

Rural Hospitals Closures in the United States¹: Theoretical Impact Analysis on African Americans Health Care Disparity in the South²

Ucheoma Nwagbara, PhD
Department of Public Policy
Nelson Mandela College of Government and Social Sciences
Southern University and A&M College, Baton Rouge, Louisiana, USA

Abstract

This paper examines the impact of rural hospitals closures in the United States on African Americans health care access with focus on the South region (Black Belt). Specifically, the paper argues that rising rural hospital closures has disproportionate impact on African Americans and has exacerbated the health disparity between African Americans and Whites. In addition, the paper will examine the underlying socioeconomic factors influencing African Americans health outcomes in the South. Furthermore, the paper will add to the body of knowledge and literature on the subject of African Americans health disparity in the United States, with implications for public policy. African Americans health disparity in the United States is a long-standing problem. The rising closures of rural hospitals that provide critical care to historically underserved populations including Blacks has made the situation worse. The closures has made it more difficult for African Americans to obtain basic health care services and has resulted to diminishing access to care and persistent gaps in health quality for African Americans. The health disparity problem will be analyzed in the context of four underlying factors: race, discrimination, costs, and poverty. Methodically, the study is a narrative literature review and data analysis of previous and current works using Boolean search technique. The study finds and further re-affirm that race, discrimination, costs, and poverty contribute to African American health disparity in the United States. Based on the findings, the study concludes that rural hospital closures has disproportionate impact on African Americans health compared to Whites. To address the inequity, the study recommends better funding and resources for rural hospitals, Medicaid expansion, enhanced reimbursement incentives for health providers who practice in rural communities, strengthening federal health programs that support rural residents, such as, Essential Communities Providers (ECP), Federally Qualified Health Centers (FQHCs), Rural Health Centers (RHCs), Health Professional Shortage Area (HPSA). In this paper, the terms “Black (s),” “Black Americans,” and “African Americans” are used interchangeably.

Keywords: African Americans, Whites, South, health disparity, access, rural hospital closures, race, discrimination, costs, poverty

DOI: 10.7176/PPAR/10-7-06

Publication date: July 31st 2020

I. Introduction

The aim of this paper is to examine the impact of rural hospitals closures (Table 2) on African Americans health care access in the United States, particularly, in the South. Specifically, the paper argues that rural hospitals closures have disproportionate impact on African Americans and have further widened health disparity between Blacks and Whites. In addition, the paper will examine the underlying socioeconomic factors influencing African Americans health outcomes in the South with implications for public policy thereof. Before going further, it will be in order to define health disparity in the United States. According to the U. S. National Institutes of Health (NIH, 2014), “Health disparities are differences that exist among specific population groups in the United States in the attainment of full health potential that can be measured by differences in incidence, prevalence, mortality, burden of disease, and other adverse health conditions.”

The examination of the impact of rural hospitals closures on the African American population in the South region is necessary for three reasons. First, majority of African Americans in the United States live in the South.³

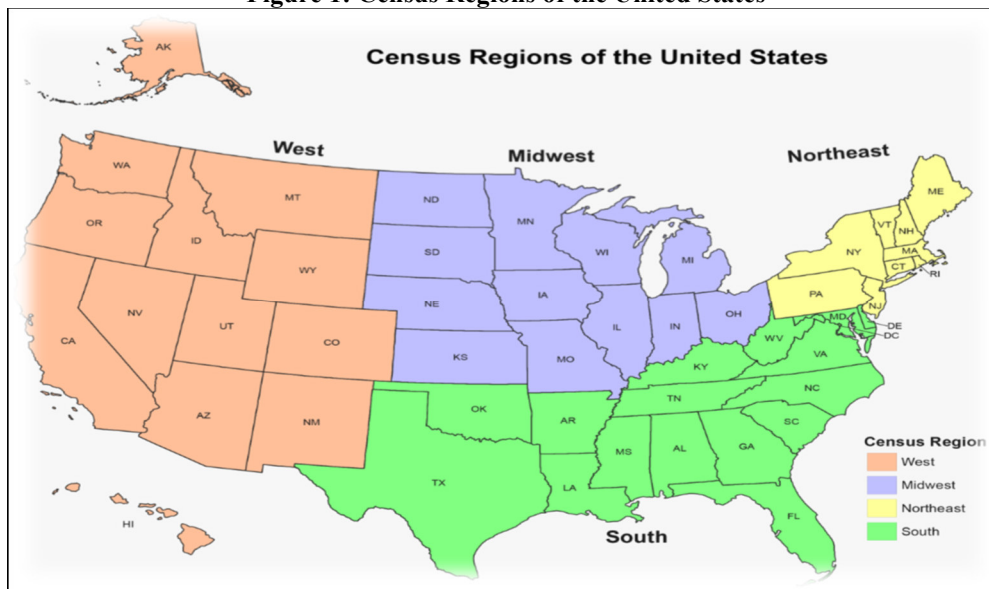
¹ Per North Carolina Rural Health Research Program (NCRHRP) rural hospitals closures data is available beginning 2005 to the present. This is the time covered in this paper.

² The term “South” is defined in a variety of ways. For the purposes of this paper and consistency, we will follow the U.S. Census Bureau’s definition that include the following 16 states (including Washington, DC): Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Oklahoma, Tennessee, Texas, Virginia, and West Virginia (Figure 1). U.S. Census Bureau. *Census Regions and Divisions of the United States*. https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf.

³ Analysis of U.S. Census Bureau data (Table 1), show that 55 percent of the African-American population lived in the South as of 2018 compared to 35 percent of white population. The ten states with the largest black population in 2018 were Texas, Georgia, Florida, New York, North Carolina, California, Illinois, Maryland, Virginia, and Louisiana. Combined, these 10 states represent nearly 60% (59.06% exactly) of the total black population in the United States.

As such, the research findings can be generalized as representative of Black health care inadequacy problem in the general U.S. population. Second, the South has the highest percentage of people living in poverty and without health insurance in the United States, with Black poverty and health inequity in particular disproportionately higher than that of whites. As Brookings Institution scholars, Shambaugh, Nunn, and Anderson (2019) observed, "...poverty in the Deep South tend to be much higher in counties with high black populations." Third, the South has historical resistance to African American equity including health care access (Dent, 1949; Daniel, 1970; Beardsley, 1986 and 1987; Smith, 1998, 1999, 2005a, 2005b; Reynolds, 1997a) and the rural hospitals closures has aggravated the problem, calling for urgent and necessary policy measures to address the disparity.

Figure 1: Census Regions of the United States



Source: Adapted from U.S. Census Bureau

<https://gis-portal.data.census.gov/arcgis/apps/MapSeries/index.html?appid=7a41374f6b03456e9d138cb014711e01>

Table 1: African American Population by State in the South, 2018

State	Population	White	Black	% Black
United States	308,745,538	241,937,061	40,250,635	13.0
Alabama	4,779,736	3,362,877	1,259,224	26.3
Arkansas	2,915,918	2,342,403	454,021	15.6
Delaware	897,934	645,770	196,281	21.9
Florida	18,801,310	14,808,867	3,078,067	16.4
Georgia	9,687,653	6,144,931	2,993,927	30.9
Kentucky	4,339,367	3,864,193	342,804	7.9
Louisiana	4,533,372	2,902,875	1,462,969	32.3
Maryland	5,773,552	3,541,379	1,731,513	30.0
Mississippi	2,967,297	1,789,391	1,103,101	37.2
North Carolina	9,535,483	6,898,296	2,088,362	21.9
Oklahoma	3,751,351	2,851,510	284,332	7.6
South Carolina	4,625,364	3,164,143	1,302,865	28.2
Tennessee	6,346,105	5,056,311	1,068,010	16.8
Texas	25,145,561	20,389,793	3,070,440	12.2
Virginia	8,001,024	5,725,432	1,579,414	19.7
West Virginia	1,852,994	1,746,513	63,885	3.4
Washington, DC	601,723	251,265	310,379	51.6
Total South Pop.	114,555,744	85,485,949	22,389,594	
% South Population	37.1	35.3	55.6	

Source: U.S. Census Bureau, American Fact Finder

"Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2018."

Author calculation

<https://www2.census.gov/programs-surveys/popest/tables/2010-2018/state/asrh/PEPSR6H.pdf>

Table 2: Rural Hospitals¹ Closures by State in the South,² 2005-Present*

State	Closures	No. of Beds	% Total Closures
Alabama	7	180	4.1
Arkansas	3	143	1.8
Delaware			
Florida	5	157	2.9
Georgia	7	227	4.1
Kentucky	5	163	2.9
Louisiana	2	127	1.2
Maryland	1	3	0.6
Mississippi	6	290	3.5
North Carolina	11	361	6.5
Oklahoma	9	332	5.3
South Carolina	4	208	2.4
Tennessee	13	550	7.6
Texas	24	908	14.1
Virginia	3	115	1.8
West Virginia	5	228	2.9
Total South Closures	105	3,992	61.8
Total US Closures	170	6,406	

*Thru May, 2020

Source: North Carolina Rural Health Research Program
 Cecil G. Sheps Center for Health Services Research
 University of North Carolina at Chapel Hill

<https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/>

According to Byrd and Clayton (1992, p. 189) “the present black health crisis [disparity] is a continuum...Since colonial times, the racial dilemma that affected America's liberal democratic system also distorted medical relationships and institutions.” And while there are several studies on health care disparities by rurality and race/ethnicity in the United States (Henning-Smith et al., 2019; Hung et. al, 2017; Glass, 2020; Chicago Department of Public Health, 2019; Illinois Department of Public Health, 2018; Frakt, 2020; U.S. Institute of Medicine, 2003, Mead et al., 2008; Iglehart, 2018), none has focused exclusively on the impact of rural hospitals closures on health care disparity of African Americans in the South. This paper will bridge the gap in the literature. There is a persistent and common pattern of inferior African American health in the United States (Dressler, 1993; American Medical Association, 2005; Taylor, 2019). Researchers Riley, Hayes, and Ryan (2016) has pointed out, “the U.S. health care system does not perform well for Black Americans. On average, they experience worse access to care, lower quality of care, and poorer health outcomes than the nation as a whole. As a result, blacks are substantially more likely than whites to die early from health conditions considered at least partially treatable or preventable with timely and appropriate medical care.” Perhaps not in similar terms, health care scholars Michael Byrd and Linda Clayton have called the African American health inequity “established slaveocracy” (1992, p. 189). Figures 2-6 speak volumes and unequivocally illustrative of Black health care disparity in the United States.

The rest of the paper is organized as follows: Section II is the literature review. Section III discusses health disparity factors. Section IV concludes the paper.

¹ A rural hospital is any short-term, general acute, non-federal hospital that is a. not located in a metropolitan county OR b. is located in a rural-urban commuting area (RUCA) type 4 or higher OR c. is a Critical Access Hospital.

² Nearly two-thirds or 105 (62%) of the total 170 rural hospitals closures in the United States from 2005-May 2020 was in the South.

Figure 2: Preventable Death Rate for Blacks Is Double the Rate for Whites

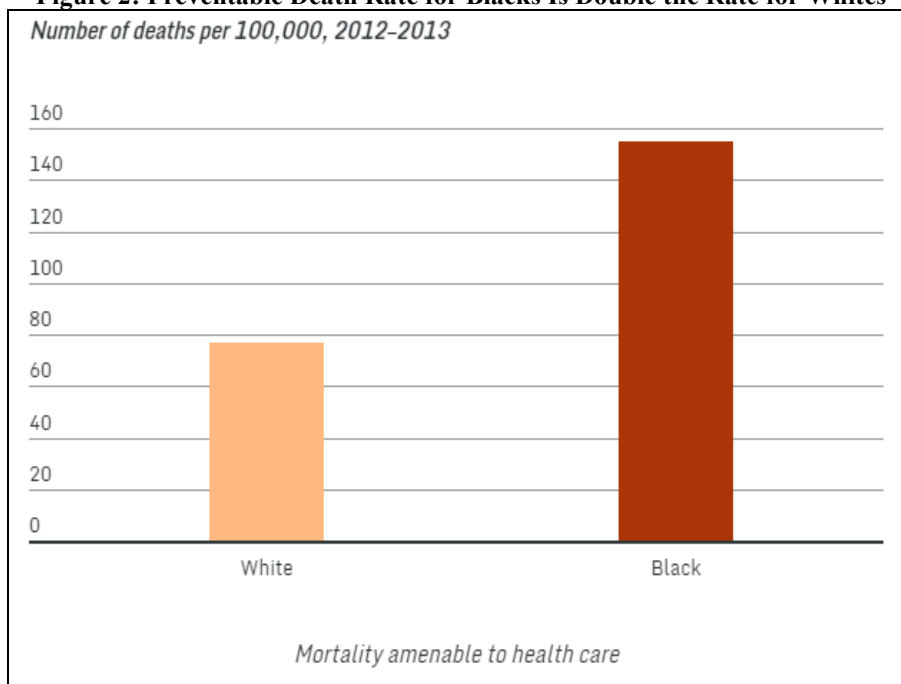
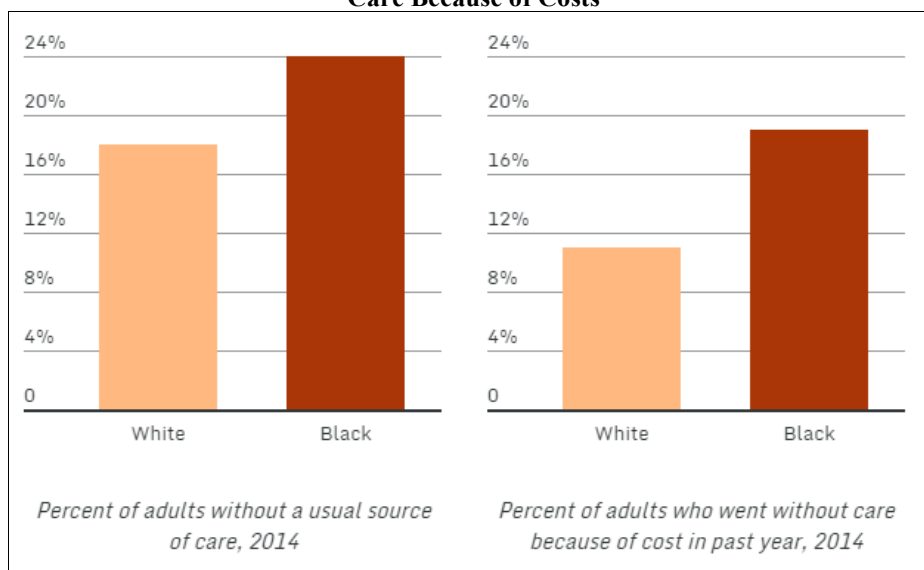


Figure 3: Blacks More Likely than Whites to Lack a Usual Source of Care & Forgo Care Because of Costs



Figures 2 and 3 adapted from Pamela Riley, Susan L. Hayes, and Jamie Ryan (2016, July 15). "Closing the Equity Gap in Health Care for Black Americans." *The Commonwealth Fund*. <https://www.commonwealthfund.org/blog/2016/closing-equity-gap-health-care-black-americans>.

