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SPATIAL INEQUALITY, HOUSING AFFORDABILITY, AND URBAN HEALTH IN THE UNITED STATES: AN INTEGRATIVE REVIEW

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ABSTRACT

Housing is one of the most consequential yet unevenly distributed determinants of health in the United States, and the geography of who can afford safe, stable housing increasingly determines who experiences chronic disease, psychological distress, and premature mortality. Contemporary housing disparities are not incidental; they are rooted in decades of racialized zoning, mortgage redlining, and exclusionary land-use policy that continue to shape neighborhood conditions long after their formal repeal. Despite a growing body of research connecting housing conditions to health, the literature remains fragmented across disciplines: urban economists conduct studies on spatial inequality in housing markets. Public health scholars study housing instability and disease outcomes, and health equity researchers study gentrification and displacement. Only few works integrating these strands into a single account of how spatial inequality, housing affordability, and urban health interact. This integrative review synthesizes peer-reviewed and institutional literature published primarily between 2019 and 2026, organized around four thematic domains: the structural and historical drivers of spatial inequality; housing affordability, cost burden, and financial precarity; housing instability, eviction, and health outcomes; and neighborhood change, gentrification, and health care access. The review finds that housing-related health harms are cumulative and mutually reinforcing across these domains, and that interventions addressing any single dimension in isolation, such as affordability subsidies without zoning reform, or technical hardening of housing stock without attention to displacement, produce limited and unstable gains.

Keywords: Spatial Inequality, Housing Affordability, Urban Health, Residential Segregation, Health Equity

1 INTRODUCTION

For most American households, housing is the single largest financial commitment they will make, and the physical shelter and neighborhood gateway that shapes their access to schools, transportation, and health services. Because housing carries this dual weight, financial and physical, inequities in housing access and affordability translate directly into inequities in health (Hernandez & Swope, 2019; Mehdipanah, 2023). Housing remains highly racially and geographically segregated both in terms of rates of homeownership and in value and quality of housing, as this pattern dates back to the New Deal era in mortgage underwriting that continues to influence household health and wealth nearly

a century later (Lee et al., 2022; Swope et al., 2022). The 2008 financial crisis also reconfigured this situation by reshaping the spatial pattern of housing gains and losses, and the spatial distribution of housing wealth (Li et al., 2020).

The impact of the resulting affordability crisis is a significant one. A significant percentage of U.S. renters (24.9 %) is cost-burdened; which implies, they spend more than 30 % of their household income on rent, utilities, and related expenses and even more are severely cost-burdened (Denary et al., 2021; Mehdipanah, 2023). These disparities disproportionately impact low-income renters, Black and Hispanic families, and communities that were historically redlined, as well as those who are less likely to be stably housed and exposed to hazardous living environments (Lee et al., 2022; Bauer et al., 2025). The impact goes beyond financial burden, it can also lead to higher rates of cardiometabolic disease, depression and anxiety, adverse birth outcomes, and heat-related illness (Gu et al., 2023; Bauer et al., 2025).

In spite of this evidence base, there is still a lack of coherence in literature. Spatial dynamics in housing markets have been the focus of a separate strand of urban economics research, which largely ignores health outcomes (Li et al., 2020), and a separate strand of public health scholarship documents links between chronic disease outcomes and redlining, but does not engage with contemporary housing market dynamics of displacement and affordability (Lee et al., 2022; Swope et al., 2022); a separate stream on housing instability and eviction links chronic disease and mental health outcomes to housing instability but does not trace it back to structural drivers that create instability (Gu et al., 2023; Hoke & Boen, 2021; Denary et al., 2021); and a more recent gentrification literature documents neighborhood improvement impacts on health outcomes, but offers no settled understanding of the displacement mechanisms by which neighborhood improvement can cause harm (Cole & Franzosa, 2022; Delong, 2023; Schnake-Mahl et al., 2020). There is no current synthesis that brings these different strands together, so that policymakers can design interventions to be affordable without knowing where disinvestment is geographically concentrated, and cities can develop a zoning reform plan without a shared evidence base demonstrating a link between land use and population health.

