The University of Texas at Austin
**Institute for Urban Policy
Research & Analysis**
College of Liberal Arts

THE STATE OF BLACK LIVES IN TEXAS
HEALTH REPORT

MARCH 2019
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STATE OF
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IN TEXAS

OVERVIEW

We traditionally think of good health as the absence of disease or infirmity, but good health encompasses not just our physical well-being but our mental and social well-being (World Health Organization, 2018). Health outcomes are influenced by many interrelated factors and cannot be solely attributed to individual behaviors. Where a person lives can determine that person's health outcomes; those who experience social, economic, and environmental disadvantages are more likely to have poor health outcomes such as premature death and chronic disease (Office of Disease Prevention and Health Promotion, 2014).

In the United States and in Texas, there are marked differences in Black health outcomes compared to other racial and ethnic groups. A goal of Healthy People 2020 is to eliminate health disparities and achieve health equity across racial and ethnic groups. This is a principled goal, as it is the fundamental right of all human beings to have the opportunity to attain the highest level of health. Race remains a significant factor in determining whether an individual receives care, the quality of that care, and in predicting health outcomes (Bahls, 2011). Any state committed to health equity is making a fiscally prudent decision since health disparities amount to excessive costs of more than $4.6 billion annually (Turner, LaVeist, Gaskin, & Munoz-Rumsey, 2016). Data collected between 2003-2006 demonstrates that eliminating health disparities for people of color would reduce direct medical expenditures across the United States by $229.4 billion and reduce the indirect costs associated with illness and premature deaths by $1 trillion (LaViest, Gaskin, & Richard, 2009). Across a broad spectrum of health outcomes, Black Americans and Black Texans disproportionately fair worse. Representing only 12 percent and 13 percent of the population in the state and the nation, respectively, Blacks are overrepresented in poor health outcomes when compared to other racial and ethnic groups (U.S. Census, 2017; U.S. Census, n.d.).

Despite economic growth in certain regions of Texas, the health status of Blacks within the state continues to decline due to social context and modifiable shortcomings of the health system.

In 2017, Texas had a Black population totaling 3.8 million residents (U.S. Census, 2018). The state's Black population experienced a 27% growth in a span of ten years from 2000 to 2010 (Rastogi, Johnson, Hoeffel, & Drewery, 2011). This trend is mostly driven by young college educated Blacks and baby boomers nearing retirement who are returning to the southern region of the United States. Demographers call this relocation pattern the reversal of the Great Migration. Between 1916 and 1970, Southern Blacks headed to the Northeast, Midwest, and Western U.S. with the intent of escaping overt racism, and gaining employment in industrialized cities in the face of declining rural plantation life. This reversal of the Great Migration is driven by the dwindling effects of Jim Crow laws, improvement in race relations, and the desire to rejoin families and restore kinship (Siegel, 2005). Blacks migrating to Texas are lured by the prospect of economic opportunities and the lower cost of living in the southern states (Siegel, 2005). In Texas, Houston and the Dallas-Fort Worth metro area ranked second and fourth, respectively, for attracting the largest number of new Black residents between 2006 and 2010, where Houston drew a yearly average of 11,008 and Dallas-Fort Worth 7,678 new arrivals (Frey, 2015). Austin, among the 10 fastest-growing cities in the U.S., is an exception to this migration trend with a declining Black population (U. S. Census, 2017b). A 2014 Institute for Urban Policy Research and Analysis issue brief reports this decline was due to structural inequities such as gentrification, policing, educational disparities and a lack of economic opportunity (Tang & Ren, 2014). Despite economic growth in certain regions of Texas, the health status of Blacks within the state continues to decline due to social context and modifiable shortcomings of the health system.

Health equity and eliminating health disparities are achievable goals—most of the factors that contribute to health disparities are modifiable. However, efforts to eliminate health disparities are dependent, to a large extent, on the commitment and collaboration of multiple partners, including those in the healthcare systems and those in other sectors such as business, transportation, and housing. **The health of Texans starts with working with various sectors and communities to reduce the burden of diseases among those that are disproportionately affected. The information provided in this report can help motivate partners to increase efforts to eliminate such disparities.**

The Heckler report of 1985 highlighted significant disparities that existed between the health of Whites and people of color in the United States (Heckler, 1985). The report became a driving force for monumental changes in policies and programs to advance health equity at the national, state, regional, and local levels. In response to the findings of the Heckler report, Texas, like other states, passed legislation in 1993 (House Bill 1510, 1993) to establish an Office of Minority Health for eliminating health disparities among disadvantaged populations across the state. In 2011, with the passage of Senate Bill 501, the legislature joined efforts to reduce disparities in Texas' child welfare agency with the state's Office of Minority Health. These programs merged under the umbrella of the Center for Elimination of Disproportionality and Disparities, which worked to reduce racial disproportionality and disparities across health and human services systems. Despite the seven years of concentrated efforts to advance equity statewide, the office was defunded during Texas' 85th legislative session. The state of Texas is the only state in the nation without an Office of Minority Health. This is particularly problematic given that all of our institutions continue to operate inequitably. This report examines health disparities across a wide range of diseases, injuries and associated risk factors and will identify evidence informed programmatic strategies and recommend equity orientated policies. The specific aim of this report is to find ways to improve the health of Black Texans, as measured by an increase in life expectancy. The data used in this report is the most recent publicly available data. The most recent trends and ongoing variations in health disparities for selected health indicators are included in the report. The reader will find specific diseases and health conditions further highlight the health disparity gaps by race and ethnicity in Texas and the U.S. In this report, Latino and Black are used interchangeably to represent Hispanic and African American, respectively. The reason for the use of these different racial and ethnic categories is to remain consistent with the data reported from various sources. The authors of this report recognize that "race" is a socio- political category that is used by society to classify individuals and is not a reflection of the biology or genetic make-up of individuals.

This report will examine the socio-contextual factors, including the structural and institutional factors, that influence health outcomes and the policy solutions that can improve the health status of the Black population. The complexities of disparate health outcomes experienced by Black Texans will be examined, in addition to the:

1. Complex drivers of health inequities operating independently and concurrently
2. Breadth of health disparities comparable to other race/ethnicities; and
3. Crucial programmatic strategies, interventions and policy recommendations necessary for eliminating health disparities.

DRIVERS OF HEALTH INEQUITIES

Stress and Health Outcomes

Blacks of all socioeconomic levels are disproportionately affected by stress-related diseases that translate into a racialized life expectancy gap. Arline Geronimus referred to this as the weathering effect; the early health deterioration among the Black population "as a consequence of the cumulative impact of repeated experiences with social or economic adversity and political marginalization" (Geronimus, Hicken, Keene, & Bound, 2006, p. 826). The crux of the weathering effect is the association between overall health outcomes and the disparate toll that stressors have on Black bodies and minds overtime. Since there is no direct measure for weathering, researchers use adverse health outcomes such as preterm birth, low birth weight, excess mortality, and disability as indicators of weathering.

The association between weathering and stressors become clearer when we consider the role of allostatic states on our health. Allostatic states result in erosion of the brain and the body's regulatory system due to repeatedly adapting to stressors. Our allostatic load, or the cumulative biological burden exacted on the body through daily adaptation to physical and emotional stress, is a risk factor for several diseases—coronary vascular disease, obesity, diabetes, depression, cognitive impairment, and both inflammatory and autoimmune disorders (Djuric, Bird, Furumoto-Dawson, Rauscher, Ruffin, Stowe, Tucker & Masi, 2008).

Black people carry a substantial allostatic load burden and experience earlier health deterioration compared to other populations. Researchers theorize that perceived racial discrimination during interpersonal interactions or as a result of institutional racism could result in elevation of

primary (or cortisol) and secondary (systolic blood pressure) biomarkers among Blacks, leading in turn to subclinical disease, overt disease, and, ultimately, death from a variety of conditions. (Duru, Harawa, Kermah, & Norris, 2012, p. 94). Early health deterioration coupled with the stressors of living as a Black person experiencing systemic inequities translates into worse health outcomes among Black people.
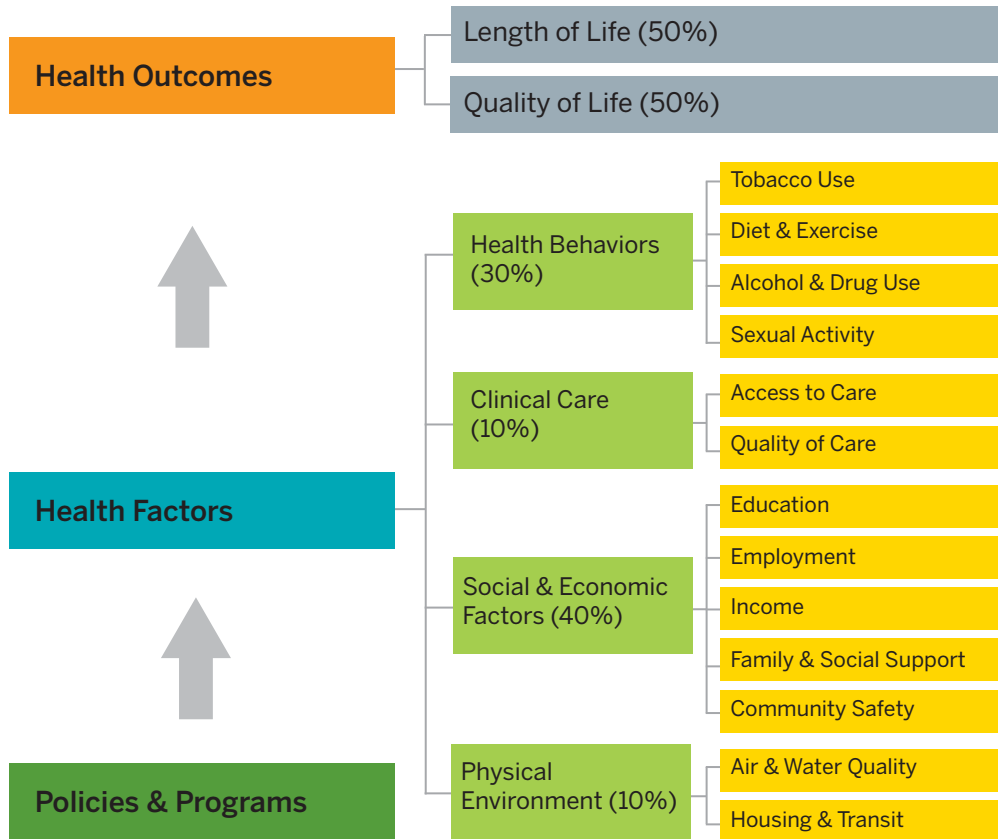
Determinants of Health

Though health care is essential to achieving positive health outcomes, it is a relatively weak determinant of health—contributing only 20 percent to an individual's overall health. Instead, health outcomes are predicated on determinants and risk factors. A risk factor is any attribute, characteristic, or exposure to harmful agents that increases an individual's chances of developing a disease or injury (Braveman & Gottlieb, 2014). Some health risk factors are fixed such as heredity, gender and age while others are modifiable and are related to social and economic determinants as well as lifestyle and habits. Some common health risk behaviors accounting for 30 percent of individual health outcomes are poor diet, physical inactivity, high blood pressure, and tobacco and alcohol consumption, and substance abuse. Obesity and diabetes are considered risk factors for several chronic diseases.

Access to healthcare and risky behaviors can't fully account for our overall health outlook because our health is also determined by our access to available social and economic opportunities and resources (or lack thereof) in our homes, workplaces, neighborhoods, and communities (Givens, Jvaag & Van Dijk, 2018). These social conditions promote and support healthy choices and have the ability to affect a wide range of health, functioning, and quality-of-life outcomes and risks. Healthy People 2020 defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age (Office of Disease Prevention and Health

Promotion, 2014). **Determinants of health such as access to educational, economic, and job opportunities, quality healthcare services, and community-based resources and support, accounts for 40% of the factors that are strong predictors of health (see Figure 1).**

Figure 1: Social Determinants of Health

| Health Outcomes | Length of Life (50%) |
| | Quality of Life (50%) |

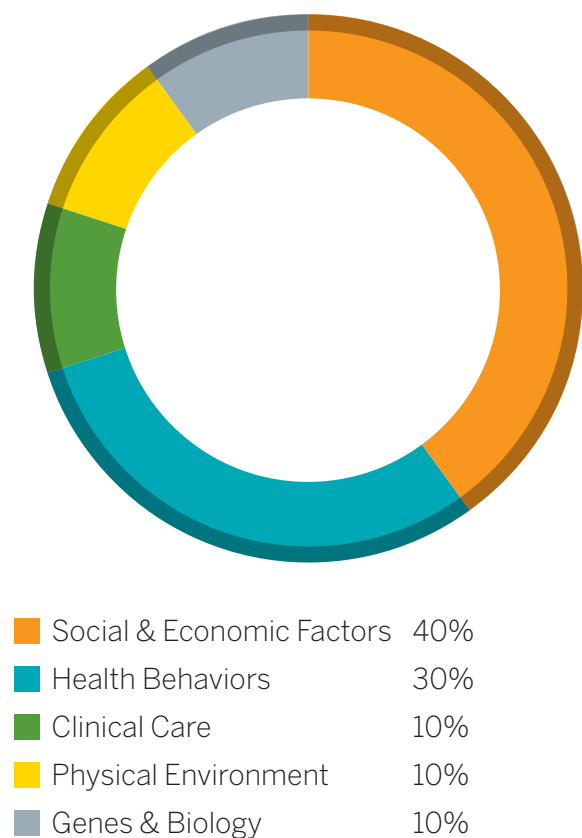| Health Factors | Health Behaviors (30%) | Tobacco Use |
		Diet & Exercise
		Alcohol & Drug Use
		Sexual Activity
	Clinical Care (10%)	Access to Care
		Quality of Care
	Social & Economic Factors (40%)	Education
		Employment
		Income
		Family & Social Support
		Community Safety
	Physical Environment (10%)	Air & Water Quality
		Housing & Transit

| Policies & Programs | | |

Research demonstrates that income and low educational attainment are important risk factors for health outcomes and life expectancy. Poverty may limit access to healthy foods and safe neighborhoods. There is a strong link between the lack of healthy food options in low-income communities (food deserts), poor diet, and disease outcomes. In a randomized study where low-income families were relocated from high-poverty to low-poverty neighborhoods, researchers reported that changing neighborhood environments can lead to a reduced prevalence of obesity and diabetes (Ludwig, Sanbonmatsu, Gennetian, Adam, Duncan, Katz, Kessler, Kling, Lindau, Whitaker & McDade, 2011). In addition, findings from a 2017 population-based analysis study, revealed that inequalities account for much of the variation in life expectancy, which can be explained by differences in race and ethnicity, socioeconomic factors, behavioral and metabolic risk factors, and health care factors (Dwyer-Lindgren, Bertozzi-Villa, Stubbs, Morozoff, Mackenback, Van Lenthe, Mokdad & Murray, 2017). To eliminate health disparities, policy makers have to consider the reciprocal relationship between the different factors that influence an individual's health and engage multi-level approaches to the Social Determinants of Health.

There are a range of interactive factors that contribute to the health gaps between Black and White population groups. Consequently, no single model can fully explain the complex biosocial mechanisms that drive the differences in health outcomes among Black and White Americans. There is a strong belief among clinicians and some researchers that genetics play a role (10 percent, as grown in Figure 2) but genetics cannot account for the racial differences in health status between Blacks and Whites. The socioeconomic stratification linked to the historical exploitation and oppression of Black Americans systematically generates larger gains in wealth and health for White Americans than for Black Americans. There is a growing recognition among researchers that social and economic factors shape individuals' ability to engage in healthy behaviors (Berkman and Kawachi, 2000; Marmot and Wilkinson, 2006). The quality of the air and water a person has access to, their housing conditions,

their connectedness or isolation from community institutions, and their neighborhood's economic conditions all affect health status over time. Close attention to the socioeconomic drivers of health has the potential to close some of the racial and ethnic gaps in health equity.

Figure 2: Determinants of Health

|		
🟧 Social & Economic Factors	40%
🟦 Health Behaviors	30%
🟩 Clinical Care	10%
🟨 Physical Environment	10%
⬜ Genes & Biology	10%

Shortages of Black Healthcare Professionals

Black students are admitted to medical schools at a lower rate than other racial/ethnic groups. Though the Association of American Medical Colleges has made significant efforts to increase diversity in medicine, the number of Black male applicants has declined over the last 40 years (Association of American Medical Colleges, 2017). In 1978, 1,410 Black men applied to U.S. medical schools. In 2014, that number was 1,337 (Association of American Medical Colleges, 2017). Over a 36-year period (from 1980 to 2016), the number of medical school applicants increased by 47 percent, from 36,083 to

53,042 (Association of American Medical Colleges, 2017). In contrast, the number of Black or African American applicants increased by 1.2 percent--from 7 percent to 8.2 percent of all applicants, or 1,837 applicants total (U.S. Department of Education, 2017). Physician diversity expands access to health care as physicians of color are more likely to practice primary care than their White peers (Grumbach & Mendosa, 2014; Xierali, Nivet & Fair, 2014). Black, Latino and American Indian or Alaska Native physicians are also more likely to practice in medically underserved areas (Xierali, Nivet & Fair, 2014). Within specific disciplines people of color and in particular Black people, are gravely underrepresented in the healthcare workforce (see Figure 3) reported by the Texas Department of Health Services (Ura, 2015). Direct care physicians, of which just 5.3 percent are Black Texans, are usually the healthcare providers who make decisions about patient care and must be able to do so using a health equity lens. Healthcare in Texas is provided mostly by older, White direct care physicians. In 2015. Blacks represented 5.7 percent of psychiatrists, 7.1 percent of primary care physicians, 14.9 percent of pharmacists, 6.3 percent of physician assistants and 24.3 percent of community health workers (Texas Health & Human Services Commission, 2014). A patient's health outcomes can be dependent upon a physician's cultural awareness and the physician's sensitivity and responsiveness to the patient's cultural beliefs, health literacy, preferred language and other communication needs. Expanding the healthcare workforce to include non-traditional health professionals is one way to improve the health of racial and ethnic populations.

