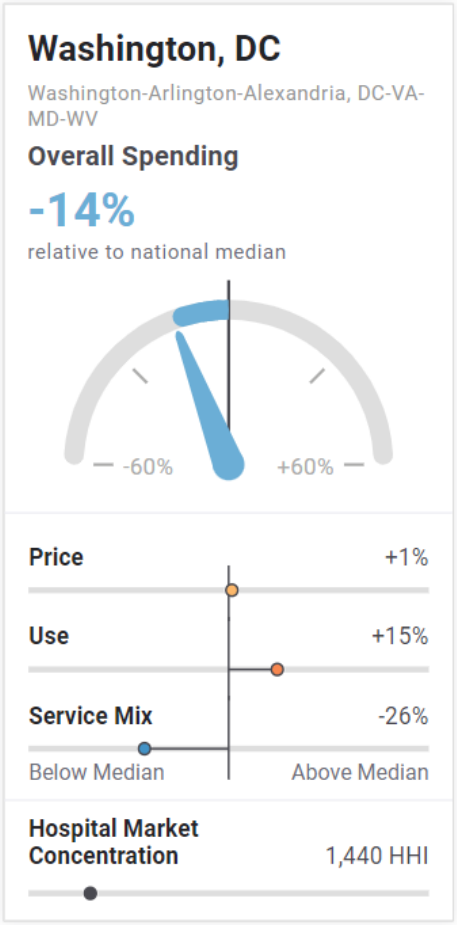
HEALTH CARE COST INSTITUTE

Healthy Marketplace Index

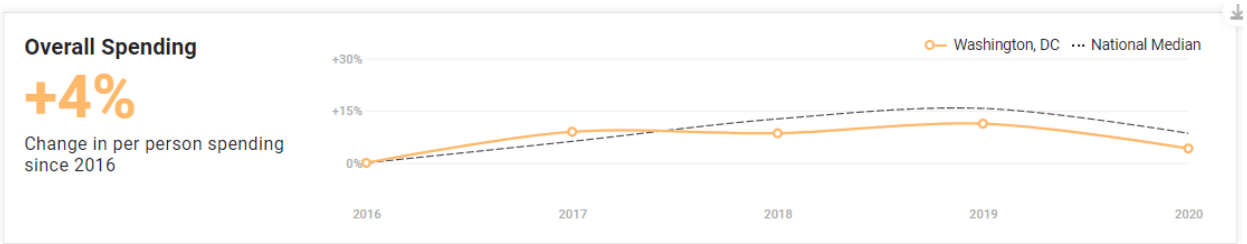
January 2023

A Closer Look at Washington, D.C.



Each year, HCCI creates the Healthy Marketplace Index (HMI) to measure how health care spending varies across the United States. The HMI shows local health care spending, prices, and use compared to the national median. By describing how health care spending varies geographically, HMI is a starting point in understanding what is causing high and rising health care costs in a particular metropolitan area. Across the country, a range of factors drive health care spending. High spending on health care, in turn, forces families, businesses, and governments to make difficult tradeoffs between needed care and other priorities such as housing, education, and food.

This case study begins to broaden HMI's exploration of health care spending in specific areas by describing some of the factors contributing to spending, use, and prices in one area—Washington, D.C.—including social determinants of health, prevalence of disease, health care providers, and health care markets. The HMI shows that health care spending in Washington, D.C. was 14% lower than the national median in 2020 with slightly higher prices and higher use, but a lower cost mix of services provided. Spending in Washington, D.C. grew at a rate roughly similar to the national median—about 4%—from 2016-2020. Although Washington, D.C.'s HMI includes the broader Washington-Arlington-Alexandria metro area, this case study focuses only on Washington, D.C.

