



# **District of Columbia** HEALTH SYSTEMS PLAN



Final Draft for Comment



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## **BACKGROUND AND APPROACH**

#### BACKGROUND AND OVERVIEW

#### Background and Purpose of HSP

The District of Columbia's (DC) State Health Planning and Development Agency (SHPDA) is responsible for developing a comprehensive Health Systems Plan (HSP). The primary purpose of the HSP is to serve as a roadmap for the development of a comprehensive, accessible, equitable health care system capable of providing the highest quality services in a cost effective manner to those who live and work in DC. The HSP is informed by a comprehensive needs assessment that clarifies community need, barriers to care, unmet service need, provider capacity, and service gaps across all health service categories. Per DC Official Code § 44-403 and § 44-404, the HSP is developed under the auspices of the SHPDA and the Statewide Health Coordinating Council (SHCC) - a representative body of community stakeholders appointed by the Mayor with the advice and consent of the Council of the District of Columbia. The SHPDA and the SHCC will use the HSP to recommend specific strategic action and to facilitate cooperation between the Department of Health and other public and private sector entities. The SHPDA and the SHCC will also use the HSP to guide the District of Columbia's Certificate of Need (CON) program; the HSP will be a source of information and guidance to help determine if CON applications show public health value. More specifically, the HSP will be used to: (1) prioritize and promote certain community need- or service-related issues for investment, (2) clarify issues related to community characteristics, community need, barriers to care, existing service gaps, unmet need, and other healthrelated factors, and (3) guide a more refined, data driven, and objective CON application review process.

Over the past decade, there has been an increased understanding among policy-makers, public officials, and providers of the importance of developing broad system wide plans that guide how public and private

agencies and service providers should work collectively to strengthen regional health systems. To be effective, these plans, along with their associated assessments and recommendations, must be:

• Comprehensive, involving the full range of health, social service, and public health providers;

• Data-driven, applying quantitative and qualitative data from primary and secondary sources in ways that allow for sound decision making;

• Collaborative, engaging all relevant stakeholders – including policy-makers, public agencies, service providers, and the community at-large – in a transparent, inclusive process;

• Action-oriented, measurable, and justifiable, providing a clear path or roadmap that guides action in clear, specific, measurable ways and allows for the implementation of short-term and long-term strategies; and

• Evidence-based, implementing projects and strategies that are proven, rooted in clinical or service provider experience, and take into consideration the interests and needs of the target population.

The HSP articulated in this report was developed with these principles in mind. Each service domain has a series of associated goals and objectives which illustrate the types of evidence-based initiatives or



service-related investments that are called for to address service gaps, areas of unmet need, barriers to care, or other health service related issues based on the HSP's assessment. The SHPDA will use this information to promote investments in particular service sectors, or to justify initiatives geared towards specific communities or segments of the population.

Data compiled and analyzed to develop the HSP will be used to guide the CON development and review process. More specifically, the HSP will inform the process of identifying objective benchmarks related to unmet need, service gaps, and/or service capacity. These benchmarks will be used by the SHPDA to provide guidance to potential CON applicants and will be used to ensure an objective, data-driven, and transparent CON approval process.

POST-ACUTE

SERVICES

DISTRICT OF COLUMBIA HEALTH SYSTEMS PLAN 2017 (Final Draft for Comment)

#### Broader Context of the HSP

The HSP will provide vital information that will be used to help drive the SHPDA approval process, and determine if CON applications address community need and can show demonstrable "public health value." Despite the clear focus on the health service delivery system, it is important to note that the overall goals of the SHPDA, the SHCC and the DOH are much broader and more inclusive. The mission of the DC DOH is as follows:

"The District of Columbia Department of Health **promotes health, wellness and equity, across the District,** and protects the safety of residents, visitors, and those doing business in the nation's Capital."

## CONCEPTUAL FRAMEWORK FOR DETERMINANTS OF HEALTH



There is a growing appreciation for the idea that health system improvements related to access and quality have limited impact on overall population health status; research shows that only 10-15% of one's preventable mortality is attributable to medical care; the remainder is linked to genetics, behavior, social determinants of health, and physical environment.<sup>1</sup> In order to have a real and sustained impact on overall well-being and the health disparities that exist in DC, the SHPDA, SHCC, DOH, and the District government must also address the underlying social determinants, inequities, and injustices that are at the root of existing health status issues.

In providing guidance related to the development of the HSP, the SHPDA and SHCC were clear that the core analyses should focus on assessing health service gaps, capacity, utilization, and the distribution of health services. The SHPDA and SHCC were also clear that the assessment should be aligned with DOH's broader mission and should consider an extensive array of quantitative and qualitative data points related to health risk factors, morbidity, mortality, health equity, and the underlying social determinants of health; these issues needed to be considered when identifying HSP priorities and developing strategic action plans. This information will be used to direct improvements to DC's CON application guidance review process in ways that promote activities and investments that are most likely to impact health status and existing health disparities.

In order for the HSP to be aligned with the DOH's broader agenda, the HSP was developed in the context of health equity. Health equity is the attainment of the highest level of health for all people. Achieving requires ongoing and focused societal efforts to address avoidable inequalities, underlying socioeconomic factors, and historical and contemporary injustices that prevent all people from being valued equally. Ultimately, the goal of achieving health equity is the elimination of health and health care disparities. In 2015, the DC Director of the DOH hired a Director of Health Equity to spearhead an effort to create a District-wide Health Equity Plan. The HSP will augment this work and will be fully aligned with these efforts.



## **Health Equity**

## EQUALITY DOESN'T MEAN EQUITY

Image adapted from Craig Froehle, University of Cincinnati.

Finally, it is important to note that DOH, and the DC government as a whole, has adopted a health in all policies approach – a collaborative method for improving the health of all people and ensuring health equity by incorporating health considerations into decision-making across DC departments, policy areas, and private service sectors. The DOH Office of Health Equity is working in collaboration with the DC Office of Planning to incorporate health considerations into the District's Comprehensive Plan; the SHPDA, the SHCC, and DOH will work closely with the DC Office of Planning to ensure that the HSP is aligned with these efforts. The image below illustrates six domains that are to be considered when developing a health equity and health in all policies approach.



## **Health in All Policies Domains**

Image adapted from City of Richmond, California: Health in All Policies Report, 2015.

#### APPROACH AND METHODS

#### **Overview of Approach**

The DC Health Systems Plan is being developed through a three-phased process designed to:

1) Clarify community characteristics, community health need, health status, social determinants, and other health-related priorities for the District overall and for specific geographic (i.e., wards

and zip codes), demographic (i.e., race/ethnicity, age, gender, family composition), and socioeconomic (i.e., income, poverty-level, and education) segments of the population.

2) Characterize and assess the capacity and strength of the existing health system, particularly the safety net.