This integrative review addresses that gap. It synthesizes literature published mainly between 2019 and 2025, organized around four themes: the structural and historical drivers of spatial inequality, housing affordability and financial precarity, housing instability and health, and neighborhood change and health care access. The review begins by explaining the search procedure. It then presents the thematic synthesis, develops a conceptual framework linking the four domains, and closes with the practical and research implications of the evidence.

2 METHODS

This review used peer-reviewed and articles that were discovered via Google Scholar, PubMed, ScienceDirect, and targeted searches of housing and public health organizations, such as the Center on Budget and Policy Priorities, the National Low Income Housing Coalition, and County Health Rankings & Roadmaps. The search focused on literature published from 2019 to 2025, to ensure finding are from the most recent data available, with earlier, foundational texts on redlining and spatial inequality included if they were the most up-to-date treatment of the mechanism. Spatial inequality, housing affordability, housing instability, residential segregation, redlining, health disparities, eviction, housing cost burden, gentrification, displacement, health equity, exclusionary zoning, inclusionary zoning, and urban health were used in various combinations, starting with the broadest and moving toward the more specific.

Sources were included if they spoke directly to the housing and health situation in the U.S., were published in peer-reviewed journals, or came from a recognized institution or source in housing or public health that provided either evidence or synthesis relevant to one of the four thematic domains. Sources were excluded when they discussed only housing or health disparities outside the U.S. and were not clearly applicable, discussed only homelessness as a separate issue covered in detail elsewhere, or did not contain any health or well-being outcome. All sources which provided a main contribution were then arranged according to that main contribution and summarized in sections that follow.

3 DATA SYNTHESIS

The literature reviewed here converges on four thematic domains that together explain how spatial inequality and housing affordability produce disparate urban health outcomes in the United States: structural and historical drivers of spatial inequality, housing affordability and financial insecurity, neighborhood change and gentrification, and housing instability and eviction. The four themes presented a natural division of the literature, rather than one imposed, with sources generally clustering in each of the four areas: (1) structural and historical drivers of housing disparities; (2) the financial burden of housing on households (affordability and precarity); (3) the acute disruptions to housing that most directly precipitate health crises (instability and eviction); and (4) the paradox of neighborhood improvement as a distinct and more recently recognized health risk (gentrification and health care access). Every source was assigned to the theme that best captured its empirical contribution or conceptual insight, and sources that covered more than one theme were explained in the theme that was most central to their main argument (where applicable, such as linking cost burden directly to displacement) and referenced to the other theme(s) to which they were linked.

3.1 Theme 1: Structural and Historical Drivers of Spatial Inequality

An understanding of the geography of housing disparity in the United States would not be possible without an understanding of its structural and historical roots. Redlining refers to the practice of the federally established Home Owners' Loan Corporation (HOLC) in the 1930s to assign investment risk grades to U.S. neighborhoods that explicitly took the race of the residents into account, which meant that minority neighborhoods were ineligible for financing and investment went to the highest graded, white neighborhoods (Swope et al., 2022; Bauer et al., 2025). Redlining officially ended decades ago, but its geographic reach remains very long-lasting. In a systematic review and meta-analysis conducted by Lee et al., (2022), people who live in historically redlined neighborhoods had higher risks for multiple health outcomes compared to people who lived in non-redlined neighborhoods, such as having a higher risk of incidence for gunshot-related injury, lower self-rated health, higher risk of heat-related illness, and a higher risk of preterm birth. Later, Swope et al., (2022) added to this evidence by compiling the environmental pathways through which redlining continues to affect health: neighborhoods formerly redlined tend to have systematically fewer trees, green spaces, and more industrial land use and environmental hazards, all of which increase the risk of exposure to heat, pollution, and other harms to health. A systematic review further confirms the historic HOLC grading and association with negative current health outcomes as continued to be among the most widely replicated associations in urban health research, with some studies suggesting that the impact is diminishing in recent years (Bauer et al., 2025).

