Algorithms and Race in the Pursuit of Equitable Health Care Quality Policy

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Abstract

As part of the Inpatient Quality Reporting Program (IQR), the Centers for Medicare and Medicaid Services (CMS) sought to improve data collection on racial inequities by introducing an algorithm that purports to infer the race of patients from their census block, language preference, and surname. However, the algorithm and the structure of the IQR, broadly, do not necessarily provide meaningful information on the quality of care but rather reflect a tiered health care system that is largely defined along racial lines. This country’s lengthy history of racial oppression in a variety of sectors emerges as a driving force behind disparate health outcomes. Residential segregation, mass incarceration, and disparate insurance coverage, for example, each independently and collectively restrict the access of marginalized communities to often poorly funded hospitals and complicate data on health care quality at that level. In essence, algorithms inherently consist of human bias, and, by defining race in this manner, CMS fails to account for the complex interaction of race and access to care as they relate to the collection and analysis of health care quality data. In light of the shortfalls of the algorithm and the IQR, this essay proposes a reimagining of health care quality that centers the perspectives and needs of marginalized communities and the hospitals that serve them.
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1.0 Introduction

Health care expenditures in the United States far exceed those of other high-income countries in dollar amount per capita and as a percentage of the GDP.¹ Nevertheless, the United States consistently ranks last among high-income countries on health outcome measures such as infant mortality, preventable mortality, and condition-specific outcomes.² Although outcomes are often attributed simply to quality of health care, they are indicative of competing policy considerations in regards to access, cost, quality, and equity in health care on a systemic level.

Health equity refers to the opportunity for every individual to attain their full health potential without barriers posed by their social position or circumstances.³ From a policy perspective, health equity is inextricably linked to the accessibility, cost, and quality of health services provided by government initiatives and the private health care market. However, none of those policy considerations truly matter without success in the others. For example, peak quality of care does little for health equity if people lack access to that care because they have no means of transportation to hospitals. Similarly, access to health care services provides nominal relief if those services are not high quality. Simply put, health equity cannot be achieved without equitable access to quality health care that minimizes the overall cost of those services.

The United States has yet to achieve health equity due, in large part, to its lengthy history of genocide, slavery, and other forms of exploitation. Through government-sanctioned actions, people of color, women, LGBTQ+ individuals, and other marginalized communities have been systematically excluded from achieving their full health potential. Despite major advancements such as the Civil Rights Act of 1964 and the Affordable Care Act, significant disparities remain in access to quality care as well as in health outcomes. The COVID-19 pandemic, for instance, exposed the inequitable pitfalls of our fragmented health system in that the risk of hospitalization and death among people of color far exceeded that of white people. This could be caused by several factors. One possible explanation is that patients of color, particularly those who are black or Latinx, were less likely than white patients to be treated with Paxlovid and other medication treatments for COVID-19. However, racial disparities in COVID-19 outcomes cannot be traced solely to the receipt of a particular treatment. Rather, it is in combination with structural factors such as unequal access to affordable care or the ability to work remotely during the pandemic. The fact that such disparities exist despite achievements such as the Civil Rights Act of 1964 suggests that current civil rights laws are insufficient to protect patients of color and reach health equity.

As part of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003, the federal government initiated the Hospital Inpatient Quality Reporting Program

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(IQRP). Through this program, the Centers for Medicare and Medicaid Services (CMS) reduces the annual percentage increase in payment rate for services covered by Medicare by one quarter for hospitals that do not report data on specific measures of quality.\(^7\) That data is then made publicly available for the purpose of increasing transparency and allowing consumers to make informed decisions about their health care.\(^8\)

In an attempt to collect data on racial disparities in the quality of health care services, CMS introduced an algorithm intended to perfect incomplete data on the racial composition of patients at individual hospitals.\(^9\) CMS derives most of its race data from the Social Security Administration, but, prior to 1980, the only options for race were White, Black, and Other.\(^10\) To account for the rapidly diversifying U.S. population, the CMS algorithm purports to infer a patient’s race from their census block, surname, and language preference.\(^11\) Then, using Bayes’ Theorem, the algorithm combines the probabilities of being a certain race in each of those categories to determine whether they are White, Black, Hispanic, Asian/Pacific Islander (API), American Indian/Alaska Native (AI/AN), or multiracial.\(^12\)

The algorithm represents an attempt to inform equitable health policy by improving the collection of data and the reporting of health care quality measures for people of color. However, it falls well short of providing meaningful information on disparities in the quality of care.

\(^7\) 42 U.S.C. § 1395ww(b)(3)(B)(viii)(I)
\(^8\) Centers for Medicare and Medicaid Services, Section on Hospital Inpatient Quality Reporting Program, (Dec. 1, 2021), available at https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalRHQDAPU
\(^11\) Id.
\(^12\) Id.
Furthermore, it entrenches those disparities on a systemic level by failing to account for disparities in access to care and within-group differences among the defined categories. Thus, the algorithm and its outcomes perpetuate a racialized, two-tiered health care system in the United States. This essay will first establish that the U.S. health care system is segregated into tiers that reflect—but are not defined by—racial disparities in access to care. Next, it will critique the CMS algorithm as a function of those disparities and how its results further perpetuate the tiered health care system. Finally, the essay will propose a resolution to the issues posed by the present method of collecting data on racial disparities in the quality of care.
2.0 Public Health Significance

The quality of care is a crucial consideration in the development of health law and policy, but it is deeply intertwined with systems of racial hierarchy beyond the health care system. Disparities in the quality of care can be traced to both interpersonal and structural factors. Implicit bias notably continues to influence medical decision-making on an individual level such that trust in physicians is significantly lower among people of color.\(^\text{13}\) However, those interactions must be viewed in the context of broader social systems. Current anti-discrimination law is particularly insufficient to protect the interests of patients of color because of its requirement of discriminatory intent for successful claims against providers. In order to appropriately identify and measure racial disparities in the quality of care, policy should account for both structural and interpersonal causes.