Figure 4: Black Women Are More Likely to Die from Heart Disease, Cervical Cancer, and Pregnancy Related Causes than White Women

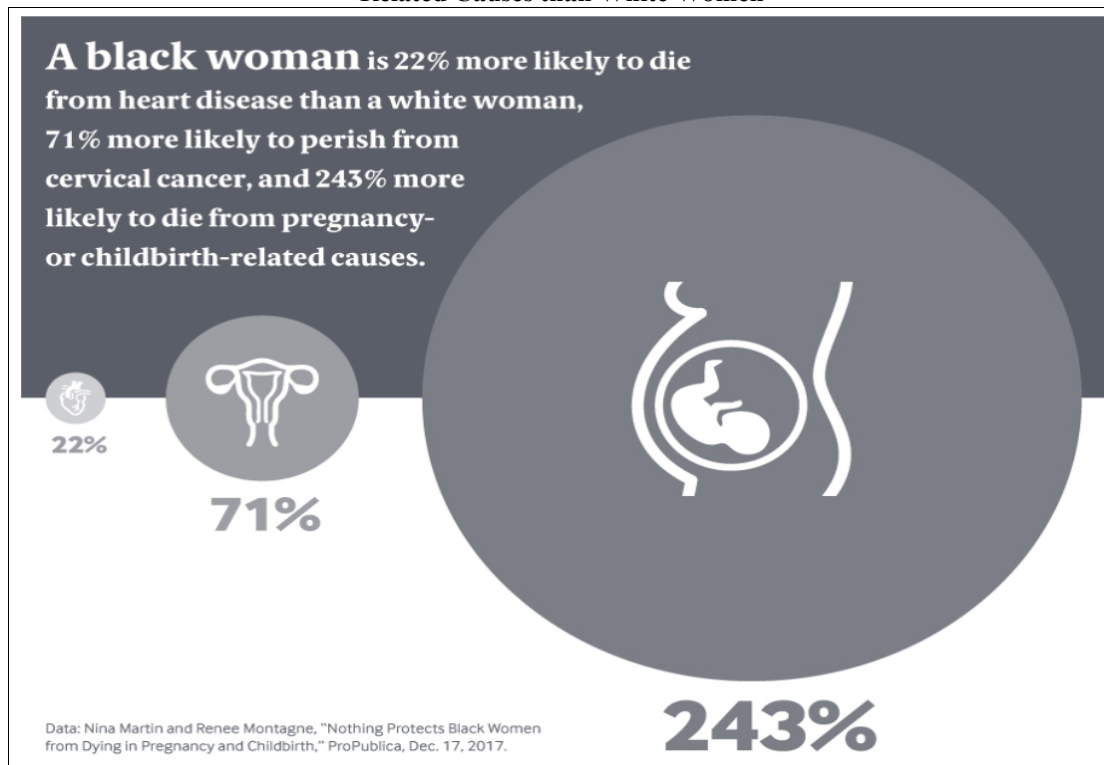
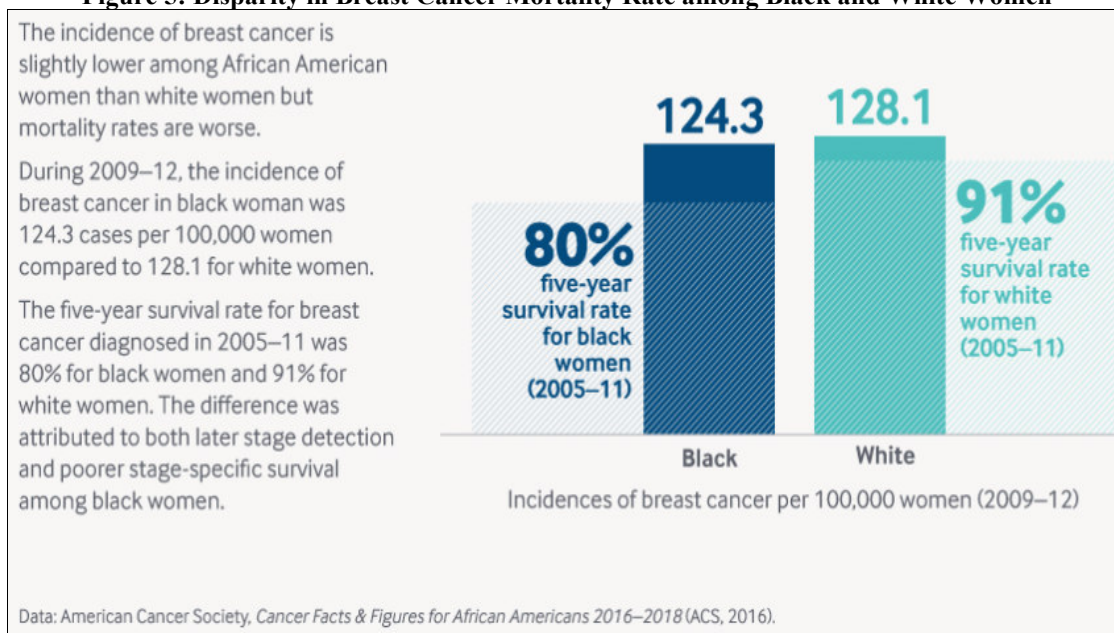


Figure 5: Disparity in Breast Cancer Mortality Rate among Black and White Women



Source: Figures 4 and 5 adapted from Martha Hostetter and Sarah Klein (2018). "In Focus: Reducing Racial Disparities in Health Care by Confronting Racism." The Commonwealth Fund. <https://www.commonwealthfund.org/publications/newsletter-article/2018/sep/focus-reducing-racial-disparities-health-care-confronting>.

Figure 6: Black Infants Mortality Rate is Twice the Rate for White Infants

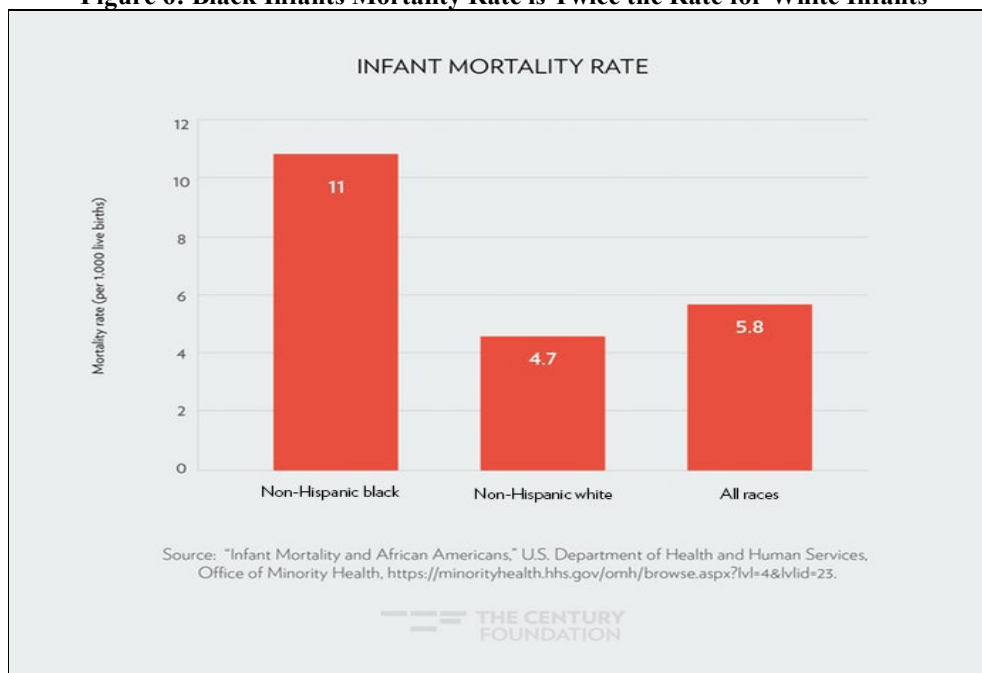


Figure 6 adapted from Jamila Taylor (2019, December 19). "Racism, Inequality, and Health Care for African Americans." The Century Foundation.

<https://tcf.org/content/report/racism-inequality-health-care-african-americans/>

II. Literature Review

On March 23, 2010, then President Barack Obama signed into law a landmark comprehensive health reform legislation, the Patient Protection and Affordable Care Act (PPACA). (PPACA is called the Affordable Care Act, ACA, for short). At the bill signing ceremony President Obama declared: "We are a nation that faces its challenges and accepts responsibilities...That is what makes us the United States of America...the core principle that everybody should have some basic security when it comes to their health care." While the ACA mandated national insurance coverage expansion has led to significant improvements in health care coverage and access (Cohen, Martinez, and Zammiti, 2016; Nwagbara and Ejigiri, 2018; Artiga, Orgera, and Damico, 2020) and "narrowed longstanding racial and ethnic disparities in health coverage" (Artiga, Orgera, and Damico, 2020), continued "racial/ethnic health disparities" remains one of "the most serious and shameful health care issue of the time" (Peterson et al., 2018). Even after allowing for ACA coverage gains, "those most at risk of being uninsured" and without access to care continue to be "persistently" higher among "low-income individuals, adults, and people of color" (Garfield, Orgera, and Damico, 2019, p. 1). Garfield, Orgera, and Damico (2019, p. 2) goes further to state: "As of 2018, most groups of color remained more likely to be uninsured compared to Whites. Moreover, despite the larger coverage increases for groups of color, the relative risk of being uninsured compared to Whites did not improve for some groups. For example, Blacks remained 1.5 times more likely to be uninsured than Whites from 2010 to 2018, and the Hispanic uninsured rate remained over 2.5 times higher than the rate for Whites."

According to the U.S. Department of Health and Human Services (USDHHS, hereafter, *Healthy People 2020*) "A health disparity is a health difference that is closely linked with social, economic, or environmental disadvantage." As such, the impact of rural hospitals closures on Black health in the South vis-à-vis in the United States will be analyzed in context of four "closely linked disadvantageous" factors: race, discrimination, costs, and poverty. The analytical context is important because health disparity analysis "without explanatory context can perpetuate harmful myths and misunderstandings that actually undermine the goal of eliminating health inequities" (Chowkwanyun and Reed, 2020). Williams and Jackson (2005) enjoined, "health and health disparities are embedded in larger historical, geographic, sociocultural, economic, and political contexts." Also, analytical context will allow us to "gain" what Matthew Desmond, Harvard sociologist, called "analytical leverage on the structures and dynamics of racial life in America" including health inequality. Furthermore, contextualization will help address health inequity pathology in public debate by researchers, analysts, public health officials, policymakers and, in the process "promote greater equality of life outcomes for all Americans" (Davis and Bangs, 2010), and "model a path forward towards broader racial equity...and perhaps America's desperate need for racial healing" (Matthew, 2018). The literature review is expanded continuation linking into health disparity factors beginning with race.

III. Health Disparity Factors

A. Race

Over the past several decades, the health of Americans has improved as evidenced by dramatic increases in life expectancy, declines in infant and maternal mortality, improved disease prevention, improved access to medical and prescription drug insurance and primary care providers, passage of Medicare and Medicaid, hospital desegregation (Williams and Rucker, 2000; Betancourt and Maina, 2004; USDHHS, 2018; 2014; 2020; Beardsley, 1987; Thomas, 2006). As one analyst put it, “America has enjoyed public health triumphs” (Greenblatt, 2020). However, challenges remain, especially, the disparity of care between African Americans and Whites. In 1985, the USDHHS released the *Report of the Secretary’s Task Force on Black and Minority Health*, a landmark report documenting the extent of health disparities among minorities in the United States. Also known as the *Heckler Report*, it called such disparities “stubborn” and “an affront both to our [America’s] ideals and to the ongoing genius of American medicine” (p. ix). Thirty years later in 2015, in a report to Congress, the Office of Minority Health of the USDHHS noted, “persistent and well-documented health disparities continue to exist among racial and ethnic minorities and underserved populations” (p.1). While there are other factors inducing Black health disparity, such as, “health care systems, health care providers, patients and utilization managers” (Betancourt and Maina, 2004), none compare to the problem of race (Franklin and Higginbotham, 2010; Woodward, 2002; Stampf, 1989; Equal Justice Initiative, 2013; King, 2011; Schulman et. al, 1999) because historically the pathogen of “racism is America’s original sin” and it is well and alive. Michelle Williams, Dean of Harvard University’s T.H. Chan School of Public Health, noted of the continuing pattern of health disparity based on race, “Racism is still pernicious, pervasive and cutting short the lives of black Americans to this day” (*The Economist*, June 17, 2020).

The American philosopher, Cornel West, in his 1993 memorable book “Race Matters,” argued pertinently that race still affects American life. Fifty years earlier in 1944, Gunnar Myrdal, sociologist and Nobel economist, called race “An American Dilemma,” the title of his landmark study on race relations in the United States. Health care of African Americans is no exception to the “dilemma.” “Race, and its by-product racism,” argued Harvard health researchers, Boyd and Clayton (2001, p. 11s) “are major factors in the U.S. health system and help define one of America’s health dilemmas...the conflict between what the U. S. preaches in its creed compared to what it practices.” They are not alone. Taylor (2019) “racism [race] is an important social factor leading to poor health outcomes and economic disadvantage among African Americans, because not only is it a stressor, leading to wear and tear on the body, but it also impacts who gets what in America, particularly health care.” Earlier, Boyd and Clayton (2001, p. 11s) postulated: “Racism in medicine, a problem with roots over 2,500 years old, is a historical continuum that continuously affects African-American health and the way they receive healthcare. Racism is, at least in part, responsible for the fact African Americans, since arriving as slaves, have had the worst health care, the worst health status, and the worst health outcome of any racial or ethnic group in the U.S.” In 2003, the U.S. Institute of Medicine’s landmark report “Unequal Treatment” further disclosed, “racial and ethnic disparities in health care do exist in the United States.” As a disadvantaged racial minority, Black health inherently has “unequal treatment” (Smedley, Stith, and Nelson, 2003) compared to White’s.