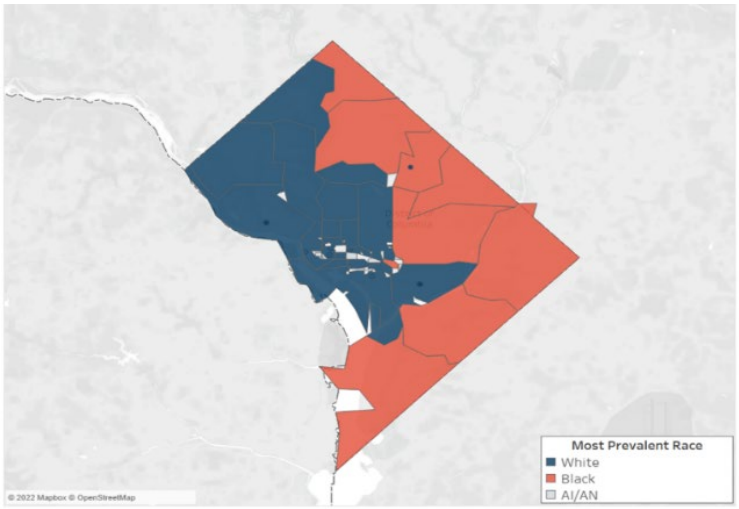


Established in 1790s, the nation's capital, Washington, D.C., is home to over 700,000 residents.[1] It is divided into eight wards, each with its own elected council members.

As shown in Table 1, the racial and ethnic makeup of Washington, D.C.'s population is quite different than the U.S. overall. Close to half (46%) of the population in Washington, D.C. is Black, and an equal share of residents are White. In contrast, nationally, 14% of the population is Black, and 76% is White. Hispanic residents make up 12% of the Washington, D.C. population, compared to 19% in the U.S. As we discuss throughout this report, there are substantial disparities between Black and White populations in the District, likely reflecting the lasting effects of policies enforced throughout the 20th century. These policies include redlining, in which neighborhoods that were majority Black were labeled as less desirable. These and other exclusionary zoning practices contributed to the structural neighborhood conditions that exist in D.C. today, particularly in communities east of the Anacostia River (Figure 1).[2]

The median household income in Washington, D.C. ($90,000) was $26,000 (40%) above the national median, and the poverty rate was 16%, compared to 11% nationally. A smaller share of Washington, D.C. residents have no health insurance (4%) relative to the national population (9%), in part due to the district's robust Medicaid program, which insures a quarter of the city's population. Over half of city residents receive health insurance through work, which is particularly important for HMI as the data used to create HMI are representative of people with employer-sponsored insurance.

Figure 1. Racial/Ethnic Prevalence in Washington, D.C. by Zip Code, 2020



Notes: Map was created using five-year estimates from the 2020 U.S. Census American Community Survey Database. All zip codes that are partially within the city's boundaries are included.

Table 1. Demographic Characteristics of the Population in Washington, D.C., 2020

	Washington, D.C.	U.S.
Total Population	670,050	331,893,745
Race/Ethnicity		
Black/African American	46%	14%
White	46%	76%
Hispanic or Latino	12%	19%
Asian	5%	6%
American Indian/Alaska Native	Less Than 1%	Less Than 1%
Female	53%	51%
Age		
Under 18 Years	19%	22%
Over 65 Years	13%	17%
Education*		
High School Graduate or Higher	92%	89%
Bachelor's Degree or Higher	60%	33%
Employment^		
In Civilian Labor Force	70%	63%
Unemployment Rate	8%	8%
Median Household Income	$90,842	$64,994
Poverty	17%	11%
Health Insurance		
Uninsured	4%	9%
Employer-Sponsored Insurance	55%	50%
Medicare	13%	14%
Medicaid	25%	20%

Notes: All measures are five-year estimates from the 2020 U.S. Census American Community Survey Database.[3]
*Includes persons of age 25 and older. ^ Includes civilians of age 16 and older