The CMS algorithm and the IQRP are minute components of a larger scheme of health care quality policy at the federal level. However, the algorithm presupposes a flawed definition of race and erroneously conflates racial disparities in the quality of care with disparities in access to care. In other words, the algorithm fails to identify with particularity the root causes of racial disparities in health outcomes and other health care quality measures.

The data obtained through the algorithm and the IQRP is key to informing equitable policy and improving the quality of care for marginalized patients. However, that data must be sound and clear from racial bias to the extent possible. As such, health equity must always be a component of developing and implementing evidence-based health policy.

3.0 Access in a Segregated Health Care System

3.1 The Right to Health Care

Unlike other industrialized nations, the United States does not provide for universal and equitable access to health care for all individuals.\(^\text{14}\) Whereas other wealthy countries operate single-payer systems or subsidize private insurers, the United States employs a fragmented system design that emphasizes private markets for both the provision and coverage of health care.

Notably, the United States generally does not recognize a fundamental right to health care.\(^\text{15}\) In *Estelle v. Gamble*, the Supreme Court held that deliberate indifference to the serious medical needs of incarcerated people constitutes cruel and unusual punishment under the 8\(^{th}\) Amendment.\(^\text{16}\) In so holding, the Court declared that prison authorities and, by extension, the public are responsible for meeting the medical needs of incarcerated people because their incarcerated status leaves them unable to care for themselves.\(^\text{17}\) Although *Gamble* departed from the general understanding that health care is not a fundamental right, the Court’s reasoning reflects the dominant ideology of self-reliance as it pertains to public assistance. By emphasizing the ability to care for oneself, the Court implicitly affirmed the notion that non-incarcerated people are

\(^\text{16}\) *Estelle v. Gamble*, 429 U.S. 97, 104 (1976)
\(^\text{17}\) *Id.*
independently responsible for their own health. This ideology underscores much of the political
tension in policy intended to improve access.\(^\text{18}\)

The middle of the 20\(^{th}\) century ushered in the mass growth of government involvement in
the health care sector. Through several pieces of legislation, the federal government expanded
access to health care with a marked effect for people of color and people with low income.\(^\text{19}\)
However, such progress, while important, did not entirely address the underlying systemic issues
of the fragmented and tiered health care system in the United States.\(^\text{20}\) Consequently, low-income
individuals, of which people of color are disproportionately represented, fall victim to disparate
quality of care and health outcomes.\(^\text{21}\)

### 3.2 Federalism and the Affordability of Health Care

One of the most salient indicators of access to health care is affordability. As the Civil
Rights Movement gained traction, President Johnson signed the Civil Rights Act of 1964 and the
Medicare and Medicaid Act—also called the Social Security Amendments of 1965. Title VI of the
Civil Rights Act prohibited discrimination on the grounds of race, color, and national origin in
programs and activities receiving federal financial assistance.\(^\text{22}\) The initiation of the Medicare and


\(^{20}\) Rachel Garfield et al., *The Uninsured and the ACA: A Primer – Key Facts about Health Insurance and the
Uninsured amidst Changes to the Affordable Care Act*, Kaiser Family Foundation, (Jan. 25, 2019), available at

\(^{21}\) *Id.*

\(^{22}\) 42 U.S.C. § 2000d
Medicaid programs then substantially benefited low-income individuals, and particularly poor people of color, in two important ways. For the first time, the federal government guaranteed health insurance coverage to the elderly (Medicare) and families who meet a certain income threshold (Medicaid). Additionally, it extended the scope of Title VI to health care providers who participate in Medicare and Medicaid. As a result, many people of color, especially those with low income, could afford health care services and, in theory, access the same quality of care as white Americans.

3.2.1 The Rise of Government Health Insurance

Although the Medicare and Medicaid Act provided substantial relief to individuals in poverty, notably poor people of color, the distinct structure and operation of each program reflects a tension over who is entitled to benefits. To begin, individuals who have paid into Social Security for ten years are automatically eligible for premium-free Medicare benefits upon turning 65. People who have not paid into Social Security for the requisite time are still eligible, but they are required to pay a premium. In contrast, eligibility for Medicaid, as enacted, was dependent both on income and being either aged, blind, permanently disabled, or a family with dependent children.

24 See *NAACP v. Wilmington Med. Ctr., Inc.*, 599 F.2d 1247 (3d Cir.1979)
26 *Id.*
Another distinction is that Medicare is funded and operated solely by the federal government, while Medicaid is jointly run by state and federal governments. The joint structure of Medicaid has resulted in wide variability in the scope of benefits and income eligibility requirements. This approach allows state governments to experiment with methods of implementing the program and make decisions for the specific needs of their constituents. However, this became an avenue through which policymakers cemented racial bias in the health care system. Racist stereotypes depicted poor people of color as lazy, uneducated, and undeserving of Medicaid and other benefits.  