African Americans have endured racism within American society for hundreds of years (Taylor, 2019) with attendant harmful effects on their health. African Americans continue to have higher rates of morbidity and mortality than Whites for most indicators of health and avoidable hospitalizations (Williams and Rucker, 2000; USDHHS, 2017). Like a chronic condition that will not go away, African Americans health care “unequal treatment” has been historically prevalent and common in the United States (Dent, 1949; Daniel, 1970; Smith, 1998, 1999, 2005a and 2005b; Simkins v. Moses H. Cone Memorial Hospital, 1963; Reynolds, 1997b and 2004; Rogers, 2007). “In the United States” argued Wood (2020) Black “health disparities broadly reflect historical injustice” and “history of subpar treatment” (Paschal, 2020). Consequently, “Black Americans face worse access to care and poorer quality of care than the nation as a whole...the death rate from treatable health conditions for US blacks is twice the rate for US whites” (Riley, Hayes, and Ryan, 2016).

“Racism’s wear and tear,” argued Taylor (2019) “causes African Americans to die prematurely and experience chronic illnesses and mental health challenges at higher rates than white Americans.” Research indicate that racism has “a toxic effect” and is linked to health problems, but also the ability of African Americans to be healthy—both mentally and physically (University of Southern California, 2019). Chronic diseases linked to experiencing racism include heart attacks, neurodegenerative diseases, and metastatic cancer (University of Southern California, 2019). In addition, according to a recent study published in the journal *Psychoneuroendocrinology*, racist experiences trigger an increase in inflammation in African Americans, raising their risk of chronic illness (Thames, Irwin, and Breen, 2019). In earlier study, University of Michigan researchers, Geronimus et al. (2006) reached similar conclusion of the effect of racism on Black health. Using National Health and Nutrition Examination Survey data, measured across biological indicators associated with exposure to stressors, and ruling out poverty, the researchers propounded “weathering hypothesis” effect, meaning that African Americans experienced more health decline than White Americans because of exposure to stressors. They examined allostatic load scores - that is, the cumulative wear and tear on the body’s system because of the repeated

adaptation to stressors (Taylor, 2019; McEwen, 1998) for adults aged 18–64 years. African Americans were found to have higher allostatic load scores than Whites as a result of “living in a race-conscious society” (Geronimus et al., 2006, p. 826). Inextricably linked to racial bias is “distrust from a legacy of discrimination” (Frakt, 2020) and concomitant “effect of segregation on disparities” (Smith, 2005b), which as Richard Kahlenberg (2020) of the Century Foundation noted, “segregation is the fundamental social architecture that has supported white dehumanization of black people.”

B. Discrimination

Frakt (2020) “racial discrimination has shaped so many American institutions that perhaps it should be no surprise that health care is among them. Put simply, people of color receive less care — and often worse care — than white Americans.” Frakt is not alone. The literature indicate that because of racial discrimination African Americans tend to receive low quality of care for basic hospital services (Ayanian, 1999; Noonan, Velasco-Mondragon, and Wagner, 2016; Scott and Wilson, 2011; Gerend and Pai, 2008; Hostetter and Klein, 2018). Also, national data show that African Americans not only have worse health outcomes (compared to whites), but also, they are more likely than whites to die from preventable and treatable health conditions, such as, cardiovascular disease, diabetes, asthma, cancer and HIV/AIDS (Betancourt and Main, 2004; Bloche, 2004; Peterson, et al. 2018; Clements, et al. 2020; Zachary, et al, 2020). Also, Black Americans and low income areas are more likely to have unnecessary limb amputations and suffer medical malpractice than whites (Frakt, 2020; Stapleton et al., 2018; Stevens, et al. 2014; Feinglass et al., 2008; Goodney et al., 2014; Presser, 2020).

There are high levels of medical distrust linked to bad experiences and low quality of life among Blacks in the United States (Kinlock, et al., 2017; Alsan, Garrick, and Graziani, 2018; Gaston and Alleyne-Green, 2013). The infamous “Tuskegee Experiment,”¹ perhaps, represent the most egregious example of the reasons why African Americans distrust the American health care system. Byrd and Clayton (1992, p. 196) called the Tuskegee experiment “unethical experimentation on blacks.” The Tuskegee Experiment was organized by the U.S. Public Health Service in Tuskegee, Alabama, from 1932 to 1972. It conducted a study of the effects of untreated syphilis on 399 African American men with latent syphilis and 201 African American men without syphilis in the control group (U. S. Centers for Disease Control and Prevention, n.d.), for the purpose to “better understand the natural course of the disease”(Frakt, 2020). To achieve this aim and track the disease’s progression, the study participants were “promised free medical care,” “lied to about the study and provided sham treatments” (Frakt, 2020). Consequently, many of the subjects died, infected family members, went blind or insane or experienced other severe health problems due to their untreated syphilis (Frakt, 2020; Nix, 2019). “As a result of the Tuskegee Experiment,” wrote Nix (2019) “many African Americans developed a lingering, deep mistrust of public health officials” in the United States. In a 1997 apology to the study survivors and their families, then President Clinton called the Tuskegee study “America’s shameful past,” adding, “What was done cannot be undone... We can look at you in the eye and finally say on behalf of the American people, what the United States government did was shameful, and I am sorry” (The White House, 1997).

C. Cost

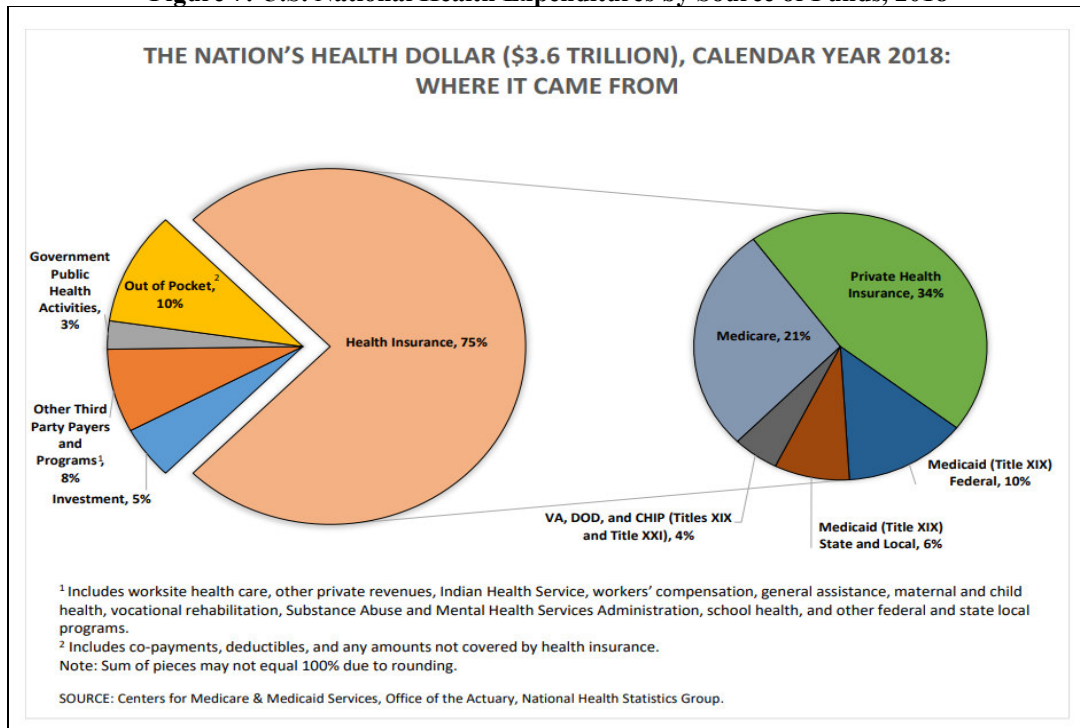
The cost of health care has long been a concern in the U.S., on both a national and a personal level (Hamel et al., 2016). The United States health care system is the most expensive in the world (Davis et. al., 2014), and cost remains the major impediment to health coverage in the United States (Nwagbara and Ejigiri, 2018). A brief overview of the cost problem will be in order. In the United States, nearly one in every six dollars spent goes to health care, yet, almost one in every six American lack coverage that would ensure access to medical care (Brauchli, 2010). A recent report indicated that 45% of uninsured adults said that they tried to get coverage but did not because it was too expensive (Tolbert, Orgera, and Singer, 2019), while 53% had problems paying household medical bills in the past year (Hamel, et al., 2016). Overall, 70% of Americans who have faced medical bill problems report that they cut back spending on food, clothing, and basic household items (Hamel et al., 2016.) At the same time, medical expenses have become a leading cause of personal bankruptcy in America (Kutilek, 2016).

A 2007 Harvard university seminal study found that medical expenses contributed to 62% of all bankruptcies in the United States, up 50% from 2001 (Himmelstein, Thorne, Warren, and Woolhandler, 2007). In addition, healthcare costs continued to grow faster than the economy and has maintained upward trend (Torio and Andrews, 2013). To put it in historical perspective, U.S. health spending as a share of the Gross Domestic Product (GDP) was 5.3% in 1960, 5.9% in 1965, 7.4% in 1970, 13.8% in 2000 (Rushefsky, 2013), reaching 17.7% in 2018 (Centers for Medicare & Medicaid Services (CMS) and National Health Expenditure Accounts (NHEA) n.d.). Latest report show that the United States spent \$3.6 trillion (17.7% GDP) on health care in 2018, or \$11,172 per person (CMS and NHEA, n.d., Hartman, et al. 2019), up 54% from \$7,269 in 2007 (Keehan, et al., 2016). America’s health care portion of the GDP of 17.7% is twice the average (8.9%) among developed nations

¹ The study is officially known as “Tuskegee Study of Untreated Syphilis in the Negro Male.”

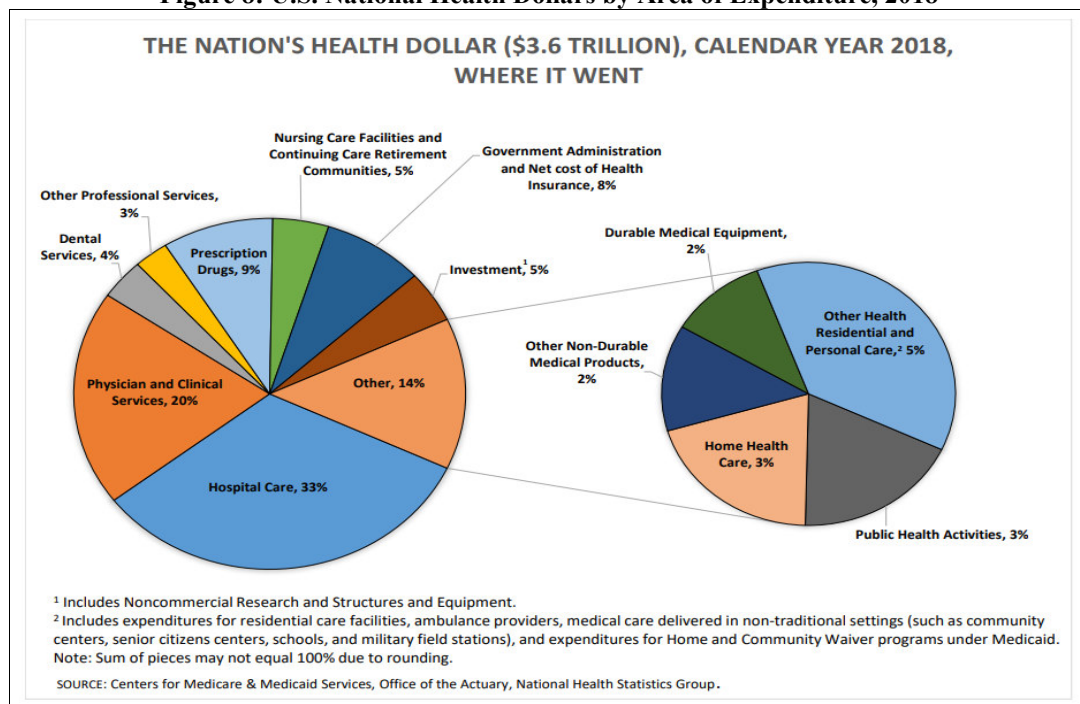
(Organization for Economic Cooperation and Development, 2016), and it is expected to rise to 20.1% in 2025 (Keehan, et al., 2016). Figures 7 and 8 show where America’s health dollars come from and where they go. The health care cost problem is highest in the African American community (Williams et al., 2010; Sohn, 2017; Taylor, 2019).

Figure 7: U.S. National Health Expenditures by Source of Funds, 2018



Source: USDHHS, Centers for Medicare & Medicaid Services
<https://www.cms.gov/files/document/nations-health-dollar-where-it-came-where-it-went.pdf>

Figure 8: U.S. National Health Dollars by Area of Expenditure, 2018

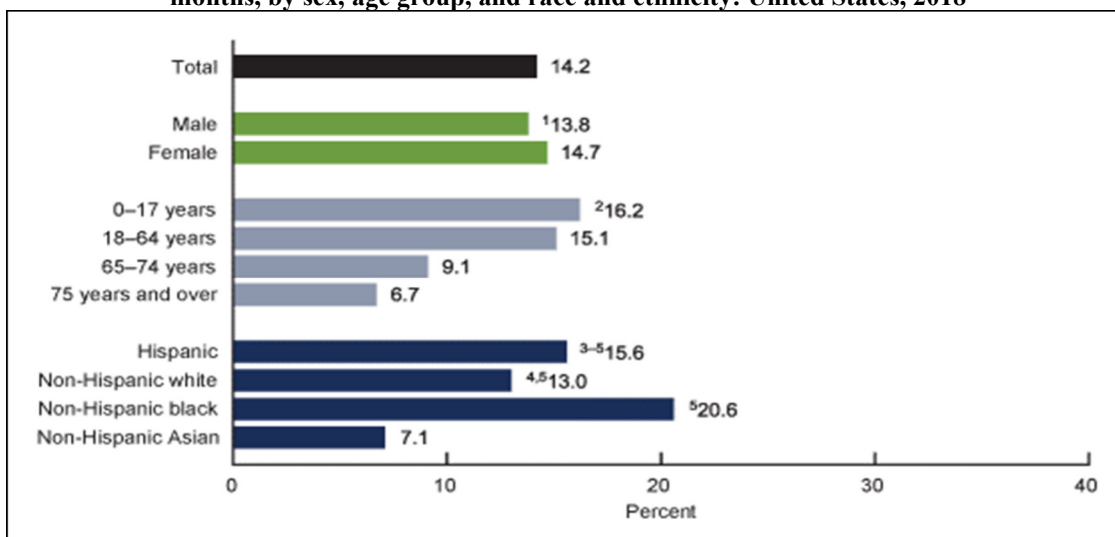


Source: USDHHS, Centers for Medicare & Medicaid Services
<https://www.cms.gov/files/document/nations-health-dollar-where-it-came-where-it-went.pdf>

While the ACA coverage expansions have expedited the progress toward universal coverage, the continued

high cost of health insurance means that access to affordable health care is still a challenge for many Americans—particularly African Americans (Taylor, 2019). According to *County Health Rankings & Roadmaps*, a collaborative program between the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation (health philanthropy), “Poverty and financial insecurity can have profound negative effects on mental and physical health outcomes. When families cannot access financial resources, the choices they can make about housing, food, medical care, and other key factors in living a long and healthy life are limited. Across and within counties, there are stark differences in these opportunities and the barriers to them disproportionately impact communities of color” (n.d.). Recent research (Figure 9) show that in 2018, the percentage of persons who were in families having problems paying medical bills was highest among non-Hispanic black persons (20.6%), followed by Hispanic (15.6%), non-Hispanic white (13.0%), and non-Hispanic Asian (7.1%) persons (Cha and Cohen 2020). By region, “The Burden of Medical Debt” report from the Kaiser Family Foundation and *The New York Times* found that people in the South [majority African Americans] have the highest difficulty paying medical bills (32%), while those in the Northeast [mostly whites] have the lowest (18%). And because African Americans tend to be poorer than other demographic groups on average (Taylor, 2019), even when health insurance is available, the coverage for them can be limited for a number of factors, including rising deductibles and cost-sharing, out-of-network charges, and insufficient financial assets to cover medical expenses (Hamel, et al., 2016). Closely tied to the cost problem is the “South’s stubborn approach to Medicaid Expansion” (Taylor, 2019) which have disproportionate impact on Black health coverage because majority of African Americans live in the South.