The second, related structural driver is zoning policy, which is prospective not retrospective, but results in similar spatial patterns of exclusion. Exclusionary zoning, or zoning that only allows low-density single-family development, has been recognized as an upstream determinant of health because it reduces the supply of affordable housing and perpetuates racial and economic segregation within metros (Jones et al., 2022). In cities that have instituted inclusionary zoning policies that mandate or incentivize affordable units in new housing, there is a positive and independent relationship with population health outcomes regardless of the impact of neighborhood gentrification (Jones et al., 2022). The finding is important because it indicates that land use is not just a downstream effect of spatial inequality but can be used as a tool to either reproduce or reduce spatial inequality in health outcomes, depending on the policy decisions made by municipalities.

These historical and regulatory influences are compounded by the spatial aspect of housing markets themselves. Li & Wei (2020) show that the financial crisis-induced changes in housing value are not uniformly distributed across urban space but strongly linked to pre-existing neighborhood characteristics and spatial residential segregation and the uneven distribution of urban amenities, suggesting that financial shocks tend to further reinforce existing patterns of spatial inequality. Overall, this body of evidence demonstrates that spatial inequality in U.S. housing and health outcomes is not an unintended consequence of the market or just a legacy of current market dynamics, but is also a legacy of historical policy decisions, the geographic signature of which persists today in neighborhood conditions, housing markets, and population health outcomes.

3.2 Theme 2: Housing Affordability, Cost Burden, and Financial Precarity

The first theme is the geographic causes of housing disparity, while this theme focuses on the immediate and most common mechanism to housing disparity: the cost of housing on unaffordable market prices, and the health outcomes that result from that cost. Nearly half of American renters are cost burdened; meaning, they spend more than 30 percent of their household income on housing; a significant number of cost burdened renters are severely cost-burdened, spending over 50 percent of their household income on housing (Mehdipanah, 2023; Denary et al., 2021). Mehdipanah (2023) sees this affordability problem as linked to the growing commodification of housing, as homes are becoming more of an investment vehicle than a basic human requirement, and costs are rising in most metros at a faster rate than low and middle-income wages.

The health impacts of this cost burdens the work on established behavioural and psychosocial mechanisms (Cole et al., 2023). Housing depletion of family resources is often the reason why families make compromises between housing costs and other necessities of life including food, medications and health care, which has been referred to in the literature as material budgeting and deprivation (Gu et al., 2023). In addition to this material pathway, an additional pathway of housing cost burden is the chronic psychosocial stress that is characterized by housing security concerns and which is linked with increased rates of depression and anxiety among cost-burdened tenants (Mehdipanah, 2023; Denary et al., 2021). For example, when access to rental assistance is compared to comparable households who were not accepted for assistance, the benefit to mental health of relief from affordability of rental assistance is found by Denary et al. (2021) using longitudinal data from a cohort of low-income adults, and this finding is particularly strong when controlling for the mental health effects of being on an assistance waitlist.

Other issues of financial precarity that overlap with homeownership status further muddy a renter versus home owner narrative such as housing affordability. Indeed, the renters' burden is most apparent, but homeowners who are having trouble making their mortgage payments also experience a significant psychological toll because of forced budgeting trade-offs and the fear of foreclosure, which trigger similar stress pathways, even for those who are slowly building up

house equity over time (Mehdipanah, 2023). This financial vulnerability, caused by unaffordable housing, is thus not limited to any specific tenure type, but is an overarching characteristic of the current U.S. housing market, with downstream health impacts being increasingly known even as the root causes that lead to this unsustainable unaffordability have only partially been addressed by existing interventions aimed at affordability (such as rental assistance and subsidized housing programs) (Leifheit et al., 2026).

