## Modern Day Consequences of Historic Redlining: Finding a Path Forward



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There is emerging evidence that structural racism is a major contributor to poor health outcomes for ethnic minorities. Structural racism captures upstream historic racist events (such as slavery, black code, and Jim Crow laws) and more recent state-sanctioned racist laws in the form of redlining. Redlining refers to the practice of systematically denying various services (e.g., credit access) to residents of specific neighborhoods, often based on race/ethnicity and primarily within urban communities. Historical redlining is linked to increased risk of diabetes, hypertension, and early mortality due to heart disease with evidence suggesting it impacts health through suppressing economic opportunity and human capital, or the knowledge, skills, and value one contributes to society. Addressing structural racism has been a rallying call for change in recent years-drawing attention to the racialized impact of historical policies in the USA. Unfortunately, the enormous scope of work has also left people feeling incapable of effecting the very change they seek. This paper highlights a path forward by briefly discussing the origins of historical redlining, highlighting the modernday consequences both on health and at the societal level, and suggest promising initiatives to address the impact.

*KEY WORDS:* structural racism; health inequalities; social determinants of health; redlining; health policy; urban health.

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There is emerging evidence that structural racism is a major contributor to poor health outcomes for ethnic minorities.<sup>1</sup> Structural racism, defined as the totality of ways in which societies foster discrimination via mutually reinforcing systems, includes both historic events, such as slavery, Black code, and Jim Crow laws, and more recent events such as state-sanctioned racist laws in the form of redlining.<sup>1</sup> Structural racism results in discriminatory societal norms (employment discrimination, educational segregation, and

Received September 27, 2022 Accepted January 20, 2023 Published online February 6, 2023 interpersonal biases) and reinforces discriminatory beliefs, values, and distribution of resources.<sup>1</sup> Historical redlining is highlighted here as an example of how structural racism manifests itself, the health consequences of these manifestations, and recommendations for reversing the impact.

Redlining refers to the practice of systematically denying various services (e.g., credit access) to residents of specific neighborhoods, often based on race/ethnicity and primarily within urban communities.<sup>2</sup> The historical context of redlining includes both legally sanctioned and interpersonal aspects of structural racism. Following emancipation from slavery, the passing of the 13th, 14th, and 15th Amendments granted greater freedom for Blacks in the USA. Blacks began to take on roles in state government and White protective societies such as the Ku Klux Klan, arose, and sought to disenfranchise Black voters by using voter suppression, intimidation, and extreme violence. As the Reconstruction era ended, Southern state legislatures began enacting the first segregation laws, known as the Jim Crow laws. By 1885, most southern states had laws requiring separate schools for Black and White students, and by 1900, "persons of color" were required to be separated in nearly all establishments. Rapid industrialization of the North coupled with the Jim Crow laws in the South bread ideal circumstances for the Great Migration of Black Southerners to northern cities.<sup>3</sup> White landowners in the North responded by instituting restrictive covenants and local zoning laws.<sup>3</sup> In the Midwest, racist curfews were enforced by vigilantes, whose efforts were not countered by local law enforcement. These exclusionary practices culminated in laws and policies, such as the federal government's creation in 1933 of the Homes Owner's Loan Corporation (HOLC). This New Deal benefit provided Americans access to homeownership and means to social-financial mobility; however, it was not distributed equitably.<sup>3</sup> To determine mortgage worthiness, the HOLC assessed and ranked neighborhoods using racial composition as a central factor. Neighborhoods with a large Black community were flagged as unstable and considered "hazardous" investments, thereby rendering residents incapable of receiving HOLC loans. While the Civil Rights Acts of 1964 and the Fair Housing Act of 1968 intended to implement race-neutral housing policy, the enduring effects of economic exclusion, neighborhood disinvestment, legal limits on social-financial mobility, and codified limitation on

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resources and opportunities could not be undone by simply making housing discrimination illegal. Rather, it left a status quo upon which all subsequent housing policies emerged. As a result, the cumulative effect of legislation, policies, discrimination, and exclusionary practices endures through present day.

