VOX EQUITY THINK TANK JOURNAL · ORIGINAL RESEARCH

Language, Bias, and Outcomes: A Literature Review of Healthcare Disparities at the Intersection of Race and Housing Status

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ABSTRACT

Stigmatizing language documented in electronic health records (EHRs) has emerged as an important contributor to healthcare inequities by influencing clinician perceptions, treatment decisions, and patient-provider relationships. Black patients are more likely to receive credibility-undermining or negatively framed language in their medical records than White patients, while individuals experiencing homelessness frequently report discrimination, dehumanization, and reduced trust in healthcare systems. Despite these parallels, there is little research on how race, ethnicity, and homelessness intersect within clinical documentation or whether biased EHR language contributes to long-term healthcare disengagement among unhoused populations. This literature review integrates evidence on racial bias in medical documentation, stigmatizing language in healthcare, and healthcare experiences among those experiencing homelessness to identify major themes and persistent knowledge gaps. Across the literature, stigmatizing medical documentation is associated with altered clinical decision-making, reduced patient trust, and poorer healthcare experiences, yet few studies investigate downstream outcomes such as continuity of care, preventative service utilization, or missed appointments among unhoused patients. The review concludes that intersectional research examining both racial or ethnic identity and housing status is needed to better understand how documentation practices perpetuate healthcare inequities and to inform interventions that promote equitable, person-centered clinical communication and care.

Keywords: *stigmatizing language; electronic health records; racial bias; homelessness; health equity*

INTRODUCTION

Healthcare documentation is often viewed as an objective record of a patient's medical history. However, growing evidence suggests that the language used in electronic health records (EHRs) may unintentionally communicate bias that influences subsequent clinical care [2, 8]. Studies have shown that stigmatizing descriptors such as "noncompliant," "drug-seeking," "aggressive," or other credibility-undermining phrases can alter clinicians' perceptions of patients, contributing to differences in treatment recommendations and reinforcing existing healthcare disparities [6, 7]. These concerns are particularly relevant for populations that already experience structural inequities, including unhoused populations, who are disproportionately represented by racial and ethnic minority groups.

This literature review examines the current evidence regarding stigmatizing language in EHRs and explores how such documentation may contribute to inequitable healthcare experiences among unhoused individuals. Specifically, this review investigates whether existing research adequately addresses the intersection of race, ethnicity, homelessness, and biased clinical documentation. While numerous studies have independently examined racial disparities in EHR language or healthcare stigma toward people experiencing homelessness, few have considered how these factors interact to influence healthcare engagement and continuity of care [9].

The literature included in this review encompasses studies of racial bias in clinical documentation, investigations of stigmatizing language and physician decision-making, qualitative studies describing healthcare experiences among unhoused populations, and emerging research evaluating bias in artificial intelligence (AI) systems trained on clinical documentation [13]. These sources provide insight into how language shapes healthcare experiences by addressing one or more of these domains. Studies specifically on homelessness prevalence or healthcare utilization without discussion of stigma or documentation practices were excluded, as well as papers unrelated to clinical communication or electronic health records.

Across the literature, several consistent findings emerge. First, Black patients are more likely to receive negatively framed or credibility-undermining language within their medical records than White patients. Second, people experiencing homelessness frequently report stigmatizing interactions that discourage future healthcare utilization [10]. Third, stigmatizing documentation has shown to influence clinician attitudes and treatment decisions. However, the literature rarely examines whether unhoused Black or Hispanic patients experience disproportionately biased documentation compared with unhoused White patients, nor does it evaluate whether stigmatizing EHR language predicts long-term healthcare engagement, including preventative care utilization, continuity of care, or trust in healthcare providers. This represents a

significant gap that warrants further investigation.