Considering the widespread retention of employer-sponsored health coverage, legislators sought to reduce costs by limiting eligibility to those who, in their mind, could not help themselves. With primary authority to implement the Medicaid program, state governments set strict income thresholds and limited the scope of benefits, ostensibly to reduce the costs of the program. Although state Medicaid laws did not explicitly make racial distinctions, the decisions were made in the context of strong racial tension and negative attitudes toward poor people of color.

Although Equal Protection doctrine largely eliminated explicit racial discrimination in law, policymakers succeeded in subduing access to Medicaid and other forms of social welfare by attributing the manifestations of racial inequality to inherently inferior traits such as being uncivilized, lazy, or unintelligent. Benefits were sharply restricted to only those individuals who

28 Kristen Underhill, "Everybody Knows I'm Not Lazy": Medicaid Work Requirements and the Expressive Content of Law, 20 Yale J. Health Policy, L. & Ethics 225 (2021)  
were deserving—as determined by state governments. In effect, limiting Medicaid eligibility was a step in a self-perpetuating cycle of white supremacist ideology. Conservative policymakers portrayed poor people of color as “welfare queens” and “deadbeat dads” to justify withholding access to Medicaid and other social welfare benefits. In justifying strict eligibility requirements with personal responsibility and reducing costs, state governments acted on a racialized image of poverty which kept high proportions of nonelderly people of color without access to affordable health care. While passed in the same piece of legislation, the Medicare program was much better received in that its underlying purpose was to secure health coverage for the elderly who were no longer covered by employer health insurance. In contrast to the Medicare program, the federal government abdicated significant power to states in implementing Medicaid, which resulted in a disjointed amalgamation of regulations between the states.

In effect, the structure of the Medicaid program allowed state governments to experiment with systemic methods of subduing marginalized groups without triggering the form of discrimination envisioned by the Equal Protection Clause. In *Washington v. Davis*, the Supreme Court held that the disparate racial impact of the D.C. police department’s employment criteria was not sufficient for an equal protection claim without evidence of discriminatory intent. This sharply limited the opportunity for people of color to seek redress for government actions that were not overtly discriminatory by raising the evidentiary burden for plaintiffs.

Similarly, the evolution of qualified immunity as a defense to civil rights claims effectively limited the development of constitutional law at a time when states experimented with less blatant

34 *Washington v. Davis* 426 U.S. 229 (1976)
forms of discrimination. The Supreme Court, in *Harlow v. Fitzgerald*, effectively stunted the development of constitutional law by establishing that state actors are entitled to immunity from civil rights liability where the conduct does not violate “clearly established” rights under federal statutes and the constitution. Together with *Davis*, the Supreme Court in *Harlow* affirmed the focus in civil rights litigation on explicit racial discrimination by cementing a good faith defense in law that had already been decided. Facialy race-neutral, yet racially motivated, action taken by state policymakers could rarely amount to a constitutional violation, and claims could be dismissed for failing to identify clearly established law before developing sufficient facts to establish a constitutional violation at all. With limited opportunity to redress disparate impact equal protection claims, situations in which racist stereotypes influenced policymaking contributed to the subtle affirmation of colorblindness in law.

As it pertains to racial prejudice in state Medicaid programs, using personal responsibility and cost as a proxy for race allowed state governments to avoid accountability for policies that disproportionately affect people of color. The structure of Medicaid allows state governments to enact policies that have a discriminatory effect on people of color and justify those policies with rhetoric that carries strong racial connotations. As a result of the broad authority given to states to implement Medicaid, people of color disproportionately fall victim to a health care system that is designed to subdue them into a second-class social status.

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3.2.2 Pitfalls of the Affordable Care Act

When President Obama signed into law the Patient Protection and Affordable Care Act (ACA), the federal government claimed broad power over the Medicaid program and the health care system at large. However, concerns for federalism drastically limited the reach of the ACA, and, as a result, people of color in poverty were disproportionately left uninsured.36

A crucial component of the ACA is the Medicaid Expansion, which required state governments to increase the maximum income threshold for Medicaid eligibility to 133% of the Federal Poverty Line (FPL) and extend categorical eligibility to all single adults.37 To implement those provisions, the federal government initially offered to cover all new Medicaid expenses to states that resulted from expansion and then reduced to 90% over the next several years. Importantly, the federal government conditioned all future federal Medicaid funds to states on expanding Medicaid.38 The Medicaid Expansion, by design, would have significantly helped single people of color who were uninsured, but the Supreme Court, in *Natl. Fed. of Ind. Business v. Sebelius*, struck down the Expansion as an unconstitutional infringement on states’ rights and independence.39 Writing for the majority on the issue of Medicaid Expansion, Chief Justice Roberts reasoned that, considering the substantial portion of state budgets occupied by Medicaid, the federal government’s withholding of “existing” funds was unconstitutionally coercive.40 In this

39 Id.
40 Id.
way, the Court cemented the rights of states to determine the health care needs of their populations. Consequently, Medicaid Expansion became optional for states because the federal government could not withhold the funds that states already expected to receive. By making expansion optional, individuals in states that did not expand Medicaid remained uninsured. This is known as the Medicaid Coverage Gap; people of color are disproportionately represented in this gap.41

The Medicaid Expansion initially purported to establish relative uniformity in Medicaid eligibility across the country, but the Supreme Court in Sebelius undercut equitable reform as threatening excessive departure from the status quo. Dissenting from the judgment, Justice Ginsburg noted that the majority opinion envisions the Medicaid Expansion as an entirely new program by conflating anticipated Medicaid funds with “existing” funds and overlooking the significance of the federal contribution.42 Justice Ginsburg argued that the Expansion reflected an amendment to the conditions of Medicaid participation, as Congress had done previously in extending coverage to other groups.43 Furthermore, because the federal government would cover at a minimum 90% of costs due to expansion, the financial investment of adopting the Expansion was relatively minor.44 In focusing on anticipated Medicaid funds, the majority opinion reflected the tension between state budgets and health reform for the poor.45 Once again, equitable health coverage for many people of color was stunted by prioritizing the finances of those with official and social power.