3.3 Theme 3: Housing Instability, Eviction, and Health Outcomes

Affordability reflects the chronic financial burden of housing, but an analytically similar theme is that of disruptive housing events, most notably eviction, foreclosure, and repeated forced moves, which have the most immediate consequences for health crises. The literature broadly defines housing instability as being unable to pay rent, overcrowding, multiple moves, or having been evicted or foreclosed (Gu et al., 2023). Gu et al., (2023) draw on 42 original studies in a comprehensive narrative review to conclude that housing instability is consistently linked to poor cardiometabolic health, via three interconnected pathways: material budgeting trade-offs, neighborhood environments of displacement, and psychosocial stress, which is associated with increased risk for obesity, hypertension, diabetes, and cardiovascular disease.

Eviction is likely the most severe and impactful type of housing instability and has been examined in great detail with long-running nationally representative data, particularly with regard to the health impacts. Using the National Longitudinal Study of Adolescent to Adult Health. There is strong evidence of a longitudinal relationship between evictions and both depressive symptoms and poorer self-reported health in early adulthood, after accounting for a large number of background characteristics using inverse probability weighting and causal mediation analyses (Hoke & Boen, 2021). The methodological rigor gives special importance to the conclusion that eviction is not simply correlated with poor health because those who are economically disadvantaged are both more likely to be evicted and more likely to have poor health, it is also an independent stress mediated effect on health trajectories.

Institutional and policy stakeholders have acknowledged the significance of the evidence for public health. Reports compiling this body of evidence demonstrate that housing instability is a public health issue in and of itself, that it damages communities and results in quantifiable health disparities prior to a formal eviction, and that the mere threat of eviction has been shown to increase psychological distress in tenants affected by housing instability (Denary et al, 2021; Lee et al, 2022; Cole et al., 2022). As a result, public health institutions have become more and more inclined to recommend health systems to directly intervene in eviction prevention by investing in rental assistance and supportive housing services, viewing housing stability as a valid clinical and public health intervention, rather than just a housing policy initiative (Denary et al, 2021). Tightening the link between spatial and housing inequality and population health outcomes through rigorous evidence from the longitudinal data and by institutional advocacy places housing instability and eviction as one of the most policy actionable pathways among the wide range of pathways and mechanisms connecting these two types of inequality.

3.4 Theme 4: Neighborhood Change, Gentrification, and Health Care Access

This theme draws on an understanding of the neighborhood and how its character and quality are changing, particularly by gentrification, and its impact on health care access.

This concerns a dynamic that makes the simple health-improvements-are-easily-beneficial assumption somewhat complicated: gentrification, or the process of property values and demographic changes in a neighborhood that can create a displacement pressure and health-supporting resource access change, even as the physical characteristics of the neighborhood improve (Delong, 2023). A systematic review by Schnake-Mahl et al., (2020) that included a synthesis of the population health literature on gentrification and its impact on health reveals that gentrification has mixed effects, depending on the health outcome measured, the population studied, and the stage of gentrification, and that long-term residents, especially black residents and renters, are disproportionately affected by negative health impacts, such as experiences of displacement and psychosocial stress from neighborhood change. This heterogeneity is also reflected in a subsequent systematic review by Delong (2023) that also reports a multifaceted nature of gentrification's health effects; the direction and size of the effects depend on the conceptualization and measurement of gentrification, across different studies.

Another important, yet poorly studied aspect of neighborhood change is health care gentrification, or the ways in which the nature, location, and ownership of health care services change with neighborhood gentrification, which has the potential to diminish access for residents of long-term duration, lower income, and publicly insured status, while increasing access for those of higher income (Bauer et al, 2025). In particular, a framework underscores that gentrifying areas are often also experiencing health care disinvestment, as poor performing safety-net community health care providers that take up valuable space in a rising-value neighborhood can be more profitable being built as market-rate housing, and thus the hospital/clinic closures in these neighborhoods can be viewed as a structural reinforcement of residential displacement pressures (Lee et al., 2022; Sellers, 2026). In light of this and related research, Cole et al.,

(2023) provide a theoretical and methodological framework for health equity researchers and practitioners to consider as the field grapples with how to work to counter the harm of gentrification. They argue that interventions addressing displacement alone are insufficient, since they fail to address the parallel erosion of health care access that often accompanies neighborhood change

Gentrification literature serves as an important complication to the themes of structure and structural change and affordability and instability, since policies designed to address the ills of these areas may create new ones if not properly conceived, executed and accompanied by measures to protect tenants and ensure affordability. One of the most important unsolved issues in the literature examined here is the conflict between remediation of historical disinvestment and the possible negative consequences of gentrification-related displacement.