RACIAL BIAS IN ELECTRONIC HEALTH RECORDS (EHRs)

The pervasive presence of racial bias within Electronic Health Records (EHRs) significantly compromises patient care and provider objectivity. A 2022 analysis on negative patient descriptors highlights that Black patients, alongside unmarried individuals and Medicaid/Medicare recipients, face disproportionately higher odds of having negative terms—such as "aggressive," "non-compliant," or "combative"—documented in their charts [11]. This bias directly targets patient reliability; a 2025 study found that clinicians are more likely to use credibility-undermining language when documenting Black patients compared to White patients, often insinuating untruthfulness [2]. The methodology of these studies is strong in identifying the prevalence of such language, but they feature notable omissions. For instance, the 2022 study fails to characterize the actual impact of this language on a patient's subsequent medical care, and the 2025 credibility study explicitly excluded nursing notes because they are heavily templated, leaving a massive portion of patient-provider interactions unexamined. Nevertheless, the physical and systemic consequences of recorded bias are evident. A 2018 study demonstrated that medical residents were more conservative in prescribing pain medications after reading stigmatizing notes, insinuating that chart language alters subsequent clinical decision-making [6]. Alarmingly, this bias is also being replicated by modern technology; a 2024 study revealed that AI large language models like GPT-3.5-turbo fabricate racially skewed patient histories and predict poorer outcomes for minority patients, though this study's methodology was limited by using case reports rather than authentic clinical records [13]. Overall, the literature confirms that biased EHR documentation acts as a structural mechanism that erodes trust and perpetuates disparities, though future research must push beyond quantifying the words to measuring their clinical fallout.

The consequences of biases in AI are not limited to issues arising from individual cases of mistakes made in hospitals. On the contrary, AI-generated biases may further systemic problems that threaten various marginalized social groups. In particular, homeless patients from Black and Hispanic backgrounds who suffer from discrimination governed by human doctors and nurses will now be at risk to discrimination perpetuated by AI systems that introduce another concealed form of unequal treatment in healthcare. In contrast to the bias that can be found in the work of one doctor, which, in theory, can be eliminated through special training of specialists and their accountability for mistakes, the bias generated by an algorithm is already fixed in the main system of healthcare service delivery. This is especially problematic, as AI systems learn from the already existing information in EMRs, which presupposes the existence of biases in healthcare and the use of such biases in AI

systems [13]. The increasing usage of AI tools is expected to worsen the racial inequalities in the healthcare sector, especially among marginalized patients without stable housing. To this end, there is insufficient empirical evidence that studies the impact of healthcare technologies on patients with intersectional statuses. Thus, this is a pressing modern issue given the widespread emergence of new innovative instruments in the clinical environment.

HEALTHCARE BARRIERS FOR UNHOUSED POPULATIONS

Parallel to the systemic biases found in medical documentation, unhoused populations face compounded, stigma-driven barriers to accessing healthcare. With a record-high of approximately 771,480 individuals experiencing homelessness in the United States in 2024, understanding these systemic failures is critical [12]. A 2025 study mapping the "Communicative Architecture of Stigma" identifies seven foundational biases against homeless individuals, including assumptions regarding substance addiction, individual failure, and a perceived lack of human qualities [3]. Consequently, this extreme stigmatization results in severe healthcare avoidance. A 2019 qualitative study found that unhoused patients experience the healthcare system as shaming, inflexible, and inherently designed for a middle-class population, leading directly to the abandonment of care [9]. Logistical and safety barriers further exacerbate this issue; a 2015 study noted that unhoused individuals struggle to register with general practitioners without a fixed address and often feel threatened or at risk of violence in medical settings [10]. While these qualitative reviews provide deep insight into the patient experience, their methodologies have limitations in generalizability. The 2019 study originally gathered its data strictly within a palliative care context, which may not accurately reflect routine, preventative healthcare interactions. Similarly, the 2015 study's sample inherently omits the perspectives of unhoused individuals who completely avoid the healthcare system or do not know how to engage with it. Despite these representational gaps, the literature cohesively illustrates that a systemic lack of compassion and structural rigidity actively forces unhoused individuals to deprioritize their health.

THE INTERSECTION BETWEEN HER BIAS AND HOMELESSNESS

While current literature robustly addresses EHR racial bias and healthcare stigma against unhoused individuals independently, there is a distinct lack of research analyzing the intersectionality of these two vulnerabilities. Demographic data from a 2020 study highlights that minority populations are disproportionately affected by homelessness, showing that 1 in 6 non-Hispanic Black individuals and 1 in 12 Hispanic individuals experience homelessness in their lifetime, compared to just 1 in 20 non-Hispanic White individuals [4]. Despite knowing that Black patients suffer from credibility-undermining EHR language and that unhoused patients

experience care-altering stigma, the current body of research fails to examine whether Black or Hispanic unhoused patients are disproportionately exposed to stigmatizing chart language compared to White unhoused patients.