43 Id.
44 Id.
45 Id. at 579
3.3 Physical Factors Affecting Access to Health Care

In combination with inequitable financial access to health care, differences in physical access to health care services complicate the ability to draw meaningful information from the CMS algorithm and health outcome measures. Residential segregation\(^{46}\) and mass incarceration\(^{47}\) have restricted access for many people of color to underfunded health care providers. Together, inequities in financial and physical access to health care reflect a racially segregated and tiered system of health care.

3.3.1 Geographic Location

State-sanctioned racial discrimination in housing adversely affected the health of people of color and simultaneously restricted accessibility to health care services. In response to Jim Crow laws and escalating racial violence in the South, millions of African Americans migrated to large cities across the country in pursuit of educational and economic opportunities.\(^{48}\) However, contrary to common parlance, racism was and is not limited to the South. Racial animus also underscored housing policy and private action in northern and western states.\(^{49}\) Consequently, the racial composition of cities and even specific neighborhoods today reflects the systematic and intentional marginalization of people of color. Additionally, by sanctioning racial segregation in

\(^{46}\) James B. Kirby & Toshiko Kaneda, *Neighborhood socioeconomic disadvantage and access to health care*, 46 J. Health Soc. Behav. 15 (2005)


neighborhoods and cities, government actors effectively limited the access of people of color, especially African Americans, to certain health care providers.

Local governments played a foundational role in the establishment and maintenance of residential segregation.\textsuperscript{50} In response to the influx of poor African Americans into cities, Baltimore, for example, adopted explicitly racist zoning laws that prevented African Americans from buying homes in neighborhoods occupied entirely by white people.\textsuperscript{51} As a result, black people could purchase homes only in neighborhoods that were entirely black or already integrated. These laws validated white supremacy and fears of racial integration by centering racial purity in limiting housing options for black people.

Despite some success in challenging discriminatory zoning ordinances, local governments in the mid-20th century maintained residential segregation by appealing to racial stereotypes and the property values of white, middle-income residents.\textsuperscript{52} The Supreme Court, in striking down a discriminatory zoning ordinance in Louisville, Kentucky, impliedly facilitated local governments in their segregation efforts. In \textit{Buchanan v. Warley}, a white plaintiff sued the defendant, a black man, for specific performance of a property sale in a white neighborhood. At the time, Louisville’s ordinance provided that it is “unlawful for any colored person to move into and occupy as a residence […] upon any block upon which a greater number of houses are occupied as residences […] by white people.”\textsuperscript{53} In other words, black people were prohibited from moving to neighborhoods that were occupied in the majority by white people. The Court held that Louisville’s racially discriminatory zoning ordinance unconstitutionally impeded the free conveyance of

\textsuperscript{50} \textit{Id.} at 41  
\textsuperscript{51} \textit{Id.} at 39  
\textsuperscript{52} \textit{Id.} at 53  
\textsuperscript{53} \textit{Buchanan v. Warley}, 245 U.S. 60, 71 (1917)
property rights under the 14th Amendment.\textsuperscript{54} However, although the Court invalidated the ordinance, it did so under the Due Process clause rather than the Equal Protection clause.\textsuperscript{55} While affirming the police power of states to regulate the disposition and use of property to protect the general welfare, the Court reasoned that the Due Process clause unlawfully restricted the white plaintiff’s freedom to convey property to whomever he wanted.\textsuperscript{56} In so holding, however, the Court reaffirmed the “separate but equal” doctrine established in \textit{Plessy v. Ferguson}\textsuperscript{57} and prioritized the property rights of the white plaintiff rather than the civil rights of the black defendant.\textsuperscript{58} As with the focus on intentional discrimination in \textit{Washington v. Davis},\textsuperscript{59} the \textit{Buchanan} court centered the white perspective in deciding issues of civil rights.

The gaps left by \textit{Buchanan} allowed local governments to experiment with methods of residential segregation that did not necessarily implicate the rights of property owners to freely convey their property.\textsuperscript{60} Some municipalities, like West Palm Beach, Florida, outright forbade African Americans from living on the same side of the railroad tracks as white people.\textsuperscript{61} Others used proxies imbued with racial stereotypes to maintain the racial homogeneity of neighborhoods. One such proxy that was encouraged by both local and federal officials was zoning that differentiated single-family from multi-family dwellings and public housing.\textsuperscript{62} Underlying those designations was the proposition that low-income African Americans could not afford single family dwellings and thereby could not buy homes in zones occupied by middle-income white

\begin{itemize}
\item \textsuperscript{54} \textit{Buchanan v. Warley}, 245 U.S. 60 (1917)
\item \textsuperscript{55} \textit{Id.} at 82
\item \textsuperscript{56} \textit{Id.} at 74
\item \textsuperscript{57} \textit{Plessy v. Ferguson}, 163 U.S. 537 (1896)
\item \textsuperscript{58} \textit{Buchanan v. Warley}, 245 U.S. 60, 74 (1917)
\item \textsuperscript{59} \textit{Washington v. Davis}, 426 U.S. 229 (1976)
\item \textsuperscript{60} Richard Rothstein, \textit{The Color of Law: A Forgotten History of How Our Government Segregated America} (2017)
\item \textsuperscript{61} \textit{Id.}
\item \textsuperscript{62} \textit{Id.}
\end{itemize}
people in single family dwellings. In this way, segregationists in local government used facially neutral legal constructs to further white supremacist ideology and stoke fear of integration. Similar to the limitations in access to Medicaid, residential segregation reflected the substitution of race with poverty to justify discriminatory action.