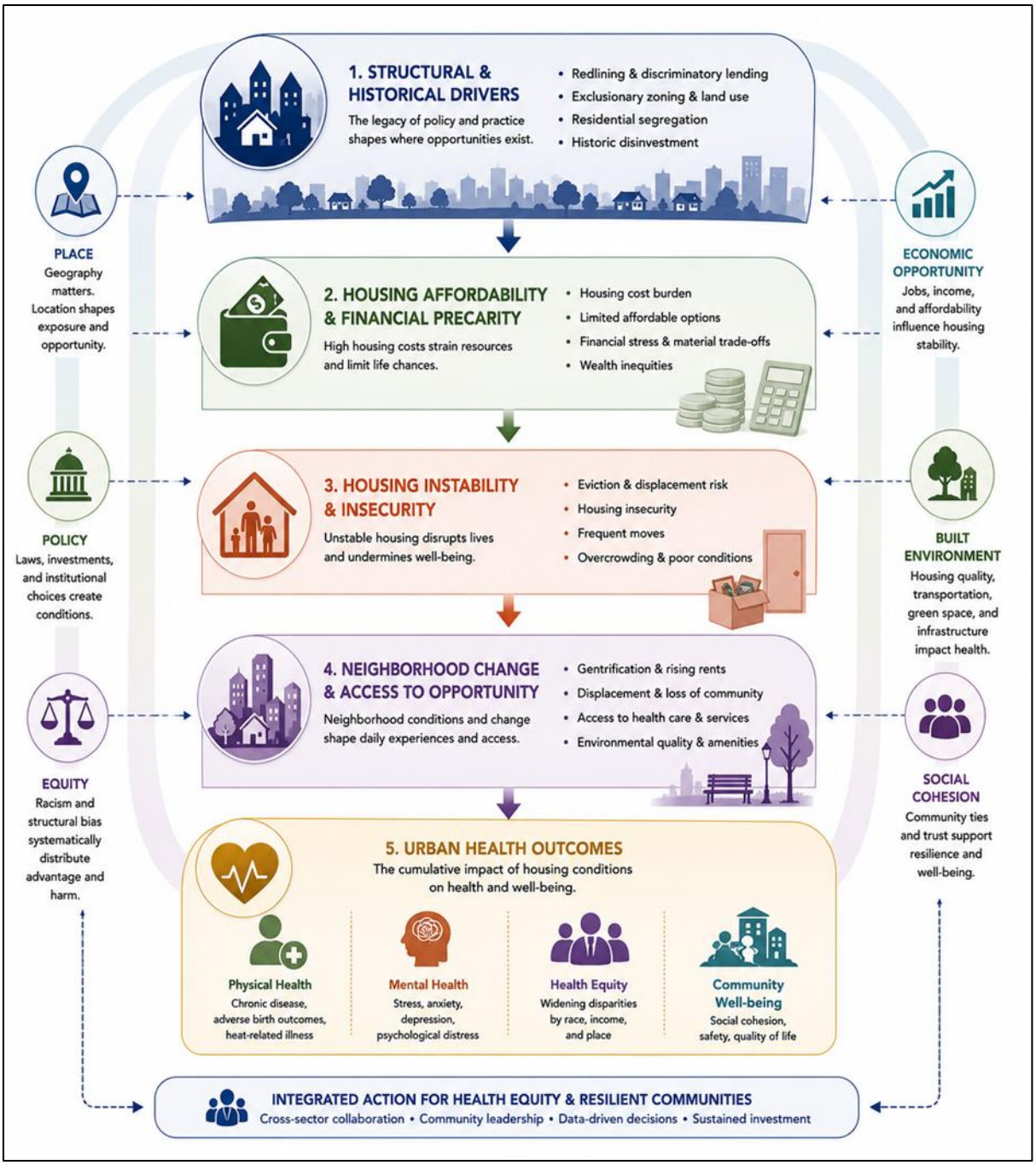
4 CONCEPTUAL FRAMEWORK

The four thematic domains synthesized in this review, structural and historical drivers, affordability and financial precarity, housing instability and eviction, and neighborhood change and gentrification, do not operate as isolated determinants of urban health but as sequentially and reciprocally linked layers of a single system. To capture this layered relationship, a conceptual framework was developed from the evidence base of this review, organizing the four themes along a pathway that begins with the historical and structural roots of spatial inequality, moves through the financial and stability conditions those roots produce in the present-day housing market, and culminates in the neighborhood change dynamics that determine whether interventions targeting earlier layers ultimately improve or undermine population health.

The framework's base layer is structural and historical drivers, which are largely redlining, residential segregation, and exclusionary zoning, as seen in Figure 1. This layer defines the geographic distribution of neighborhood disadvantages which are inherited by other layers and don't create them. It directly impacts the second layer, housing affordability and financial precarity, since historically disinvested neighborhoods have also historically been disproportionately burdened by housing costs and have had very limited housing supply. The affordability layer also influences the third layer (housing instability and eviction) including the experience of forced moves and eviction, which is strongly related to housing cost burden in the absence of relief measures like rental assistance that address the housing crisis. Neighborhood change and gentrification (layer 4) has a unique relationship with the other three layers. It can serve as a remediation pathway if an infusion of investment occurs in a historically disinvested neighborhood, positively affecting conditions without displacing the current residents of the area, or it can be a harm-amplifying pathway if an infusion of investment is centered on displacement, and results in less access to health care for the residents the investment was designed to help. This feedback loop between neighborhood changes and affordability and instability represent this reciprocal relationship. It demonstrates that a policy change can only be deemed to be successful if it has distributional impacts on people who were already living in the neighborhood prior to the change.