The health disciplines experiencing a shortage of Black professionals include primary medical, dental and mental health. Texas is one of five states in the U.S. health professional shortage Area (HPSA) with the greatest shortage of Black medical professionals (see Figure 4). In Texas, the total Healthcare Professional Shortages (HPSA) designation is 425, containing a population of nearly 10 million residents (Health Resources & Services Administration, 2017). Furthermore, there

Figure 3: Representation of the Black Population in Selected Healthcare Professions, Texas, 2015
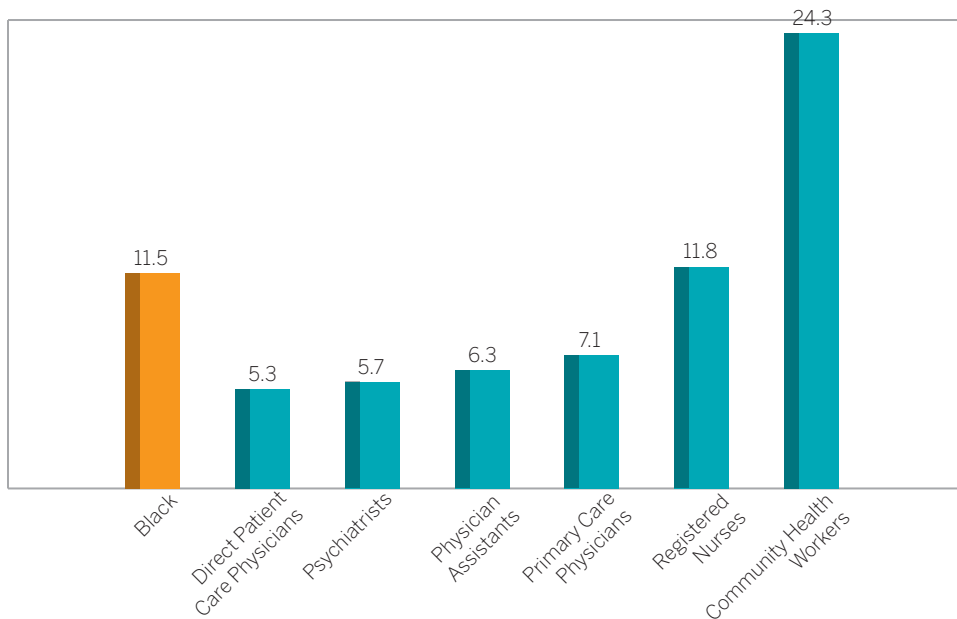
Source: Texas Department of State Health Services

Figure 4: Designated Health Professional Shortage Area by State, U.S., 2017
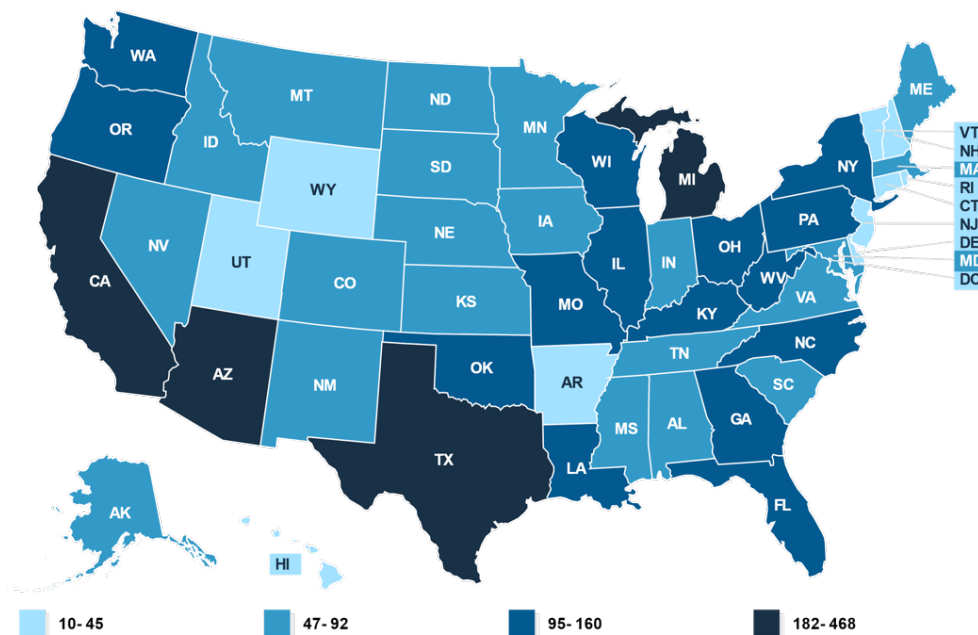
is lack of cultural and linguistic diversity among mental health providers. Based on 2010 data, the Substance Abuse and Mental Health Services Administration reported about 3.1 percent of psychiatrists and 2 percent of psychologists were African Americans. Similarly, only 4.3 percent of psychiatrists and 2.3 percent of psychologists identified as Latino (Substance Abuse & Mental Health Services Administration, 2013; Holden, McGregor, Thandi, Fresh, Sheats, Belton, & Satcher, 2014).

Within the United States, there is an overall shortage of mental health professionals, creating a barrier to diagnosis and treatment. 89.3 million Americans live in areas that are federally-designated as mental health professional shortage areas (The Kaiser Family Foundation, 2018). Those living in rural areas often have few or no mental healthcare providers at all and are even less likely to have access to specialty mental health providers. Clinics and providers in metropolitan areas often have long waiting lists, and patients can suffer for months while waiting for a basic intake appointment. Greater racial and ethnic diversity among healthcare providers could narrow the gap in access to healthcare and contribute to the reduction in health disparities. Of five studies which examined racial and ethnic bias, specifically against African Americans as compared to Whites, four found evidence of implicit race bias among clinicians (Brener, Von Hippel, Kippax, 2007; Green, Carney, Pallin et al., 2007; Von Hippel, Brener, Von Hippel, 2008; Sabin, Nosek, Greenwald et al. 2009; White-Means, Zhiyong Dong, Hufstader, Brown, 2009; Penner, Dovidio, West et al., 2010). The study that did not find bias against African Americans is notable in its reliance on a small and primarily minority clinician sample (Penner, Dovidio, West, et al., 2010).
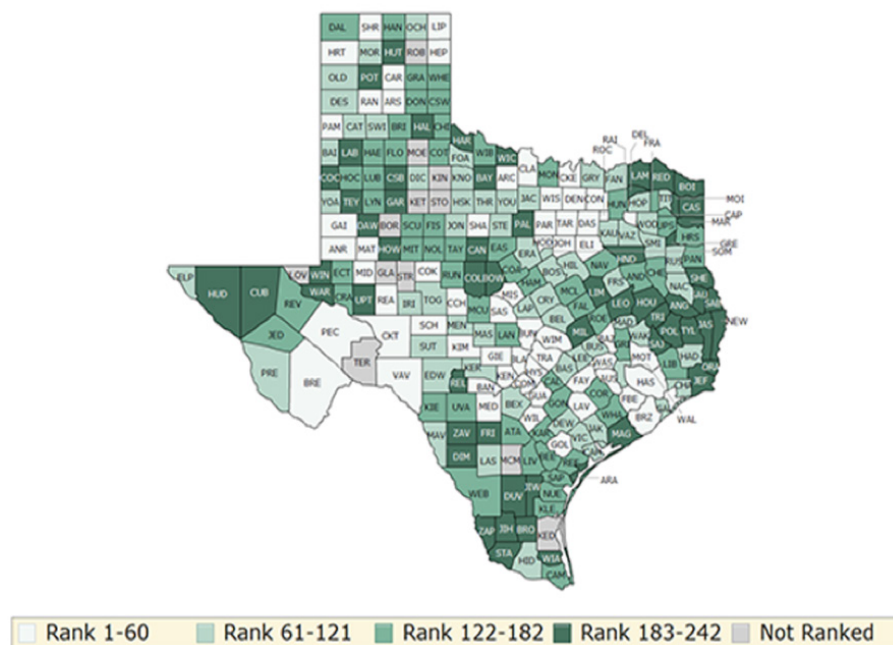
County Health Ranking in Texas

Our zip codes, race, and socioeconomic status are significant predictors of our overall health. The impact of social and economic conditions on a community may be used to predict the life expectancy of its residents. National survey data shows that residents of communities of color continue to have lower socioeconomic statuses, greater barriers to healthcare access, and greater risk and burden of disease, compared to the general population living in the same state and county (Centers for Disease Control and Prevention, 2013). The 2018 County Health Ranking Report demonstrates health gaps persist not only by place but also by race and ethnicity (Givens, Jvaag & Van

Figure 5: The Distribution of Texas Health Outcomes

Rank 1-60   Rank 61-121   Rank 122-182   Rank 183-242   Not Ranked

Dijk, 2018). **Racial and ethnic health gaps are attributed to the unequal distribution of resources that promote healthy living. The**

racial disparities illustrated in the report are believed to be the result of discriminatory practices and structural and institutional policies, such as residential segregation and inadequate access to quality clinical care. Figure 5 shows the length and quality of life in Texas, divided in four quartiles, where the deeper the intensity of green color indicates worse health outcomes. At the county level, data on health outcome measures, by race and ethnicity, is consistent with the differences in life expectancy among racial and ethnic groups in Texas.

Black Texans, no matter where they live in the state, are experiencing health outcomes that are the most similar to Texans living in the least healthy quartile of counties.

As illustrated in Table 1, there are significant differences in length and quality of life by race and ethnicity in Texas. American Indians (AI) and Alaskan Natives (AN) experience health outcomes most similar to those living in the middle 50 percent of Texas counties. Asians and Pacific Islanders are healthier as a population than residents of the highest ranked county for health outcomes. Black Texans, no matter where they live in the state, are experiencing health outcomes that are the most similar to Texans living in the least healthy quartile of counties. White and Latino Texans are most similar in health outcomes to those living in the healthiest quartile of counties.

Table 1: Differences in Health Outcome Measures among Counties and for Racial/Ethnic Groups in Texas							
Health Measure	Healthiest TX County	Least Healthy TX County	AI/AN	Asian/PI	Black	Hispanic	White
Premature Death (years lost/100,000)	4200	14800	3300	2900	9800	5500	7000
Poor or Fair Health (%)	12	32	13	9	17	26	13
Poor Physical Health Days (avg)	3.0	4.7	3.9	2.3	3.2	3.9	3.3
Poor Mental Health Days (avg)	3.1	3.8	7.8	1.5	3.6	3.2	3.7
Low Birthweight (%)	7	9	7	9	13	8	7

The Insurance Coverage Gap & Black Texans

In 2016, Texas led the nation in people who were not insured with 4.5 million uninsured Texans (United States Census Bureau, 2017). At 16.6 percent, the state's uninsured rate is nearly double the national rate of 8.8 percent (United States Census Bureau, 2017). White Texans were most likely to be insured and had an uninsured rate of 6.3 percent (United States Census Bureau, 2017). Latino and Black Texans had uninsured rates of 16 and 10.5 percent, respectively (KUT, 2017). At least part of the reason why Texas has the highest uninsured rate is due to the state's decision not to expand Medicaid. The states with the steepest increases in insurance coverage are those who expanded Medicaid eligibility under the Affordable Care Act (KUT, 2017). Texas is one among just 19 states who chose not to extend subsidized coverage to poor adults (Arriaga, 2017).

Within the insurance coverage gap nationally, 45 percent are White adults, 28 percent are Black, and 23 percent are Latino (Garfield & Damico, 2016).

Among the states who did not expand Medicaid coverage, nearly 90 percent of those who fall within the insurance gap are adults living in the American South (Garfield & Damico, 2016). The racial and ethnic demographics of southern states means the decision not to expand Medicaid disproportionately impacts people of color, and in particular Black people. Conversely, in states that chose to expand coverage, the early impact data suggests that the coverage gains were largest among people of color, those without a college degree, young adults, those who are unmarried, and those without children (Courtemanche, Marton, Ukert, Yelowitz, & Zapata, 2017).

Within the southern states that expanded Medicaid coverage, the choice to expand improved access to healthcare along income lines, reducing income-based health disparities (Benitez, Adams & Seiber, 2018). A 2016 study of American Community Survey data estimates that the fully implemented ACA lowered the coverage disparity between Whites and people of color by 2.0 percentage points, or 14 percent, whereas the ACA without the Medicaid expansion actually increased this disparity (Courtemanche, Marton,

Ukert, Yelowitz, & Zapata, 2017). Another study found that Medicaid expansion improved self-rated health and reduced the number of days that poor health interfered with or prevented usual activities among childless, low-income adults (Simon, Soni & Cawley, 2017). This result further suggests that expansion reduces racial disparities.

Those who fall into the coverage gap are often working-class families who are unlikely to be able to afford coverage through the Affordable Care Act without financial assistance. In 2016, the national average unsubsidized premium for a non-smoker in his or her 40's was equal to more than half of the monthly income for those at the lower income range of people in the gap and about a quarter of income for those at the higher income range of people in the gap (Garfield & Damico, 2016).

There are robust financial incentives for states to expand Medicaid and some researchers argue that the decision not to expand by 19 states is rooted in racial bias. States with greater Black and Latino populations spend less on Medicaid (Kousser, 2002). Racial resentment is also a predictor of low-support for the Affordable Care Act and other healthcare assistance programs (Tesler, 2016). Researchers found that Medicaid disability expenditures were lowest in states with the highest levels of anti-Black bias and where Whites had less of an economic advantage over Blacks (Leitner, Hehman & Snowden, 2018).

BREADTH OF HEALTH INEQUITIES: REGIONALLY & NATIONALLY

Life Expectancy

The health of a state and a nation as a whole can be examined through the life expectancy of its people – the average years a person is expected to live based on the year of birth, current age, and other demographic factors including race and gender.

Nationally, the life expectancy rate decreased in 2015, for the first time since 1993, with noticeable differences between racial and ethnic groups. The most recent data shows that this trend remains the same for 2016, resulting in the U.S. trailing behind its top industrialized European counterparts – France, Canada, and the United Kingdom in life expectancy (Kochanek, Murphy, Xu, & Arias, 2017). In 2016, life expectancy at birth, for the total U.S population was 78.6 years, a decrease of 0.1 years from 78.7 in 2015.

When examined by race and ethnicity, life expectancy in the U.S. rises steadily from 2006 to 2010 with slight fluctuations between 2011 and 2014 and the notable decrease in 2015. For all 10 years, Latinos have the highest years of life expectancy, followed by White and then Black populations. For Latinos, life expectancy was approximately 79 years from 2006 to 2014 with consistent yet minimal improvement over time . Between 2013 and 2014, Black men and Latinas experienced the greatest increase in life expectancy at birth (0.2 years), followed by Latinos (0.1 years). Life expectancy at birth remained unchanged for White men (76.5 years) and Black women (78.1 years) (Arias, 2016). Similarly, the White population in Texas has a life expectancy of 78 years. Even with a slight increase, the life expectancy for Black Texans lags behind other racial and ethnic groups, approximately 73 and 75 years in 2006 and 2014.

The decline in life expectancy in the U.S. paints a clear picture of high mortality rates, despite advances in medical care. Low life expectancy is directly correlated with a higher prevalence of preventable disease. Between 2014 and 2015, the age-adjusted death rates increased among drug-induced causes, alcohol-induced causes and firearm-related injuries. According to the U.S. Department of Health and Human Services and the Centers for Disease Control and Prevention, the 2015 decrease in life expectancy at birth for the total population was "mainly due to the increase in mortality from unintentional injuries, Alzheimer's disease, homicide, chronic lower respiratory diseases, and suicide" (Xu, Murphy,

Kochanek, Bastian & Arias, 2017, p. 2). There were marked improvements in the Black and White life-expectancy gap with a decrease of 2.3 years between 1999 and 2013 (5.9 to 3.6 years). This small improvement is due to fewer deaths within the Black population from heart disease, cancer, HIV/AIDS, unintentional injuries, and perinatal conditions which together accounted for 59.1 percent of the 2.3-year decrease in the gap. However, despite this decline, Blacks still have higher death rates than Whites for all-cause mortality in all age groups, for individuals less than 65 years of age. In 2015, the widening of the Black and White life expectancy gap was due primarily to greater improvements in mortality for the White population than were experienced within the Black population for homicide, kidney disease and stroke. During this period, the Black population saw improvements in mortality for cancer, heart disease and suicide.