3) Assess unmet need, service gaps, and barriers to access.

4) Explore a number of emerging service delivery categories in more depth to ensure that they are appropriately addressed in the HSP.

5) Engage community residents, a full range of service providers, and other key stakeholders.

6) Present primary and secondary data findings (quantitative and qualitative) in ways that guide the SHPDA and the SHCC to approve a sound HSP.

7) Conduct strategic planning exercises with key stakeholders, either one-on-one or in small group sessions, to identify key priorities and evidence-informed interventions that address identified priorities.

8) Develop a clear and visually appealing final report.

#### Phase 1: Assessment

The assessment compiles, analyzes, and presents quantitative and qualitative information in two major areas:

- <u>Assessment of Community Characteristics, Health Status, and Social Determinants of Health:</u> With respect to assessing community characteristics, health status and social determinants, a broad range of quantitative data was compiled to characterize the population (demographically, socioeconomically, and geographically), identify the leading health-related risk factors and causes of morbidity/mortality, and identify the most significant barriers to care and social determinants of health facing DC residents. This information was compiled primarily from existing quantitative secondary data sources, including data from Healthy People 2020, the behavioral risk factor survey system (BRFSS), a recent community health needs assessment (CHNA) conducted by the DC Healthy Communities Collaborative, and a range of other existing secondary sources.
- <u>Assessment of Health System Strength, Service Distribution, and Utilization Trends:</u> With respect to assessing the strength of DC's health system, a broad array of health service utilization, capacity, and claims data was compiled and analyzed to assess service gaps or shortages, unmet need, and distribution of services across the district. In addition, utilization and claims data was analyzed to assess utilization trends and in particularly in- and out-migration of services within DC across wards, as well as out-migration of services by DC residents. More specifically, this portion of the assessment to-date has involved an analysis of Medicaid claims,

commercial insurance claims, emergency department data, hospital discharge data, and capacity data from primary care providers, hospitals, and other service areas (e.g., long-term care, specialty care, behavioral health, etc.).

#### **Quantitative Data Sources**

#### I. DEMOGRAPHIC DATA

• US Census Data. American Community Survey (ACS) Data, 1-Year Estimates and 5-Year Estimates. These datasets includes demographic, family composition, poverty, income, housing, and other data variable for DC residents overall, by census tract and by ward.

#### II. EPIDEMIOLOGIC DATA

- **Healthy People 2020.** The District of Columbia Healthy People 2020 Framework is a shared community health agenda that monitors 150 objectives and targets for the year 2020, and recommends over 85 strategies to improve population health. Data was pulled on selected variables to assess current health status.
- **BRFSS.** The Behavioral Risk Factor Surveillance Survey is a monthly telephone survey conducted in every state in the U.S., DC, and three U.S. territories. The survey collects data on chronic diseases and related health behaviors from a randomly selected adult in each household that participates. Data was pulled on selected variables to assess current health status.
- **DC Healthy Communities Collaborative Community Health Needs Assessment.** The DC Healthy Communities Collaborative is group of community health leaders and organizations, formed in 2012, to assess and address community health needs in the DC area. In 2015-2016, the collaborative conducted a community health assessment identifying health needs within the District.
- **Range of Data from DC Government Sources.** Data was compiled from a broad range of sources from across DC Government including the Department of Health, the Office of Planning, the Department of Housing and Community Development, the Department of Health Care Finance, the Department of Behavioral Health, and others.

#### **III. UTILIZATION AND CLAIMS DATA**

• **Hospital Discharge.** The inpatient discharge data reflects all hospitalizations taking place at short-term medical hospitals located within DC. This data provides information about the patients' location (zip code only), age, gender, and other personal characteristics, as well as the facility to which they were admitted, the length of stay, diagnoses, procedures, and likelihood of complications, etc. The data permits the examination of access patterns for hospital services by DC residents, as well as the reliance of DC facilities by residents of surrounding states. The diagnoses can be used to examine Ambulatory Care Sensitive (ACS) conditions as well as

'marker' or reference condition hospitalizations.

- Hospital Outpatient and Emergency Department (ED). Similar to the hospitalization data, this data set provides the ability to look at activity within the other services that hospitals provide through their facilities and networks. The ED data shows the degree to which primary care and ambulatory-care sensitive conditions are being provided through the ED and where patients using the ED are coming from. Similar origin-destination matrices are developed to examine patient flow from within a community for both ED and outpatient department services.
- Medicaid Claims Data. Medicaid claims information was received based on a structured data request that was submitted near the beginning of the project. This data set covers all Medicaid billed office visits for medical, psychiatric, and dental services.
- **Private Claims.** While care access for the Medicaid population is a point of analysis of primary care and health care resources availability, Medicaid does not typically constitute the majority of care for the population, many more of whom have private insurance. Furthermore, without a comparably defined data set for those with commercial insurance, it is difficult to interpret the degree to which those on Medicaid may experience the system differently than those with private coverage. Utilization rates, differential flow patterns, average/fractional distance and time to receive care, and per capita utilization rates are all calculations possible using this data. The new federal Shortage Designation Submission System (SDMS) asks that each state identify capacity across all provider groups, not just in requested designation areas. While private data will not be fully representative of the privately insured population, it will likely highlight all providers in the area based on the acceptance of major carrier insurance, feeding directly into the shortage designation and Primary Care Needs Assessment planning.

#### **IV. CAPACITY DATA**

- **Primary Care Survey.** Primary care clinical staffing data is compiled from the DC DOH Community Health Administration (CHA) to help assess the capacity of DC's primary care network. With assistance from CHA, a primary care assessment survey was created and distributed to over 20 District providers.
- FQHC Uniform Data System (UDS). Capacity and other health-related data is compiled from HRSA's Bureau of Primary Health Care, the DC Primary Care Association, and DC's Federally Qualified Health Centers.
- **DC Department of Behavioral Health.** Capacity and other health-related data is compiled from DC's Department of Behavioral Health.
- Other Health System Capacity Data. Other data detailing the capacity (e.g., hospital beds, longterm care beds, nursing home beds, and assisted living slots, etc.) is compiled from various sources, including the DC Hospital Association and the DC Home Health Association.

#### **Qualitative Data Sources**

I. KEY INFORMANT INTERVIEWS. Face-to-face interviews were conducted with nearly 40 individuals from August to December of 2016. HSP key informants include health and public officials, service providers, representatives from advocacy groups, consumers, and other community leaders. The purpose of the interviews was to collect qualitative information that would allow for confirmation and refinement of quantitative data findings. This information provided important context and clarified the needs and priorities of the community. Finally, the interviews identified a series of core initiatives, tied to community need and health system capacity, that were likely to have broad buy-in for the HSP. A list of HSP key informant interviews can be found in Appendix A.