Social Determinants of Health

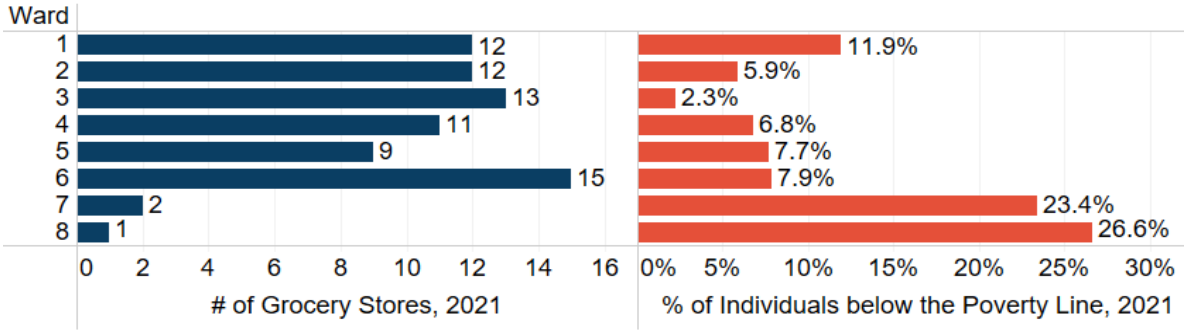
It is well established that the conditions in which people live, play, grow, and work affect health outcomes.[4] Therefore, understanding these conditions is important for understanding health spending, though the interaction between them and spending is complex and could be influenced by a range of local and systemic factors.

The CDC identified five key areas of social determinants of health: health care access and quality; education access and quality; social and community context; economic stability; and neighborhood and built environment.[5] Table 1 provides some insight into how people in Washington, D.C. experience many of these social determinants, including economic stability, education, and health care access.

Food security and housing stability have received increasing attention in recent years due to their impact on people's health. More than 20% of D.C. residents experienced severe housing problems in 2019, including overcrowding, high costs, lack of kitchen facilities, and lack of plumbing.[6] Further, 17% of the city's residents spent 50% or more of their income on housing, compared to 14% of people across the U.S.[7] In 2019,

10% of D.C. residents experienced food insecurity, similar to the U.S. average of 11%. Data from DC Hunger Solutions shows that the District has 75 full-service grocery stores across all wards, however there is significant variation in where grocery stores are located (Figure 2).[8] DC's food deserts are concentrated in Wards 7 and 8, which together have only three full-service grocery stores for more than 150,000 residents. From 2010 to 2020, Wards 7 and 8 each lost two full-service grocery stores.[9]

Figure 2. Number of Grocery Stores and Percent in Poverty by Ward in Washington, D.C.



Notes: All measures are from DC Hunger Solutions data.[10]

Prevalence of Disease, Life Expectancy, and Health Status

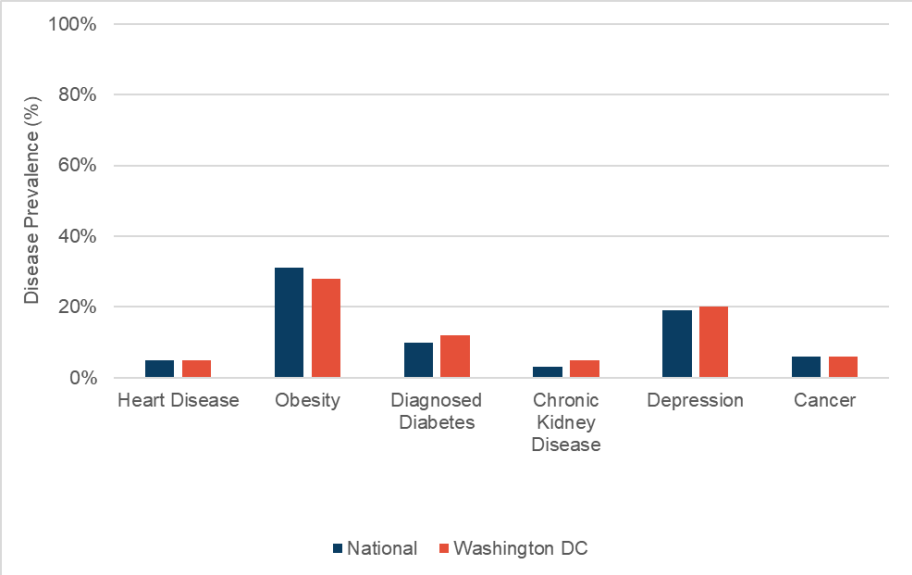
Overall, people living in Washington, D.C. have similar prevalence of disease as the general U.S. population, with equal rates of heart disease (5%), cancer (6%), and high blood pressure (30%).