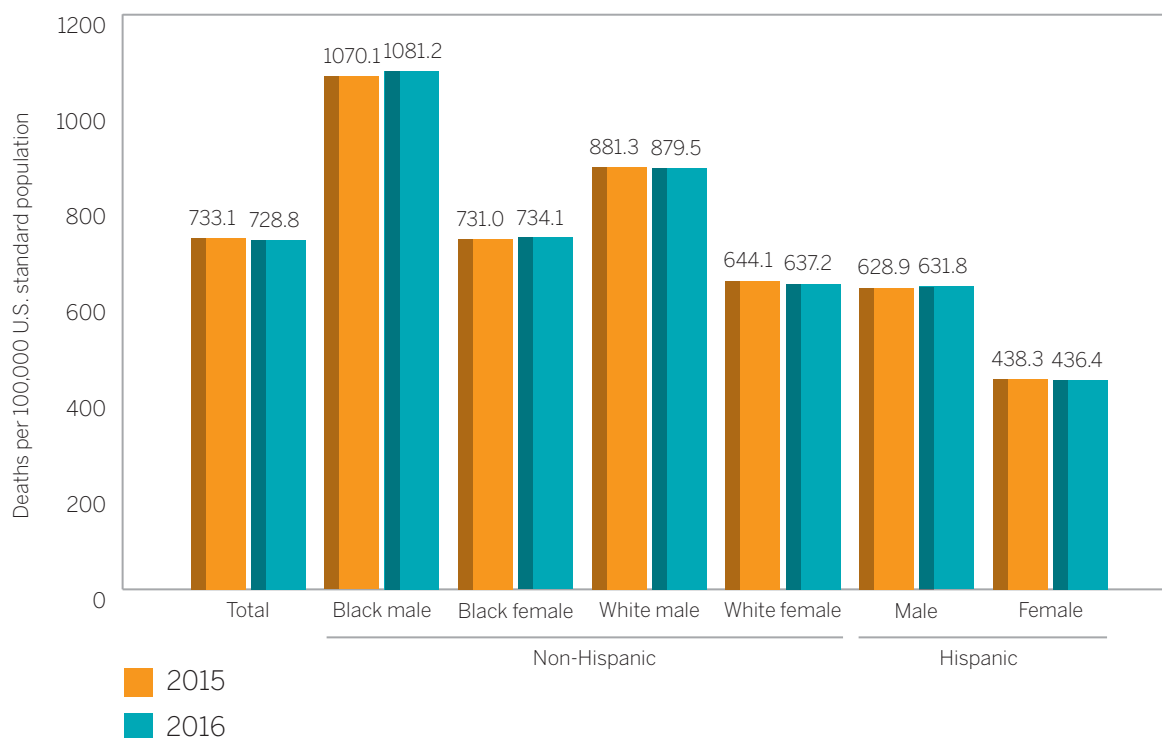# MORTALITY: LEADING CAUSES OF DEATH BY DEMOGRAPHIC FACTORS

The 1985 landmark Malone-Heckler Report of the Secretary's Task Force on Black & Minority Health detailed wide health disparities in the burden of death and illness experienced by African Americans (US Department of Health and Human Services, 1985). Six medical conditions accounted for 86 percent of all mortality of Blacks: cancer (3.8 percent), heart disease and stroke (14.4 percent), diabetes (1 percent), infant mortality (26.9 percent), cirrhosis (4.9 percent), and homicide and accidents (35.1 percent). The report stated the excess mortality Black Americans experienced would have been avoidable if patients had access to better evaluation,

detection and treatment. Thirty-three years later, despite improvements in mortality rates, Blacks remain disproportionately impacted by all six medical conditions when compared to other races and ethnicities.

Mortality rates become reflected in life expectancy rates over time due to changes in age-at-death and causes of death. Differences in death rates among demographic subpopulations, such as racial and ethnic groups, may reflect differences in socioeconomic status, healthcare coverage, timely access to healthcare services, and the prevalence of specific risk for diseases in that subpopulation (Centers for Disease Control, 2018). When examining mortality data by race and ethnicity, it should be noted that deaths for the American Indian/Alaskan Natives, Asian/Pacific Islander, and Hispanic populations are underreported to varying degrees on death certificates.

Overall, the age-adjusted death rate for the U.S. population decreased by 0.6 percent from 2015 to 2016. When the data is examined by race, ethnicity and gender, age-adjusted death rate decreased for White women and increased for Black men from 2015 to 2016. No significant changes in the rates were observed among Black women, Whites men, or Latino men and women for the same period. Age-adjusted death rates increased for younger people (15-44 years old) and decreased for older people (>65 years old) from 2015 to 2016, which resulted in a decreased in life expectancy for that period for the U.S. population (data not shown). **In 2015 and 2016 the death rates of Black males surpassed those of all the other subpopulations**.

Figure 6: Age-adjusted death rates for selected populations: United States, 2015 and 2016

Leading Causes of Death

Cause-of-death ranking is a useful tool for illustrating the relative burden of cause-specific mortality. Rankings denote the most frequently occurring causes of death among the diseases eligible for ranking. The rank of the specific cause of death may remain the same even if the mortality rate remained unchanged, increased or decreased over time. Nonetheless, mortality data can be used to monitor and evaluate health status as well as to identify population groups that are at increased risk for diseases and injuries. Age-adjusted mortality rate is used to measure the risk of death in a population without the influence of age and is a better indicator of whether the age distribution of a population is changing over time.

Between 2014 and 2016, the top two leading causes of death in the nation and Texas were heart disease and cancer (see Table 2) though the number of deaths varied each year. The 10 leading causes of death accounted for 74.1 percent of all deaths in the U.S. in 2016. In 2016, the top two causes, diseases

of heart (heart disease) and malignant neoplasms (cancer), accounted for 44.9 percent of all deaths in the U.S. In 2016, of the total deaths in Texas, 43,772 persons died from heart disease and an additional 40,195 died from cancer. From the 2016 list (Table 2), stroke was identified as the third leading cause of death in Texas, whereas it occupied fifth position in the U.S. Accidental deaths are in third and fourth positions for the U.S. and Texas, respectively. Alzheimer's disease and diabetes assumed sixth and seventh positions for both the state and the nation as the leading causes of deaths. The top three leading causes of death data remain consistent in Texas, dating back to 2014. In 2016, chronic lower respiratory diseases switched place with accidents to assume 5th position and accidents moving up to 4th position based on the number of deaths documented for each disease in Texas.

In the U.S., the age-adjusted death rates decreased for seven of the 10 leading causes of deaths and increased for three, from 2015 to 2016. The rate decreased for heart disease (1.8 percent), cancer

(1.7 percent), chronic lower respiratory diseases (2.4 percent), stroke (0.8 percent), diabetes (1.4 percent), influenza and pneumonia (11.2 percent), and kidney disease (2.2 percent). Increases were observed for unintentional injuries (9.7 percent), Alzheimer's disease (3.1 percent), and suicide (1.5 percent) (Kochanek, Murphy, Xu & Arias, 2017). Figure 5 illustrates the number of deaths by leading causes for 2015 and 2016.

Table 2: Ten Leading Causes of Death in the United States and Texas, 2016	
United States	Texas
1. Diseases of heart (heart disease)	1. Diseases of heart (heart disease)
2. Malignant neoplasms (cancer)	2. Malignant neoplasms (cancer)
3. Accidents (unintentional injuries)	3. Cerebrovascular diseases (stroke)
4. Chronic lower respiratory diseases	4. Accidents (unintentional injuries)
5. Cerebrovascular diseases (stroke)	5. Chronic lower respiratory diseases
6. Alzheimer's disease	6. Alzheimer's disease
7. Diabetes mellitus (diabetes)	7. Diabetes mellitus (diabetes)
8. Influenza and pneumonia	8. Septicemia
9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)	9. Kidney disease
10. Intentional self-harm (suicide)	10. Chronic liver disease/cirrhosis

Figure 7: Age-adjusted death rates for the 10 leading causes of death in 2016: United States, 2015 and 2016

Deaths per 100,000 U.S. standard population

2015
2016
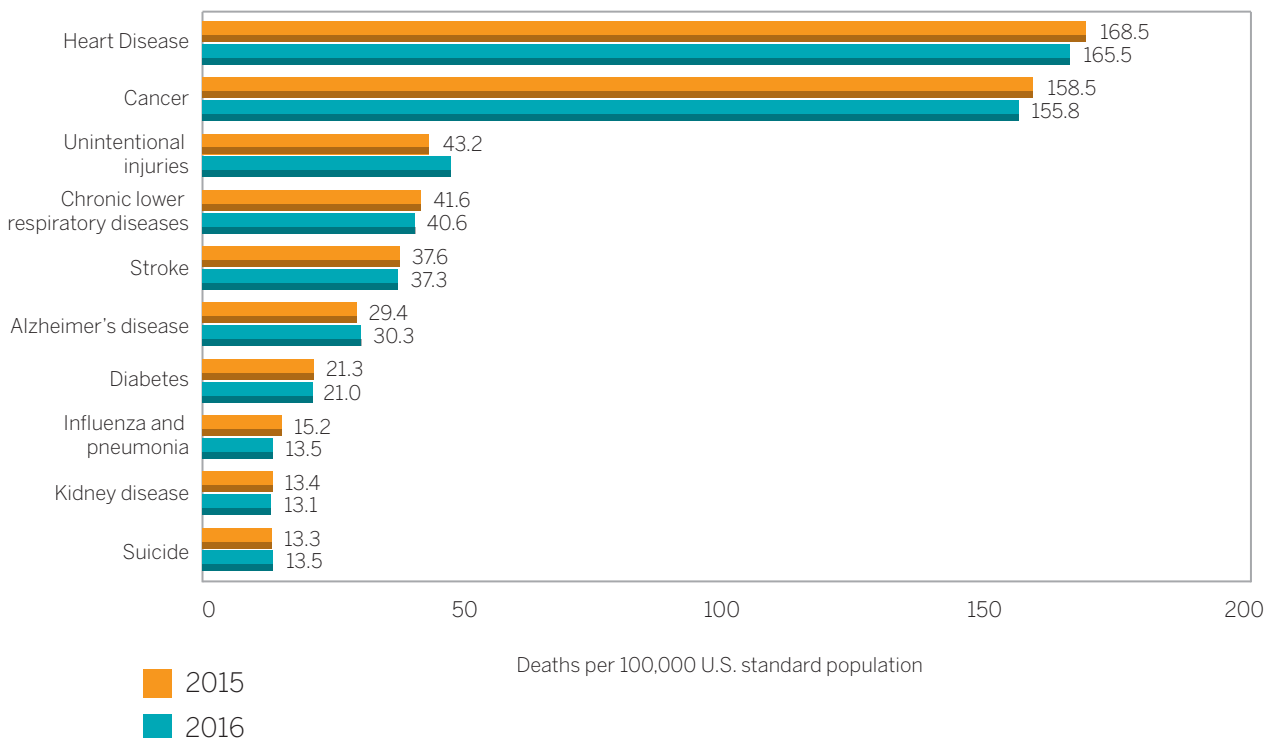
Diseases of the heart serve as an indicator for life expectancy and overall health outcomes. **Black Texans are disproportionately affected by diseases of the heart and this has consistently been the case over a span of fifteen years from 1999 to 2014**. Black Texans have the highest heart disease death rates compared to White and Latino populations. This has remained true from 1999 to 2014 in conjunction with consistent, incremental decreases in the heart disease death rate for all racial groups. As heart disease death rates have decreased over time, racial gaps have also decreased. Thus, demonstrating that though diseases of the heart affect all racial groups, Black Texans are still disproportionately impacted by the illness.

RACE & ETHNICITY

Even though seven of the leading causes of death are common among all racial and ethnic groups in the U.S., the disease burden is different (Heron, 2018). In 2016, heart disease was the leading cause of death for Black, White, and American Indian/Alaskan Natives but the second leading cause for the Asian/Pacific Islander and Latino populations in the U.S. Conversely, cancer was the first leading cause of death for Asian/Pacific Islander and Latino populations, but the second leading cause for the White, Black, and American Indian/Alaskan Native groups. Consistent with weathering theory, research suggests gendered

racial microaggressions against Black women decrease heart health and immune system function. **The Black-White life expectancy gap can be attributed to higher death rates among Black men and women due to heart disease, cancer, stroke, diabetes perinatal conditions, and homicide**.

Even though seven of the leading causes of death are common among all racial and ethnic groups in the U.S., the disease burden is different.

Based on the 2014 data, heart disease and cancer are the top two leading causes of death for Black, Latino and White populations. Stroke and accidents are the 3rd and 4th leading causes of death among Black Texans for 2014. For Latinos, accidents and stroke are in 3rd and 4th positions whereas chronic lower respiratory diseases and stroke are in 3rd and 4th positions for Whites in Texas for the year. Diabetes is ranked 5th among both Blacks and Latinos but ranked 7th for Whites. Alzheimer's disease is the 9th leading cause of death for Black and 6th and 7th for Whites and Latinos, respectively. Intentional self-harm (suicide) is in 9th position for Whites but is not among the top 10 leading causes of death for Blacks and Latinos. The leading causes of death by age group and gender for U.S. Blacks, in 2015 are as shown in Tables 3 and 4.

Table 3: Leading Causes of Death for Blacks by Age Group, United States, 2015

Age Group	Leading Cause of Death (age-adjusted)	Percent*
1-4	Unintentional injuries	29.4%
5-9	Unintentional injuries	31.2%
10-14	Unintentional injuries	22.1%
15-19	Homicide	49.5%
20-24	Homicide	49.7%
25-34	Homicide	35.5%
35-44	Heart disease	21.0%
45-54	Heart disease	26.1%
55-64	Cancer	27.1%
65+	Heart disease	26.6%
65-74	Cancer	29.4%
75-84	Heart disease	26.5%
85+	Heart disease	27.4%
All ages	**Heart disease**	**23.9%**

Table 4: Leading Causes of Death for Black Females, All Ages, United States, 2015		
Age Group	**Leading Cause of Death (age-adjusted)**	**Percent***
1-4	Unintentional injuries	26.2%
5-9	Unintentional injuries	33.3%
10-14	Unintentional injuries	24.3%
15-19	Unintentional injuries	28.3%
20-24	Unintentional injuries	26.1%
25-34	Unintentional injuries	18.0%
35-44	Cancer	21.3%
45-54	Cancer	28.3%
55-64	Cancer	32.7%
65+	Heart disease	25.5%
65-74	Cancer	30.5%
75-84	Heart disease	24.4%
85+	Heart disease	28.0%
All ages	**Heart disease**	**23.1%**

AGE GROUP

The leading causes of death for younger and older persons in the U.S. remained unchanged from 2015 to 2016. Generally, among younger people, external causes accounted for more deaths than others, whereas chronic diseases were far more prevalent causes of death in older groups (Heron, 2018). In 2016, the leading cause of death for the population aged 1 to 44 was unintentional injuries, where homicide and suicide were also major causes of death for this group (Heron, 2018). Stroke, influenza, pneumonia and diabetes are consistently ranked among the 10 leading causes of death for those aged 1 to 44 (Heron, 2018). Congenital malformations, deformations and chromosomal abnormalities were more prevalent cause of death at the youngest ages (Heron, 2018). Among those ages 65 and over, heart disease was the leading cause of death, accounting for 25.3 percent of all deaths and comprising 28.9 percent of deaths for those 85 and older (Heron, 2018). For the population aged 45–64, the leading cause of death was cancer, accounting for 29.2 percent of all deaths (Heron, 2018). **In 2015, American Black men and women, aged 1-14, were more likely to die from unintentional injuries. This cause of death extends to age 34 years old for Black females. Conversely, Black men, aged**

Figure 8: Homicide Mortality Rate by State, 2016
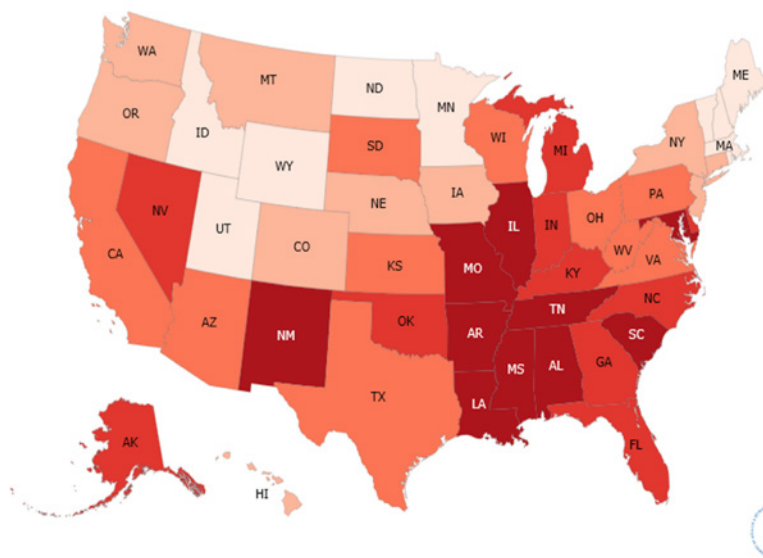
15-34, were more likely to die from homicides for the same year (Center for Disease Control, 2018).
In 2016, the homicide mortality rate in the U.S. was 6.2 percent. Figure 8 illustrates the homicide mortality rates by states with the number of age-adjusted deaths by homicide, where the increasing graduation of color to represent higher rates of death, that is, rate intervals of 0-0.25 (lightest color) and 8.7-14.3 (darkest color). Texas is considered mid-range with a rate of 6.0, accounting for 1,669 deaths in 2016. Homicide mortality data was not available by race and ethnicity in Texas at the time of this report. Information on homicide mortality rates by race and ethnicity was gleaned from research conducted on the topic. A nine-year study examining the differences between absolute rates firearm and non-firearm homicide and suicide in Black and White men found 84,113 homicides and 251, 772 suicides occurred. Relative to White men, Black men experienced 9 and 57 additional firearm homicides per 100,000 per year (Riddell, Harper, Cerdá & Kaufman, 2018). **Chronic diseases, such as heart disease and cancer accounted for most deaths for Blacks 35 years and older, regardless of gender in 2015**. The 2015 leading causes of death data, by age and gender, for Texas, were not available at the time of this report.