**II. PRIMARY CARE KEY INFORMANT INTERVIEWS.** Approximately 20 primary care providers were interviewed to inform the HSP and the Primary Care Needs Assessment (PCNA). Interviews explored the underlying root causes of access barriers, no-show rates, limited acceptance of Medicaid insured patients by private providers, and related health system issues.

**III. COMMUNITY FORUMS.** Three community forums, one in Wards 7/8 (December 7, 2016), one in Ward 5 (December 10, 2016), and one in Ward 4 (January 14, 2017), were held to gather information directly from community residents, particularly in the wards that were experiencing the greatest health disparities.

A review of data limitations is included in Appendix B.

#### Phase II: Priority Setting, Planning, and HSP Development

Based on review of quantitative and qualitative findings to-date, a menu of priority areas related to community health status, health system strengths, and health system structures was developed. These strategic priorities were presented to the SHPDA, the SHCC, and senior leadership at DOH to begin the process of identifying priority areas and strategic recommendations.

The HSP includes narrative sections that clearly articulate key findings, and identifies a series of activities that will allow stakeholders to digest the range of actions that should be taken to achieve HSP goals and recommendations. The HSP will identify potential collaborators and community partners, recommend measures to assess impact, and suggest a timeline for implementing the recommended activities.

#### Phase III: Reporting and Dissemination of Findings

The HSP will (1) succinctly summarize findings, priorities, and strategic plans, (2) provide the full range of detailed data that was compiled for the HSP, and (3) include a set of recommendations that will serve as a guide to the SHPDA, the SHCC, DOH, and service providers in their efforts to address unmet need, service gaps, barriers to care, and social determinants of health, as well as strengthen the DC health system overall.

## COMMUNITY CHARACTERISTICS, UNDERLYING DETERMINANTS, AND HEALTH STATUS

The assessment captured quantitative and qualitative data related to demographics, social determinants of health, morbidity and mortality, and access to health-related resources. This data provided valuable information that characterized the population and provided insights into barriers to care, leading determinants of health, and health inequities. Qualitative information gathered through stakeholder interviews and community forums was critical to assessing health status, clarifying health-related disparities and determinants of health, identifying community health priorities, and identifying health system strengths and weaknesses.

Population characteristics such as age, gender identity, race, ethnicity, sexual orientation, and language were examined to characterize community composition, needs, and health status. Social, economic and environmental factors that impact health status and health equity, like income, education, housing, and mobility, were also examined. Finally, epidemiologic and morbidity/mortality related data was used to characterize disease burden and health inequities, identify target populations and health-related priorities, and to target strategic responses.

This document outlines a summary of key findings related to community characteristics, the social determinants of health for DC, and the leading health disparities. For additional information, please see Data Placemats in Appendix C.

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#### COMMUNITY CHARACTERISTICS

#### Age and Gender

Age and gender are fundamental factors to consider when assessing individual and community health status. Men tend to have a shorter life expectancy and more chronic illnesses than women; older individuals typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community

resources for support compared to young people.<sup>2,3</sup>

As is the case in most urban areas, median age of residents in the District is younger than the US average (33.7 vs. 37.6, respectively).<sup>4</sup> DC also has a slightly higher percentage of females (53% vs. 51%) than the US average.<sup>5</sup>

- Ward 2 has the lowest proportion of children age 0-4 years at 3%, compared to Wards 7 and 8 which had the highest proportion at 8-9%.<sup>6</sup>
- Wards 3, 4, and 5 have the highest proportion of older adults (65 years and older) at over 15%.<sup>7</sup>



Source: US Census Bureau, American Community Survey, DC Office of Planning. From the DC Community Health Needs Assessment Data Appendices, 2016

• Wards 3, 5, 7, and 8 have significantly more females than males, at 56%, 53%, 55%, and 54% respectively.<sup>8</sup>

#### Race, Ethnicity, and Language

There is an extensive body of research that illustrates the health disparities that exist for racial/ethnic minorities, foreign-born populations, and individuals with limited English language proficiency (LEP).<sup>9</sup> According to the Centers for Disease Control and Prevention (CDC), non-Hispanic blacks have a higher rate of premature death, a higher infant mortality rate, and higher preventable hospitalization rates than non-Hispanic whites.<sup>10</sup> Individuals with LEP have lower levels of medical comprehension, which lead to higher rates of medical issues and complications, such as adverse reactions to medication.<sup>11</sup> These disparities illustrate the unfair, disproportionate, and often avoidable inequities that exist within

communities and reinforce why it is important to understand the demographic makeup of a community to identify population segments that are more likely to experience adverse health outcomes.

In 2015, the racial makeup of DC was majority non-white; 47% of the population was black, 11% was Hispanic/Latinx, and 36% was white.<sup>12</sup> In the District, 5.4% of the population whose primary language is not English report that they speak English less than "very well;" this is significantly lower than the US average (8.6%).<sup>13</sup>



#### MEDIAN HOUSEHOLD INCOME IN DC BY RACE (2013)

Source: American Community Survey 2011-2013. From DC Community Health Needs Assessment, 2016

- Wards 1, 2, and 3 have a disproportionately higher white population than other wards in the District, at 48%, 63% and 76% respectively.<sup>14</sup> In these wards, blacks make up 24%, 14%, and 5% of the population, and Hispanic/Latinx make up 21%, 12%, and 9% of the population, respectively.<sup>15</sup>
- The racial makeup of Wards 7 and 8 is disproportionately black, at 93% and 92%, respectively. In these wards, whites make up 2-3% of the population and Hispanic/Latinx make up 3%.<sup>16</sup>

Stakeholders report that race, ethnicity, and language are key predictors and drivers of major health disparities in the District. Stakeholders note particular inequities for residents living in Wards 5, 7, and 8, all of which have majority racial/ethnic minority populations. The impact of racism and the linkages to geographic disparities and where one lives, or their "place," is clear; these concepts are well documented in literature on race-related disparities. Interviewees and community forum participants alluded to issues of overt and discreet racism, prejudice, and discrimination.

