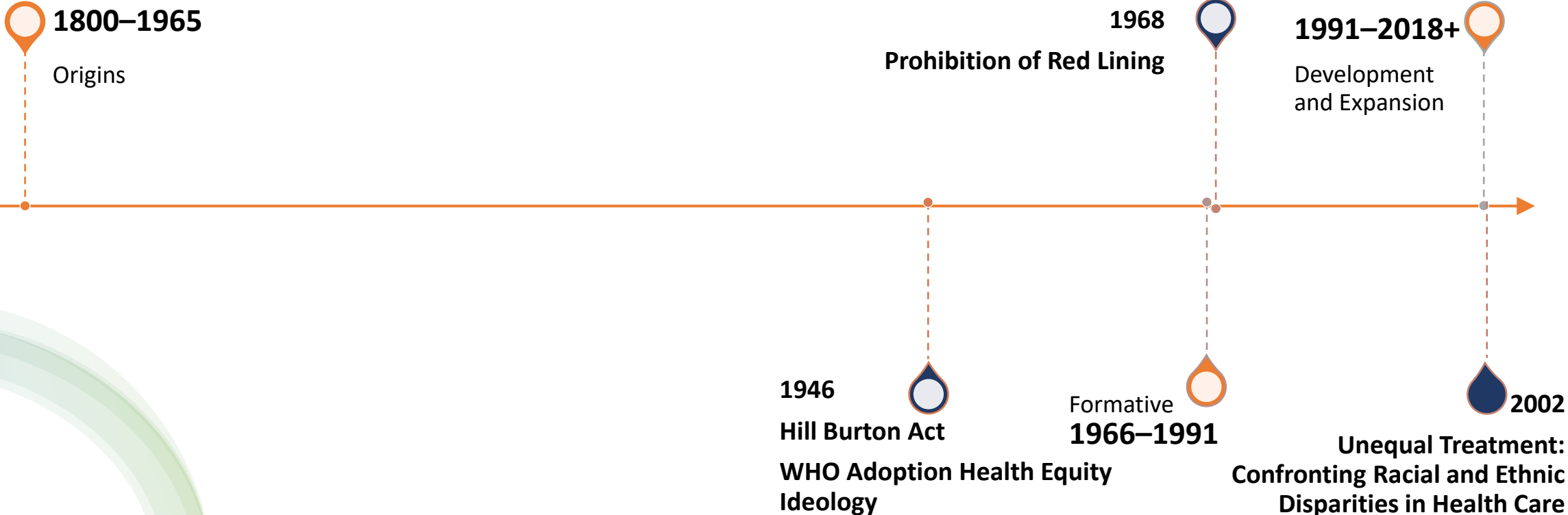
Major Domain	Category	Measure
Disparities Themes	Demographics	Age, sex, race, socioeconomic status, education
	Geographic and neighborhood factors	Material deprivation, social cohesion/fragmentation, neighborhood opportunity structures
	Social stressors and barriers	Discrimination, stigma (disease-related), neighborhood domains, financial strain, childhood trauma, self-perceived stress, experiences of prison
	Social support	Emotional, Informational, Instrumental
	Health-related behaviors	Smoking, drinking, physical activity, eating habits, sleep disorders, preventive care Coping mechanisms, social isolation, religion, spirituality

Recap

- **Definition and History** of Health Equity and Social Determinants of Health Research
- Health Equity and Social Determinants of Health **Frameworks**
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Perspective: Stages of Health Equity Research



References

- Social Determinants of Health. (n.d). World Health Organization. Retrieved January 21, 2024, from https://www.who.int/health-topics/social-determinants-of-health#tab=tab_3
- Yao Q, Li X, Luo F, Yang L, Liu C, Sun J. The historical roots and seminal research on health equity: a referenced publication year spectroscopy (RPYS) analysis. *Int J Equity Health*. 2019 Oct 15;18(1):152. doi: 10.1186/s12939-019-1058-3. PMID: 31615528; PMCID: PMC6792226.
- Social Determinants of Health. (n.d). World Health Organization. Retrieved January 21, 2024, from https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1
- Santacroce L, Dellaripa PF, Costenbader KH, Collins J, Feldman CH. Association of Area-Level Heat and Social Vulnerability With Recurrent Hospitalizations Among Individuals With Rheumatic Conditions. *Arthritis Care Res (Hoboken)*. 2023 Jan;75(1):22-33. doi: 10.1002/acr.25015. Epub 2022 Oct 12. PMID: 36071609; PMCID: PMC9947700.
- Sohrabi, Poya & Oikonomaki, Eleni & Hamdy, Nourhan & Kakderi, Christina & Bevilacqua, Carmelina. (2023). Navigating the Green Transition During the Pandemic Equitably: A New Perspective on Technological Resilience Among Boston Neighborhoods Facing the Shock. 10.1007/978-3-031-34211-0_14.
- Dahlgren G, Whitehead M. The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows. *Public Health*. 2021 Oct;199:20-24. doi: 10.1016/j.puhe.2021.08.009. Epub 2021 Sep 14. PMID: 34534885.
- Solar O, Irwin A. A conceptual framework for action on the social determinants of health. *Social Determinants of Health Discussion Paper 2 (Policy and Practice)*. Geneva, WHO, 2010
- Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>
- Nduga, N, Artiga, S. (2023, April 21). Disparities in Health and Health Care: 5 Key Questions and Answers. KFF. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/>
- National Institute on Minority Health and Health Disparities (2017). NIMHD Research Framework. Retrieved from <https://nimhd.nih.gov/researchFramework>. Accessed on January 1, 2024. 4
- Krieger, Nancy, 'Ecosocial Theory of Disease Distribution: Embodying Societal & Ecologic Context', *Epidemiology and the People's Health: Theory and Context* (2011; online edn, Oxford Academic, 1 May 2011), <https://doi.org/10.1093/acprof:oso/9780195383874.003.0007>, accessed 21 Jan. 2024.
- Lim SS, Drenkard C. Understanding Lupus Disparities Through a Social Determinants of Health Framework: The Georgians Organized Against Lupus Research Cohort. *Rheum Dis Clin North Am*. 2020 Nov;46(4):613-621. doi: 10.1016/j.rdc.2020.07.002. Epub 2020 Sep 9. PMID: 32981639.