Across some dimensions, people in Washington, D.C. have lower disease prevalence, including obesity (28% versus 31% nationally) and chronic obstructive pulmonary disease (5% versus 6% nationally). However, as shown in Figure 3, rates of diagnosed diabetes and depression are higher in Washington, D.C. than in the U.S. overall.[11]

Compared to a national share of 14%, 12% of D.C. residents report 14 or more days of poor mental health in the past month. Further, 10% report 14 or more days of poor physical health in the past month, also slightly lower than the general U.S. population (12%).[12]

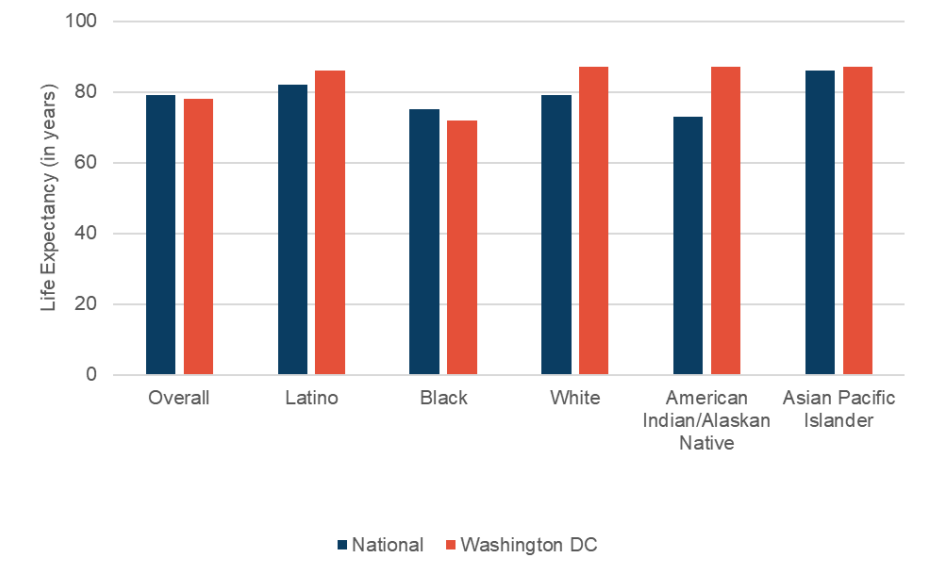
For someone born today in Washington, D.C., life expectancy is similar to the general U.S. population at 78 years old compared to 79 years nationally. Life expectancy within the Black population is lower (72 years old) compared to the White population (87 years old) and the Latino population (86 years old), shown in Figure 4. [13]

Figure 3. Prevalence of Disease in Washington, D.C., 2020



Notes: All measures are from the Centers for Disease Control and Prevention's PLACES 2020 Database at the county level.

Figure 4. Life Expectancy in Washington, D.C. by Race/Ethnicity, 2020



Notes: All measures are from the Institute for Health Metrics and Evaluation 2021 Life Expectancy Database at the county level.

Health Care Providers in Washington, D.C.