GENDER/SEX

The leading causes of death data by gender was not available for Texas for 2016 but the most prevalent causes of death for American men and women were similar. For both genders, heart disease and cancer ranked in first and second positions respectively (Kochanek, Murphy, Xu & Arias, 2017). In 2016, heart disease accounted for 24.2 percent of all men's deaths and 22 percent of all women's deaths. Cancer accounted for 22.5 percent of deaths to men and 21.1 percent of deaths to women (Kochanek, Murphy, Xu & Arias, 2017). For both genders, chronic lower respiratory disease ranked fourth, making up 5.2 percent of deaths among men and 6.1 percent of deaths among women (Kochanek, Murphy, Xu & Arias, 2017). Notwithstanding these similarities, there are noted differences between the prevalence of causes of death between men and women. In 2016, unintentional injuries caused 7.4 percent of deaths to men and was the third highest cause of death among men, but the sixth leading cause for

women (Kochanek, Murphy, Xu & Arias, 2017). Stroke was the fifth most prevalent cause of death for men but third for women (Kochanek, Murphy, Xu & Arias, 2017). Diabetes was the sixth most common cause of death for men (3.1 percent of all deaths), but seventh for women (2.7 percent of all deaths) (Kochanek, Murphy, Xu & Arias, 2017). The prevalence of several causes of death changed between 2015 and 2016. For men, Alzheimer's disease and suicide switched ranks to become the seventh and eighth leading causes, respectively; chronic liver disease and cirrhosis went from being the tenth most prevalent cause of death to the ninth; and kidney disease moved up into the top (Kochanek, Murphy, Xu & Arias, 2017). Each year, in the U.S., about 610,000 people die (1 in 4 deaths) of heart disease. Across most ethnicities, heart disease is the leading cause of death for both men and women. Heart disease is second to cancer as the leading cause of death for

American Indians or Alaska Natives and Asians or Pacific Islanders. **The Black population has higher heart disease mortality rate when compared to Whites, translating into a loss of 1.007 years in life expectancy (Kochanek, Arias & Anderson, 2013)**. When compared to White men, Black men are 30 percent more likely to die of heart disease. While many of these disparities can be attributed to patient-level factors such as medication adherence and health literacy, health care system factors (such as access to care, differential treatment and referral patterns) and socioeconomic factors (the patient's reduced access to quality education, reduced access to employment, disproportionate probability of incarceration) also play a role (Leigh, Alvarez & Rodriguez, 2016; Xanthos, Treadwell & Holden, 2010).

DIABETES

In the United States, people who are at the highest risk for diabetes are over 45 years old, prediabetic and either Black, Latino, American Indian or Alaska Native (Center for Disease Control, 2018. **Table 5 illustrates that since 2002, Black rates of diabetes mellitus death have exceeded that of Latino and White Texans (Texas Department of State Health Services, 2013)**. The differential in diabetes mellitus death rates between Texans who are either Black or Latino compared to White Texans ranged

from approximately 10 to 30 from 1999 to 2014. Furthermore, diabetes mellitus death rates within this time period are consistent with the racial gaps that persist in national death rates. Whites have the lowest diabetes mellitus death rate by more than half at any point in time from 1999-2014. Even so, men are more likely to die from diabetes than women across all racial groups.

Racial disparity in hypertension and hypertension-related conditions have been recognized for decades with Blacks having a greater risk than their White counterparts.

The risk for hypertension increases with age, with people 60 years and older having the greatest risk. Men had a higher prevalence of hypertension than women among adults aged 18 to 39 years but had a lower prevalence of hypertension than women at 60 years and older from 2015 to 2016. Racial disparity in hypertension and hypertension-related conditions have been recognized for decades with Blacks having a greater risk than their White counterparts. Figure 9 demonstrates that between 2015 and 2016, the prevalence of hypertension was higher among adults who are Black (40.3 percent) compared to those who are White (27.8 percent), Asian (25 percent), or Latino (27.8 percent).

Table 5: Diabetes Mellitus Death Rate Per 100,000 by Race, Texas, 1999-2014			
Year	Black	Latinx	White
1999	52.6%	55.0%	22.0%
2000	53.5%	58.3%	22.4%
2001	55.9%	56.6%	23.3%
2002	57.4%	55.5%	23.8%
2003	55.1%	53.3%	23.7%
2004	52.2%	47.8%	22.6%
2005	54.4%	52.7%	21.4%
2006	48.6%	41.7%	20.1%
2007	45.7%	40.2%	19.3%
2008	44.1%	39.0%	19.4%
2009	39.4%	34.8%	18.1%
2010	36.7%	32.9%	16.4%
2011	38.5%	34.2%	16.5%
2012	38.8%	33.1%	16.2%
2013	36.1%	32.7%	16.4%
2014	35.0%	31.5%	16.6%
1999-2014	45.3%	41.5%	19.7%

Figure 9: Age-adjusted prevalence of hypertension among adults aged 18 and over, by sex and race: United States, 2015-2016
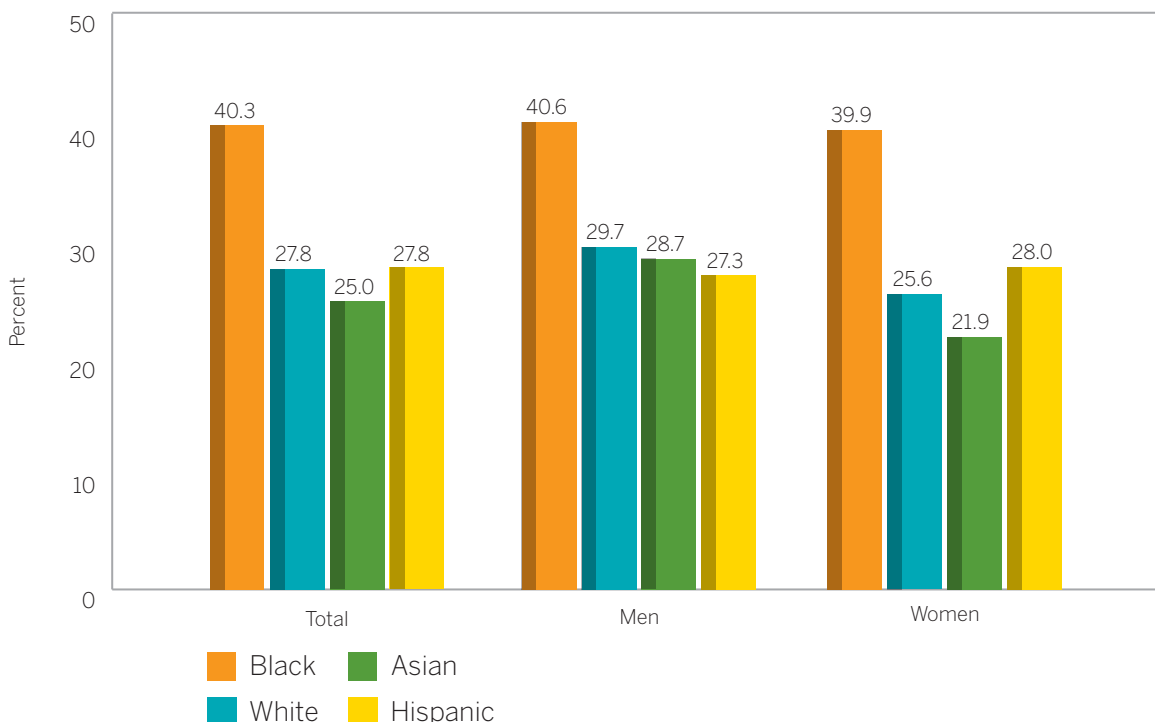
Black Texans consistently have had the highest mortality rate for hypertension in the state. In Texas, the racial gaps for hypertension mortality rates between Black and White population groups, as well as gaps between Black and Latino populations, have persisted for 15 years. For some years, the gaps in hypertension death rates narrowed or disappeared between some racial and ethnic groups in Texas. For example, White and Latino populations had the same hypertension death rates from 2010 through 2014.

Table 6: Hypertension Death Rate Per 100,000 by Race and Ethnicity, Texas, 1999-2014			
Year	Black	Latinx	White
1999	16.2%	6.5%	5.4%
2000	19.1%	7.5%	5.7%
2001	17.1%	7.7%	5.8%
2002	17.1%	8.7%	6.1%
2003	18.4%	7.5%	6.5%
2004	17.0%	8.1%	6.6%
2005	18.3%	9.5%	7.2%
2006	17.4%	7.8%	6.4%
2007	16.6%	8.5%	6.7%
2008	18.6%	8.3%	6.8%
2009	15.1%	8.4%	7.1%
2010	16.8%	8.7%	7.1%
2011	13.6%	6.3%	6.3%
2012	15.2%	7.1%	7%
2013	16.2%	8%	7.9%
2014	17.4%	7.8%	7.8%
1999-2014	16.8%	7.9%	6.7%

CANCER

This report examines cancer among all racial and ethnic groups in the United States and compares the death rates to identify disparity trends across different types of cancer. As highlighted in this report, Black Americans have higher death rates than all other racial and ethnic groups for most, although not all, types of cancer. The risk that an American woman will develop cancer over the course of her lifetime is 37.6 percent, or slightly more than one in three. Black women experience

a higher rate of death from cancer compared to women of all other race/ethnicities. Across all cancer types combined, the death rate was 14 percent higher among Black women than with White women and the racial disparities for some cancers are increasing (DeSantis, Siegel, Sauer, Miller, Fedewa, Alcaraz & Jemal, 2016). Black women's death rates from cancer are slightly higher than that of White women in the U.S. The cancer death rate disparity between Black and

White women is primarily driven by lung and breast cancers, even as breast cancer incidence rates in these two groups converge. Additionally, Latina and American Indian/Alaska Native women have higher rates of cervical cancer than women of other racial and ethnic groups in the United States yet African American women have the highest rates of death from the disease (data not shown). Consistently, the trends in cancer death rates by race, ethnicity and sex in Texas mirror that of the nation as a whole. Table 7 illustrates the death rates for all cancers by race, ethnicity and gender in Texas for 2015.

Table 7: Cancer Death Rate Per 100,000, All Cancer Types, by Race, Ethnicity and Sex, Texas, 2015				
Race	Sex	Age-Adjusted Rate	Death Count	Population
Black	Male	230.2	2,519	1,719,316
Hispanic	Male	147.8	4,118	5,353,499
White	Male	179.9	17,912	11,055,820
Black	Female	152.2	2,370	1,828,785
Hispanic	Female	100.6	3,578	5,294,569
White	Female	126.1	15,378	11,118,191

Cancer is one of the top ten leading causes of death in the U.S. and Texas. For American men, the average lifetime risk of developing cancer is 39.7 percent, a little more than 1 in 3, although smoking and other lifestyle and other factors can increase this risk. Men of all races and ethnicities have a higher rate of new cancer cases than women at 492.4 cases per 100,000 and 408.7 new cases, respectively. A 2018 report from the American Cancer Society indicated that cancer mortality is higher among men than women (196.8 per 100,000 men and 139.6 per 100,000 women) (American Cancer Society, 2018). When examined by race, ethnicity and gender, the data shows that cancer mortality is highest in Black men (239.9 per 100,000) and lowest in Asian/Pacific Islander women (88.3 per 100,000) (American Cancer Society, 2018). Since the mid-1970s, cancer incidence rates have been substantially higher among Black men when compared to White men (American Cancer Society, 2018). See Figure 11 for the 2015 cancer death rates disaggregated by race, ethnicity, and gender. Compared to Black women and men and women of other racial and ethnic identities, Black men have the highest rate of new cancer cases each year, as well as the highest rate of death from cancer each year (American Cancer Society, 2018). American Black men have the highest rate of prostate cancer in the world and are more likely than White men to develop lung cancer (Xanthos, Treadwell & Holden, 2010). Even when disease severity, socioeconomic status, education and access are controlled, people of color receive a lower quality of care and experience worse clinical outcomes (Brener, von Hippel, Kippax, 2007; Green, Carney, Pallin et al., 2007; Von Hippel, Brener, Von Hippel, 2008; Sabin, Nosek, Greenwald et al. 2009; White-Means, Zhiyong Dong, Hufstader, Brown, 2009; Penner, Dovidio, West et al., 2010).

Figure 10: Cancer deaths per 100,000 by race/ethnicity, both sexes, Texas, 2015
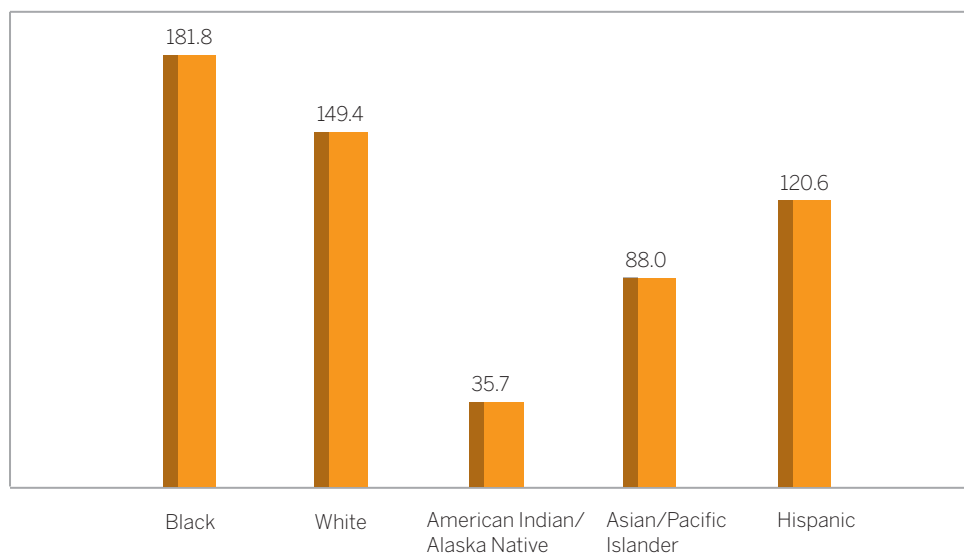
Source: CDC

Although cancer incidence and mortality are declining within every racial and ethnic group in the United States, some groups experience an increased risk of developing or dying from particular cancers. Regardless of gender, Black Americans have the overall highest death rate and shortest survival rate of any racial or ethnic group nationally for most cancers. These inequities are driven by complex social and economic disparities more than biological differences. Inequitable access to opportunities and resources, such as work, wealth, income, education and housing, as well as barriers to high-quality cancer prevention, early detection, and treatment information and services are partially to blame for the high-mortality and short survival rates among Black Americans with cancer (American Cancer Society, 2016, p.1). Ending racial disparities in cancer will reduce the estimated national expenditures for cancer care in the U.S. which were $147.3 billion in 2017.

Breast Cancer

In the United States, breast cancer is most common cancer among women of all races and ethnicities (American Cancer Society, 2018). It is the most common cause of cancer-related death among Latinas and the second most common cause of cancer-related death among Black women, White women, Asian/Pacific Islander women and American Indian/Alaskan Native women (American Cancer Society, 2018). Triple-negative breast cancer, which is more aggressive and harder to treat than other subtypes of breast cancer, is nearly twice as common a diagnosis among Black women compared to White women (American Cancer Society, 2018). In the United States, breast cancer incidence rates in females have been increasing very slightly over the last 10 years of available data (2005-2014), with the trend entirely driven by increasing rates among women of color (American Cancer Society, 2018). In 2015, Black women died from breast cancer at almost twice the rate as White women, as shown in Table 10 (U.S. Department of Health and Human Services, 2018).

Table 8: Rates of Breast Cancer Deaths in Females per 100,000 by Race, Texas, 2015			
Race	Age-Adjusted Rate	Death Count	Population
Black	28.2	466	1,828,785
Hispanic	14.8	556	5,294,569
White	19.1	2330	11,118,191

Prostate Cancer

By looking to data collected between 2013 and 2015, we can predict that an estimated 11.2 percent of American men will be diagnosed with prostate cancer at some point during their lifetime (American Cancer Society, 2018). In 2015, approximately 3,120,176 men were living with prostate cancer in the United States and the rate of new prostate cancer cases was 112.6 new cases per 100,000 men per year (American Cancer Society, 2018). Based on 2011 to 2015 age-adjusted data, the prostate cancer death rate was 19.5 deaths per 100,000 men per year (American Cancer Society, 2018). Nationally, Black men are more than twice as likely as White men to die of prostate cancer (American Cancer Society, 2018). In Table 9, we see that in Texas, the age-adjusted death rate for prostate cancer was two times more prevalent in Black men than White men in 2015 (U.S. Department of Health and Human Services, 2018). Latinos had the lowest prostate cancer death rate in Texas for that year (U.S. Department of Health and Human Services, 2018).