Figure 9: Percentage of persons who were in families having problems paying medical bills in the past 12 months, by sex, age group, and race and ethnicity: United States, 2018



¹Significantly different from females ($p < 0.05$).

²Significant cubic trend with age ($p < 0.05$).

³Significantly different from non-Hispanic white persons ($p < 0.05$).

⁴Significantly different from non-Hispanic black persons ($p < 0.05$).

⁵Significantly different from non-Hispanic Asian persons ($p < 0.05$).

NOTES: “Problems paying medical bills” is based on a positive response to the question, “In the past 12 months, did you or anyone in the family have problems paying or were unable to pay any medical bills? Include bills for doctors, dentists, hospitals, therapists, medication, equipment, nursing home, or home care.”

Source: Adapted from Amy E. Cha and Robin A. Cohen (February 2020). “Problems Paying Medical Bills, 2018.” National Center for Health Statistics. Data Brief No. 357.

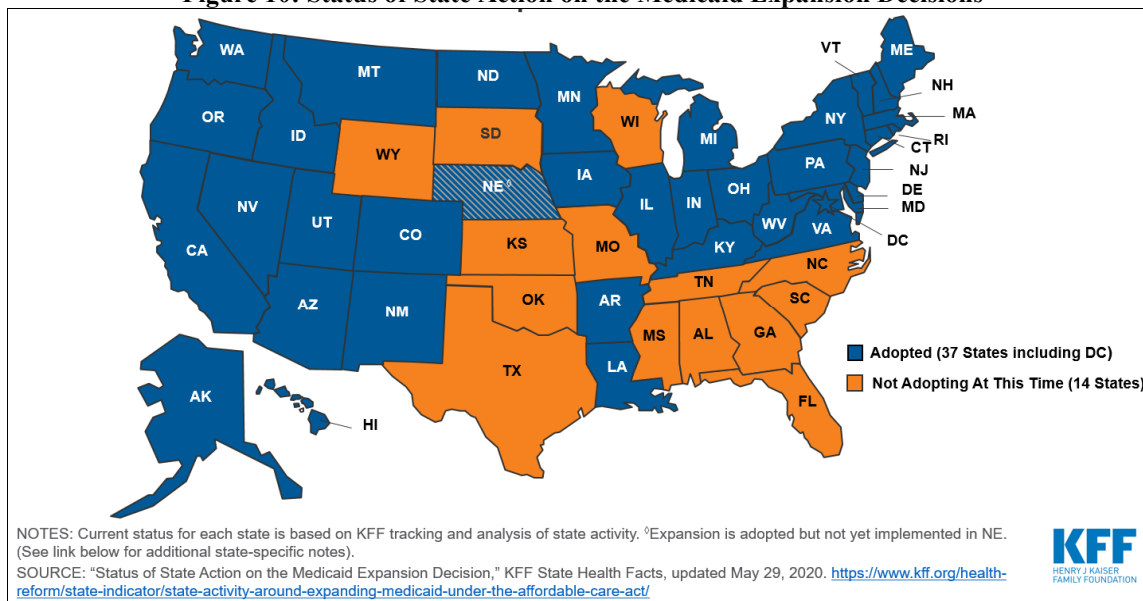
<https://www.cdc.gov/nchs/data/databriefs/db357-h.pdf>

Under the Affordable Care Act (ACA) protocol, Medicaid¹ eligibility was expanded for adults with incomes at or below 138 percent of the federal poverty level (FPL) (\$12,760 for an individual in 2020) (USDHHS, *HHS Poverty Guidelines*, 2020). Given that African Americans are disproportionately poor compared to other demographic groups, public health insurance programs such as Medicaid go a long way to address their health care needs (Taylor, 2029). In states that have not expanded Medicaid eligibility under the ACA (as of May 2020, 14 states had not expanded their programs) (Kaiser Family Foundation, 2020), African Americans and other people of color are more likely to fall into a “coverage gap”— meaning they earn too much to qualify for the traditional Medicaid program, yet not enough to be eligible for health coverage premium tax credits under marketplace plans

¹ Medicaid is a public health insurance program for low-income Americans. It was established in 1965 under Title XIX of the Social Security Act. Medicaid is jointly funded by states and the Federal government.

(Taylor, 2019; Garfield, Orgera, and Damico, 2020). The majority (9 out of 14) of states that have not adopted Medicaid expansion eligibility are located in the South (Figure 10). As a result, nine in ten people in the coverage gap reside in the South (Garfield, Orgera, and Damico, 2020). Put another way, “due to the failure to expand Medicaid, the South is now home to the nation’s sickest people, and is where health disparities between whites and people of color are the most pronounced” (Taylor, 2019). The cost problem is made worse by poverty.

Figure 10: Status of State Action on the Medicaid Expansion Decisions



Source: Adapted from Kaiser Family Foundation. “Status of State Medicaid Expansion Decisions: Interactive Map.” May 29, 2020.

<https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/>

D. Poverty

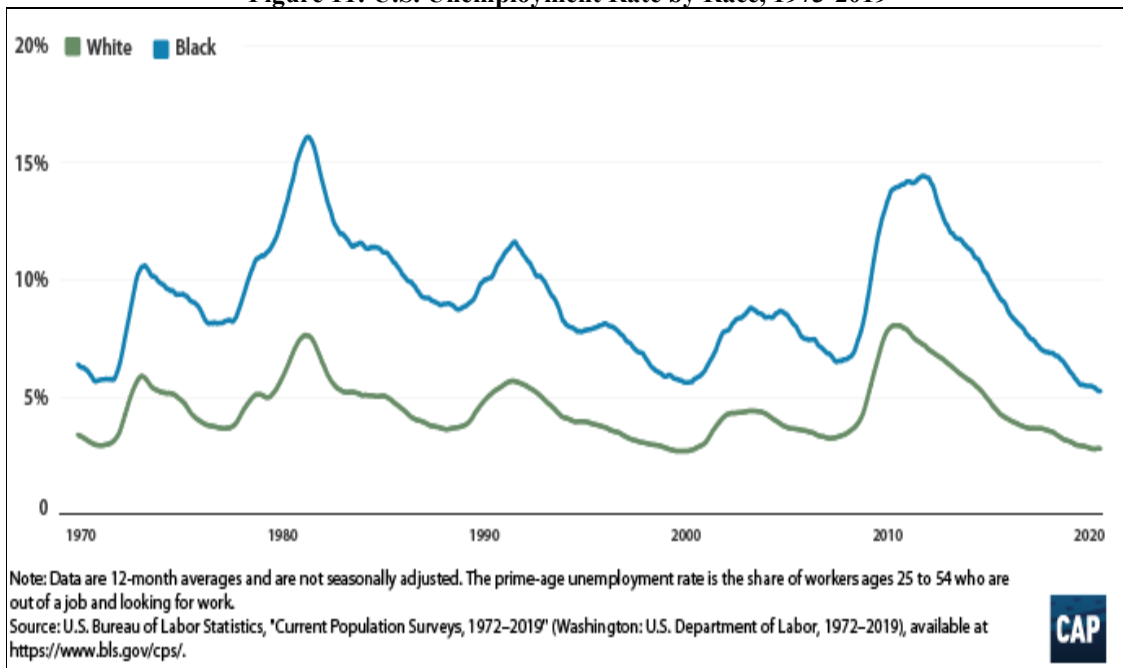
African Americans are one of the most economically disadvantaged populations in the United States (Bloome, 2014; Chetty et al. 2014; Hardy, Logan, and Parman, 2018; Fausset and Rojas, 2020). A 2019 study (Probst and Ajmal, 2019) from the University of South Carolina’s Rural and Minority Health Research Center found that rural African Americans are much more likely to live in counties with persistent poverty (41.3%), and in persistent child poverty counties (63.9%) than are white rural residents (8.9% and 20.9%, respectively), and more likely to live in regions that the federal government has designated as Health Professional Shortage Areas. Another study from the North Carolina Rural Health Research Program (NCRHRP) found that rural hospitals considered to be at high risk of financial distress serve communities that have statistically significant percentages of non-Whites and Blacks in particular; higher rates of unemployment, premature deaths, and worse health status (Thomas, Pink, and Reither, 2019), pointing to economic disadvantage and poor health.

Due to structural and systematic barriers, African Americans are more likely to be poor than white Americans (Taylor, 2019), more likely to be unemployed (Figure 11) (U.S. Bureau of Labor Statistics, 2020; Weller, 2019) and more likely to earn less than Whites (Figure 12) (Weller, 2019), pointing to unequal pay as a contributing factor in the gap in household income. Also, according to a recent key “Economic Well-Being of U.S. Households” report by the U.S. Federal Reserve (Central Bank), African Americans are more likely (19%) to suffer income volatility, meaning, unpredictable incomes and low savings than Whites (11%); African Americans were less likely to get a raise than Whites regardless of educational attainment. Furthermore, African Americans were more likely to encounter adverse credit application outcomes and negative perceptions (44%) compared to Whites (18%); African Americans are more likely (36%) than Whites (21%) to have no retirement savings, and are less likely (25%) to view their retirement savings as being on track compared to Whites (42%). Further perpetuating African American disproportionate poverty is the spatial distribution of Black population.

Studies indicate predominant African Americans regions and areas (e.g. South and urban counties and large metropolitan areas – Figure 13) are more likely to experience economic distress and low level of economic mobility compared to White neighborhoods in smaller metropolitan areas and in rural counties (Chetty et al. 2014; Hardy, Logan, and Parman, 2018). In addition, black neighborhoods are more likely to experience pollution and environmental risks than White’s, as in the Mississippi Delta with predominant African American population, where Black health suffer consequential of “densest concentration of petrochemical plants in the country” (Denne, 2020), leading to feared “Cancer Alley” phenomenon. As Shambaugh, Nunn, and Anderson (2019) suggested “this

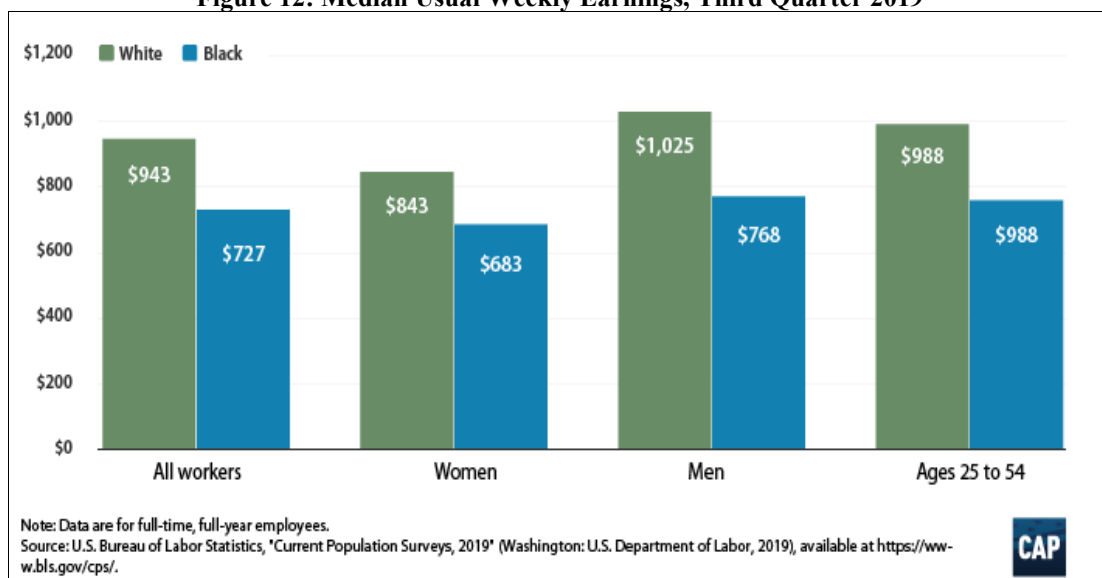
concentration of African-American population is not accidental,” influences include “slavery, Reconstruction, Jim Crow, discrimination and intimidation, lender behavior, white flight from cities, public policies, e.g. redlining or highway construction” (Hardy, Logan, and Parman, 2018; Berger, 2018).