Emerging evidence shows the health consequences of historical redlining on present-day health indices including increased risk of diabetes, hypertension, and early mortality due to heart disease.<sup>4,5</sup> Studies using digitized copies of the HOLC maps to examine the association between historic redlining and present-day health outcomes also show associations with worse mental health and worse self-rated health.<sup>6,7</sup> Recent work has further indicated that residents of historically redlined areas are subject to increased rates of gunshot-related ED visits and injuries, increased odds of preterm birth, and higher rates of diabetes specific mortality and years of life lost (YLL).<sup>8–13</sup> Linde et al. documented the persistence of these associations, noting that HOLC redlining scores consistently explain 45-56% of the variation in census tract-level diabetes mortality rate and 51-60% of the variation in the census tract diabetes YLL rate between the years of 1990 and 2014 in Seattle, Washington.<sup>13</sup> Finally, historically redlined neighborhoods were shown to be subject to worse COVID-19 outcomes than residents within non-redlined areas.14,15

While the mechanisms between historical redlining and health outcomes have not been well examined, evidence suggests that historic redlining operates upstream to suppress social advancement by limiting potential to achieve higher income.<sup>4</sup> This limitation ultimately impacts human capital, defined as the skills, knowledge, and value individuals add to a society.<sup>16</sup> A key example of this can be seen through the systematic closure of hospitals across historically redlined communities.<sup>4</sup> Hospital closures not only represent the removal of access to care, but also remove employment opportunities and asset building through increased economic capacity. Another example includes the collateral consequences of mass incarceration. Historical redlining and the hyperincarceration of Black men within historically redlined neighborhoods have occurred for decades across the country's major metropolitan areas.<sup>17</sup> The concentration of mass incarceration itself contributes to further neighborhood-level disadvantage, creating an environment where a large proportion of the population experiences barriers to employment, education, housing, and social services, in addition to the destabilization of social and family networks.<sup>17</sup> Hospital closures, mass incarceration, and neighborhood level disadvantage as a function of historic redlining confer risk for poor health outcomes and morbidity, culminating in wide ranging health consequences.

The question then is how we move forward as a society to undo the consequences of historic redlining. A fundamental flaw in prior efforts to address redlining is ignoring that redlining is a direct result of *de jure* segregation.<sup>2</sup> While de facto segregation results from discriminatory actions by individuals, de jure segregation is a result of intentional government action, law, and public policy.<sup>2</sup> This includes local committees supported by local law enforcement all the way to federal policies.<sup>2</sup> Individual decisions, bias training, and efforts to minimize discriminatory practices at an individual level cannot alone change the impact of segregation codified into law. The enduring effects of de jure segregation require removal of laws and policies that racialized housing, education, employment, and transportation options.<sup>2</sup> It also requires new legislation and policies that directly reverse the impact of prior actions. Exploitative practices initiated through racist policies often continue even after new policies are enacted, as was the case in real estate practices and housing discrimination.<sup>18</sup> The only sustainable path forward is one that concurrently targets housing, education, healthcare, economic empowerment, the built environment, and access to healthy foods. Table 1 highlights initiatives across these sectors that can help reverse the impact of historical redlining on present-day health outcomes through purposeful reinvestment in disenfranchised communities. The healthcare system plays an important role in these efforts. For example, place-based initiatives focus directly on reinvestment through economic development using cluster-oriented initiatives and economic development plans. Many placebased initiatives are focused on locations that experienced historical redlining and show promising examples of how the healthcare field can partner with other sectors for greater impact. In each case, improved community health is noted as an important goal of the initiative, and healthcare systems are primary partners in the effort. Examples include Cuyahoga County PlaceMatters in Ohio; BioSTL in St. Louis, Missouri; ThriveOn in Milwaukee, Wisconsin; Communities of Opportunity in King County, Washington; and Community Development Advocates of Detroit in Detroit, Michigan. Individuals also play an important role in this work through their support of local initiatives, engagement in efforts that promote removing exploitative practices across sectors, and personal efforts to address bias and discrimination in their daily lives.

The first sector of policy initiatives highlighted in Table 1 are policies that directly offer support via vouchers, tax credits, or development grants to improve access to quality housing within historically redlined communities. A second critical category of policy initiatives are those seeking to improve educational opportunities, including expanding early childhood schooling programs, expanding funding for special needs education in public schools, and altering the underlying public school funding mechanisms within the USA that tie district budgets to property taxes, which risks systematically underfunding historically redlined communities. Third, policies that specifically target healthcare access are needed. Examples include Medicaid expansions