Lung Cancer

Nationally, an estimated 541,035 Americans were living with lung and bronchial cancer in 2015 (American Cancer Society, 2018). Based on data collected between 2011 to 2015, approximately 6.2 percent of all Americans will be diagnosed with lung and bronchial cancer at some point in their lives and that an estimated 43.4 per 100,000 people will die of lung or bronchial cancer per year (American Cancer Society, 2018). Table 10 illustrates that in Texas, as in the United States, Black men are more likely to die from lung and bronchial cancer while Latinas have the lowest death rates (U.S. Department of Health and Human Services, 2018). Differences in the lung cancer rates between the genders can be partially explained by smoking behaviors, including later uptake and slower cessation among women (O'Keeffe, Taylor, Huxley, Mitchell, Woodward & Peters, 2018).

Table 9: Rate of Prostate Cancer Deaths in Males per 100,000 by Race, Texas, 2015

Race	Age-Adjusted Rate	Death Count	Population
Black	34.5	297	1,719,316
Hispanic	15.4	337	5,353,499
White	16.5	1,472	11,055,820

Table 10: Rate of Cancer (Lung and Bronchus) Deaths per 100,000 by Race, Texas, 2015

Race	Sex	Age-Adjusted Rate	Death Count	Population
Black	Male	60.2	659	1,719,316
Hispanic	Male	25.5	652	5,353,499
White	Male	43.5	4,367	11,055,820
Black	Female	28.6	437	1,828,785
Hispanic	Female	11.7	387	5,294,569
White	Female	28.6	3,494	11,118,191

Table 11: Rate of Colorectal Cancer Death per 100,000 by Race and Sex, Texas, 2015						
	Males			Females		
Race	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	25.2	287	1,719,316	16.1	249	1,828,785
Hispanic	17	494	5,353,499	8.8	321	5,294,569
White	17.1	1,738	11,055,820	10.7	1,319	11,118,191

Colorectal Cancer

About 1 in every 22 (4.49 percent) American men and 1 in every 24 (4.15 percent) American women are at risk of developing colorectal cancer over the course of their lifetimes (American Cancer Society, 2018). Not only is colorectal cancer the third most common cancer among both genders, it is the second leading cause of cancer-related deaths in the nation (American Cancer Society, 2018). Due in part to increased screening, early diagnosis and treatment of the illness, the national death rate from colorectal cancer has been dropping for

several decades (American Cancer Society, 2018). Similar to the colorectal cancer mortality trends by gender in the United States, Texas' 2015 death rate for colon and rectal cancers combined was higher among men than women (U.S. Department of Health and Human Services, 2018). Table 13 demonstrates that even among men in Texas, Black men have the highest rates (almost twice as high) when compared to White men and Latinos (U.S. Department of Health and Human Services, 2018).

Table 12: Rate of Corpus and Uterine Cancer Death Rate in Females per 100,000 by Race, Texas, 2015			
Race	Age-Adjusted Rate	Death Count	Population
Black	7.6	123	1,828,785
Hispanic	4	146	5,294,569
White	3.8	477	11,118,191

Corpus and Uterine Cancer

Uterine cancer is the most commonly diagnosed gynecologic cancer in the United States (American Cancer Society, 2018). It is estimated that 2.9 percent of all American women will be diagnosed with uterine cancer at some point during their lifetimes (American Cancer Society, 2018). Using national data from 2011-2015, the age -adjusted number of new cases of uterine cancer was 26 new cases per every 100,000 American women per year, with an age-adjusted death rate of 4.6 deaths per every 100,000 American women per year (American Cancer Society, 2018). Approximately 727,200 American women were living with uterine cancer in 2015 (American Cancer Society, 2018). In 2018, it was estimated that there were 63,230 new cases of uterine cancer and 11,350 deaths from uterine cancer. Across the nation, the rate of new cases of corpus and uterine cancer per every 100,000 American women is slightly higher in White women (27) than Black women (26.6) followed by Latinas (23.7) (American Cancer Society, 2018). American Indian and Alaskan Native women have the lowest rates (17.0 per

100,000) of new cases of uterine cancer in the country (American Cancer Society, 2018). Table 12 demonstrates that Black women in Texas are disproportionately impacted by uterine cancer: their death rates are almost twice as high than those of Latinas or White women (U.S. Department of Health and Human Services, 2018).

Leukemia

Based on data collected between 2011 and 2015, we can predict that approximately 1.5 percent of all Americans will be diagnosed with leukemia at some point during their lifetime (American Cancer Society, 2018). In 2015, an estimated 405,815 Americans had leukemia. In Table 13, we see that men in Texas were more likely to die from Leukemia than Texas women in 2015 (U.S. Department of Health and Human Services, 2018). Black men and White women have the highest rates of mortality from Leukemia in Texas (U.S. Department of Health and Human Services, 2018).

Table 13: Rate of Leukemia Deaths per 100,000 by Race, Texas, 2015						
	Males			Females		
Race	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	9.7	99	1,719,316	4.2	504	11,118,191
Hispanic	6	187	5,353,499	3.2	120	5,294,569
White	9	838	11,055,820	3.9	58	1,828,785

Table 14: Rate of Liver and Intrahepatic Bile Duct Cancer Deaths per 100,000 by Race, Texas, 2015

Race	Males			Females		
	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	15	221	1,719,316	5.6	95	1,828,785
Hispanic	15.4	498	5,353,499	7.3	244	5,294,569
White	11.1	1,241	11,055,820	4.9	591	11,118,191

Liver and Intrahepatic Bile Duct Cancer

The percentage of Americans who are diagnosed with liver cancer has been rising for several decades (American Cancer Society, 2018). About 33,000 people get liver cancer and an estimated 26,000 people die of liver cancer each year in the United States (American Cancer Society, 2018). In the U.S., men (12.7 per 100,000) are much more likely than women (4.5 per 100,000) to be diagnosed with liver or intrahepatic bile duct cancer. Based on 2015 data, Latinos (13.1 per 100,000) are more likely than other groups to have liver and intrahepatic cancers, and Asian/Pacific Islanders (12.3 per 100,000) are the second most likely to have these cancers (American Cancer Society, 2018). Black Americans and American Indian/Alaskan Natives (10.8 per 100,000) are the third most likely to have these cancers, and White Americans (7.6 per 100,000) are the least likely (American Cancer Society, 2018). As demonstrated in Table 14, Latinos and Black men in Texas have the highest rates for both cancers followed by White men (U.S. Department of Health and Human Services, 2018). Among Texas women, Latinas have the highest rate, followed by Black women, and then White women (U.S. Department of Health and Human Services, 2018).

Myeloma Cancer

Myeloma only affects approximately 0.8 percent of Americans over the course of lifetimes (American Cancer Society, 2018). Using 2011 to 2015 age-adjusted data, the rate of new cases of myeloma was 6.7 per 100,000 Americans per year (American Cancer Society, 2018). With a death rate for this cancer of 3.3 deaths per 100,000 people per year, those who are most likely to be diagnosed with this cancer in the United States are men who are at least 65 years old (American Cancer Society, 2018). African Americans are more than twice as likely as Whites to be diagnosed with and die from multiple myeloma in the U.S. (American Cancer Society, 2018). Table 15 shows that, similar to myeloma trends across the nation, in Texas the death rate for myeloma cancer is highest among Black men and women (U.S. Department of Health and Human Services, 2018).

Table 15: Rate of Myeloma Cancer Deaths per 100,000 by Race, Texas, 2015

Race	Males			Females		
	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	7.3	69	1,719,316	5.6	80	1,828,785
Hispanic	3	81	5,353,499	2.1	69	5,294,569
White	3.3	320	11,055,820	2.2	260	11,118,191

Table 16: Rate of Pancreatic Cancer Deaths per 100,000 by Race and Sex, Texas 2015

Race	Males			Females		
	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	14.8	163	1,719,316	11.2	168	1,828,785
Hispanic	10	279	5,353,499	8.7	295	5,294,569
White	11.8	1.198	11,055,820	8.8	1,079	11,118,191

Pancreatic Cancer

Approximately 1.6 percent of all Americans will be diagnosed with pancreatic cancer at some point during their lifetimes, based on data collected between 2013 and 2015 (American Cancer Society, 2018). In 2015, there were an estimated 68,615 people living with pancreatic cancer in the United States (American Cancer Society, 2018). Although adults of any age can be diagnosed with pancreatic cancer, the risk of developing pancreatic cancer increases with age and the cancer is most common in people who are older than 45 (American Cancer Society, 2018). More men are diagnosed with pancreatic cancer than women and Black Americans are more likely to develop pancreatic cancer than other racial or ethnic groups (American Cancer Society, 2018). As shown in Table 16, Black men and women in Texas have higher pancreatic death rates among their gender counterparts by race and ethnicity (U.S. Department of Health and Human Services, 2018).

Table 17: Rate of Stomach Cancer per 100,000 by Race and Sex, Texas, 2015						
	Males			Females		
Race	Age Adjusted Rate	Death Count	Population	Age Adjusted Rate	Death Count	Population
Black	7	76	1,719,316	4.1	149	1,828,785
Hispanic	6.7	184	5,353,499	3.1	48	5,294,569
White	4.2	417	11,055,820	2.5	303	11,118,191
Asian/Pacific Islander	7.5	33	683,663	4.5	23	717,457

Stomach Cancer

In 2015, there were an estimated 97,915 Americans living with stomach cancer (American Cancer Society, 2018). Stomach cancer is more common in men than in women and among those who are between their late 60's and 80's (American Cancer Society, 2018). In the United States, stomach cancer is more common in Latinos, African Americans, Native Americans, and Asian/Pacific Islanders than it is in Whites (American Cancer Society, 2018). African Americans are nearly twice as likely as Whites to die of stomach cancer in the United States (American Cancer Society, 2018). Based on 2011-2015 data, the death rate for stomach cancer was 3.2 deaths per 100,000 Americans per year (American Cancer Society, 2018). Table 19 shows the death rates for stomach cancer disaggregated by race, ethnicity, and gender. In Texas, the death rates for stomach cancer is highest among Black men and Asian/Pacific Islander men (U.S. Department of Health and Human Services, 2018). Among women in Texas, the death rate for the disease is most prevalent among Asian/Pacific Islander women, followed closely behind by Latinas (U.S. Department of Health and Human Services, 2018). Black and White women have the lowest stomach cancer death rates in Texas (U.S. Department of Health and Human Services, 2018).

OBESITY

Obesity is associated with preventable chronic diseases, including heart disease, stroke, type 2 diabetes, and some cancers (National Heart, Lung, and Blood Institute, 2013). **Table 18 visualizes data from the 2016 Behavioral Risk Factor Surveillance System which indicated that obese adults in Texas are more likely to be Latina or Black women between 45 and 65 years old who have an annual household income in the range of $35,000 to $50,000** (Texas Health and Human Services, 2016). The 2016 Behavioral Risk Factor Surveillance System data also showed that public health region 4 has the highest prevalence of obesity in Texas followed by regions 8, 9, and 11, representing counties in Northeast, Northwest, Central and South Texas (Texas Health and Human Services, 2016).

Figure 11: Prevalence of Adult Obesity by Public Health Region, Texas, 2016
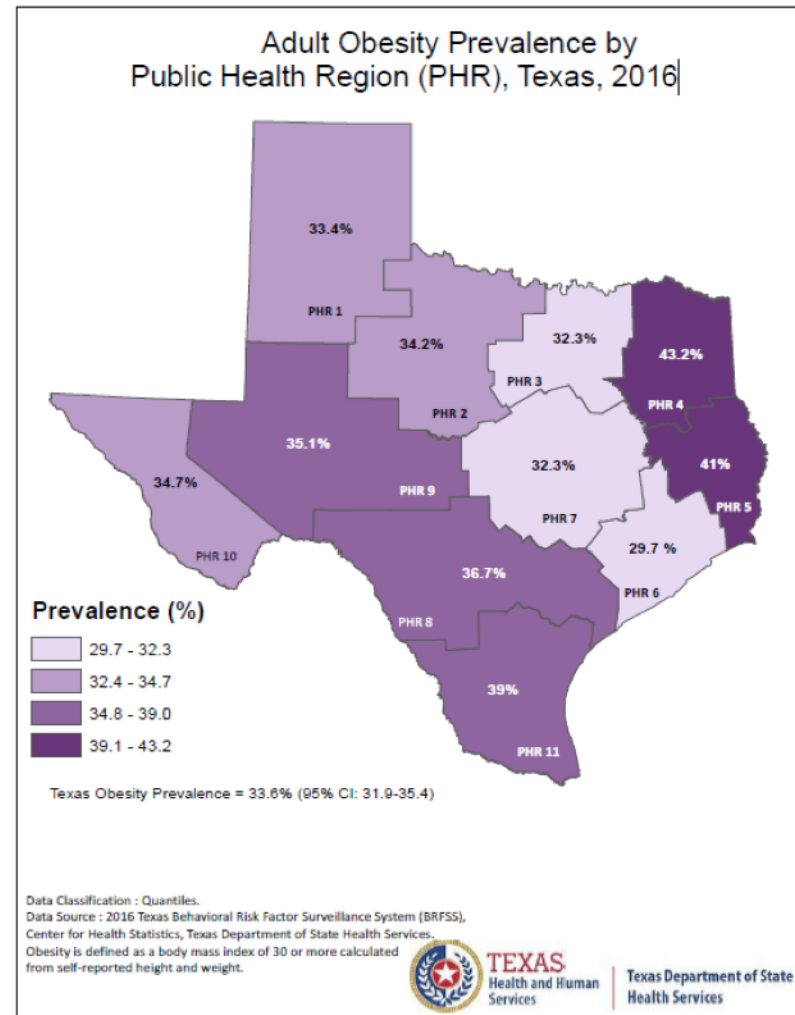
Table 18: Number and Percentage of Adults, 18 Years and Older, by Obesity and Demographic Characteristics, Texas, 2016
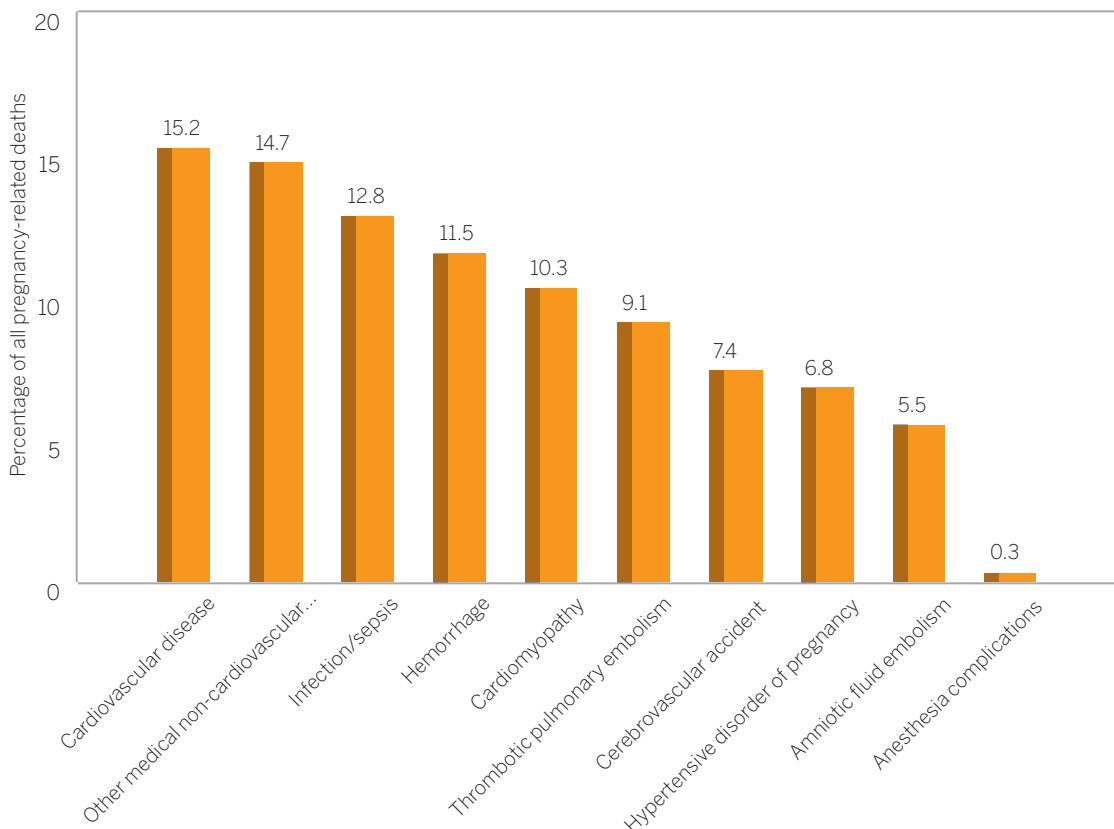
Demographic Characteristics	Estimated Number of Adults	Percentage of Adults	Lower and Upper Limits 95% Conficdence Interval
Total Population	6,330,270	33.6	31.9 – 35.4
Gender			
Male	3,184,905	32.8	30.4 – 35.2
Female	3,145,366	34.6	32.1 - 37.1
Age Group			
18 to 29 years	1,174,308	28.0	23.9 – 32.1
30 to 44 years	1,731,664	34.2	30.8 – 37.5
45 to 65 years	2,395,894	38.9	35.8 – 41.9
65+ years	969,382	30.1	26.8 – 33.3
Race/Ethnicity			
White only, non-Hispanic	2,676,671	31.0	28.8 – 33.2
Black only, non-Hispanic	920,311	41.7	35.6 – 47.8
Hispanic	2,403,630	37.8	34.4 – 41.1
Other only/Multiracial	159,787	13.5	8.9 – 18.1
Education			
Less than High School	1,232,961	38.8	33.8 – 43.7
High School Graduate	1,825,850	36.8	33.4 – 40.2
Some College	2,113,312	35.4	32.1 – 38.8
College Graduate	1,148,830	24.6	22.2 – 27.0
Annual Household Income			
Less than $35,000	2,430,128	35.6	32.6 – 38.5
$35,000 to <$50,000	837,262	36.2	30.9 – 41.5
$50,000 to <$75,000	813,838	35.5	30.6 – 40.4
$75,000 or more	1,583,921	30.3	27.2 – 33.3

MATERNAL MORTALITY AND MORBIDITY DISPARITIES

A pregnancy-related death is, "the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy," (Centers for Disease Control, 2018). The United States experienced a gradual increase in maternal death: from 7.2 deaths per 100,000 live births in 1987 (the initiation of data collection) to 18 deaths per 100,000 live births in 2015 (Centers for Disease Control, 2018). The exact reasons maternal mortality is rising in the United States are unclear. An increasing number of pregnant American women have chronic health conditions placing them at a greater risk for pregnancy-related complications (see Figure 9), such as hypertension, diabetes and chronic heart disease (Centers for Disease Control, 2018). Over the past decade, Black women across the United States experienced a much higher maternal mortality rate than women of all other races and ethnicities (Centers for Disease Control, 2018). Black mothers die at three to four times the rate of White women; that is, Black mothers are 243 percent more likely to die from pregnancy- or childbirth-related causes than their White peers (Centers for Disease Control, 2018). Social determinants of health, such as poverty, institutional racism, inadequate health care infrastructure, high costs, and lack of insurance have a cumulative, negative impact on Black women's bodies before, during, and after pregnancy and may contribute to maternal morbidity and death (Prather, Fuller, Marshall & Jeffries, 2016; Baeva, Saxton, Ruggiero, Kormondy, Hollier, Hellerstedt, Hall & Archer, 2018). Similar factors that increase the risk of Black babies dying before their first birthdate may also result in the mother's death.