Broader issues of language and culture were not major themes in interviews or community forums, though a number of interviewees identify DC's large immigrant population as a cohort that requires specialized health care services and resources; Hispanic/Latinx and Ethiopian immigrants were referenced, specifically. Immigrants are less likely to visit doctor's offices and emergency rooms than

low-income native residents.<sup>17</sup> Prejudice, discrimination, and cultural differences deter many immigrants and refugees from seeking health services, and it is common for immigrants and refugees to self-isolate due to stress.<sup>18</sup> Approximately 1 in 7 people in the District are immigrants; roughly 3.9% of the District's population is classified as unauthorized.<sup>19</sup>

#### LGBT Community

Lesbian, gay, bisexual, and transgender (LGBT) individuals face a number of health disparities linked to discrimination and stigma, though the severity of these disparities is often difficult to quantify since questions around gender identity and sexual orientation are left off of most population-based surveys. Though there are no LGBT-specific diseases, members of this community are more likely to experience barriers in accessing and maintaining care than heterosexuals and cis-gendered individuals. For some segments of the LGBT population, sexually transmitted infections, like HIV, are a major concern. LGBT individuals are more likely to experience behavioral health issues, such as depression and substance abuse, which may be tied to high rates of stress.<sup>20</sup>

In 2013, DC had the largest percentage of residents (10%) who identified as lesbian, gay, bisexual, or transgender (LGBT) among all states.<sup>21</sup> According to the Human Rights Campaign, government leadership in DC supports all of their top nine priority areas, including marriage equality and other relationship recognition laws, statewide school anti-bullying laws and policies, transgender healthcare, and gender marker change on identification documents.<sup>22</sup>

- Fifteen percent of DC high school students identify as lesbian, gay, bisexual, transgender, or questioning (LGBTQ).
- DC's transgender population, particularly transgender women of color, face significant income disparity. Nearly 50% of the transgender population earn less than \$10,000 a year, compared to 11% of DC residents overall. Transgender women of color tend to earn even less.

#### SOCIAL DETERMINANTS OF HEALTH AND BARRIERS TO CARE

Quantitative and qualitative data showed clear geographic and demographic disparities related to the leading social determinants of health (e.g., economic stability, housing, education, and community/social context). These issues influence and define quality of life for many segments of DC's population. A dominant theme from key informant interviews and community forums was the tremendous impact that the underlying social determinants, particularly housing, poverty, transportation and food access, have on DC residents. The following is a brief discussion of the major domains; they are listed in order of concern or priority based on the frequency in which these issues arose during interviews and in the community forums.

#### Poverty, Income, and Employment

Socioeconomic status, as measured by income, employment status, occupation, education, and the extent to which one lives in areas of economic disadvantage, is closely linked to morbidity, mortality, and overall well-being. According to research, lower than average life expectancy is highly correlated with low-income status.<sup>23</sup> A recent study showed that residents of Arlington County, Virginia have a median household income of nearly \$106,000 and an average life expectancy of 86 years. In Montgomery County, Maryland, which has a median household income of over \$99,000, residents have an average life expectancy of 84 years. Residents in DC, however, have a median household income of \$70,848 and a life expectancy of only 78 years.<sup>24</sup> While data on life expectancy is not available at the ward level, a review of epidemiologic data suggests that individuals living in DC's more affluent communities likely have a life expectancy consistent with these counties in Maryland and Virginia. Nearly all interviewees and forum participants cited poverty, lack of employment opportunities, and the high cost of living as a barrier to health and well-being, especially for those living in Wards 7 and 8. Furthermore, children born to low-income families are, as they move into adulthood, less likely to be formally educated, less likely to have job security, more likely to have poor health status, and less likely to rise to higher socioeconomic levels.<sup>25</sup> DC faces major economic and education discrepancies between its wards and racial/ethnic groups.

- In 2015, 14% of DC families lived in poverty. Wards 7 and 8 have over 75% more families living in poverty, at 25% and 29% respectively, compared to the District benchmark.<sup>26</sup>
- The median household income for DC's white population is 86% higher than the median household income for the Hispanic/Latinx population, and 175% higher than the black population.<sup>27</sup>
- DC's unemployment rate has decreased since 2011; however, major discrepancies in unemployment between wards persist. Compared to the national average, unemployment is two times higher in Ward 7 and three times higher in Ward 8 as of June 2016. High unemployment rates also affect Wards 4 and 5.<sup>28</sup>

#### **Education**

Higher education is associated with improved health outcomes and social development at the individual and community level.<sup>29</sup> Compared to individuals with more education, people with lower educational attainment are more likely to experience a number of health issues, including obesity, substance misuse, and injury.<sup>30</sup> The health benefits of higher education typically include better access to resources, healthier and more stable housing, and better engagement with providers. Proximate factors associated with low education that affect health outcomes include the ability to navigate the health care system, educational disparities in personal health behaviors, and exposure to chronic stress.<sup>31</sup> It is important to note that while education affects health, poor health status may also be a barrier to education.

Research shows that student attendance is correlated with student achievement.<sup>32</sup> For the 2014-2015 school year, DC had 90% overall school attendance, falling short of its 95% target.<sup>33</sup> Education is an important factor of employment status; in 2014, college graduates were two times more likely to be employed than individuals with less than a high school diploma.<sup>34</sup> It is estimated that by 2020, 76% of jobs in DC will require some form of postsecondary education.<sup>35</sup> As there are clear relationships between education, employment, and health, it is evident that educational attainment is an important determinant of health outcomes. In DC, the average public school high school graduation rate for all students was 69% for the 2014–15 school year, which was lower than the national average of 83%.<sup>36</sup>

- Educational disparities exist between racial and ethnic groups. In 2015, the highest high school graduation rate by race was for white students (86%), compared to 62% for black students.<sup>37</sup>
- In wards with higher percentages of minorities, residents tend to have lower levels of educational attainment.<sup>38</sup>





Although the quantitative data shows clear disparities in educational attainment for different racial groups, and an overall lower graduation rate for DC compared to the U.S., lack of education or access to education did not arise as a major priority in qualitative findings. Some interviewees and forum participants did mention the need for early childhood support for low-income families, as well as the need for afterschool activities for children and youth, though these were not dominant themes.

#### Housing and Homelessness

A large body of evidence suggests that poor housing is associated with a range of health conditions, including asthma and other respiratory conditions, exposure to environmental toxins, injury, and the spread of communicable diseases.<sup>39</sup> These health issues are more common among low-income segments of the population who struggle to find safe and healthy housing.

Over the past decade, DC has experienced rapidly rising housing costs, which has led to a significant loss of low-cost units in the District. This lack of affordable housing, compounded by limited increase in wages and high cost of living, has made housing a critical concern for people in the District,



*Source:* Neighborhood Info DC, DC City Profile, "Median Sales Price of Single-Family Homes 2000 and 2015."

especially for those most vulnerable.<sup>40</sup> When individuals and families are forced to spend more on housing and shelter, they have less to spend on other necessities such as food, medical prescriptions, and health care.