Action areas	Strategies
Housing	• Expand voucher programs through broader eligibility (tied to income adjusted for family structure), increased accept- ability of use, and increased funding
	• Protect current homeownership during revitalizing efforts through deed restrictions, housing trust funds, and tax
	credits
	Invest in structural housing repairs via home improvement tax credits
	<ul> <li>Expand use of community development block grants</li> <li>Reform zoning for mixed income housing</li> </ul>
	<ul> <li>Expand early childhood schooling programs such as the Head Start program within historically redlined communities</li> </ul>
	<ul> <li>Increase access to job counseling, support for applications to technical schools with subsidies for tuition, and navigation of college application process</li> </ul>
	• Develop a federally funded retention program for skilled educators in public schools
	• Create school funding system that is independent of the local tax base
	• Expand funding for special needs education in public schools
Healthcare	Medicaid Expansion
	• Expand mandatory coverage of non-clinician services in Medicaid: pharmacy, community health worker, home nurs- ing
	<ul> <li>Design value-based health system payments to incentivize addressing social needs, such as offering food vouchers</li> <li>Federal incentives for expanding hospital sites</li> </ul>
Economic empowerment	Minimum wage increases based on federal guidelines for livable wages adjusted for locality
	• Standardize asset limits (asset tests) in public benefit programs (e.g., eliminating asset limits for Temporary Assistance for Needy Families (TANF), the Low-Income Home Energy Assistance Program (LIHEAP), and the Supplemental Nutrition Assistance Program (SNAP))
	• Tax incentives to create employment in historically redlined neighborhoods
	• Develop education programs to use systems in place for pre-tax savings, credit, and compounded interest
	• Increase new homeownership through coordinated tax credits for developers building low-income home for first time homeowners and banks providing low down payment loans with planned support to minimize foreclosure
Built environment	• Investing in development of sidewalks and bike lanes
	• Incentivize greenspace development, development of open lots, and restoration of older buildings through tax and zoning structures
	• Use special use districts to protect specific types of land use based on community input
	Greater investment in public transportation to expand routes
Food	Broaden SNAP coverage and eliminate state level SNAP asset tests
	• Use incentives like Healthy Food Financing Initiative or New Market Tax Credits to increase retail outlets in redlined neighborhoods
	• Remove zoning barriers and provide tax incentives for supermarket or healthy retail store placement
	• Expedite reviews and approval for grocery store site placement

## Table 1 Recommended Action Areas and Strategies to Reverse the Impact of Historic Redlining

within current non-expansion states and federal incentives for expanding hospital and clinic sites within underserved communities. Additionally, revisions of value-based care reimbursement models to incentivize addressing patients' social needs, and the expansion of mandatory coverage of non-clinical services in Medicaid, may both act to improve care and care outcomes for historically vulnerable patient populations.

Fourth, policies that target economic empowerment can reverse some of the effects of redlining. Examples include geographically adjusted livable minimum wages, standardizing asset limits in public benefit programs, and offering tax incentives for the creation of employment opportunities within historically redlined neighborhoods. Economic policies that directly boost home ownership potential, such as coordinated tax credits for both developers building lowincome homes for first-time homeowners and banks providing low down payment loans with planned support to minimize foreclosure, can support building intergenerational wealth for individuals residing within historically redlined communities. Finally, it is important to consider reparations as a solution to historic injustice.<sup>19</sup> Advocates highlight the importance of direct cash benefits to individuals in addition to structural policies to establish wealth equity<sup>20</sup> Opponents argue that people owed reparations are long gone.<sup>21</sup> The debate is ongoing and only time will tell if this will be a viable policy lever to address historic injustice, including historic redlining.

Fifth, the built environment of residents within historically redlined areas can be improved. Investments in public transportation can help expand job accessibility and general ease of travel, as can investments into the development of sidewalks and bike lanes within these communities. Additionally, policymakers may wish to improve the built environment by providing incentives for greenspace development, for development of open lots, and to designate special use districts where land use will be based on community input. Lastly, the impact of historic redlining on food security may be reversed by broadening public SNAP coverage and benefits. It may also be achieved by removing zoning barriers and by providing tax incentives for supermarket or healthy retail store placement within formerly redlined neighborhoods.

In closing, addressing structural racism has been a rallying call for change in recent years—drawing attention to the racialized impact of historical policies in the USA. Unfortunately, the enormous scope of work has also left people feeling incapable of effecting the very change they seek. We offer a path forward on one of structural racism's most enduring impacts—the redlining of US cities by breaking down the historical origins, modern day health consequences, and suggesting solutions and strategies to address the impact of redlining. Healthcare providers and individuals within the healthcare system play a vital role in supporting this work by participating in local initiatives, engaging in cross-sectoral work, and supporting efforts to reverse the impact of historical redlining through policy initiatives at the local, state, and federal level.

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Data Availability Not applicable.

## Declarations

Conflict of Interest The authors declare no conflicts of interest.

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