Figure 11: U.S. Unemployment Rate by Race, 1973-2019



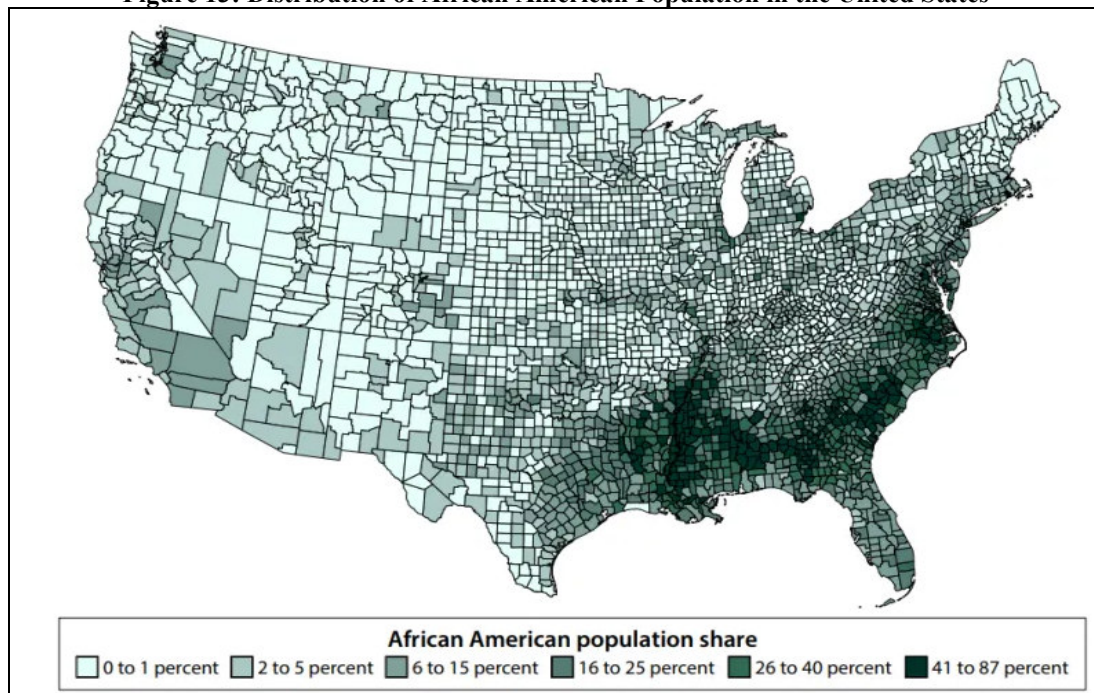
Source: Adapted from Christian E. Weller (2019, December 5). “African Americans Face Systematic Obstacles to Getting Good Jobs.” Center for American Progress.
<https://www.americanprogress.org/issues/economy/reports/2019/12/05/478150/african-americans-face-systematic-obstacles-getting-good-jobs/>.

Figure 12: Median Usual Weekly Earnings, Third Quarter 2019



Source: Adapted from Christian E. Weller (2019, December 5). “African Americans Face Systematic Obstacles to Getting Good Jobs.” Center for American Progress.
<https://www.americanprogress.org/issues/economy/reports/2019/12/05/478150/african-americans-face-systematic-obstacles-getting-good-jobs/>.

Figure 13: Distribution of African American Population in the United States

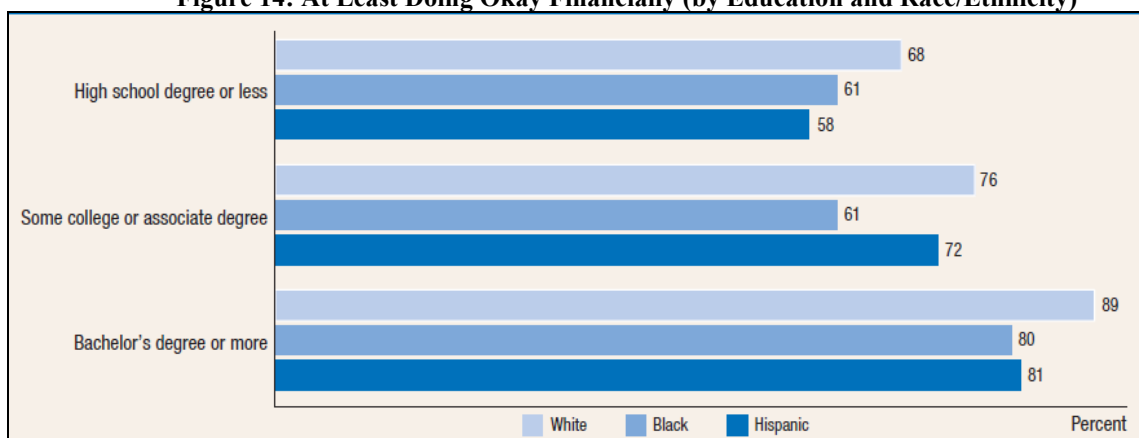


Source: Adapted from Bradley L. Hardy, Trevon D. Logan, and John Parman (2018).
 “The Historical Role of Race and Policy for Regional Inequality.” The Hamilton Project.
 Brookings Institution.

http://www.hamiltonproject.org/assets/files/PBP_HardyLoganParman_1009.pdf.

Across economic indicators, vast disparities exist between African Americans and whites that reflect the proportions noticed in health disparities (Taylor, 2019). Gap in household incomes between African Americans and Whites brings the disadvantage to sharp focus. And since household “income is a major factor in a family’s ability to access health care, it can constitute a significant share of household spending in terms of insurance premium costs and out-of-pocket costs” (Taylor, 2019). Income is central to most people’s economic well-being (U. S. Federal Reserve Board, 2019, p. 11). While “a large majority (Figure 14) of individuals report that, financially, they are doing okay or living comfortably, the gaps in economic well-being by race and ethnicity persist, even as overall well-being has improved” (U. S. Federal Reserve Board, 2019, p. 1). According to the U.S. Census Bureau in 2018 (latest), the average Black median household income was \$41,361 in comparison to \$70,642 for White households (Semega, Kollar, Creamer, and Mohanty, 2019, p. 2). (Figure 15). By region, median incomes were highest in the Northeast (\$70,113) and the West (\$69,520), followed by the Midwest (\$64,069) and the South (\$57,299) (Semega, Kollar, Creamer, and Mohanty, 2019, p. 2).

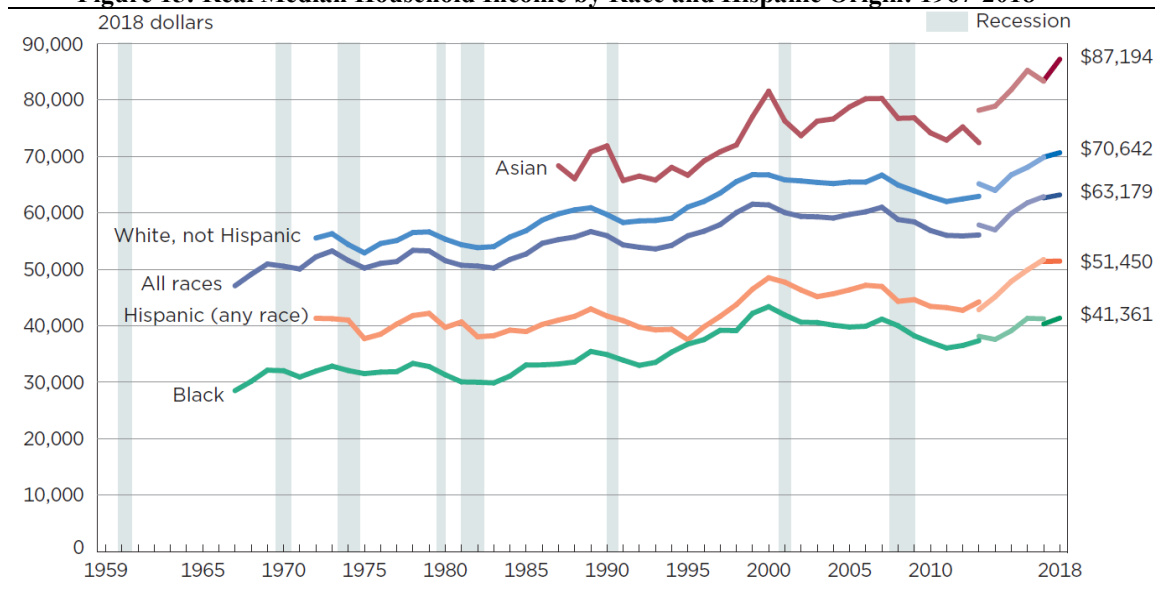
Figure 14: At Least Doing Okay Financially (by Education and Race/Ethnicity)



Source: Adapted from U. S. Federal Reserve Board (2019). *Report on the Economic Well-Being of U.S. Households in 2018*.

<https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>.

Figure 15: Real Median Household Income by Race and Hispanic Origin: 1967-2018



Source: Adapted from Jessica Semega, Melissa Kollar, John Creamer, and Abinash Mohanty (2019). U. S. Census Bureau, Current Population Reports, P60-266. “Income and Poverty in the United States: 2018.” Figure 2, p. 5. <https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf>.

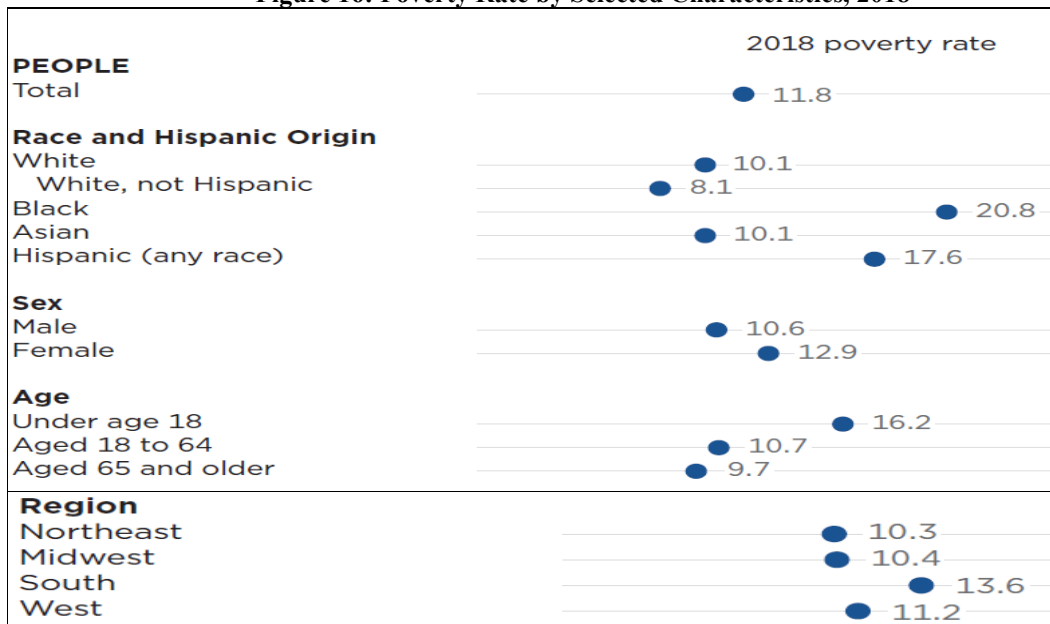
In 2018, the U.S. Census Bureau reported that 20.8% of Blacks in comparison to 10.1% of Whites were living at the poverty level (Semega, Kollar, Creamer, and Mohanty, 2019, p. 13). (Figure 16). That is, African American poverty rate was higher than for any other ethnic or racial group in the United States, and more than double that of Whites. By region, poverty was highest in the South (13.6%) followed by West (11.2%), Midwest (10.4%), and Northeast (10.3%) (Semega, Kollar, Creamer, and Mohanty, 2019, p. 13). In 2018, according to the U.S. Census Bureau, 55.4% of Blacks in comparison to 69.3% of Whites used private¹ health insurance (Berchick, Barnett, and Upton, 2019, p.14). Also in 2018, 41.2% of Blacks compared to 33.8% of Whites were enrolled in public² health insurance or Medicaid. During the same period, 9.7% of Blacks in comparison to 5.4% of non-Hispanic Whites were uninsured³ (Berchick, Barnett, and Upton, 2019, p.14). The five states (Texas, Oklahoma, Mississippi, Georgia, and Florida) in the United States with the highest percentage (12 percent or more) of people without health insurance coverage are located in the South, consequently, the South has the majority of the uninsured, and is where health gap between African Americans and Whites are most glaring (Figure 17). Linked to poverty is the wealth gap between African Americans and Whites.

¹ Private health insurance includes coverage provided through an employer or union, coverage purchased directly, or TRICARE (Berchick, Barnett, and Upton, 2019, p.14).

² Public health insurance coverage includes Medicaid and Children’s Health Insurance Program (CHIP), Medicare, CHAMPVA (Civilian Health and Medical Program of the Department of Veteran Affairs) and care provided by the Department of Veteran Affairs and the military (Berchick, Barnett, and Upton, 2019, p.14).

³ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year (Berchick, Barnett, and Upton, 2019, p.14).

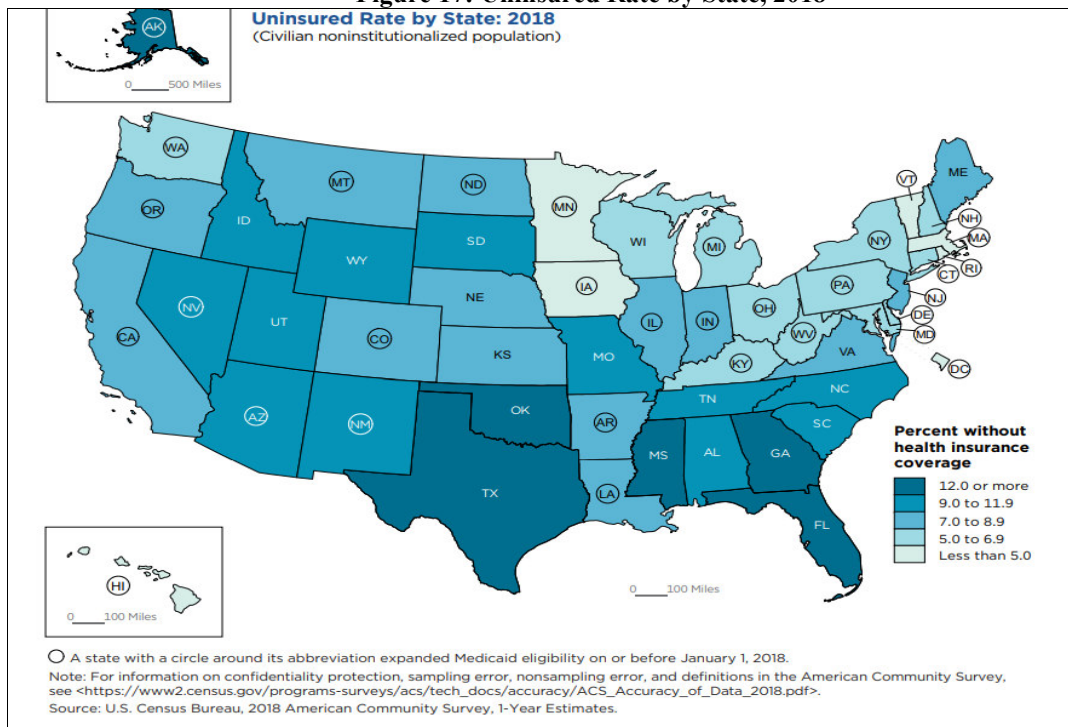
Figure 16: Poverty Rate by Selected Characteristics, 2018



Source: Adapted from Jessica Semega, Melissa Kollar, John Creamer, and Abinash Mohanty (2019). U. S. Census Bureau, Current Population Reports, P60-266. "Income and Poverty in the United States: 2018." Figure 8, p. 13.