- The median price of a single family house in DC has more than tripled in the last 15 years; in 2000, the median price was \$209,000, whereas in 2015 the median price was \$670,000.<sup>41</sup>
- The number of rental units priced \$800 per month or less has declined by 42% in the past decade. In 2002, there were 57,700 units and only 33,400 units in 2013.<sup>42</sup>

As home prices rise disproportionately to standard economic growth, so do the rates of homelessness. Compared to other states, DC had the largest change in the number of homeless people in families—an increase of 137% of homeless individuals between 2007 and 2014.<sup>43</sup>

Between 2007 and 2016, the number of homeless individuals in DC increased from 5,320 to 8,350.<sup>44</sup>
However, the number of homeless veterans decreased between 2012 and 2016, from 531 to 350.<sup>45</sup>

Despite being one of the most diverse places in the nation, race-based residential segregation is a major concern amongst community residents and stakeholders. Key informants identified gentrification, or the transition of a neighborhood from low value to high value, as a reason for displacement of older and low-income residents. Research has shown that the poor, older adults, women and children, and racial/ethnicity minorities often suffer disproportionate health consequences as a result of gentrification, as it limits access to affordable housing, transportation, quality schools, and social networks.

#### Safety and Violence

Crime and violence can have major impacts on health status, from death and injury to emotional trauma, anxiety, isolation, and absence of community cohesion. Residents of low-income neighborhoods are less likely to report adequate pedestrian and biking infra- structure, safety from traffic, and favorable neighborhood appearance compared to people in higher-income areas.<sup>46</sup> Furthermore, living in a neighborhood with pervasive violence is likely to increase chronic stress, thus leading to poorer health outcomes.<sup>47</sup> These impacts often have a ripple effect on families, schools, and entire communities.

Individuals living in certain areas of DC are more likely to face issues related to crime and violence. Overall, DC's homicide rate remains consistently higher than that of the United States; though DC's rate declined between 2010 and 2012, it increased to 14 homicides per 100,000 population in 2014 (compared to 5.1 for the US overall).<sup>48,49</sup>

- Between 2014 and 2015, the homicide rate increased in most wards throughout DC. Ward 8 had the greatest increase. <sup>50</sup>
- Racial and gender disparities are reflected in the homicide rate: 85% of homicide victims were black males in 2015.<sup>51</sup>
- Between 2015 and 2016 the number of hate crimes reported in the District increased by 64%. The greatest numbers of hate crimes reported were in regards to sexual orientation, followed by race.<sup>52</sup>

Research shows that individuals with criminal records are more likely to be excluded from housing and employment opportunities, which impacts mental and physical health.<sup>53</sup>





- The U.S. has the highest incarceration rate compared to all other countries. DC's incarceration rate per 100,000 is the highest in the world, at 1,196 incarcerated individuals per 100,000 population.<sup>54</sup>
- Since 2011, however, the number of incarcerated individuals in a DC Department of Corrections (DOC) facility has steadily decreased, though there was a slight uptick in 2016 (3,093 incarcerated individuals in 2011 compared to 1,845 in 2016).<sup>55</sup>
- Racial inequities persist: 89% of DC inmates are black, 5% are Hispanic/Latinx, and only 3.4% are white.<sup>56</sup>

While these issues were not cited explicitly in interviews and forums, crime and violence is a pervasive issue among certain populations in the District. When crime and violence did come up in interviews, it was primarily in the context of youth and domestic violence.

#### **Transportation**

Lack of transportation was a theme from the assessment's key informant interviews and community forums. Lack of transportation was cited not only for having a significant impact on access to health care services, but also as a determinant of whether an individual or family had the ability to access the basic resources that allowed them to live productive and fulfilling lives; access to affordable and reliable transportation widens opportunity and is essential to addressing poverty, unemployment, and goals such as access to work, school, healthy foods, recreational facilities and a myriad of other community resources, including health care services. Many forum participants and



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interviewees identified transportation issues for those living in Wards 4, 5, 7, and 8; the primary issue being the expense of public transportation, followed by the system's inefficiency. A number of forum participants reported using the DC public bus system as a low-cost alternative to the Metro, but described the system as time-consuming, unreliable, and inflexible. As seen in the map to the left, the metro stations in DC are concentrated in the central region (Wards 2 and 6) and are lacking especially in Wards 4, 7, and 8.

#### Food Access

Issues related to food insecurity, food scarcity, hunger and the prevalence and impact of obesity are at the heart of the public health discourse in urban and rural communities across the United States. While there is limited quantitative data on food access, lack of access to healthy foods was a common theme in interviews and community forums, particularly for lowincome individuals and families, and those living in Wards 5, 7, and 8. Many Ward 7 and 8 forum participants reported that they not only struggled to afford the cost of fresh produce, but that they often had difficulty locating stores that stocked a decent selection. Despite these comments, a number of interviewees referenced the numerous and well-



organized farmers markets offered throughout the District; however, it seems, at least anecdotally, that these markets do not address the breadth of the District's food access issues, specifically for those living in Wards 5, 7, and 8. The map to the right shows the lack of grocery stores and farmers markets in Wards 4, 5, 7, and 8, consistent with information gathered from key informants about food scarcity in these areas.

#### Health Literacy

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions.<sup>57</sup> Low health literacy can have a major impact on one's health, as patients can have difficulty locating providers, following doctors' instructions, understanding medication directions, managing chronic conditions, among other issues. Health literacy is more prevalent among older adults, individuals of low socioeconomic status, and minority populations.<sup>58</sup>

- Nationally, Hispanic/Latinx individuals have lower health literacy compared to other races; in 2003, 41% of Hispanics had below basic health literacy, compared to 25% of American Indians/ Alaskan Natives, 24% of blacks, 13% of Asian/Pacific Islanders, 9% of multiracial individuals, and 9% of whites.<sup>59</sup>
- Nationally, in 2003, 29% of individuals older than age 65 had health literacy levels that were below basic, whereas no more than 13% of people younger than 65 had below basic health literacy.<sup>60</sup>
- In DC, more than 20% of individuals in Wards 1, 2, 3, and 4 speak a second language at home.<sup>61</sup> When English is not the primary language, the health care system may be particularly difficult to navigate.

During community forums and interviews the need for improved health literacy arose as a key priority; informants identified low health literacy as a key driver of inappropriate hospital utilization.

#### HEALTH STATUS AND DISPARITIES

At the core of the assessment process is an understanding of access-to-care issues, the leading causes of morbidity and mortality, and the extent to which population segments and communities participate in certain risky behaviors. This information is critical to assessing health status, clarifying health-related disparities, and identifying health priorities. This assessment captures a wide range of quantitative data from federal and municipal data sources. Qualitative information gathered from key informant interviews and community forums informed this section by providing perceptions on the confounding and contributing factors of illness, health priorities, barriers to care, service gaps, and possible strategic responses to the issues identified. Furthermore, this data augmented the quantitative data and allowed for the identification of demographic and socioeconomic population segments most at-risk. Traditionally, barriers to care often disproportionately impact minority groups and result in disparities in health outcomes.<sup>62</sup>

The following are key findings related to health insurance coverage, health risk factors, mortality, chronic disease, cancer, infectious disease, behavioral health (mental health and substance use), elder health, and maternal and child health.