Figure 12: Causes of pregnancy-related deaths in the United States, 2011-2014

Note: The cause of death is unknown for 6.5% of all pregnancy-related deaths.

Table 19: Maternal Death Rates by Demographic Characteristics, Texas, 2012-2015			
Demographic Characteristics	Number of live Births	Number (%) of Maternal Deaths	Rate (per 100,000 live births)
Race/Ethnicity			
Black	180,714	77 (20%)	42.6
White	539,177	147 (39%)	27.6
Hispanic	748,644	144 (38%)	19.2
Other	103,934	12 (3%)	11.5
Age			
<20	218,240	20 (5%)	9.2
20-24	322,975	77 (20%)	23.8
35-29	443,547	100 (26%)	22.5
30-34	376,051	113 (30%)	30.0
35-39	171,533	50 (13%)	29.1
40+	40,029	22 (6%)	55.0
Marital Status			
Married	911,004	184 (48%)	20.2
Not married	661,227	196 (51%)	29.6%
Unknown	-	2 (1%)	-
Highest Educational Level			
No High School Diploma	328,710	95 (25%)	28.9
High School Diploma	417,864	149 (39%)	35.7
Some College, No Degree	352,864	61 (16%)	17.3
Associate degree	89,385	24 (6%)	26.9
Bachelor's Degree	264,256	33 (9%)	12.5
Master's Degree/PhD	118,016	15 (4%)	12.7
Unknown	-	5 (1%)	-
Health Insurance at Delivery			
Medicaid	728,359	219 (57%)	30.1
Self-Pay/No Insurance	125,599	31 (8%)	24.7
Private	596,330	86 (23%)	14.4
Unknown	-	46 (12%)	-

In March 2018, the Texas Morbidity and Mortality Task Force (hereafter referred to as the task force) completed a review of 84 pregnancy-related (34) and associated (56) cases of maternal deaths that took place in 2012. The Task Force concluded that the top four leading causes of pregnancy-related deaths were cardiovascular and coronary conditions, obstetric hemorrhage, infection/sepsis, and cardiomyopathy, which together accounted for 76 percent of all pregnancy-related deaths in Texas (Texas Health and Human Services, 2018). Preeclampsia/Eclampsia, mental health conditions, and amniotic fluid embolisms were all the fifth most common cause of maternal death in Texas (Texas Health and Human Services, 2018). The Task Force's findings are comparable to those contained in a report completed by the Centers for Disease Control that analyzed nine maternal mortality review committees in other states.

Compared to other races and ethnicities in Texas, Black women continue to be at greatest risk for maternal death (Texas Health and Human Services, 2018). In Texas, the pregnancy-related mortality rate for Black women was 2.3 times higher than the rate for White women (13.9 versus 6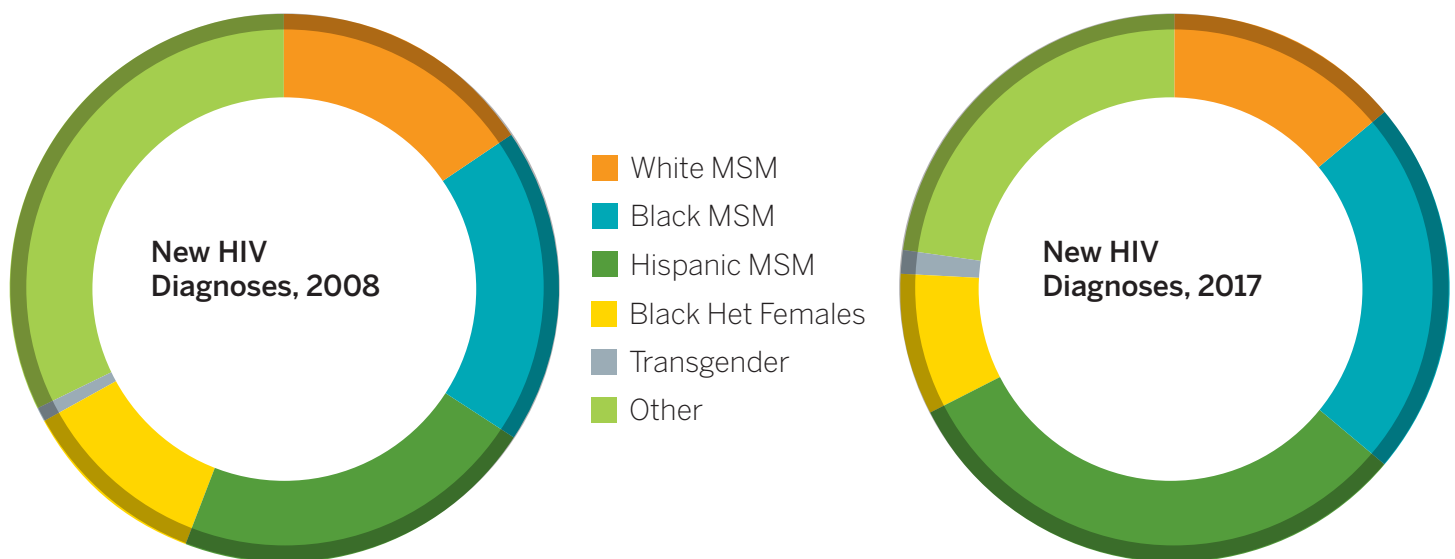.0 per 100,000 live births, respectively). Women ages 40 years or older were at increased risk for maternal death, overall (Texas Health and Human Services, 2018). In 2014, obstetric hemorrhage was the top cause of severe maternal mortality during delivery hospitalizations among Black women in Texas (Texas Health and Human Services, 2018). Regardless of socioeconomic status, marriage status, high educational attainment, or private health insurance status, the risk for maternal death among Black mothers remained high, as illustrated in Table 19 (Baeva, Saxton, Ruggiero, Kormondy, Hollier, Hellerstedt, Hall & Archer, 2018). Several risk factors are believed to be associated with deaths among Black mothers in Texas. Compared to women of other races and ethnicities, Black women have the highest rate of late entry to care—slightly more than half begin prenatal care during their first trimester of pregnancy—as well as higher rates of pre-pregnancy obesity and maternal hypertension (Centers for Disease Control, 2018). However, recent reports of Black mothers dying in the United States show that lack of adequate medical care during and after delivery account for several deaths among healthy mothers.

HIV/AIDS

Black Texans are disproportionately affected by HIV; nearly one percent of all Black Texans are diagnosed with HIV (Texas Health and Human Services, 2018). Black Texans also have higher rates of new diagnoses compared to Texans of other races (Texas Health and Human Services, 2018). Black men who have sex with men bear the highest burden of HIV in the state (Texas Health and Human Services, 2018). In 2017, a significant proportion of the people living with HIV in the United States were White men who have sex with men, Black men who have sex with men, Latino men who have sex with men, Black women who have sex with men, and transgender people (Centers for Disease Control, 2015). These groups increased by 7 percent among all people living with HIV between 2008 and 2017. The Department of State Health Services estimates that 19 percent of all Black men who have sex with men in Texas are diagnosed with HIV (Texas Health and Human Services, 2018). African Americans are disproportionately impacted by HIV in the South, where they accounted for 54 percent of new HIV diagnoses in that region in 2014 (Centers for Disease Control, 2015). Black women face an equally disproportionate burden of the disease, accounting for 69 percent of all HIV diagnoses among women in the South (Centers for Disease Control, 2015).

Figure 13: HIV Diagnoses by Sub-Group, 2008 vs. 2017

New HIV Diagnoses, 2008 | New HIV Diagnoses, 2017

Legend:
- White MSM
- Black MSM
- Hispanic MSM
- Black Het Females
- Transgender
- Other

SUICIDE

Suicide is more than a mental health concern in the U.S. as it is the tenth leading cause of death nationally (Centers for Disease Control, 2017). More than half of people who died by suicide did not have a known diagnosed mental health condition at their time of death (Centers for Disease Control, 2017). In 2016, suicide was the second leading cause of death among individuals ages 10 to 34, and the fourth leading cause of death among those between 35 and 54 years old (Centers for Disease Control, 2017). Suicide rates are rising in nearly every state in the country (Centers for Disease Control, 2017). In 2016, nearly 45,000 Americans age 10 or older died by suicide, indicating a percent change of 25.4 from 1999 to 2016 (Centers for Disease Control, 2017). As illustrated in Figure 13, between 1999 and 2016 there was a higher increase (18.9 percent) in suicide rate in Texas compared to other southern states such as Georgia (16.2 percent) and Florida (10.6 percent) but lower than Louisiana (29.3 percent) and Mississippi (32.9 percent) (Centers for Disease Control, 2017). In 2015, suicide claimed the lives of 3,408 Texans (University of Texas, 2017). Suicide rates vary by demographic factors in Texas. For more than a decade, rural counties had consistently higher suicide rates than urban

counties (University of Texas, 2017). In 2015, suicide rates in Texas were more than three times as high for White Texans than Black and Latino Texans (University of Texas, 2017). Although rates have risen for both genders in Texas, men are more likely to die by suicide than women (University of Texas, 2017). The ratio of female to male suicide deaths was 1 to 3.5 in 2015, a decline from 1 to 4.3 in 2000 (University of Texas, 2017). From 2011 to 2015, suicide rates were highest among Texans 45 to 54 years old and those over the age of 75 (University of Texas, 2017).

Though many people who die of suicide were not diagnosed with a mental illness at the time of their deaths, studies show there is an extremely high risk of suicide among those diagnosed with bipolar disorder, depression, and schizophrenia, as well as among those who struggle with substance abuse (Centers for Disease Control, n.d.). Research shows that those who struggle with alcoholism are five times more likely to commit suicide than those who have no alcohol abuse issues (Centers for Disease Control, n.d.). Firearms were the most common method of suicide used by those with and without a known diagnosed mental health condition (Centers for Disease Control, n.d.).

Figure 14: Suicide Rates in the United States, 1999-2016

SOURCE: *CDC's National Vital Statistics System; CDC Vital Signs, June 2018.*
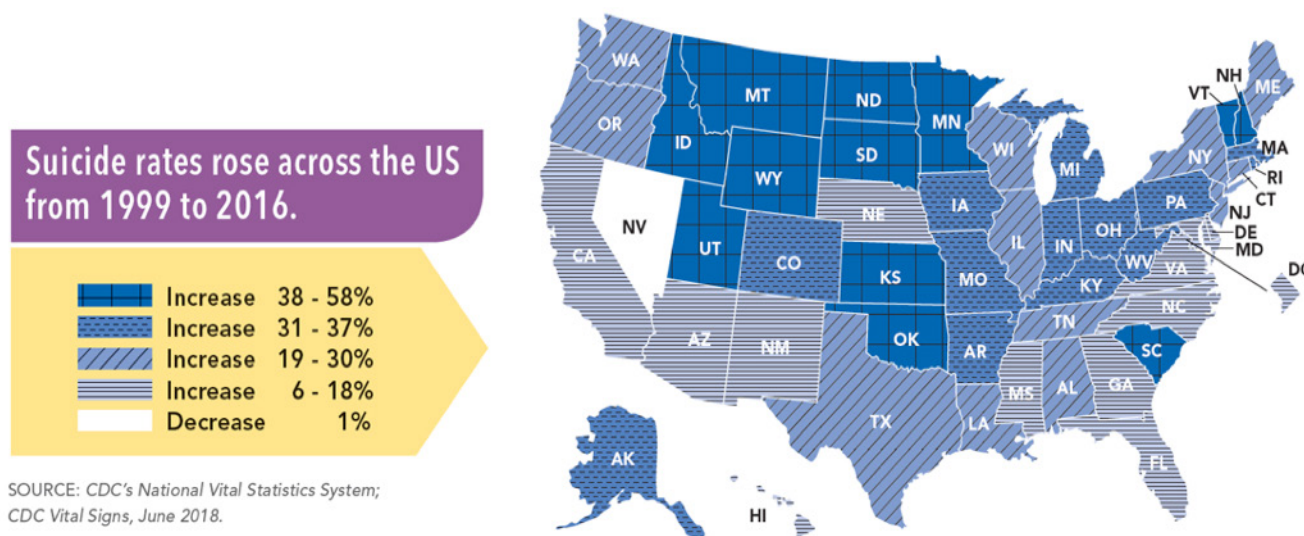
Suicide Among Children

The second leading cause of death for children, adolescents, and young adults, people between the ages of 5 and 24, is suicide (American Academy of Child and Adolescent Psychiatry, 2017). Depression, and other significant mental health disorders, are risk factors for suicide among children (American Academy of Child and Adolescent Psychiatry, 2017). Disparities in suicide among children and adolescents vary by age and race. While suicide is quite rare among young children (especially Black children who, overall, have a lower rate of suicide than White children), new research suggests the suicide rate is roughly two times higher for Black children ages 5 to 12 of any gender compared with White children of the same age group (Bridge, Horowitz, Fontanella, Sheftall, Greenhouse, Kelleher & Campo, 2018). Black adolescents of any gender, however, were half as likely as their White peers to commit suicide (Bridge, Horowitz, Fontanella, Sheftall, Greenhouse, Kelleher & Campo, 2018). The factors contributing to age-related racial disparities in suicide are not fully explored and warrant further research.

Recent high school shootings in Florida and Texas have shed a light on the need to address mental health among American teens as such illnesses may go unrecognized. Based on the CDC semi-annual report, nearly 1 in 6 high school students has seriously considered suicide, and 1 in 12 has attempted it (Centers for Disease Control, 2017). Thoughts of suicide have increased among high school-aged children;17.2 percent of high schoolers reported seriously considering suicide––a notable increase from the 13.8 percent of students who self-reported in 2009 (Centers for Disease Control, 2017). Multiracial students were the most likely (23.2 percent) to consider suicide (Centers for Disease Control, 2017). Black students were significantly less likely than their White peers to report seriously considering suicide in 2017, at 14.7 and 17.3 percent, respectively (Centers for Disease Control, 2017). Female high school students reported seriously considering suicide at nearly twice the rate of their male counterparts in 2017 (Centers for Disease Control, 2017).

MENTAL HEALTH

Nationally, mental disorders are some of the most common causes of disability (Office of Disease Prevention and Health Promotion, n.d.). In a given year, approximately 1 in every 25 American adults (which is about 9.8 million people), experiences the sort of serious mental illness that substantially interferes with or limits one or more major life activities (National Alliance on Mental Illness, n.d.). Five times as many--1 out of every 5 American adults, or 43.8 million Americans, experiences mental illness in a given year (National Alliance on Mental Illness, n.d.). A study of more than seven million American adults found that a patient's racial or ethnic identity influences the diagnosis and treatment of mental health conditions (Kaiser Permanente, 2016). Patients of color had much lower rates of mental health diagnosis compared to White patients, where the largest diagnosis gap was a difference of 64 percent lower diagnoses among Asian patients when compared to White patients (Kaiser Permanente, 2016). The narrowest gap was significant, a 28 percent difference between Latino and White patients (Kaiser Permanente, 2016). At 20.6 percent, Native American/Alaskan Native patients had the highest rates of mental disorder diagnosis and Asian Americans had the lowest rates at 7.5 percent (Kaiser Permanente, 2016). Though this trend of lower incidence of diagnoses among patients of color was repeated across several illnesses, an exception the study found is that Black patients were nearly twice as likely to be diagnosed with schizophrenia as White patients (Kaiser Permanente, 2016).