At the federal level, housing policy in the early to mid-20th century was designed to entrench residential segregation by systematically devaluing homes in integrated neighborhoods. The practice of redlining, in particular, had the effect of restricting the upward mobility for African Americans and other people of color in poverty. By refusing to insure mortgages for homes in integrated neighborhoods, i.e. “redlined” neighborhoods, the federal government forced residents of those neighborhoods to relinquish more of their already low income to creditors who charged exorbitantly high interest rates. At the same time, the federal government subsidized the construction of single family homes on the condition that they were only sold to white people. In effect, African Americans were systematically excluded from disposable financial resources that could go toward developing property or even paying for health coverage. Additionally, the devaluation of property in integrated neighborhoods and the suburbanization of white, middle-income families incentivized developers to divest from integrated neighborhoods.

The fear of integration and colorblind tactics persist today. The American Psychological Association reported that white Americans perceive threats to their safety or cultural way of life

65 Id.
when confronted with changing demographics in a hypothetical, white-majority neighborhood. Projected population growth of Latinos, Asian Americans, and Arab Americans evoked strong perceptions of a foreign cultural threat, and African Americans posed a threat to safety. This is not limited to interpersonal prejudice. On a systemic level, the perceived threats posed by people of color inform policy in such a manner that government actors can discriminate based on race without ever mentioning race itself. As previously discussed, the focus on the white perspective in equal protection doctrine protects colorblind policies that have a disproportionate impact on people of color.

In the health care system, the segregation of American cities results in both adverse health conditions and the limitation of people of color to certain health care providers. People living in historically redlined neighborhoods experience worse effects of climate change than other neighborhoods such as high temperatures and air pollution from nearby industrial zones. Additionally, African Americans living in segregated neighborhoods have reduced access to public parks and are often located in food deserts where residents lack access to affordable and healthy food options. Residential segregation, therefore, implicates more than simply housing. People of color living in segregated neighborhoods are limited in their ability to engage in healthy activities like recreation and obtaining health care services that are often taken for granted by people with power and resources.

67 Id.
3.3.2 Mass Incarceration and the Right to Receive Health Care

The U.S. system of mass incarceration is a prime example of how purportedly colorblind policies cast large segments of the population into second-class status and perpetuate health inequities along racial lines. Nearly two million people are behind bars in the United States, of whom African Americans and Latinos are disproportionately represented.\(^{71}\) Although incarcerated persons are the only people with a constitutional right to health care, the collateral consequences of incarceration perpetuate a cycle of inequities that extends beyond the individual who is incarcerated.\(^{72}\)

Under the auspices of safety and crime control, the U.S. criminal legal system facilitated health inequities by criminalizing mental health conditions and failing to account for the health consequences of incarceration. At the same time that state governments grappled with how to implement the Medicaid program, the War on Drugs assumed a uniquely dark-skinned image.\(^{73}\) Since the inception of the War on Drugs, people of color, particularly black men, have been disproportionately arrested and incarcerated.\(^{74}\) The crack epidemic of the 1980s destroyed the health and safety of impoverished communities with a disparate impact on African Americans.\(^{75}\) Due to the highly addictive qualities of crack cocaine and the associated violence, the federal government enacted mandatory minimum sentencing legislation for cocaine offenses, drawing a 100:1 ratio of criminalized quantities of crack to powder cocaine.\(^{76}\) Not only were African

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\(^{74}\) Id.


\(^{76}\) Id.
Americans more likely to be arrested for small amounts of crack cocaine, but the sentencing policies treated drug abuse as a crime issue rather than a health issue. The disparity between the criminalized quantities of crack and powder cocaine fostered a blatant disregard for the health needs of African Americans with addiction. It also had the effect of subjecting African American communities to discriminatory policing; racialized perceptions of violence and drug use effectively drew all African Americans into suspicion, especially those with darker skin. By emphasizing the violence associated with crack cocaine in inner cities, the federal government validated and stoked racial fears as justification for the disparate impact of policing and drug sentencing policy on African Americans.

Once people are incarcerated, the U.S. criminal legal system entrenches health inequities and validates white supremacy. Presently incarcerated persons are the only segment of the U.S. population that has a right to health care, as deliberate indifference to their serious medical needs is cruel and unusual punishment under the 8th Amendment. The principle of health care as a right is critical to understanding how government policies perpetuate health inequities. The right to health care in the United States ends at the prison gates, but, especially for the people in the Medicaid Coverage Gap, incarceration may be the only available option for access to health care services. Effectively, the U.S. legal system guarantees health care in exchange for freedom. This paradox is indicative of a systemic desire to marginalize communities of color and maintain white supremacy in the health and criminal legal systems. For those in the Medicaid Coverage Gap, the

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77 Id.
choice is between consistent health care and freedom. Either way, they become marginalized from mainstream society.