The channel is vertical and it is constantly changing because of the forces acting on the left and right sides of the channel (Figure 1). On the left, place, policy, and equity are part of the lived experience of the four core layers as institutional decisions shape and maintain structural drivers, structural bias and reify harms. Economic opportunity built environment and social cohesion are how household resilience is impacted by these pressures on the right. Income, infrastructure and community trust can mitigate the effects even when structural conditions do not change. These lateral forces will not be enough on their own to address urban health inequities; they will be influenced by the core pathway.

This multi-level approach also explains why some interventions that are successful at one level of intervention fail to maintain or work at other levels of intervention. Eviction prevention, combined with no neighborhood change can result in households being “stable” but vulnerable to eviction when new investments come to the neighborhood. Tenant protection-free restoration can give rise to the very harms it is supposed to alleviate. Interventions that address multiple layers are most effective, as the framework shows multiple layers are not discrete but interactive. Wherever the framework shows the largest distance of separation; between Layers 3 and 4, it is where stabilization may turn into displacement. In this instance, cross-sector collaboration, community leadership, decisions based on data and ongoing investment are all key.



Source: Author's construct, 2026.

Figure 1: An Integrated Framework Linking Spatial Inequality, Housing Affordability, and Urban Health in the United States

5 CONCLUSION

This integrative review has highlighted the evidence from four related areas (structural and historical drivers of spatial inequality, housing affordability and financial precarity, housing instability and eviction, and neighborhood change and gentrification) that show housing-related health disparities in the United States are not independent, but rather the result of a complex and reinforcing system. The evidence is strong and mounting place, income, housing stability, and the changing context of neighborhood environments all affect health outcomes separately and interactively and also, the impacts are greatest for people living in neighborhoods that were historically redlined and excluded. Solutions to this system must work on multiple layers, not just one; affordability solutions must include measures to protect residents from displacement, and neighborhood investment must include measures to protect current residents. This review has synthesized and integrated the evidence presented to provide a solid platform for housing and health interventions that can help address spatial inequality at its source, not just its downstream manifestations, for researchers, health systems, and policymakers.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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