A lack of access to care or inappropriate care due to higher social, environmental and economic risk factors leads communities of color to experience a greater burden of mental and substance use

disorders (Substance Abuse and Mental Health Services Administration, 2018). When asked if they have been told that by a health professional if they have a mental illness (i.e., minor depression, major depression, and dysthymia), 19.5 percent of Black Texans reported they had, compared to 20.9 percent of White Texans and 11.1 of percent of Latino Texans (Kaiser Permanente, 2016). Conversely, Black Texans (23.6 percent) are more likely than White Texans (21.6 percent) and Latinos (20.5 percent) to report five or more days of having poor mental health (Kaiser Permanente, 2016). Within racial groups, the study found that differences in self-reported poor mental health days existed across gender and age. Black women in Texas (28.5 percent) were more likely than Black men (16.1 percent) to report poor mental health days (Kaiser Permanente, 2016). Also, Black Texans who are 45 to 64 years (28.8 percent) are more likely to report poor mental health days than those 65 years and older (21.5 percent) (Kaiser Permanente, 2016). Black Texans who are between the ages of 30 and 44 were the least likely within the demographic to report poor mental health days (15.0 percent) (Kaiser Permanente, 2016). Even after diagnosis, there are racial disparities in treatment: Black patients were 35 percent less likely to receive medication for their schizophrenia and 2.64 times more likely to receive formal psychotherapy for this condition than their White counterparts (Kaiser Permanente, 2016).

Black and Latino Americans each use mental health services at about one half the rate of Whites and about one-third the rate of Asian Americans (Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010). Challenges in seeking mental health care may be due to cultural differences in interpreting and understanding of mental illness. A 2010 study found that although the White patients felt the impact of social stigma and rejection around mental illness, stigma was far more of a prominent, core theme for Latinos and African-Americans (Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010). Latino participants described mental illness diagnoses as "potentially very socially damaging," while African-Americans considered mental illness "private family business"

(Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010). White participants sought out professional mental health treatment most frequently whereas people of color were more likely to turn toward primary care providers and nonprofessional sources of support such as clergy, family, friends and community groups (Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010). The study further found that people of color tended to wait to seek out professional mental health services until their symptoms were severe (Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010). African Americans are less likely to seek mental health care than their White peers, and when they sought out mental health care, they were more likely to leave treatment prematurely (Carpenter-Song, Chu, Drake, Ritsema, Smith & Alverson, 2010).
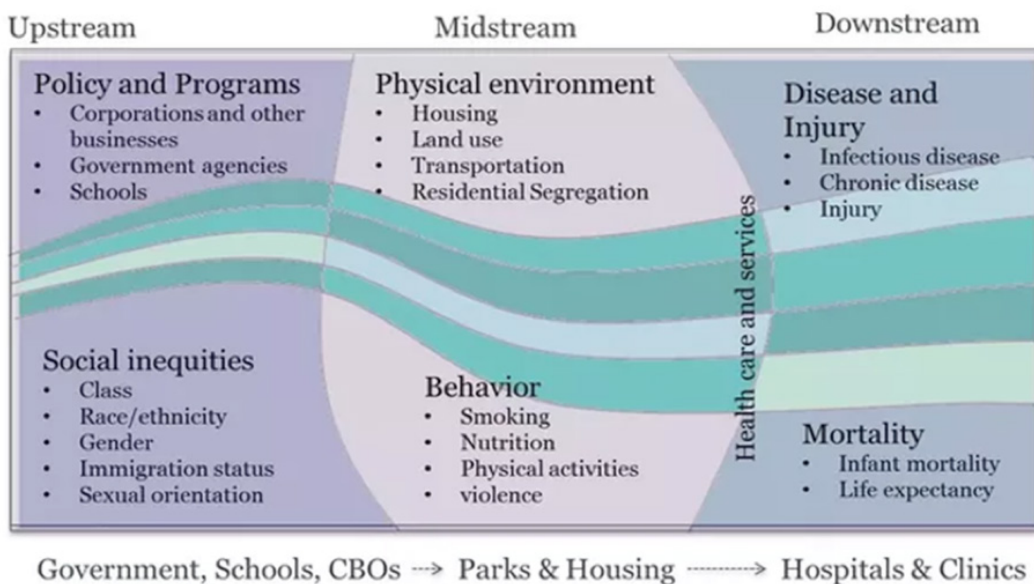
Whether mental disorders are diagnosed and treated greatly depends on the level of communication and trust between the patient and clinician. Many barriers deter people of color from seeking treatment for mental illness. To one degree or another, all Americans experience some barriers to treatment, whether they be related to cost, fragmentation of services, lack of availability of services, or societal stigma toward mental illness (Treadwell, Xanthos & Holden, 2012). Still others experience additional barriers such as migration and acculturative stress (Treadwell, Xanthos & Holden, 2012). In communities of color, common barriers to mental health treatment may include mistrust and fear of treatment, racism and discrimination, and differences in language and communication (Treadwell, Xanthos & Holden, 2012). In particular, patients of color may mistrust medical professionals based on well-documented, historical accounts of unethical treatment of their communities in research and practice (Treadwell, Xanthos & Holden, 2012). Fear of poor treatment could result in mental illness going undiagnosed and untreated which could lead to worsening of the illness. Given that culture plays a significant role in the identification of mental illness, increasing the proportion of mental health providers of color could result in appropriate and timely diagnosis and treatment for patients of color.

POLICY RECOMMENDATIONS

Since the passage of the 1964 Civil Rights Act, there are demonstrated reductions in Black and White disparities in life expectancy and infant mortality (Williams, Costa, Odunlami & Mohammed, 2008). Title VI of the Civil Rights Act was monumental in advancing access to equal participation in the health care setting for people of color. It reads, in part:

"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Title VI of the Civil Rights Act paved the way for integrated health care. Addressing the health disparities discussed throughout this report through policy is crucial to achieving health equity. The lack of equal access for people of color to quality healthcare today is strongly rooted in the legacy of residential segregation. Understanding the history of healthcare and race in this country is therefore critical to raising physician awareness of the role discrimination often plays – in treating patients and when faced with decisions impacting people of color's access to healthcare. Healthcare providers can positively affect racial and socioeconomic disparities in care through their direct interactions with patients and by implementing equitable institutional procedures and policies.

Addressing health disparities using a policy-practice perspective aligns with the concept of intervening upstream (versus downstream) in order to eliminate health disparities. As illustrated in Figure 15, upstream determinants of health are largely outside of a person's control and have a significant impact on life expectancy (Peters, 1999). Improvements in midstream factors such as housing, neighborhood conditions and socioeconomic status can lead to sizable improvements in health. Downstream factors of health cannot be fully mitigated or sustained by mere changes in individual behavior, instead requiring the development of policies that support tangible improvement

Figure 15: Upstream, Midstream, and Downstream Factors of Health

in health outcomes. For example, if policies are not in place to eliminate the social inequalities experienced by communities of color (such as unequal access to education and employment), health disparities in chronic diseases will persist due to inadequate access to quality healthcare. For example, individuals without access to reliable transportation options face major barriers that may impede travel to work, doctor's offices, and grocery stores—all of which may result in negative effects on health outcomes. Racial segregation leaves communities of color with limited resources for healthy eating options, instead putting these communities in the position to rely on the food available to them, often supplied by corner stores, fast food chains, and liquor stores. The prevalence of these businesses and lack of healthy options in communities of color is partially responsible for the higher risks of obesity and chronic diseases such as stroke, hypertension, and diabetes experienced by Black Americans and Texans.

I. EXPAND AND IMPROVE ACCESS TO HIGH-QUALITY & CULTURALLY RELEVANT CARE

I.1 » Expansion of Medicaid

Those who are uninsured and poor have limited options for healthcare services outside of emergency rooms and the sparse and strained supply of community healthcare centers (Kaiser Family Foundation, 2018). America's particular history of exploiting and oppressing people of color means they have a disproportionate risk of being uninsured and having low incomes (Kaiser Family Foundation, 2018). Over half of the uninsured Latinos in the United States and nearly two-thirds of uninsured Black Americans and American Indians/Alaska Natives have incomes below the federal poverty level (Kaiser Family Foundation, 2018). Those without health insurance are less likely to receive preventive care and services for major health conditions and chronic diseases (Kaiser Family Foundation, 2018). In 2016, one in five of every uninsured American adults were prevented from seeking needed medical attention by prohibitive costs (Kaiser Family Foundation, 2018).

A key goal of the Patient Protection and Affordable Care Act of 2010 was to reduce the number of uninsured Americans through Medicaid expansion to those who do not currently qualify because their income is above the poverty line, and those who have incomes which fall below the poverty line but who do not meet current criteria for Medicaid coverage (Kaiser Family Foundation, 2018). Texas policy makers' decision to not expand Medicaid could further exacerbate racial health disparities and is to the detriment of the more than 4.3 million Texans-- including 623,000 children--who currently lack health insurance (Texas Medical Association, n.d.). Differential access to health insurance among Texans will further impede efforts in the state to eliminate health disparities. Similarly, underutilization of preventive health services and late detection of diseases will further exacerbate health disparities between populations with differential exposure risk.

If state legislators won't expand Medicaid, an alternative mechanism for providing health insurance coverage needs to be established in Texas to improve healthcare access for vulnerable population groups. These policies must ensure all Texans have access to adequate, affordable health care coverage and can receive culturally competent services and care. This can be accomplished by making health care services accessible and available in community, school, and clinical settings, including medical, dental, vision, mental healthcare, and long-term care for the sick and the aging (Givens, Jvaag, & Van Dijk, 2018). In line with this suggestion, Texas' 85th legislative session passed House Bill 1600, allowing Medicaid to pay physicians to conduct mental health screenings during each annual well-child exam but does not extend to adults. Currently, some local efforts to connect Texans with community-based providers are achieved under the state's Delivery System Reform Incentive Payment initiatives, but this funding stream will be phased out in fiscal years 2020-2021 and will be discontinued. A disproportionate percentage of African Americans are covered by Medicaid, 27.1 percent, compared to just 10.7 percent of White Americans (DeNavas-Walt, Proctor & Smith, 2010). Expanding healthcare coverage could increase access to preventive services for many low-income individuals and people of color in Texas. Additionally, as Medicaid is the leading payer for mental health services in the nation, expanding Medicaid would likely increase coverage for mental health treatment (Kaiser Family Foundation, 2018). Screening for and addressing adverse life events at home or in the workplace during clinical visits may lead to better health outcomes for adults at the greatest risk of poor physical and mental health.

II. ADDRESS SOCIAL DETERMINANTS OF HEALTH

II.1 » Expand Health Communities Model

This model is a derivative of ACA and is administered through the Center for Medicare and Medicaid Innovation, established in 2016. The model connects Medicare and Medicaid beneficiaries with community services that address social needs such as food insecurity and inadequate or unstable housing. Under this model, persons are linked to services through screening, referral, and community navigation services. The aim of this intervention is to reduce health cost and inpatient and outpatient utilization. While there were no bills on the floor during the 85th legislative session that sought to expand the Health Communities Model, this is an action that can be taken at the municipal level. Grants to expand the model were awarded to 32 organizations in 2017. Currently, 31 organizations are participating in the model over a 5-year period. There are three such organizations in Texas, located in Houston, San Antonio, and Dallas.

II.2 » Delivery System Reform Incentive Payment

Reform initiatives within Medicaid often focus on linking healthcare and social needs. Some state Medicaid programs are supporting providers' focus on social determinants of health through "Delivery System Reform Incentive Payment" (DSRIP) initiatives. In Texas, this initiative is part of the state's 1115 Medicaid demonstration waiver and will be discontinued in fiscal year 2020-2021. In Texas, some providers have used DSRIP funds to install refrigerators in homeless shelters to improve access to insulin. This initiative, should be considered for extension beyond fiscal year 2020-2021 and after being evaluated for its effectiveness, should be considered for expansion statewide in low-income communities and communities of color.

II.3 » Adopt the Health Homes Model offered through Delivery System Reform Incentive Payment Initiatives funds

Using Delivery System Reform Incentive Payment funds, Texas can establish a health homes program to coordinate care for people who have two or more chronic conditions. States that have adopted this model can select providers whose services include comprehensive care management, care coordination, health promotion, comprehensive transitional care, patient and family support, as well as referrals to community and social support services. An evaluation of the health homes model that exist across 21 states found that most providers reported significant growth in their ability to connect patients to nonclinical social services and supports under the model.

III. BLACK HEALTHCARE PROFESSIONALS

III.1 » Increase Representation of Black Healthcare Professionals

The Institute of Medicine report, "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care" contained key recommendations that emphasized the need to increase the proportion of people from underserved communities of color in the healthcare workforce; integrate cross-cultural education in healthcare training; and advance research efforts to identify sources of disparities and promising interventions (Nelson, 2002). Consistently, one of the national actions recommended for healthcare systems for ending health disparities is to train and hire more qualified staff from underrepresented racial and ethnic groups, as well as more people with disabilities. A diverse and culturally competent healthcare workforce will help to expand health care access for the underserved. Black

and Latino Americans are less likely to receive bypass surgery when medically indicated, are less likely to receive adequate pain management, and are less likely to be treated with medication for HIV infection when treated by a physician who does not share the patient's racial or ethnic identity (Hoffman, Trawalter, Axt & Oliver, 2016). Conversely, evidence suggests that racial and ethnic concordance between physician and patient results in greater patient satisfaction (Meghani, Brooks, Gipson-Jones, Waite, Whitfield-Harris & Deatrick, 2009).

The National Health Care Disparities Report discussed the results of a random telephone survey in which the patients were asked if they agreed with the following statement: "Race affects my health care." About one-sixth, or 17 percent, of African-American patients agreed with the statement, compared to just 3 percent of White patients (National Healthcare Quality and Disparities Reports, 2004). The Kaiser Family Foundation conducted a similar study and asked patients and physicians a similar question, "How often do you think our health system treats people unfairly based on race or ethnic background?" Of the physicians surveyed, 29 percent agreed that the healthcare system treats people unfairly based on race or ethnic background very often or somewhat often, while almost half, or 47 percent, of the non-physicians stated that racial or ethnic background plays a role in treatment bias (Kaiser Family Foundation, 2002). In a 2015 survey, most of the participating primary care providers acknowledged the existence of racial and ethnic as well as socioeconomic disparities within the American health system, but a minority reported disparities in care among patients they personally treat (Kendrick, Nuccio, Leiferman & Sauaia, 2015). In a related study, compared to White patients, Black patients reported worse communication with physicians, especially regarding psychosocial and rapport-building behaviors (Cené, Roter, Carson, Miller & Cooper, 2009). People with more implicit ethnic/racial bias have worse interpersonal interactions with people of color (Zestcott, Blair & Stone, 2016). Another study demonstrates

that implicit racial bias was related to treatment recommendations for Black patients, even when physicians reported to preference between White and Black patients (Green, Carney, Pallin, Ngo, Raymond, Iezzoni & Banaji, 2007).

Community-level approaches to improve health and healthcare and reduce health disparities should include the engagement of community health workers. In Texas, African Americans make up a disproportionate share (almost 25 percent) of all community health workers, compared to their representation in the state's overall population. Community health workers are considered frontline healthcare workers and are typically trusted members of the communities they serve. In Texas, community health workers often serve as patient navigators, with enrollment in the Affordable Care Act's health insurance marketplace, while still others act as emergency responders during natural disasters. As community health workers are more likely to be people of color than other providers, and because they typically have close understandings of the communities they serve, they are more likely to provide services from a culturally and linguistically appropriate perspective, community health workers are best positioned to assist Texas patients who are most at risk of experiencing healthcare disparities.

A policy to officially recognize and certify community health workers as part of the healthcare network with equitable compensation rates would further legitimize this expanded healthcare structure in Texas. Increasing the number of billable services performed by community health workers would further strengthen the healthcare delivery system in Texas. No such bills were on the floor during Texas' 85th legislative session, but the legislature did pass House Bill 1486 which requires Health and Human Services to establish training, certification, and supervision requirements for peer specialists who would be paid for through Medicaid. Policies exist in other states that explicitly address the expansion of community health workers and can be looked to as models for Texas. In Minnesota,

Medicaid legislation (MS 256B.0625, subdivision 49), allows for payment for services of a community health worker who has completed standard curriculum; requires community health workers to be supervised by specific types of Medicaid-enrolled providers; and allows initial period of grandfathering based on prior experience. The fiscal note to this bill projected modest net savings in healthcare.

III.2 » Medicaid Payment for Doula Care

The Labor Doula program may serve as a catalyst for reducing the high maternal morbidity and mortality rate among Black mothers in Texas. When compared to mothers and babies who went through pregnancy and birth without the support of a doula, doula-assisted mothers were four times less likely to have a low birth weight baby, two times less likely to experience a birth complication, and significantly more likely to initiate breastfeeding (Gruber, Cupito & Dobson, 2013). According to Gruber and colleagues, working with a doula throughout pregnancy may increase the mother's self-efficacy in her ability to impact her own pregnancy outcomes (Gruber, Cupito & Dobson, 2013). Today, attending nurses are less available to remain with mothers throughout the duration of labor, yet many women with doula support are able to forego epidurals, avoid cesarean births, and have less stressful births (Gruber, Cupito & Dobson, 2013).