Beyond the prison gates, the collateral consequences of mass incarceration drastically reduce the avenues for reentry into mainstream society and contributes to an everlasting cycle of poverty and adverse health outcomes. Although formerly incarcerated persons theoretically paid their debt to society, legal and social restrictions on people with felony convictions prevent them from truly rejoining mainstream society. In several states, people with felony convictions are stripped of their right to vote. Additionally, background checks as conditions for employment sharply curtail their ability to obtain regular jobs (with health benefits) and escape poverty. Because of such restrictions, formerly incarcerated people are effectively denied access to health care as well as a voice to influence health policy.

Moreover, mass incarceration perpetuates systemic inequities because of its effect on people who are not and have not been incarcerated. From expensive collect calls to travel expenses for visits, the families of incarcerated people suffer significant financial strain. Additionally, children with an incarcerated parent are at increased risk of mental and behavioral health needs and homelessness. Considering that black men are disproportionately incarcerated, these ramifications of mass incarceration thereby entrench racial health inequities for generations to come.

81 Id.
84 Wendy Sawyer, Visualizing the Racial Disparities in Mass Incarceration, Prison Policy Initiative (July 27, 2020), available at https://www.prisonpolicy.org/blog/2020/07/27/disparities/?gclid=Cj0KCQjwt_qgBhDFARl5JzIoF-6GRN9jgZfWD6vITPjORwRcmVyxU1tGb1-NMJYwrIDBDwT5FKiMaAhMHEALw_wcB
3.4 The Tiered Health Care System

Overall, the system of mass incarceration exacerbates racial inequities in access to health care and, together with Medicaid policy, establishes tiered and disparate health care systems that disproportionately affect people of color. Because private insurers typically reimburse providers more for the same services as Medicare and Medicaid, many hospital systems seek to locate facilities in areas that provide greater access to patients covered by private insurance. The motivation to maximize revenue—even for nonprofit providers—is inherent in the U.S. capitalistic system. However, that motive, in practice, serves to the detriment of people in poverty, particularly people of color. Providers in neighborhoods and municipalities that serve primarily patients with private insurance have more resources available for expenses like staffing and equipment to provide higher quality care.

Disparate sources of revenue for health care providers serving primarily low-income patients exemplify the tiered health care system. For example, under the Emergency Medical Treatment and Labor Act (EMTALA), emergency departments are required to provide emergency stabilizing treatment to all patients regardless of their insurance status or ability to pay. However, the federal government does not directly provide funding for costs incurred by providers of care to individuals who cannot pay. This is detrimental to providers who serve primarily low-income and Medicaid patients. Researchers with the Kaiser Family Foundation estimate that the total

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86 See, e.g., *ProMedica Health System, Inc. v. Federal Trade Commission*, 749 F.3d 59 (6th Cir. 2014)
87 42 U.S.C. § 1395dd
amount of uncompensated care costs for the uninsured averages around $42.4 billion every year.\textsuperscript{89} Without sources of revenue like providers who serve more privately insured patients, these providers are faced with significant financial restraints that inhibit their ability to provide high quality care. Also, considering the role of residential segregation in access to care, uninsured and Medicaid patients of color are disproportionately limited to providers with lower revenues, and do not have access to the same quality of care.

Although federal and state governments offer financial assistance to those providers, it is insufficient to remedy the health inequities entrenched in the tiered health care system. The federal government is statutorily required to issue Disproportionate Share Hospital (DSH) payments to hospitals that serve high shares of Medicaid and uninsured patients.\textsuperscript{90} Additionally, through Section 1155 demonstration waivers, state governments implement uncompensated care pools based on definitions that may differ from how DSH status is determined.\textsuperscript{91} Although such government assistance alleviates approximately 80\% of uncompensated care costs,\textsuperscript{92} they do not effectively address the underlying inequities in access to care that affect health outcomes. Even if DSH and other supplemental payments covered the total cost of uncompensated care, a hospital’s financial resources are not the sole predictor of quality. People who are uninsured receive less care than insured people.\textsuperscript{93} Since the uninsured receive care at a lower rate than insureds, this suggests

\textsuperscript{89} Teresa A. Coughlin, et al., \textit{Sources of Payment for Uncompensated Care for the Uninsured}, Kaiser Family Foundation (Apr. 6, 2021), available at https://www.kff.org/uninsured/issue-brief/sources-of-payment-for-uncompensated-care-for-the-uninsured/

\textsuperscript{90} 42 U.S.C. § 1396r-4


\textsuperscript{92} Teresa A. Coughlin, et al., \textit{Sources of Payment for Uncompensated Care for the Uninsured}, Kaiser Family Foundation (Apr. 6, 2021), available at https://www.kff.org/uninsured/issue-brief/sources-of-payment-for-uncompensated-care-for-the-uninsured/

\textsuperscript{93} Ruohua Annetta Zhou, et al., \textit{The Uninsured Do Not Use The Emergency Department More—They Use Other Care Less}, 36 Health Affairs (Millwood) 2115 (2018)
that the total costs of uncompensated care is lower than it would be if they had the same access to care. Although EMTALA effectively entitled all individuals to receive emergency care, the uninsured still do not have access to primary and preventative care. In fact, comprehensive primary and preventative care is associated with better health outcomes, particularly among marginalized populations.94 Taken together, people of color in the Medicaid Coverage Gap and other uninsured people are systematically excluded from equitable health care.