Washington, D.C. has fewer hospital beds and physicians per capita than nearby Baltimore but is similar to other mid-Atlantic cities such as Philadelphia.[14] The District has 14 hospitals, of which three are in Ward 1 and three are in Ward 8, the southern tip of the District (Figure 5).[15]

In addition to general acute care hospitals, the D.C. area is home to academic medical centers, a major children's hospital, and specialty hospitals including the Walter Reed Army Medical Center (in neighboring Bethesda, MD). In addition, the District has a relatively high number of community and other health centers. Compared to 31 Federally Qualified Health Centers in nearby Baltimore, for example, Washington, D.C. as 49 FQHCs and 70 community health centers (compared to only 29 in Baltimore).

Although there are multiple hospitals in Ward 8, these hospitals offer limited services (e.g., no obstetric care), and have relatively few beds (6% of total inpatient admissions in the city), leaving residents of this area with reduced access to care.[16]

Following the closure of the maternal ward at the United Medical Center, birthing people living in communities across the Anacostia River must go elsewhere to deliver their babies. While they can go to other D.C. hospitals, transportation and adequately coordinating appointments are barriers to access. Residents living in Wards 2 and 3, located in the northwest region of the city, are nearest to hospitals that offer obstetric care (Figure 6).

Figure 5. Number of Hospitals in Washington, D.C. by Zip Code, 2020

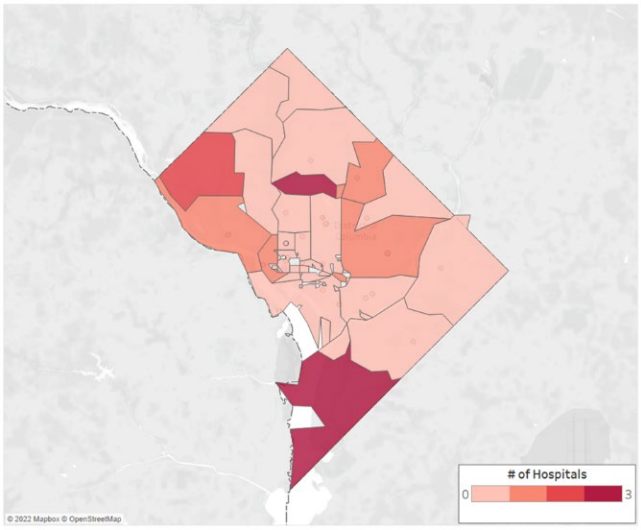
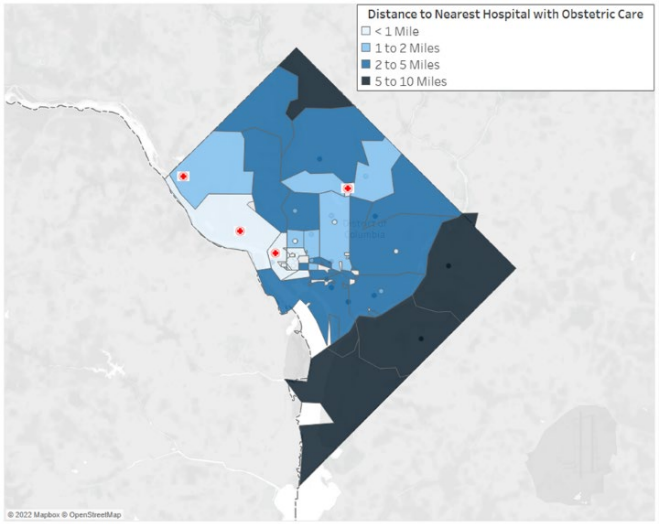


Figure 6. Distance to Nearest Hospital with Obstetric Care in Washington, D.C. by Zip Code, 2020



Notes: Maps were created using the 2020 American Hospital Association Survey. All zip codes that are partially within the city's boundaries are included.

Health Care Infrastructure and Market

Health care prices in commercial insurance markets are the result of negotiations between insurance companies and health care providers, including hospitals and physicians. These negotiations are influenced by how much market power each side has. For example, if a hospital is the only or dominant provider of a certain type of care (e.g., cancer care) in an area, that hospital may have leverage in negotiations because the insurers in the area need to have that hospital in their provider network to attract enrollees.