With the apparent need to improve the maternal health of Black women in Texas, the University of Texas (Austin), School of Social Work, applied for and received $300,000 from the St. David's' Foundation's Focus on the Fourth Initiative, which is aimed at improving the postpartum access and outcomes Texas. Through this grant, a local collective of researchers, social workers, policy makers, public health professionals and community activists (referred to as the Black Mamas Community Collective or BMCC) are working collaboratively with Black mothers in Travis Country and our surrounding communities to improve postpartum outcomes. The BMCC is leading the charge to end the disparity rates of maternal mortality and morbidity among Black women utilizing a transdisciplinary approach to achieving health equity from unpacking the systematic, groundwater analysis of institutional racism in our healthcare system, cultivating a pipeline of Black healthcare professionals, to home visits for Black mothers, specifically in Travis County. One component of this grant is a community doula home visiting program which brings needed doula support and resources to women in the early post-partum period and provides mothers with ongoing group support throughout that first postpartum year. House Bill 2466 which was passed and signed into law during the 85th legislative session in Texas requires children's Medicaid and the Children's Health Insurance Program to cover maternal depression screening for an enrolled child's mother during a covered well-baby visit or other office visit to a pediatrician or pediatric provider. Additionally, House Bill 2466 allows pregnant women enrolling in Medicaid to sign up for texts, emails, or phone calls from their Medicaid HMO providers to receive appointment reminders as well as health information to maintain a healthy pregnancy. House Bill 2466 was signed into law by the governor. There were no bills on the floor during the 85th legislature in Texas to allow for Medicaid payments to cover doula care. Hospitals and community health policy can participate in the spirit of this suggestion through enhanced prenatal health and childbirth education and support including doula assistance.

The legislature also passed SB 1599 requiring the Department of State Health Services to develop protocols for pregnancy-related death investigations and to report the protocols on the Department of State Health Services website. The protocols must address when investigators should perform a toxicology screening, when a suspected pregnancy-related death should be reported to a medical examiner or justice of the peace, and how to correctly complete a pregnancy-related death

certificate. These protocols will help the state develop a better understanding of the drivers of maternal mortality in Texas and inform future interventions.

Figure 16: Addressing Health Disparities at the Individual, Community, and System Level
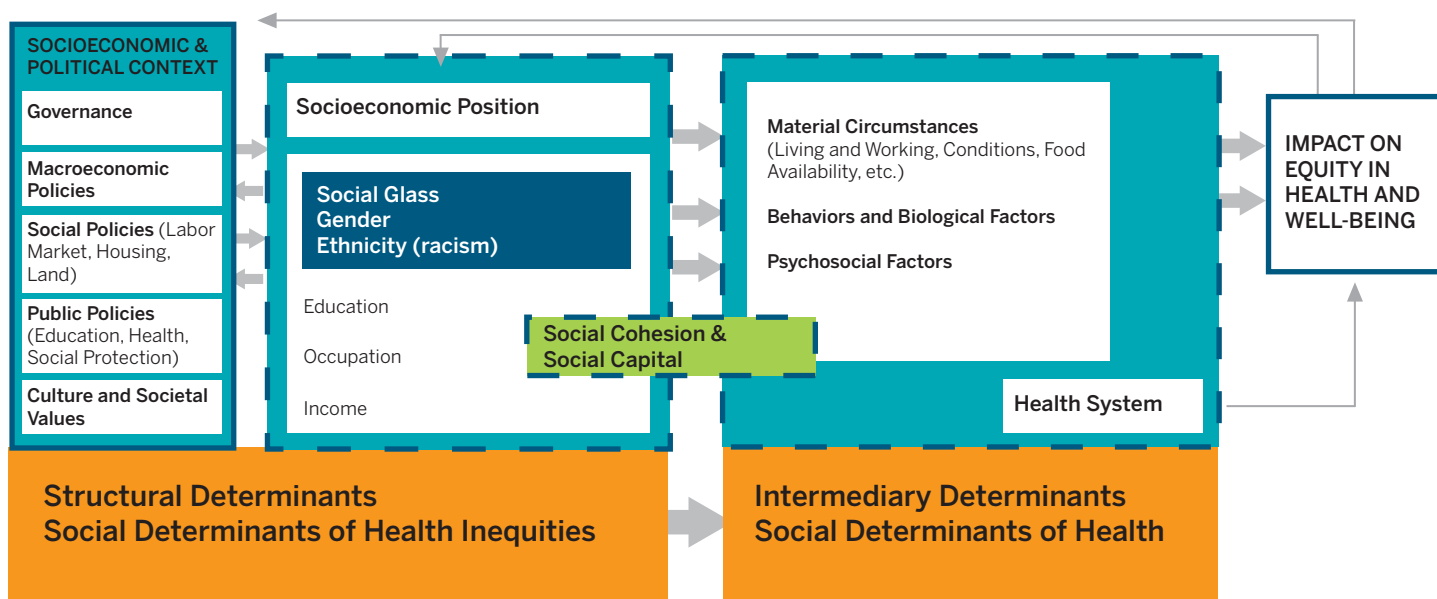
IV. SOCIAL AND ECONOMIC STRUCTURE OF COMMUNITIES

IV.1 » Strengthening Social and Economic Structure of Communities

Health equity advocates have debated the belief, with supporting evidence, that the Black-White health gap in America is a result of differential exposure to resources (e.g., quality education, well-paying jobs, and prospering neighborhoods) that promote economic success and contribute to social mobility. The Black-White racial gap in health widens when the racial economic gap widens. Upward movement on the socioeconomic status ladder is associated with improvement in health status and outcomes; there was a documented shift in the Black-White economic status which resulted in a notable increase in life expectancy among working-age Black women between the years of 1965 through 1974, or after the Civil Rights era, compared to pre-Civil Rights era, 1955-1964. Figure 22 provides a pictorial view of areas where policies (such as labor market, housing, education,

and health) can be implemented to improve the health and wellbeing of individuals. Elimination of structural and social inequities, which impede the acquisition of wealth in Texas (and within the nation, as a whole), will positively impact health equity. In this section of the report, there is a further examination of the impact of the social and economic drivers of health have on the health status of Black Texans.

Policies to address health disparities are traditionally focused on improving access, coverage, and the quality of healthcare services but, as important as healthcare is, it is a relatively small contributor to a population's overall health status. Interventions outside the healthcare system that utilize a social determinants of health lens are likely to have a larger effect on reducing the incidence of illness and may lessen the need for medical care to treat and prevent the progression of illnesses. The findings of a recent study demonstrated that college education is not linked to higher lifetime earnings and better economic achievements for Blacks when compared to Whites in the U.S. and that this

inequity leads to worse health outcomes. For example, regardless of social class, Black women experience higher risk for maternal morbidity and mortality than White women. Furthermore, income and wealth are both lower for Blacks than Whites in America. Consequently, increases in education and employment result in more tangible health gains for White Americans than Black Americans (Assari, 2018). Economic and social policies that oversimplify equal access risk further exacerbating racial inequities unless the policies address the institutional barriers that initially created disadvantages for Black Americans.

That education alone cannot close the Black-White wealth gap is, in part, related to the structural and institutional inequities riddling the American labor market (Assari, 2018). Compared to their White counterparts, college-educated Black Americans are much less likely to be employed, which reduces any health gains from education (Assari, 2018). Black Americans more commonly enter occupations that increase their exposure to environmental risk factors and must often take minimum wage, repetitive jobs that increase their risk for poor mental health, substance abuse, and health problems (Assari, 2018). Social policies should be implemented to drive economic gains among Black Americans and narrow the wealth gap between Blacks and Whites in America. These policy solutions should be at multiple levels (organizational, institutional, municipal, and statewide). Given that Black Americans are overrepresented in low paying jobs, policies providing temporary financial incentives and cash assistance may also have a role in addressing the needs of people in deep poverty. Income-related policy should also focus on expanding the eligibility for earned-income tax credits and assist parents by expanding refundable child care tax credits and increasing child care subsidies.

Even when employed in high paying jobs, Black Americans are more likely to be paid less than their White counterparts and undergo greater stress on the job (Assari, 2018). Organizational policy should ensure there is no differential in income for Blacks

and White employed in the same occupation with the same level of experience and years of service. Policy solutions should include criteria for increasing public and private sector wages with conditions for offering substantial benefits for low-income earners through living wages and paid leave. Labor policies that eliminate the racial gap in Texas will help in to redistribute incomes and allow for accumulation of wealth, over time, among Black communities. As discrimination further minimizes the health gains that Black Americans might otherwise receive as a result of upward mobility, policy makers and organizational leaders should design and enforce anti-discrimination policies that protect people of color. Even though college attainment does not protect Black wealth, post-secondary education may help in lifting the financial burden that comes with poverty and unemployment. Generally, workers with a college degree are more likely to have benefits such as health insurance, paid leave, and retirement accounts and are less likely to experience unemployment.

State level policies should minimize the disparities in access to educational resources across racial, ethnic, cultural, and social groups. Policies that invest in education from early childhood to adulthood will create a workforce that will enable Texas to develop a highly skilled workforce for an-ever changing and technically advanced labor market. However, these educational policies should be equitable across racial and ethnic lines to prevent disparities in employment (Assari, 2018). These policy-driven educational initiatives should be specifically designed with the deliberate consideration of how education attainment will benefit students of color and should not be based on evidence-based practices that were developed based on the experiences of White students. Such policies should ensure that adequate resources are allocated to school districts that serve a high proportion of students of color and should further be focused on eliminating the disproportionate discretionary disciplinary actions of Black students. Policies which help to raise school

attendance, reduce school dropout rates and increase graduation rates among Black students are also necessary in order to support health equity. For example, during the 85th Texas legislature, Senate Bill 1566 was signed into law generally requiring more school board oversight over student achievement and school district operation. Notably, an amendment in this bill requires that local school boards develop a grace period policy for students without enough money in their school lunch accounts to resolve the issue. There is a strong consensus among advocates of health equity to support initiatives that result in effective, scalable, and sustainable outcomes and impact (Artiga & Hinton, 2018). Initiatives to address health disparities cannot be successful if there is:

1. Absence of community engagement, support and participation to ensure long-term results:
2. Limited support for community development that addresses historical social inequities (e.g., housing, transportation, safety, education, and other social and neighborhood factors);
3. Lack of ongoing funding support for continuity of promising and best practices beyond the life cycle of projects (many health equity initiatives are funded for relatively short time-frames, between 2–5 years, often precluding the development of substantive partnerships and not allowing for sustaining partnerships); and
4. Nonexistence or ineffective policies for addressing social inequities to enhance the strength and assets within communities and to increase the human, physical, social capital of neighborhoods (Artiga & Hinton, 2018).

Texas housed a program within Health and Human Services (the Center for the Elimination of Disproportionality and Disparities renamed during the 85th legislative session to the Office of Minority Health Statistics and Engagement) that employed a race-equity lens and social determinants of health framework toward

understanding statewide drivers of health disparities. This program housed the state's office of minority health and as of August 31, 2018, is no longer operational. However, the contents of this report indicate that Texas still needs an office dedicated to addressing the unique health risks and disparities faced by Texans of color, and in particular, Black Texans.

Texas' 85th legislature passed House Bill 10 preventing health insurance providers from offering mental health benefits differently from other medical benefits; establishing an ombudsman within the Texas Department of Insurance to help patients navigate wrongful denials of mental health coverage; and creates a Mental Health Condition and Substance Use Disorder Parity workgroup under Health and Human Services' Office of Mental Health Coordination. This law operates within the spirit of strengthening the social and economic structure of communities by ensuring Texans aren't turned away from needed mental health services because they aren't able to navigate insurance programmatic bureaucracy; by granting the Texas Department of Insurance the ability to better investigate claims of health parity violations; and by creating a task force that is responsive to consumer complaints. Additionally, the 85th legislature passed House Bill 13 which provided a matching grant program to support community mental health programs, in an effort to support locally driven solutions to mental health challenges.

IV.2 » Promoting Health in All Policy

Policy responses to health disparities should be multilevel and operationalized across various health and social systems. Collaboration across multiple sectors to achieve a common goal of ending health disparities requires working with sectors that influence health, such as transportation, agriculture, land use, housing, public safety, and education. This idea of a multisector approach to improving health outcomes was conceptualized into a Health in All Policy by the American Public Health Association,

Public Health Institute and the California Department of Public Health. Ultimately the Health in All Policies approach seeks to institutionalize considerations of health, equity, and sustainability as a standard part of decision-making processes. The Health in All Policy model recognizes health is created by a multitude of factors beyond healthcare and, in many cases, beyond the scope of traditional public health activities. For example, policies aimed at improving access and quality of services in the public health and healthcare industry must coincide with policies that drive improvements in sectors such as businesses that boost social and economic advancement through employment.

Several cities and municipalities that have adopted Health in All Policy, are implementing related intersectoral activities focused on healthy public policy. The Seattle/King County Health Department in Washington State passed a 2014 ordinance which, in addition to establishing cross-sector partnerships, created a multi-agency task force that established determinants of equity and health against which county activities are measured and evaluated annually for progress in implementation. Richmond, California, adopted a Health in All Policy strategy and ordinance that creates an interdepartmental team with representatives of each city agency and seeks to integrate health equity into the city's strategic and business plans, accountability and performance systems, and budgets. Similarly, the City of Austin established an Equity Office to provide leadership, guidance, and insight on equity to improve the quality of life for Austinites. The City of Austin's Equity Office works across all departments and strives to build and sustain a culture of equity across the city by tackling tough issues such as institutional racism and implicit bias to meeting the needs of its residents. Ordinances like these, though unlikely to be signed into law at the state level, should be adopted across Texas at the municipal level.

During the 85th legislature, a number of laws were passed that employ cross-systems approaches to solving statewide inequities. Senate Bill 922 ensures that certain school districts and charter schools

have access to telehealth services and requires the state's Health and Human Services Commission to ensure that Medicaid reimbursement is provided for tele-health services provided through the school district or charter school, even if the health professional is not the patient's primary care provider. SB 725: Amends the Education Code related to the authority of a school district to donate food to a nonprofit organization to be served to students of the district and the overdue or negative balances on student meal accounts. The bill would authorize school districts to allow campuses to elect to donate excess food to a non-profit organization through an official of the organization who is directly affiliated with the campus. The Sandra Bland Act, or Senate Bill 1849, which was signed into law last legislative session requires county jails to divert people with mental health or substance abuse issues toward treatment; makes it easier for defendants with a mental illness or intellectual disability to receive a personal bond; and requires independent law enforcement agencies to investigate jail deaths.

SUMMARY

Overall, this report seeks to be a programmatic and policy-oriented tool within the state of Texas as it relates to applying the social determinants of health as a framework to reduce health disparities and particularly among Black Texans, who continue to bear the burden of hidden costs, declining health status and lowering life expectancy. Using a social determinants of health lens to evaluate Texas and the nation's overall health reflects that these outcomes are determined by more than what is spent on healthcare, but rather are the sum of modifiable factors.

Addressing health inequity requires a multi-level and multi-sector approach. The recommendations made within this paper encourage policy-makers and program administrators to build a more integrated approach that works across sectors to address the multi-dimensional health

and socioeconomic challenges of Black Texans. Increasing the racial and ethnic diversity within the healthcare workforce would ensure that the needs and cultural beliefs of patients are supported as well as heighten the cultural awareness of healthcare providers in the delivery of care. Well-designed interventions across health systems can be effective at targeting health inequities when done consistently and within the most vulnerable of communities. Such community-based interventions should bridge workforce diversity with addressing the social determinants to improve access to equitable and quality healthcare services for all Black Texans. It is anticipated that this expanded approach will improve healthcare access and outcomes and enhance the quality of life for underserved communities of color.

LIMITATIONS

The information provided in this report is not exhaustive. Only specific diseases were used in this report to demonstrate racial and ethnic health disparities. Disparities within racial and ethnic sub groups were not examined as the focus was to show each population groups as a collective. However, it should be acknowledged that there are recognizable differences within racial and ethnic population groups depending on whether they were born in the United States or foreign-born. These differences disappear the longer foreign-born individuals live in the United States, become acculturated, and as their offspring assimilate into American culture. In addition, this report did not differentiate population groups based on language and cultural difference for similar reasons. Furthermore, this report did not examine all factors and understands that disparities and inequalities among racial and ethnic groups are affected by many unmeasured factors, some of which cannot be easily identified, quantified and/or modified. Data sources are not always consistent with the year of publication.

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Figure 7: Chart reproduced from Kochanek, K. D., Murphy, S. L., Xu, J., & Arias, E. (2017). Mortality in the United States, 2016. NCHS data Brief, no 293. Hyattsville, MD: National Center for Health Statistics. 1 Statistically significant decrease in age-adjusted death rate from 2015 to 2016 (p < 0.05). 2 Statistically significant increase in age-adjusted death rate from 2015 to 2016 (p < 0.05). Notes: A total of 2,744,248 resident deaths were registered in the United States in 2016. Rankings for 2015 data are not shown. Causes of death are ranked according to number of deaths.'

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