#### Health Insurance Coverage and Access to Care

The extent to which a person has insurance that helps to pay for needed acute services, as well as access to a full continuum of high-quality, timely and accessible preventive and disease management or follow-up services, has shown to be critical to overall health and well-being.<sup>63</sup> Access to a usual source of primary care is particularly important as it greatly impacts one's ability to receive regular preventive, routine and urgent care, and chronic disease management services for those in need. Under the Affordable Care Act, DC implemented early expansion of Medicaid, leading to health insurance coverage for 93% of adult residents and 96% of children. Although this is the second highest coverage rate in the nation, DC residents, particularly residents of color, continue to face barriers to accessing care.

- Health insurance coverage was lowest among Hispanic/Latinx residents (78%) compared to 91% coverage among black residents and 97% coverage among white residents.<sup>64</sup>
- Residents in Ward 5 and Ward 8 had the lowest coverage amongst all wards (86% and 90%, respectively).<sup>65</sup>
- Districtwide, 10% of adults reported that they had delayed getting medical care because they could not get an appointment soon enough. Rates were highest in Ward 1 (14%), Ward 6 (12%), and Ward 2 (11%).<sup>66</sup>



Source: DC BRFSS, 2013-2014

#### Health Risk Factors

There is a growing appreciation for the effects that certain health risk factors—such as obesity, lack of physical exercise, poor nutrition, tobacco use and alcohol abuse—have on health status, the burden of physical chronic and complex conditions, and issues related to mental health and substance use. While there was some recognition amongst interviewees and forum participants that DC's population was healthy and fared well across many risk factors, there was strong sentiment that racial/ethnic minorities and low-income populations were more likely to experience poor outcomes related to health risk factors. Issues such as obesity, fitness, nutrition, and tobacco use were rarely, if ever, at the very top of informants lists of health priorities, but were clearly considered to be fundamental building blocks of good health. The map below suggests there is a relatively even distribution of recreation and community centers around DC; however, the map does not speak to their accessibility, utilization, or quality, which may vary by ward.



**Obesity:** Over the past two decades, obesity rates in the United States have doubled for adults and tripled for children. Overall, these trends have spanned all segments of the population, regardless of age, sex, race, ethnicity, education, income or geographic region. Districtwide, approximately 40% of adults are overweight, while 23% are obese.67

Rates of obesity were highest in Wards 8 (43%), 7 (35%), and 5 (32%).<sup>68</sup>

By race/ethnicity, 39% of Hispanic/Latinx residents were overweight, compared to 36% of black residents and 10% of white residents.<sup>69</sup>

- **Physical Fitness and Nutrition:** Lack of physical fitness and poor nutrition are among the leading risk factors associated with obesity and chronic health issues.<sup>70</sup> Adequate nutrition helps prevent disease and is essential for the healthy growth and development of children and adolescents, while overall fitness and the extent to which people are physically active reduce the risk for many chronic conditions and are linked to good emotional health.
  - Black residents reported the least amount of exercise: 30% reported that they had not exercised within the past 30 days compared to 17% of Hispanic/Latinx residents and 9% of white residents.<sup>71</sup>
- **Tobacco Use:** Tobacco use is the single most preventable cause of death and disease in the United States.<sup>72</sup> Each year, more than 480,000 Americans die from tobacco-related illnesses.<sup>73</sup> For every person who dies from tobacco use, 30 more people suffer with at least one serious tobacco-related illness, such as chronic airway obstruction, heart disease, stroke or cancer.<sup>74</sup>
  - The percent of adults reporting as current smokers varied significantly by race/ethnicity and by ward; 28% of black residents are smokers compared to 14% of Hispanic/Latinx and 10% of white residents.<sup>75</sup>
  - Over 40% of adults in Ward 8 reported as current smokers, more than double the Districtwide average (19%), while only 9% of residents in Ward 2 smoked.<sup>76</sup>

#### Chronic and Complex Conditions

Throughout the United States, chronic and complex diseases such as heart disease, stroke, cancer, respiratory diseases and diabetes are responsible for approximately 7 of 10 deaths each year; treating people with chronic conditions accounts for 86% of our nation's health care costs.<sup>77</sup> Half of all American adults (18+) have at least one chronic condition, and almost 1 in 3 have multiple chronic conditions.<sup>78</sup> Perhaps most significantly, despite their high prevalence and dramatic impact, chronic diseases are largely preventable, which underscores the need to focus on the health risk factors, primary care engagement, and evidence-based chronic disease management. There was broad, if not universal, awareness of these pervasive health issues amongst interviewees and most forum participants.

- Nearly 12% of DC residents currently have asthma; percentages are significantly high in Ward 8 (21%), Ward 7 (14%), and Ward 6 (12%). In 2013, nearly one third (31%) of youth in DC had been told they had asthma.<sup>79</sup>
- While 8% of DC adults have been diagnosed with diabetes, the percent was double in Ward 8 (16%) and nearly double in Ward 7 (15%).<sup>80</sup>
- Besides asthma and diabetes, chronic disease rates were highest in Ward 8 across multiple other conditions: arthritis, high cholesterol, hypertension, depression, COPD, heart disease, and heart attacks.<sup>81</sup>

While experts have an idea of the risk factors and causal factors associated with cancer, more research is needed as there are still many unknowns. The majority of cancers occur in people who do not have any

known risk factors, though the most common risk factors are well known: age, family history of cancer, smoking, overweight/obesity, excessive alcohol consumption, unprotected exposure to the sun, unsafe

sex, and exposure to airborne environmental and occupational pollutants. As with other health conditions, there are major disparities in outcomes and death rates across all forms of cancer, which are directly associated with race, ethnicity, income and whether one has comprehensive medical health insurance coverage.

 In 2012, the top four cancers diagnosed among District residents were breast, prostate, lung bronchus, and colorectal.<sup>82</sup>



Source: DC Department of Health, DC BRFSS, DC Health Matters.

- From 2011 to 2012, there was a 5% decrease in the number of new cancers diagnosed, and a 1% decrease in the number of cancer deaths.<sup>83</sup>
- By race, the cancer incidence among black residents was 546 per 100,000 residents compared to 379 per 100,000 for white residents.<sup>84</sup>
- Breast cancer incidence was highest in Ward 8. Lung cancer incidence was highest in Ward 7. Prostate cancer and colorectal cancer incidence was highest in Ward 5.<sup>85</sup>

#### Behavioral Health

Mental illness and substance use have a profound impact on the health of people living throughout the United States. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), an estimated 44 million adults (18%) in the United States have experienced some form of mental illness, and over 20 million adults (8.4%) had a substance use disorder in the past year.<sup>86</sup> Depression, anxiety and alcohol abuse are directly associated with chronic disease, and a high proportion of those living with these issues also have a chronic medical condition.<sup>87</sup>

In 2013, approximately 30% of DC adults were diagnosed with depression. Rates were highest in Ward 8

(28%), Ward 3 (24%) and Ward 6 (23%).<sup>88</sup> As seen in the map to the right, areas of Wards 7 and 8 were designated by the Health Resources and Services Administration (HRSA) as mental health professional shortage areas in 2015.