<https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf>.

Figure 17: Uninsured Rate by State, 2018



Source: Adapted from Edward R. Berchick, Jessica C. Barnett, and Rachel D. Upton. U. S. Census Bureau, Current Population Reports, P60-267(RV). "Health Insurance Coverage in the United States: 2018." Figure 8, p. 18.

<https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-267.pdf>.

Wealth is the measure of an individual's or family's financial net worth and it provides several opportunities for American families (Hanks, Solomon, and Weller, 2018). However, for African Americans, their wealth accumulation and worth pale enormously in comparison to Whites – in 2016 the median wealth of White families (\$142,180) was ten times more that of African American families (\$13,460). (Table 2). This gap has widened in

recent years especially since the Great Recession. Black families lost more wealth during and after the financial and economic crisis of 2007 to 2009. (Figure 18). This resulted in a widening racial wealth gap over the past decade. In addition, research indicate that the wealth gap impacts African Americans across the income and education spectrum, making it harder for them to own homes or build retirement savings (Hanks, Solomon, and Weller, 2018; Weller, 2019; Taylor, 2019). Moreover, while African Americans on average have less total debt than whites, the wealth gap means they are more likely to have costly, high-interest debt obligations (Taylor, 2019). High health care costs and unexpected medical bills can adversely affect a Black family’s ability to reduce or eliminate debt, and ultimately the ability to create wealth—which could affect a family for generations (Taylor, 2019).

Table 2: Wealth Inequality from 1989 to 2016, by Race

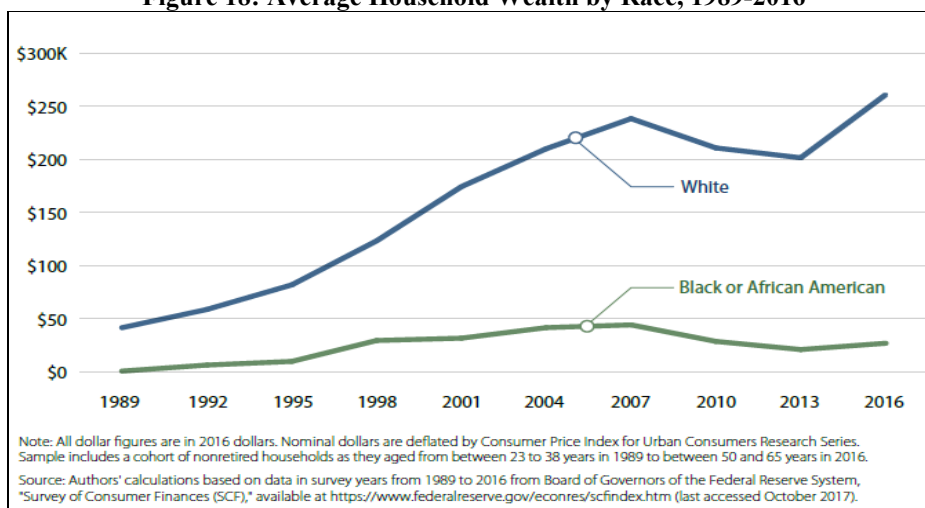
	White	Black or African American	Ratio of black or African American to white household median wealth
1989	\$129,771	\$7,090	5.5%
1992	\$106,494	\$13,417	12.6%
1995	\$112,752	\$19,622	17.4%
1998	\$129,014	\$24,198	18.8%
2001	\$162,447	\$28,316	17.4%
2004	\$169,338	\$24,927	14.7%
2007	\$188,756	\$25,841	13.7%
2010	\$126,063	\$17,133	13.6%
2013	\$124,258	\$10,115	8.1%
2016	\$142,180	\$13,460	9.5%

Note: Note: All dollar figures are in 2016 dollars. Nominal dollars are deflated by Consumer Price Index for Urban Consumers Research Series. Sample includes all non-retired households 25 years and older.

Source: Adapted from Angela Hanks, Danyelle Solomon, Christian E. Weller (2018). “Systematic Inequality: How America’s Structural Racism Helped Create the Black-White Wealth Gap.” Center for American Progress.

<https://cdn.americanprogress.org/content/uploads/2018/02/20131806/RacialWealthGap-report.pdf>.

Figure 18: Average Household Wealth by Race, 1989-2016



Note: Note: All dollar figures are in 2016 dollars. Nominal dollars are deflated by Consumer Price Index for Urban Consumers Research Series. Sample includes all non-retired households 25 years and older.

Source: Adapted from Angela Hanks, Danyelle Solomon, Christian E. Weller (2018). “Systematic Inequality: How America’s Structural Racism Helped Create the Black-White Wealth Gap.” Center for American Progress.

<https://cdn.americanprogress.org/content/uploads/2018/02/20131806/RacialWealthGap-report.pdf>.

IV: Conclusion and Policy Recommendations

This paper examined the effect of rural hospitals closures on African Americans health in the United States, particularly in the South, compared to Whites. The paper find that rural hospitals closures in the United States not only has disproportionate impact on the health of African Americans, but also, it has widened the gap in health disparity between African Americans and Whites. In addition, there is a strong correlation between African American health disparity and factors of race, discrimination, costs, and poverty. The findings are consistent with the body of research in the empirical literature as has been quoted extensively in the paper. Furthermore, the findings will be important to health care policymakers, administrators, providers, educators, analysts, and students as well as advocates for underserved populations towards policy palliatives for health disparity.

African American health disparity problem is a long-standing national crisis in America. In fact, it is inherent part of what Gunnar Myrdal, sociologist and “race crisis analyst,” harped on in his 1944 classic study “An American Dilemma,” the conflict between what White America preach and their betrayal in the daily lives of African Americans. Byrd and Clayton (1992, p. 197) added, “being black will continue to translate into health disadvantage in this system [America].” While the present African American health care crisis is a continuum, America must grapple with the fact that it can no longer pretend to be a first-class nation as long as it has large groups of second-class health citizens (Byrd, 1990), or, what the National Association of Community Health Centers called “medically disenfranchised” (2007). As the U.S. Institute of Medicine warned in its 2003 seminal report, “*Unequal Treatment*,” America must “*Confront Racial and Ethnic Disparities in Health Care*.”

In light of the foregoing, a new paradigm that will create a “level playing field” of health care for all Americans must be pursued. Policy recommendations should be directed at the following measures towards eliminating health disparities among racial and ethnic minorities with attestation from noted experts, authors, organizations, and laws:

- Push for Medicaid expansion in states that have not adopted Medicaid expansion (Affordable Care Act, 2010).
- Control health care costs and offer financial assistance/subsidy/tax credit to qualified individuals to minimize out-of-pocket costs for a doctor visit or hospital stay including deductibles, copayments, and coinsurance (Affordable Care Act, 2010; Kaiser Family Foundation, 2016).
- Know that “Racism is a public health crisis” (Michelle Williams, T.H. Chan School of Public Health, Harvard University). <https://www.hsph.harvard.edu/news/racism-is-a-public-health-crisis/>.
- Allocate more funding in safety nets, low income, underserved, and vulnerable population health programs e.g. Medicaid and CHIP, Medicare (ACA, 2010).
- Black physician leadership will be necessary if African American health disparity is to be resolved (Byrd and Clayton, 1992, p. 189; deShazo, Smith, and Skipworth, 2014, Part 1 and 2; Thomas, 2006; Smith 2005, deShazo and Parker, 2018).
- Continue to monitor and reduce disparities - the Agency for Healthcare Research and Quality (AHRQ) publishes an annual national report highlighting disparities in health care quality by race/ethnicity, age, and sex; the Office of Minority Health is tasked with developing policies and programs to eliminate disparities among racial and ethnic minority groups; the Health Resources and Services Administration (HRSA) is tasked with providing grants to states, local governments, and community-based organizations for care and treatments for low-income, uninsured, or other vulnerable populations; the Indian Health Service serves American Indians and Alaska Natives who belong to more than 500 federally recognized tribes in 37 states, and the service is fully funded through the federal government (Tikkanen, et al., 2020).
- “Think Cultural Health” - provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs (USDHHS, Office of Minority Health, “The National CLAS Standards”).
- Support Community Health Centers (CHCs) - CHCs help to improve access to care for low income, underserved, and vulnerable populations. CHCs are required to be located in medically underserved rural and urban areas; serving those with limited access to more mainstream health care and involve the community in both the management and governance of the center (Johns Hopkins University, “Definitions,” Bloomberg School of Public Health, n.d.). <https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-primary-care-policy-center/definitions.html>.
- Boost primary care – according to experts, “primary care is the means by which the two main goals of a health services system, optimization and equity of health status, are approached.” Primary care provides the entry into the system for all new needs and problems, provides person-focused (not disease-oriented)

care, and coordinates or integrates care, regardless of location and provider (Johns Hopkins University, “Definitions,” Bloomberg School of Public Health, n.d.).

<https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-primary-care-policy-center/definitions.html>.

- Strengthen Federal health programs that support rural residents, such as, Essential Communities Providers (ECP), Federally Qualified Health Centers (FQHCs), and Rural Health Centers (RHCs), Health Professional Shortage Area (HPSA), enhanced Medicare and Medicaid reimbursement incentives for designated hospitals/clinics (Thomas, Pink, and Reiter (2019).
 - Strengthen Indian Health Service Scholarship Program – offers students of American Indian or Alaska Native descent scholarships for training in health professions and allied health professions in exchange for service obligations (*The Commonwealth Fund*, “State and Federal Efforts to Enhance Access to Basic Health Care.” n.d. <https://www.commonwealthfund.org/publications/newsletter-article/state-and-federal-efforts-enhance-access-basic-health-care>).
 - Enhance National Health Service Corps Loan Repayment and Scholarship Programs – provides scholarships and educational loan repayment to primary care health professionals and students primary care physicians, dentists, nurse practitioners, certified nurse-midwives, or physician assistants who practice in underserved areas (*The Commonwealth Fund*, “State and Federal Efforts to Enhance Access to Basic Health Care.” n.d. <https://www.commonwealthfund.org/publications/newsletter-article/state-and-federal-efforts-enhance-access-basic-health-care>).
- See also Health Resources & Services Administration (HRSA), Bureau of Health Workforce. <https://bhw.hrsa.gov/>.
- Encourage telemedicine - Telemedicine involves the use of conference calls as well as videoconferencing and other Web-based technologies for consultations, medical procedures, or examinations. It can enhance access to care for patients in isolated rural areas or other areas where they face challenges in accessing care (*The Commonwealth Fund*, “State and Federal Efforts to Enhance Access to Basic Health Care.” n.d.). <https://www.commonwealthfund.org/publications/newsletter-article/state-and-federal-efforts-enhance-access-basic-health-care>.
 - Improve access to behavioral and mental health treatment (*Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act of 2018; 21st Century Cures Act of 2016; Comprehensive Addiction and Recovery Act (CARA) of 2016* (USDHHS - Substance Abuse and Mental Health Services Administration (SAMHSA), “Laws and Regulations”). <https://www.samhsa.gov/about-us/who-we-are/laws-regulations>.
- Substance Abuse Prevention and Treatment Block Grant (SABG) and Community Mental Health Services Block Grant (MHBG)* (USDHHS - Substance Abuse and Mental Health Services Administration (SAMHSA), “Substance Abuse and Mental Health Block Grants”). <https://www.samhsa.gov/grants/block-grants>.

References

- Alsan, M., Garrick, O., and Graziani, G. (2018, September). Does Diversity Matter for Health? Experimental Evidence from Oakland. Stanford Institute for Economic Policy Research (SIEPR). Working Paper No. 18-030. <file:///C:/Users/unwagbar/Downloads/18-030.pdf>.
- American Medical Association. (2005, February 23). Health Disparities Experienced by Black or African Americans—United States. *Journal of American Medical Association*, 293(8), 922-923. doi:10.1001/jama.293.8.922. <https://jamanetwork.com/journals/jama/fullarticle/200424>.
- Artiga, S., Orgera, K., and Damico, A. (2020, March). Changes in Health Coverage by Race and Ethnicity since the ACA, 2010-2018. Kaiser Family Foundation. <https://www.kff.org/disparities-policy/issue-brief/changes-in-health-coverage-by-race-and-ethnicity-since-the-aca-2010-2018/>.
- Ayanian, J.Z., Weissman, J.S., Chasan-Taber, S., and Epstein, A.M. (1999). Quality of Care by Race and Gender for Congestive Heart Failure and Pneumonia. *Medical Care*, 37(12), 1260-1269. <https://www.ncbi.nlm.nih.gov/pubmed/10599607>.
- Beardsley, E. H. (1986). Goodbye to Jim Crow: The Desegregation of Southern Hospitals, 1945–70. *Bulletin of the History of Medicine*, 60, 367–86.
- Beardsley, E. H. (1987). *A History of Neglect: Health Care for Blacks and Mill Workers in the Twentieth-Century South*. Knoxville: University of Tennessee Press.
- Berchick, E.R., Barnett, J. C., and Upton, R. D. (2019). *Health Insurance Coverage in the United States: 2018*. U. S. Census Bureau, Current Population Reports, P60-267 (RV).