4.0 Measuring Health Care Quality with Algorithms

In order to accurately measure racial disparities in the quality of health care, policymakers must account for inequities in access to care. The CMS algorithm and the larger Inpatient Quality Reporting Program (IQPR) fail to account for inequities in access for people of color in the Medicaid Coverage Gap and entrench the tiered health care system by centering individual discrimination as the driver of inequities in quality of care.

By using census block, surname, and language preference to infer race, the CMS algorithm defines racial categories for people of color based on whiteness as the default and cements an incomplete story of systemic racism in health care. As previously established, residential segregation led to the devaluation of property in African American neighborhoods and entrenched many in a cycle of poverty. On its face, this component of the CMS algorithm appears to accurately predict the race of patients in such neighborhoods. However, it does not seem to consider preexisting disparities in access to health care services, public parks, and healthy food which independently affect health outcomes. An important limitation to Bayes’ Rule is that it can produce outcome distributions that too heavily reflect the predictors. In this context, racial disparities in the quality of care are too strongly influenced by the adverse effects of residential segregation on access to care and other healthy behaviors. In order to accurately surmise disparities in quality of care, access, at a minimum, should be equal among all those measured, and that is not met here. Considering the residents of poor neighborhoods are likely to be similarly under- or uninsured and go to the same community hospitals, the underlying systemic issues are being attributed to race

and the quality of services provided. By defining race as a function of geographic location, the CMS algorithm attributes the underlying inequities in access to nominally racial characteristics. As such, the reported data on health care quality presumes that all races have equal access at baseline, and health outcomes are a result of disparities in quality alone. In effect, the algorithm perpetuates the assumption that individual bias, rather than systemic racism, drives inequities in health care quality and outcomes.

As it pertains to the other racial categories, the algorithm is less effective at predicting self-reported “race” and furthers outdated nativist perspectives of systemically marginalized groups. To begin, the predictors and designation of “Hispanic” as a racial category erroneously group individuals based on perceived foreignness and excludes others who do not fit the stereotype. Although many people self-identify as Hispanic, that framework centers the colonizing power and neglects people from Latin America and the Caribbean who share a similar history of colonization and exploitation.

Similar to how census group reflected race and access to care, language preference can also be a significant barrier to accessing high quality health care. For immigrants and their descendants who speak languages other than English, access to care is limited to the extent they can understand the English language and the complex U.S. health care system. Specifically, language barriers between patients and providers contribute to reduced patient satisfaction, and speakers of languages other than English are more likely to experience adverse events stemming from their inability to communicate effectively with providers. Because of the language barriers to

accessing health care, the algorithm’s use of language preference as a predictor of race unduly places the burden for disparities on health care providers and patients rather than the system as a whole.

The CMS algorithm also fails to provide any meaningful information to address health inequities experienced by people with intersectional identities. In racializing “Hispanics,” the algorithm disregards the vast differences in skin pigment among individuals in Latin America and the Caribbean. For purposes of segregation, black Latines who immigrated to the United States were treated more similarly to African Americans than white or white passing Latines. This complicates the picture of “Hispanic” as a race in that it neglects the systematic marginalization of black and dark skinned Latines. Whereas census block may predict black Latines as black because of residential segregation, language preference may say otherwise. The CMS algorithm purports to resolve this tension with the category “multiracial” as an apparent catch-all designation. Because access to care may be limited as a function of location and language, the multiracial category fails to provide practically significant information on the interacting causes of health inequities. Also, by reducing intersection identities to “multiracial” the algorithm does not give the opportunity to target equitable policies and programs to marginalized communities.

As a matter of the structure of the IQRP, CMS dubiously attributes deep, systemic inequities in access to care to the quality of care at individual hospitals. As previously explained, the U.S. operates a tiered health care system; thus, comparing hospitals does not effectively identify nor remedy systemic racism in the health care system. Public reporting of racial disparities in quality of care poses a substantial threat to the operations of hospitals with lower revenues. To the extent the data succeeds in increasing transparency to consumers, patients—especially those with the means—may choose to seek care elsewhere. However, it may also influence potential
sources of funding who may be hesitant to invest in low-performing hospitals according to CMS metrics. As such, the public reporting of racial disparities in quality of care can have a detrimental effect on hospitals serving the neediest patients.
5.0 Reimagining Health Care Quality

Under the algorithm’s framework for reporting racial disparities in quality of care, CMS neglects to account for systemic inequities in access to care that simultaneously lead to disparities in health outcomes. Although the CMS algorithm was intended to advance health equity in the quality of care, it falls short of providing useful information and can even have an adverse effect on struggling hospitals. Furthermore, the algorithm advances racial stereotypes in inferring race by ascribing inequities in access to care to the race of patients and, subsequently, the quality of health care received because of their race. The framework posed by the algorithm is consistent with the perspective that individual instances of discrimination and bias—rather than systemic racism—drive racial disparities in health outcomes.

This is not to say that individual instances of bias do not independently affect health; however, the algorithm tells an incomplete story because it overlooks that differences among people classified in a particular race can have widely different experiences in accessing health care services. To more fully understand and rectify disparities in the quality of care, data collection should account for the role of racially disparate access to care in confounding health outcomes. In that way, research can more comprehensively address the health needs of people of color, especially those in poverty.