When insurance companies exercise market power, higher premiums or lower plan quality for consumers, or lower payments to providers can result. On the other hand, when hospitals and other providers exercise market power, it generally results in higher prices which make health care services less affordable and accessible for people who live in the area.

The standard measure of market concentration is the Herfindahl-Hirschman Index (HHI). This measure captures the relative sizes of firms in a market and ranges from 0 (perfectly competitive, i.e., many firms of relatively equal size) to 10,000 (a monopoly, where one firm captures the whole market). Above a certain threshold (2,500), federal regulators consider a market to be highly concentrated. Above this level, there is significant concern that market power may distort price negotiations.

Both the hospital and insurance markets in the Washington, D.C. metro area are relatively unconcentrated. The hospital market HHI was 1,440 in 2020 and the commercial insurance market HHI was 1,660, with CareFirst having the largest market share at 26%, followed by the UnitedHealth Group at 15%.[17]

Hospital Prices

These market dynamics contribute to health care prices in D.C. that are close to the national median when aggregated across all hospitals in the area. Prices at individual hospitals, however, vary considerably. In Table 2 we show cash and private insurer prices (the minimum and maximum rates reported) for an abdominal ultrasound in the first trimester of pregnancy across several D.C. area hospitals. These prices are reported by hospitals as part of the federal government's requirement that, as of January 1, 2021, hospitals make public prices for a variety of services, including prices for patients with and without health insurance. Prices varied considerably across hospitals and across payers within hospitals despite being in the same metro area for the same service.

Table 2. Variation in Prices for an Abdominal Ultrasound in Selected D.C. Area Hospitals

Hospital	Cash Price	Minimum Negotiated Rate	Maximum Negotiated Rate
Howard Univ Hospital	$255	$150	$576
George Washington Univ Hospital	$739	$341	$1,847
Sibley Memorial Hospital	$881	$193	$980
Inova Fairfax Hospital	$788	$255	$902

Notes: All price data from Turquoise Health.

Conclusion

Across the country, health care costs are high, growing, and increasingly unaffordable for businesses, government, and families. The burden of health care costs has tangible financial effects. For example, 30% of adults nationally reported problems paying a medical bill and 15% reported needing to change their way of life to pay their medical bills.[18] In Washington, D.C., 6% of all residents have some share of medical debt in collections compared to 13% in the U.S.[19] Rates among communities of color in Washington, D.C. were three times higher than in White communities (9% compared to 3%). The burdens and stress of paying medical bills often mean that people delay or forego care that is needed.

High spending on health care for individuals with health insurance through their job also raises costs for employers, who cover, on average, over 70% of the premium associated with health care coverage for their workers.[20] In turn, higher spending on health insurance often means that wages and other forms of compensation are less generous. For state governments, rising health care spending threatens health care access for their residents, increases costs for businesses, and burdens state budgets.

HCCI's Healthy Marketplace Index highlights how health care costs uniquely present themselves in metro areas throughout the United States. This case study begins to add dimension to HMI with the goal of increasing understanding of what drives spending locally and nationally. Understanding the range of factors that result in an area's health care spending, and the mix of use, price, and composition of health care services that drives spending, is important for any efforts to lower prices or improve the value of spending. In turn, public and private decisionmakers can identify potential policy interventions to control and optimize health care spending that are most appropriate to the local area.

About the Healthy Marketplace Index

HCCI created the Healthy Marketplace Index (HMI) by analyzing more than 4.2 billion claims for people with employer-sponsored insurance between 2016 and 2020. We computed health care spending, prices, and use indices for 186 metro areas across 44 states. The HMI is calculated for spending overall, and separately for hospital inpatient, outpatient, and physician services. See our technical documentation and downloadable data for more information on HMI.

Endnotes

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