- <https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-267.pdf>.
- Berger, T. (2018). Places of Persistence: Slavery and the Geography of Intergenerational Mobility in the United States. *Demography*, 55, 1547-1565.
- Betancourt, J. R., and Maina, A. W. (2004). The Institute of Medicine report "Unequal Treatment": Implications for Academic Health Centers. *Mt. Sinai Journal of Medicine*, 71(5), 314-21.
<https://www.ncbi.nlm.nih.gov/pubmed/15543432>.
- Bloche, M. G. (2004, April 8). Health Care Disparities — Science, Politics, and Race. *The New England Journal of Medicine*, 350:1568-1570. DOI: 10.1056/NEJMs045005.
<https://www.nejm.org/doi/pdf/10.1056/NEJMs045005>.
- Bloome, D. (2014). Racial Inequality Trends and the Intergenerational Persistence of Income and Family Structure. *American Sociological Review*, 79(6), 1196-1225.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4598060/>.
- Brauchli, M. (2010). *Landmark – America’s New Health Care Law and What It Means for Us All*. Foreword. *The Washington Post*. New York: Thorndike Press.
- Byrd, W. M., and Clayton, L.A. (2001, March). Race, Medicine, and Health Care in the United States: A Historical Survey. *Journal of the National Medical Association*, 93(3), 11S-34S.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2593958/pdf/jnma00341-0013.pdf>.
- Byrd, W. M., and Clayton, L.A. (1992, February). An American Health Dilemma: A History of Blacks in the Health System. *Journal of the National Medical Association*, 84(2), 189-200.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2637749/>.
- Byrd, W. M. (1990). Race, Biology, and Health Care: Reassessing a Relationship. *Journal of Health Care for the Poor and Underserved*, 1(3), 278-296.
- Centers for Medicare & Medicaid Services (n.d.). *National Health Expenditure Data. Historical*. National Health Expenditure Accounts (NHEA).
<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical>.
- Cha, A. E., and Cohen, R. A. (2020, February). Problems Paying Medical Bills, 2018. National Center for Health Statistics. Data Brief No. 357.
<https://www.cdc.gov/nchs/data/databriefs/db357-h.pdf>.
- Chetty, R., Hendren, N., Kline, P., and Saez, E. (2014). Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States. *The Quarterly Journal of Economics*, 129(4), 1553-1623.
- Chicago Department of Public Health. (2019). *CDPH Data Report: Maternal Morbidity and Mortality in Chicago*. City of Chicago.
https://www.chicago.gov/dam/city/depts/cdph/statistics_and_reports/CDPH-002_MaternalMortality_Databook_r4c_DIGITAL.pdf.
- Chowkwanyun, M., and Reed, A. L. (2020, May 6). Racial Health Disparities and Covid-19 — Caution and Context. *The New England Journal of Medicine*, DOI:10.1056/NEJMp2012910.
https://www.nejm.org/doi/full/10.1056/NEJMp2012910?query=featured_home.
- Clements, J. M. et al. (2020, January). Disparities in Diabetes-related Multiple Chronic Conditions and Mortality: The Influence of Race. *Diabetes Research and Clinical Practice*, 159:107984. doi: 10.1016/j.diabres.2019.107984. Epub 2019 Dec 15.
<https://www.ncbi.nlm.nih.gov/pubmed/31846667>.
- Cohen, R. A., Martinez, M. E., and Zammitti, E. P. (2016, September 7). Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, January – March 2016. National Center for Health Statistics.
<http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf>.
- County Health Rankings & Roadmaps. (n.d.). Health & Wealth: Using Data to Address Income Inequality.
<https://www.countyhealthrankings.org/learn-from-others/webinars/health-wealth-using-data-to-address-income-inequality>.
- Daniel, P. (1970, August). Black Power in the 1920s: The Case of Tuskegee Veterans Hospital. *The Journal of Southern History*, 36(3), 368-388
- Davis, L.E., and Bangs, R. (2010). Introduction. In *Race in America: Restructuring Inequality*. Larry E. Davis and Ralph Bangs (Eds.). University of Pittsburgh. Center on Race and Social Problems, School of Social Work. Conference Proceedings, June 3-6.
http://www.crsp.pitt.edu/sites/default/files/RaceRelationsReport_001.pdf
- Davis, K., Stremikis, K., Squires, D., and Schoen, C. (2014). Mirror, Mirror on the Wall – How the Performance of the U.S. Health Care System Compares Internationally. *The Commonwealth Fund*.
<http://www.commonwealthfund.org/~media/files/publications/fund->

- [report/2014/jun/1755_davis_mirror_mirror_2014.pdf](#).
- Denne, L. (2020, June 21). In 'Cancer Alley,' a Renewed Focus on Systemic Racism is Too Late. *NBCNews*.
<https://www.nbcnews.com/science/science-news/cancer-alley-renewed-focus-systemic-racism-too-late-n1231602>.
- Dent, A. W. (1949). Hospital Services and Facilities Available to Negroes in the United States. In *The Health Status and Health Education of Negroes in the United States*. *The Journal of Negro Education*, 18(3), 326-332).
- deShazo, R.D., Smith, R., and Skipworth, L. B. (2014). Black Physicians and the Struggle for Civil Rights: Lessons from the Mississippi Experience. Part 1: The Forces for and Against Change. *The American Journal of Medicine*, 127, 920-925.
[https://www.amjmed.com/article/S0002-9343\(14\)00483-5/pdf](https://www.amjmed.com/article/S0002-9343(14)00483-5/pdf).
- deShazo, R.D., Smith, R., and Skipworth, L. B. (2014). Black Physicians and the Struggle for Civil Rights: Lessons from the Mississippi Experience. Part 2: The Forces for and Against Change. *The American Journal of Medicine*, 127 (11), 1033-1040.
<https://www.sciencedirect.com/science/article/abs/pii/S0002934314004926>.
- deShazo, R.D., and Parker, S.B. (2018). The Underappreciated Doctors of the American Civil Rights Movement: Theodore Roosevelt Mason Howard. In *The Racial Divide in American Medicine: Black Physicians and the Struggle for Justice in Health Care*. Richard D. deShazo (Ed.). Jackson: University Press of Mississippi.
- Desmond, M. (n.d.). *Race in America*. <https://scholar.harvard.edu/mdesmond/race-america>.
- Dressler, W. W. (1993). Health in the African American Community: Accounting for Health Inequalities. *Medical Anthropology Quarterly*, 7(4), 325-345.
- Equal Justice Initiative. (2013). Slavery in America: The Montgomery Slave Trade.
<https://eji.org/wp-content/uploads/2019/10/slavery-in-america-report.pdf>.
- Fausset, R., and Rojas, R. (2020, April 9). Across the South, 'Walking a Tightrope' While Awaiting the Worst. *The New York Times*.
<https://www.nytimes.com/2020/04/09/us/coronavirus-american-south.html>.
- Feinglass, J. et al. (2008). A Census-Based Analysis of Racial Disparities in Lower Extremity Amputation Rates in Northern Illinois, 1987-2004. *Journal of Vascular Surgery*, 47(5), 1001-1007.
<https://pubmed.ncbi.nlm.nih.gov/18358670/>.
- Frakt, A. (2020, January 13). Race and Medicine: The Harm That Comes From Mistrust. *The New York Times*.
<https://www.nytimes.com/2020/01/13/upshot/race-and-medicine-the-harm-that-comes-from-mistrust.html>.
- Franklin, J. H., and Higginbotham, E. (2010). *From Slavery to Freedom: A History of African Americans*. 9th Edition. McGraw-Hill.
- Gaston, G.B., and Alleyne-Green, B. (2013). The Impact of African Americans' Beliefs About HIV Medical Care on Treatment Adherence: A Systematic Review and Recommendations for Interventions. *AIDS and Behavior*, 17, 31-40.
<https://link.springer.com/article/10.1007/s10461-012-0323-x>.
- Garfield, R., Orgera, K., and Damico, A. (2019, January). The Uninsured and the ACA: A Primer. Kaiser Family Foundation.
<http://files.kff.org/attachment/The-Uninsured-and-the-ACA-A-Primer-Key-Facts-about-Health-Insurance-and-the-Uninsured-amidst-Changes-to-the-Affordable-Care-Act>.
- Garfield, R., Orgera, K., and Damico, A. (2020, January 14). The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid. Kaiser Family Foundation.
<https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/>.
- Gerend, M. A., and Pai, M. (2008). Social Determinants of Black-White Disparities in Breast Cancer Mortality: A Review. *Cancer Epidemiology Biomarkers & Prevention*, 17(11), 2913-2923.
<https://cebp.aacrjournals.org/content/17/11/2913.full-text.pdf>.
- Geronimus, A. T., Hicken, M., Keene, D., and Bound, J. (2006). "Weathering" and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States. *American Journal of Public Health*, 96(5), 826-833.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470581/pdf/0960826.pdf>.
- Glass, K. (2020, May 5). When Maternity Wards in Black Neighborhoods Disappear. *The New York Times*.
<https://www.nytimes.com/2020/05/05/parenting/coronavirus-black-maternal-mortality.html>.
- Goodney, P. P. et al. (2014). Variation in the Care of Surgical Conditions: Diabetes and Peripheral Arterial Disease. The Dartmouth Institute for Health Policy and Clinical Practice. A Dartmouth Atlas of Health Care Series.
<http://www.diabetesincontrol.com/wp->

- [content/uploads/2014/10/www.dartmouthatlas.org_downloads_reports_Diabetes_report_10_14_14.pdf](#).
Greenblatt, A. (2020, May 13). Why America's Public Health Has Always Been Fragmented. *Governing*.
<https://www.governing.com/context/Why-Americas-Public-Health-Has-Always-Been-Fragmented.html>.
- Hamel, L., Norton, M., Pollitz, K., Levitt, L., Claxton, G., & Brodie, M. (January 2016). The Burden of Medical Debt: Results from the Kaiser Family Foundation/*New York Times* Medical Bills Survey.
<https://kaiserfamilyfoundation.files.wordpress.com/2016/01/8806-the-burden-of-medical-debt-results-from-the-kaiser-family-foundation-new-york-times-medical-bills-survey.pdf>.
- Hanks, A., Solomon, D., and Weller, C. E. (2018, February). Systematic Inequality: How America's Structural Racism Helped Create the Black-White Wealth Gap. Center for American Progress.
<https://cdn.americanprogress.org/content/uploads/2018/02/20131806/RacialWealthGap-report.pdf>.
- Hardy, B. L., Logan, T. D., and Parman, J. (2018). The Historical Role of Race and Policy for Regional Inequality. The Hamilton Project. Brookings Institution. Washington, DC.
http://www.hamiltonproject.org/assets/files/PBP_HardyLoganParman_1009.pdf.
- Hartman, M., Martin, A. B., Benson, J., and Catlin, A. (2019). National Health Care Spending In 2018: Growth Driven By Accelerations In Medicare And Private Insurance Spending. *Health Affairs*, 39(1),
<https://doi.org/10.1377/hlthaff.2019.01451>.
<https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2019.01451>.
- Henning-Smith, C.E. et al. (2019, December). Rural Counties With Majority Black Or Indigenous Populations Suffer The Highest Rates Of Premature Death In The US. *Health Affairs*, 38(2),
<https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2019.00847?journalCode=hlthaff>.
- Himmelstein, D. U., Thorne, D., Warren, E., & Woolhandler, S. (2007). Medical Bankruptcy in the United States, 2007: Results of a National Study.
http://petrieflom.law.harvard.edu/assets/publications/Warren_Medical_Bankruptcy_in_the_United_States.pdf.
- Hostetter, M., and Klein, S. (2018, September 27). In Focus: Reducing Racial Disparities in Health Care by Confronting Racism. *The Commonwealth Fund*.
<https://www.commonwealthfund.org/publications/newsletter-article/2018/sep/focus-reducing-racial-disparities-health-care-confronting>.
- Hung, P., Henning-Smith, C. E., Casey, M. M. and Kozhimannil, K. B. (2017). Access To Obstetric Services In Rural Counties Still Declining, With 9 Percent Losing Services, 2004-14. (2017, September 1). *Health Affairs*, 36(9), 1663-1671.
<https://www.ncbi.nlm.nih.gov/pubmed/28874496>.
- Iglehart, J. K. (2018, February 1). The Challenging Quest to Improve Rural Health Care. *The New England Journal of Medicine*, 378(5), 473-479.
- Illinois Department of Public Health. (2018). *Illinois Maternal Morbidity and Mortality Report*.
<http://dph.illinois.gov/sites/default/files/publications/publicationsowhmaternalmorbiditymortalityreport112018.pdf>.
- Johns Hopkins University (n.d.). Bloomberg School of Public Health. *Definitions*.
<https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-primary-care-policy-center/definitions.html>.
- Kahlenberg, R. D. (2020, June 16). Getting at the Roots of Racism. The Century Foundation.
<https://tcf.org/content/report/this-moment-in-america/>.
- Kaiser Family Foundation. (Timeframe: May 29, 2020). Status of State Action on the Medicaid Expansion Decision. <https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.
- Kaiser Family Foundation. (October 2016). Explaining Health Care Reform: Questions About Health Insurance Subsidies. Retrieved February 10, 2018, from <http://kff.org/health-reform/issue-brief/explaining-health-care-reform-questions-about-health/>.
- Keehan, S.P. et al. (2016). National Health Expenditure Projections, 2015-25: Economy, Prices, and Aging Expected to Shape Spending and Enrollment. *Health Affairs*, 35 (8), 1522-1531.
- King, M. L. (2011). *Why We Can't Wait*. Beacon Press.
- Kinlock, B. L. et al. (2017). High Levels of Medical Mistrust Are Associated With Low Quality of Life Among Black and White Men With Prostate Cancer. *Cancer Control*, 24(1), 72-77.
doi: 10.1177/107327481702400112. <https://pubmed.ncbi.nlm.nih.gov/28178717/>.
- Kutilek, Paige. (May 27, 2016). The Truth About Medical Bankruptcy.
<https://www.youcaring.com/blog/2016/truth-medical-bankruptcy>.
- Matthew, D. B. (2018). Next Steps in Health Reform: Hospitals, Medicaid Expansion, and Racial Equity. *Journal*