Individual hospitals, rather than the government, should assess access to care and work with public health and community leaders to devise quality standards that consider the needs of their patients. The current paradigm of comparing health care outcomes between hospitals presumes an equal foundation, so the resulting data reflects inequities beyond the quality of care. Hospitals are more adequately situated to determine the extenuating factors contributing to health
disparities because of their interactions with individual patients and ability to coordinate with local health departments and community leaders. Under federal law, not-for-profit hospitals are required to conduct and publicly report community health assessments (CHA) in order to maintain their federal tax-exempt status.\textsuperscript{98} In collaboration with local health departments and community leaders, hospitals must define the community they serve, describe the method of assessment, and adopt an implementation strategy for addressing the identified health needs of their community.\textsuperscript{99} Through CHAs, hospitals can more effectively account for the social determinants of health that affect their community, specifically. Because hospitals are already supposed to collect such information, they can more seamlessly integrate new quality standards that account for the specific health needs of their community like access. The resulting implementation strategy thereby reduces the strain on struggling hospitals to meet the same standards as those with better funding and lower risk patients. Additionally, regarding the purpose of the CMS algorithm, individual hospitals can more easily account for race-specific issues that affect health outcomes. As a condition of federal tax-exempt status, requiring providers to construct their own quality standards fosters accountability and trust between patients and providers.

Two principal arguments arise from approaching health care quality data collection in this way. Initially, new requirements for CHAs may unduly burden hospitals who already struggle with time and budgetary constraints and shifts responsibility for systemic issues to the hospitals themselves. That struggling hospitals must commit more resources to identify and address systemic racial inequities apparently absolves the government of accountability. However, this analysis is misguided. This framework does not place the burden on hospitals to remedy systemic

\textsuperscript{98} 26 C.F.R. § 1.501(r)-3
\textsuperscript{99} Id.
issues like access. Rather, it allows them to account for it in determining the quality needs of their patients. Moreover, it is true that struggling hospitals have limited resources available to complete additional tasks, but new and unique quality measures allow these hospitals to more effectively delegate and economize their resources for the specific needs of their communities. Rather than expending time and money to meet quality standards that unscrupulously compare their patients to those with better access, hospitals can improve quality of care by dedicating resources to the issues that suit their patients and communities. The development of unique quality standards may cost more up front, but, like the CHA itself, the new requirements should be viewed as an investment in their communities, rather than a liability. In this fashion, hospitals can lead the diminution of racial inequities by providing data and strategy that fits their needs.

The other core argument against this method of identifying and addressing disparities in health care quality is that it lacks accountability for underperforming hospitals. By allowing hospitals to create their own standards, this approach is amenable to manipulation by hospitals to improve reputation and limits consumers’ ability to make informed choices based on uniform standards. As to the potential for self-serving quality measures, the existing requirements for CHAs foster accountability by mandating that providers incorporate the input of public health experts and community leaders into the assessment. Community leaders as well as local governmental entities can play a significant role in ensuring accountability by mobilizing resources to engage with patients and ascertain their needs. Otherwise, providers who do not meet that requirement risk losing federal tax-exempt status.

Furthermore, the lack of uniformity in existing quality measures is the exact reason standards should be devised on a community level. The fact is, because of inherent inequities in access to care, the current measures do not uniformly represent the circumstances of all patients.
Racial and economic disparities in access to care are presumed nonexistent at baseline, but uniformity at baseline is necessary to effectively parse out the interacting effects of access and quality of care on health outcomes. To the extent consumers rely on published quality measures to make decisions about their health care, this proposed framework inhibits their ability to compare quality of care between hospitals.

However, this only matters if consumers have the means and resources to choose where they receive care. The proximity of hospitals and availability of transportation limit people—especially those with low-income—to those hospitals. Additionally, certain hospitals may be the only physically accessible facilities that accept Medicaid. With all this considered, the power of consumers to make informed health care decisions is not simply a function of transparency and accountability. It is also determined by financial stability and access to health care services. Therefore, as part of the required CHAs, hospitals should develop their own quality measures that more adequately identify the specific needs of their communities and account for systemic racial inequities in access to care.
6.0 Conclusion

Health outcomes attributed to the quality of care are only relevant to the extent that they consider vast inequities in access to care. The CMS algorithm attempts to stratify data on the quality of care by race as a method of identifying racial disparities to which equitable health policy may be targeted. However, in the process, CMS furthers racial bias and the perspective that racial disparities are solely the product of individual instances of discrimination in health care services. In grouping together individuals with unequal access to care and “othering” individuals with intersectional racial identities, the algorithm fails to accurately depict disparities in quality of care or provide sound basis for policy that meets the needs of marginalized communities. Additionally, the structure of the IQRP and the public reporting of the resulting quality data entrench inequities by neglecting to acknowledge the role of access in health outcomes. Taken together, the present scheme of identifying racial disparities in quality of care perpetuates a racialized, tiered health care system that subjects people of color to ineffective and harmful policy.

The tiered health care system in the United States poses unique barriers to health equity arising from the lengthy history of racism, but they are not insurmountable. The history of residential segregation and the discordant implementation of Medicaid by state governments leaves many people of color to seek care at hospitals with limited resources to meet their compounding needs. However, by empowering hospitals to create and report their own quality measures, the issues encountered by their communities can be properly accounted for, and the identified needs can be more comprehensively addressed. As a matter of health equity, policymakers must work to dismantle the tiered health care system and give struggling hospitals flexibility and assurance that their work matters. Equitable access to care is a necessity, and
Community hospitals can more easily determine how to alleviate those disparities that exist largely along racial lines.
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