One underexplored dimension of this intersection is the role that repeated stigmatizing encounters play in shaping long-term patient behavior beyond the clinical setting. When patients, especially those in housing crises or those belonging to a racial minority, receive treatment documents and care frequently denoting them as "low credibility," they develop distrust towards the health system [5, 9]. This distrust is not confined to one specific doctor-patient relationship but rather accumulates in a person's experience over time. This pattern of compounding distrust is especially significant for unhoused Black and Hispanic patients, who face overlapping structural vulnerabilities that make re-engagement with healthcare particularly difficult once trust has been broken [4]. Nevertheless, the existing research has mostly focused on whether patients use healthcare services rather than how stigmatizing documentation influences their decision-making process. Further research should not limit itself to the specific doctor-patient interaction but should analyze the relationship between records with biased content and patient behavior patterns with respect to the healthcare system [1].

Furthermore, a major weakness across the current literature is the omission of long-term patient behavioral metrics. While researchers have successfully measured how stigmatizing language alters a physician's attitude or prescribing habits, they have not thoroughly measured how this language impacts the long-term healthcare utilization of unhoused patients, such as missed appointments, emergency department dependence, continuity of care, and vaccination rates. This represents a vital gap in the literature. By designing intersectional studies that connect EHR language to concrete utilization metrics, researchers can move beyond merely identifying stigma to quantifying its systemic harm. Ultimately, addressing this gap is necessary to develop trauma-informed communication styles and person-first language frameworks that can rebuild trust and ensure equitable care for the most marginalized patient populations.

CONCLUSION

Ultimately, this literature review reveals a consistent pattern in which language recorded within clinical documentation is an active mechanism through which bias is transmitted and reinforced. With the rise of AI and automated technologies, we can expect this issue to be exacerbated even further. Studies on racial bias in EHRs and studies on stigma toward unhoused populations, describe similar downstream effects: erosion of trust, altered clinical decision-making, and avoidance or abandonment of care, all which have real health impacts. While no study directly investigates whether unhoused Black or Hispanic patients experience compounded documentation bias

relative to unhoused White patients nor whether stigmatizing language measurably predicts long-term disengagement from care among unhoused individuals specifically, this literature review may serve as a starting point. Future research should adopt an intersectional approach to examine race, ethnicity, and housing status simultaneously within clinical documentation to determine whether biased language compounds across overlapping identities. This research will inform interventions capable of producing more equitable, person-centered clinical communication.

HEALTH EQUITY IMPLICATIONS

Addressing the gap explored in this literature review is necessary to develop trauma-informed communication styles and person-first language frameworks that can rebuild trust and ensure equitable care for the most marginalized patient populations. This research will inform interventions capable of producing more equitable, person-centered clinical communication, and speaks directly to practitioners, health systems, and policymakers seeking to reduce documentation-driven disparities for unhoused patients of color.

STATEMENTS AND DECLARATIONS

Ethics Approval. Not applicable — this manuscript is a literature review and did not involve the collection of primary human subjects' data.

Consent to Participate. Not applicable.

Consent for Publication. Not applicable — no individually identifying data are included.

Declaration of Conflicting Interests. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding. This work was supported in part by the VOX Equity Think Tank Cohort Program. No external funding was received.

Data Availability. Not applicable — this literature review did not generate new primary data. All sources synthesized are publicly available and cited in the References section.

AI Use Disclosure. No generative AI tools were used in the preparation of this manuscript.

Author Contributions. All authors contributed to conceptualization and initial research on the topic. N.B. and M.L. supervised the project, provided guidance, and reviewed all drafts. N.B., C.M., L.S., S.S., and N.U. contributed to manuscript drafting.

Acknowledgments. The authors thank the VOX Equity Think Tank leadership team and community partners for their support throughout this project.

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