- of Law, Medicine & Ethics*, 46, 906-912.
- McEwen, B. S. (1998, January 15). Protective and Damaging Effects of Stress Mediators. *The New England Journal of Medicine*, 338: 171-179. DOI: 10.1056/NEJM199801153380307.
<https://www.nejm.org/doi/10.1056/NEJM199801153380307>.
- Mead, H. et al. (2008, March). Racial and Ethnic Disparities in U.S. Health Care: A Chartbook. *The Commonwealth Fund*.
https://www.commonwealthfund.org/sites/default/files/documents/_usr_doc_Mead_raceethnicdisparities_chartbook_1111.pdf.
- Myrdal, G. (1944). *An American Dilemma: The Negro Problem and Modern Democracy*. New York & London: Harper & Brothers.
- National Association of Community Health Centers. (2007, March). Access Denied: A Look at America's Medically Disenfranchised. Washington, DC.
- National Institutes of Health. (2016, November 2). *Health Disparities. 2014*.
<http://www.nhlbi.nih.gov/health/educational/healthdisp>.
- Nix, E. (2019, July 29). Tuskegee Experiment: The Infamous Syphilis Study. *History.com*.
<https://www.history.com/news/the-infamous-40-year-tuskegee-study>.
- Noonan, A.S., Velasco-Mondragon, H.E., and Wagner, F. A. (2016). Improving the Health of African Americans in the USA: An Overdue Opportunity for Social Justice. *Public Health Reviews*, 37(12), 1-20. DOI 10.1186/s40985-016-0025-4.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5810013/pdf/40985_2016_Article_25.pdf.
- Nwagbara, U., and Ejigiri, D. (2018). The Impact of the Patient Protection and Affordable Care Act on Health Care Access in the United States: The Case of Louisiana. Paper Presented at the Annual Meeting of the Alabama Political Science Association. Held at University of South Alabama, Mobile, Alabama, USA, March 16-17.
- Organization for Economic Cooperation and Development. (2016). Health at a Glance 2015: How Does the United States Compare? <https://www.oecd.org/unitedstates/Health-at-a-Glance-2015-Key-Findings-UNITED-STATES.pdf>.
- Pascal, O. (2020, May 18). Experts are Warning that the ‘Sky is Falling’ for Rural Health Care in the South. *The Louisiana Weekly*.
<http://www.louisianaweekly.com/experts-are-warning-that-the-sky-is-falling-for-rural-health-care-in-the-south/>.
- Peterson, K. et al. (2018). Mortality Disparities in Racial/Ethnic Minority Groups in the Veterans Health Administration: An Evidence Review and Map. *American Journal of Public Health*, 108(3), e1-e11. doi: 10.2105/AJPH.2017.304246.
<https://www.ncbi.nlm.nih.gov/pubmed/29412713>.
- Presser, L. (2020, May 19). The Black American Amputation Epidemic. *PROPUBLICA*.
<https://features.propublica.org/diabetes-amputations/black-american-amputation-epidemic/>.
- Probst, J. C., and Ajmal, F. (2019, July). Social Determinants of Health among the Rural African American Population. University of South Carolina, Columbia, SC, USA. Rural and Minority Health Research Center.
https://www.sc.edu/study/colleges_schools/public_health/research/research_centers/sc_rural_health_research_center/documents/socialdeterminantsofhealthamongtheruralafricanamericanpopulation.pdf.
- Reynolds, P. P. (1997). Hospitals and Civil Rights, 1945-1963: The Case of Simkins v. Moses H. Cone Memorial Hospital. *Annals of Internal Medicine*, 126(11), 898-906.
<https://www.acpjournals.org/doi/10.7326/0003-4819-126-11-199706010-00009>.
- Reynolds, P. P. (1997). The Federal Government's Use of Title VI and Medicare to Racially Integrate Hospitals in the United States, 1963 Through 1967. *American Journal of Public Health*, 87(11), 1850-1858.
- Reynolds, P. P. (2004, May). Professional and Hospital Discrimination and the US Court of Appeals Fourth Circuit 1956-1967. *American Journal of Public Health*, 94(5), 710-720.
- Riley, P., Hayes, S.L., and Ryan, J. (2016, July 15). Closing the Equity Gap in Health Care for Black Americans. *The Commonwealth Fund*.
<https://www.commonwealthfund.org/blog/2016/closing-equity-gap-health-care-black-americans>.
- Rogers, N. (2007). Race and the Politics of Polio - Warm Springs, Tuskegee, and the March of Dimes. *American Journal of Public Health*, 97(5), 784-795.
- Rushefsky, M. E. (2013). *Public Policy in the United States* (5thed.). New York: M. E. Sharpe.
- Scott, A. J., and Wilson, R.F. (2011). Social Determinants of Health among African Americans in a Rural Community in the Deep South: An Ecological Exploration. *Rural Remote Health*, 11(1), 1634.
<https://www.ncbi.nlm.nih.gov/pubmed/21299335>.
- Semega, J., Kollar, M., Creamer, J., and Mohanty, A. (2019, September). *Income and Poverty in the United States:*

2018. U.S. Census Bureau, Current Population Reports, P60-266.
<https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf>.
- Schulman, K. A. et al. (1999, February 25). The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization. *The New England Journal of Medicine*, 340, 618-626. DOI: 10.1056/NEJM199902253400806.
https://www.nejm.org/doi/10.1056/NEJM199902253400806?url_ver=Z39.88-2003&rft_id=ori:rid:crossref.org&rft_dat=cr_pub%20%200www.ncbi.nlm.nih.gov.
- Shambaugh, J., Nunn, R., and Anderson, S.A. (2019, February 15). How Racial and Regional Inequality Affect Economic Opportunity. Brookings Institution. Washington, DC.
<https://www.brookings.edu/blog/up-front/2019/02/15/how-racial-and-regional-inequality-affect-economic-opportunity/>.
- Smedley, B. D., Stith, A. Y., and Nelson, A. R. (2003). Review. In *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. B. D. Smedley, A. Y. Stith, and A. R. Nelson (Eds.). Washington, DC: National Academies Press.
- Smith, D. B. (1998). The Racial Segregation of Hospital Care Revisited: Medicare Discharge Patterns and Their Implications. *American Journal of Public Health*, 88(3), 461-463.
- Smith, D. B. (1999). *Health Care Divided: Race and Healing a Nation*. Ann Arbor: University of Michigan Press.
- Smith, D. B. (2005a). The Politics of Racial Disparities: Desegregating the Hospitals in Jackson, Mississippi. *The Milbank Quarterly*, 82(2), 247-269.
- Smith, D. B. (2005b). Eliminating Disparities in Treatment and the Struggle to End Segregation. *The Commonwealth Fund*. Publication No. 775.
https://www.commonwealthfund.org/sites/default/files/documents/_media_files_publications_fund_report_2005_aug_eliminating_disparities_in_treatment_and_the_struggle_to_end_segregation_775_smith_ending_disparities_in_treatment_pdf.pdf.
- Sohn, H. (2017). Racial and Ethnic Disparities in Health Insurance Coverage: Dynamics of Gaining and Losing Coverage over the Life-Course. *Population Research and Policy Review*, 36(2), 181-201. doi:10.1007/s11113-016-9416-y.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5370590/pdf/nihms823497.pdf>.
- Stampp, K. M. (1989). *The Peculiar Institution: Slavery in the Ante-Bellum South*. Vintage Books.
- Stapleton, S. M. et al. (2018). Variation in Amputation Risk for Black Patients: Uncovering Potential Sources of Bias and Opportunities for Intervention. *Journal of the American College of Surgeons*, 226(4), 641-649.
<https://www.sciencedirect.com/science/article/abs/pii/S107275151830019X>.
- Stevens, C.D. et al. (2014, August). Geographic Clustering of Diabetic Lower Extremity Amputations in Low Income Regions of California. *Health Affairs*, 33(8), 1383-1390.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4242846/>.
- Taylor, J. (2019, December 19). Racism, Inequality, and Health Care for African Americans. *The Century Foundation*.
<https://tcf.org/content/report/racism-inequality-health-care-african-americans/>.
- Thames, A. D., Irwin, M. R., Breen, E. C., and Cole, W. (2019). Experienced Discrimination and Racial Differences in Leukocyte Gene Expression. *Psychoneuroendocrinology*, 106, 277-283.
<https://www.sciencedirect.com/science/article/abs/pii/S0306453018310436?via%3Dihub>.
- The White House. (1997, May 16). Presidential Apology. Remarks by the President in Apology for the Study Done in Tuskegee. <https://www.cdc.gov/tuskegee/clintonp.htm>.
- The New York Times*. (1987, May 18). Gunnar Myrdal, Analyst of Race Crisis, Dies.
<https://www.nytimes.com/1987/05/18/obituaries/gunnar-myrdal-analyst-of-race-crisis-dies.html>.
- Thomas, K. R. (2006, November). The Hill-Burton Act and Civil Rights: Expanding Hospital Care for Black Southerners, 1939-1960. *The Journal of Southern History*, LXXII(4), 823-870.
- Thomas, S. R., Pink, G. H., and Reiter, K. (2019). Characteristics of Communities Served by Rural Hospitals Predicted to be at High Risk of Financial Distress in 2019. North Carolina Rural Health Research Program.
https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2019/04/FDI-Community.pdf.
- Tikkanen, R. (2020, June 5). International Health Care System Profiles – United States. *The Commonwealth Fund*.
<https://www.commonwealthfund.org/international-health-policy-center/countries/united-states>.
- Tolbert, J., Orgera, K., and Singer, N. (2019, December 13). Key Facts about the Uninsured Population. Kaiser Family Foundation.
<https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>.
- Torio, C. M., and Andrews, R. M. (August 2013). National Inpatient Hospital Costs: The Most Expensive Conditions by Payer 2011. Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project Statistical Brief #160. <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb160.jsp>.
- United States Bureau of Labor Statistics. (2020, January 22). Labor Force Statistics from the Current Population

- Survey. Household Data - Annual Averages. *Employment Status of the Civilian Non-institutional Population by Age, Sex, and Race*.
<https://www.bls.gov/cps/cpsaat03.htm>.
- United States Centers for Disease Control and Prevention. (n.d.). U.S. Public Health Service Syphilis Study at Tuskegee. <https://www.cdc.gov/tuskegee/faq.htm>.
- United States Department of Health and Human Services (2020). *Healthy People - Access to Health Services*.
<https://www.healthypeople.gov/2020/data-search/Search-the-Data#>.
- United States Department of Health and Human Services (2014). National Healthcare Quality and Disparities Report. *Chartbook on Access to Health Care*.
<https://archive.ahrq.gov/research/findings/nhqdr/2014chartbooks/access/2014nhqdr-access.pdf>.
- United States Department of Health and Human Services (2018). National Healthcare Quality and Disparities Report. *Chartbook on Patient Safety*.
<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/chartbooks/patientsafety/2018qdr-patsaf-chartbook.pdf>.
- United States Department of Health and Human Services (2017). National Healthcare Quality and Disparities Report. *Chartbook on Rural Health Care*.
<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/chartbooks/qdr-ruralhealthchartbook-update.pdf>.
- United States Department of Health and Human Services (2018). *National Healthcare Quality and Disparities Report*.
<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/2018qdr-final.pdf>.
- United States Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Healthy People 2020*.
https://www.healthypeople.gov/?_ga=2.94113373.1909179520.1589566271-1736881177.1589566271.
- United States Department of Health and Human Services. Office of the Assistant Secretary for Planning and Evaluation. *HHS Poverty Guidelines for 2020*.
<https://aspe.hhs.gov/poverty-guidelines>.
- United States Department of Health and Human Services (2015). Office of the Secretary. Office of Minority Health. *Report to Congress on Minority Health Activities as Required by the Patient Protection and Affordable Care Act (P.L. 111-148)*. For Fiscal Years 2013 and 2014.
https://www.minorityhealth.hhs.gov/Assets/pdf/2015_0916_Report_to_Congress_on_Minority_Health_Activities_FINAL.pdf.
- United States Department of Health and Human Services. Office of Minority Health. The National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (The National CLAS Standards).
<https://www.minorityhealth.hhs.gov/omh/browse.aspx?vl=2&lvlid=53>.
- United States Department of Health and Human Services (1985). *Report of the Secretary's Task Force on Black & Minority Health*.
<https://minorityhealth.hhs.gov/assets/pdf/checked/1/ANDERSON.pdf>.
- United States Department of Health and Human Services (n.d.). Substance Abuse and Mental Health Services Administration (SAMHSA). "Laws and Regulations."
<https://www.samhsa.gov/about-us/who-we-are/laws-regulations>.
- United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration (SAMHSA). "Substance Abuse and Mental Health Block Grants."
<https://www.samhsa.gov/grants/block-grants>.
- United States Federal Reserve Board. (2019). *Report on the Economic Well-Being of U.S. Households in 2018*. Board of Governors of the Federal Reserve System. Washington, DC.
<https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>.
- United States Institute of Medicine. (2003). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. B.D. Smedley, A.Y. Stith, and A.R. Nelson (eds.). Washington, DC: National Academies Press.
<https://www.ncbi.nlm.nih.gov/pubmed/25032386>.
- University of Southern California. Racism Has a Toxic Effect: Study May Explain How Racial Discrimination Raises the Risks of Disease among African Americans. *Science Daily*, May 31, 2019.
<https://www.sciencedaily.com/releases/2019/05/190531100558.htm>.
- Weller, C. E. (2019, December 5). African Americans Face Systematic Obstacles to Getting Good Jobs. Center for American Progress. Washington, DC.
<https://www.americanprogress.org/issues/economy/reports/2019/12/05/478150/african-americans-face->

- [systematic-obstacles-getting-good-jobs/](#).
- West, C. (1993). *Race Matters*. Beacon Press.
- Williams, D. R., and Rucker, T. D. (2000). Understanding and Addressing Racial Disparities in Health Care. *Health Care Financing Review*, 21(4), 75-90.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4194634/pdf/hcfr-21-4-075.pdf>.
- Williams, D. R. et al. (2010). Race, Socioeconomic Status and Health: Complexities, Ongoing Challenges and Research Opportunities. *Annals of the New York Academy of Sciences*, 1186, 69-101.
doi: [10.1111/j.1749-6632.2009.05339.x](https://doi.org/10.1111/j.1749-6632.2009.05339.x).
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3442603/>.
- Williams, D.R., and Jackson, P. B. (2005). Social Sources of Racial Disparities in Health. *Health Affairs*, 24(2), 325-334. doi: 10.1377/hlthaff.24.2.325.
<https://pubmed.ncbi.nlm.nih.gov/15757915/>.
- Williams, M. (2020, June 17). Racism is a Public Health Issue. *The Economist*.
<https://euperspectives.economist.com/healthcare/racism-public-health-issue>.
- Wood, G. (2020, May 27). What's Behind the COVID-19 Racial Disparity? *The Atlantic*.
<https://www.theatlantic.com/ideas/archive/2020/05/we-dont-know-whats-behind-covid-19-racial-disparity/612106/>.
- Woodward, C. V. (2002). *The Strange Career of Jim Crow*. Oxford University Press.
- Zachary, C., Scott, T. A., Foggs, M., and Meadows, J. A. (2020). Asthma: An Illustration of Health Care Disparities. *Annals of Allergy, Asthma & Immunology*, 124(2), 148-149.
[https://www.annallergy.org/article/S1081-1206\(19\)31391-2/abstract](https://www.annallergy.org/article/S1081-1206(19)31391-2/abstract).