• In 2014, the second most common inpatient hospital discharge among all DC residents was for Mood disorders (3.9%).<sup>89</sup> Mood disorders were the third most common inpatient discharge for



- Among white residents, mood disorders were the fourth most common condition.<sup>93</sup>
- White adults were twice as likely to report as binge-drinkers compared to black adults (32% and 15%, respectively). Furthermore, the percent of adults reporting as binge drinkers varied significantly by ward: percentages were highest in Ward 1 (26%) and Ward 2 (25%) and were lowest in Ward 7 (14%) and Ward 4 (15%).<sup>94</sup>
- From 2010 to 2012, the Mental Health Rehabilitation Services (MHRS) program services were accessed the most by black children and youth, those living in Wards 6, 7, and 8, and those

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between the ages of 6-13 years.<sup>95</sup>

• In 2012, the most commonly diagnosed mental health conditions among children and youth in DC ages 0-17 years receiving MHRS were Bipolar Disorder and Manic, Depressive, and Other Episodic Mood Disorders.<sup>96</sup>

Second to sentiments related to social determinants and racial health disparities, the leading theme from the assessment's interviews and community forums was the impact and burden of behavioral health issues. Service providers reported that the burden of behavioral health issues on hospital inpatient and emergency department services was extreme, and this was reflected in quantitative data: psychoses as a diagnosis was the leading diagnosis as a proportion of all hospital discharges across every zip code in the District. Interviewees from nearly every health service sector talked at length about the burdens of behavioral related to (1) the level of generalized stress and anxiety felt by the general public, (2) the prevalence of mild and moderate depression and anxiety, (3) the prevalence of co-morbidity among those with physical chronic conditions, (4) the burden of those with serious mental illness, (5) the behavioral health challenges faced by the homeless population, (6) behavioral health issues in children and adolescents (e.g., ADHD, autism, substance misuse, bullying, and suicide), (6) the prevalence of depression and social isolation in the elderly, (7) the burden of alcohol and opioid abuse on adults overall, and (8) the need for transitional or supportive housing for those with behavioral health challenges to support them in their recovery. Although lengthy, these issues do not constitute a complete list of behavioral health related issues and challenges that came up interviews.

Community forum participants discussed the lack of access to behavioral health education and cited limited awareness of mental health resources as a barrier to seeking care. A small number of participants said there were a limited number of service sites, while others expressed that they were aware of behavioral health services being run out of community centers, elder service agencies, and community health centers. There was consensus among forum participants that they had limited knowledge of tailored behavioral health services, such as substance abuse treatment.

#### **Oral Health**

Poor oral health not only causes pain and discomfort, but also contributes to various diseases and conditions including cardiovascular disease, diabetes, infectious disease, and Alzheimer's disease.97 Maintaining good oral health is especially important for children; untreated dental conditions may lead to issues with speech, eating, and learning.98 Although oral health was not discussed as a primary area of concern amongst interviewees of forum participants, the map to the right showing dental health professional shortage areas, as designated by HRSA, indicates oral health services are lacking in Wards 2, 7, and 8.

• In 2012, white

residents were more likely to have visited a dental clinic within the past year (79%) compared to Hispanic/Latinx (69%) and black residents (65%).<sup>99</sup>

• From 2011–2012, 82% of children (ages 1–17) in DC had 1 or more preventive dental care visit. This rate was highest amongst black children (87%) compared to 79% of white children and 68% of Hispanic/Latinx children.<sup>100</sup>

#### Maternal and Child Health

Maternal and child issues are of critical importance to the overall health and well-being of a geographic region and are at the core of what it means to have a healthy, vibrant community. While maternal and child health was not discussed as an area of major concern amongst interviewees or forum participants, the quantitative data suggests there are disparities in this area.

Statistics indicate that low birth weight, prematurity, and lack of adequate prenatal care are some of the factors associated with the critical indicators of maternal and child health, such as infant mortality. In



2013, the District's infant mortality rate was 6.8 per 1,000 live births, a 13.9% decrease since 2012.<sup>101</sup> Despite this improvement, there are significant disparities in birth outcomes by race/ethnicity and ward.

- The infant mortality rate to Hispanic/Latinx mothers increased 25.5% between 2012 and 2013, from 5.1 per 1,000 live births to 6.4. In the same years, infant mortality decreased 19.5% amongst black mothers and 50% amongst white mothers.<sup>102</sup>
- Wards 5 (11.9), 8 (10.9) and 7 (9.7) had the highest infant mortality rates in 2013, compared to 6.8 in the District overall.<sup>103</sup>
- Births to young mothers (ages 15-19) decreased 18.4% between 2012 and 2013.<sup>104</sup>



## HEALTH SYSTEM STRENGTHS, SERVICE DISTRIBUTION, and UTILIZATION TRENDS

#### HOSPITAL SERVICES

Hospitals are critical components of a strong health system, as they provide essential services for those with acute, often life-threatening conditions that require immediate, highly coordinated, and specialized expertise and equipment. In addition to providing inpatient and emergency services (including maternity services), hospitals are often the hub for a broad range of other specialized outpatient medical, behavioral health, and oral health services for those with highly acute, chronic, or complex illnesses or injuries. Hospitals are also often the source of specialized laboratory and diagnostic services, such as cytology, radiology, MRI, and CT services. These specialized outpatient and diagnostic services are generally provided directly on hospital campuses or in close proximity to hospitals.

In 2014, the United States expended nearly \$3 trillion on health services and supplies, and approximately one-third (33.8%) of these expenditures were for hospital care (Figure 1).<sup>105</sup> Historically, the role of hospitals has been narrowly focused on the treatment of acute illness or life threatening injury. However, in response to an increased understanding of the importance of patient-centered primary care, a more holistic approach to health and wellness, and the underlying determinants of health, hospitals are evolving into much more integrated, multi-dimensional institutions that provide a range of post-acute care, preventive care, primary care, urgent care, and wellness services either on their own or through collaborative relationships. These trends have also increased the emphasis on care coordination and service integration, particularly as patients leave the hospital, as a way of promoting higher quality, patient-centered, and lower cost services.

**Figure 1:** National Expenditures for Health Services and Supplies by Category, 1980 and 2014



Source: TrendWatch Chartbook 2016, "Trends Affecting Hospitals and Health Systems. "American Hospital Association, 2016.

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#### Characteristics of DC's Hospital Service System

In DC, there are eight acute care hospitals (ACHs) or medical centers that provide services to DC residents: Children's National Medical Center, George Washington University Hospital, Howard University Hospital, MedStar Georgetown University Hospital, MedStar Washington Hospital Center, Providence Hospital, Sibley Memorial Hospital, and United Medical Center (UMC) (See Appendix D for Service Area Maps). In addition to these core hospitals, there are also two psychiatric hospitals: Psychiatric Institute of Washington and St. Elizabeth's Hospital that provide services for those with severe mental health or substance use conditions. It should be noted that Walter Reed Army Medical Center and the Washington DC VA Medical Center are not included in this assessment due to the specialized nature of the services these facilities provide, and Walter Reed's location in Bethesda, Maryland. Finally, while there are ambulatory surgical centers located throughout the District, there is limited data showing the capacity or need associated with these services. These facilities are distributed throughout the DC, but are predominantly located in the central downtown area of DC. The distribution of DC hospitals and ambulatory surgical centers can be seen in Figure 2.



#### Figure 2: Distribution of DC Hospital and Surgical Services

Source: DC Department of Health

This assessment utilizes data from the 2014 hospital discharge data set obtained from the DC Hospital Association (DCHA), which describes the DC inpatient hospital volume during the 2014 calendar year. Figure 3 shows the total number of hospital discharges in 2014 by hospital. One important finding is that there is significant variation in total volume by hospital. In 2014, the largest hospital, MedStar

Washington Hospital Center, had nearly twice the volume of discharges as the next largest hospital in DC, George Washington University Hospital. Not only does the number of discharges vary by facility, but each hospital's geographic draw differs significantly, as seen in Figure 4. There are several hospitals within DC for which District residents make up less than half of the total admissions; differences are somewhat correlated to the size of the facility, such as MedStar Washington Hospital Center, or the specialized nature of the services provided, such as Children's National Medical Center, where DC residents account for only 29% of total discharges. The physical location of facilities relative to neighboring states is also a factor, though this has notable exceptions: two hospitals located near the border boundaries, UMC and Providence Hospital, exhibit some of the lowest rates of admissions from neighboring states, serving 82% and 75% DC residents, respectively.

#### Figure 3: Total Discharges by Hospital, 2014



#### Source: DC Department of Health

Like hospitals nationally, DC's hospitals provide a broad range of services to those with acute injuries or illnesses. All eight of DC's ACHs provide inpatient services, emergency services, comprehensive outpatient medical specialty and surgical services, with inpatient care being the core service provided. Based on current licensure data provided by the DC Department of Health, the eight ACHs combined have 3,298 licensed inpatient beds. Of these licensed beds, 86% (2,788) are medical/surgical beds, 9% (302) are obstetrics/gynecology beds, and 208 are psychiatric beds. The average number of licensed beds per hospital is 471 beds. The largest of the ACHs has 873 beds and the smallest has 234 beds. With respect to emergency services, Children's National Medical Center, Medstar George Washington University Hospital, Medstar Washington Hospital Center, and Howard University Hospital are all verified Level I trauma centers. In 2014, all ACH emergency departments (excluding UMC, whose data was unavailable) provided 449,197 emergency room visits in 2014.

DC is home to one of the leading pediatric hospitals in the nation, Children's National Medical Center, which provides specialized inpatient and outpatient services to children. MedStar Georgetown University

Medical Center also serves this population. Overall, DC's hospital system is nationally renowned for the breadth and quality of care it provides. DC is a source of care not only for local residents, but for the greater Mid-Atlantic region and beyond; as referenced above, more than 40% of all hospital discharges in DC in 2014 were for patients living outside the District.



### Figure 4: Percent of DC Hospital Patient Origins by State, 2014

#### Characteristics of Hospital Utilization and Insurance Coverage

Figure 5 shows the mix of payers of total hospital admissions at each facility (not adjusted for level of service or level of charges). Figure 6 shows the number of 'marker condition' discharges by hospital, while Figure 7 shows the percentage of 'marker conditions' by payer type by hospital. While total admissions represent the true revenue mix, the 'marker conditions,' also known as reference admissions, are a narrow set of diagnoses (appendicitis, acute myocardial infarction, gastrointestinal obstruction, and fracture of the hip or femur) that are thought to be largely insensitive to factors such as socioeconomic status and access to primary/outpatient services, as well as the service mix within the facility and elective procedures. As such, they may better represent the community that might naturally rely on that facility. One notes that Medicare represents a larger portion of admissions when examined on this basis, likely owing to the age at which some of the included conditions are experienced.


## Figure 5: Percent of Hospital Total Admissions by Payer, 2014

## Figure 6: 'Marker Discharges' by Hospital, 2014



Source: DC Department of Health



### Figure 7: Percent of DC Hospital 'Marker Discharges' by Payer Type

Source: DC Department of Health

A review of this data shows that there is considerable variation by institution in the proportional service to populations with different coverage types. Children's National Medical Center serves the highest portion of Medicaid patients, as one would expect based on the historical eligibility of Medicaid for children. It will be interesting to monitor this pattern as the impact of the Affordable Care Act implementation, which began in 2014, is reflected in future years of data. Several other facilities also see Medicaid as their largest payer, including Howard, Providence, and UMC. Medicare is the dominant overall payer, marginally, for admissions at MedStar Washington Hospital Center, while private insurance covers the plurality of admissions at George Washington, MedStar Georgetown, and Sibley. Rates of self-pay/indigent care are relatively low at all facilities, though Howard sees a higher proportion, at 5% of their total.

The variation in payers by facility raises the question as to whether the differences are mediated largely by the nature of the communities served by each hospital, or whether other factors, such as insurance coverage, managed care organization (MCO) contracting, or provider panel networks may be directing care. To examine this, a group of admissions that could be relatively cleanly compared between Private and Medicaid insured patients were selected (Figure 8); females age 18–34 were selected, as they are a group naturally represented in Medicaid for basic coverage. Children were excluded because of the children's hospital, men had low representation in Medicaid, and older women may be more enrolled due to disabilities that can drive the care needed. The maps in Figure 8 show the dominant destination for hospitalizations of women 18–34 depending on their coverage. Zip codes shaded in yellow exhibit different hospital destination patterns of residents based on Private vs. Medicaid coverage. Note that nearly all zip codes where there were sufficient Medicaid admissions to examine (>10) exhibited a different hospital destination pattern between those with Private vs. Medicaid coverage. This suggests that these patterns are not primarily dictated by community characteristics, but rather by other factors related to patient or provider preference and network patterns. Interestingly, while one might assume that Medicaid patients might travel further for care, the results show that privately insured women travel

further from their zip code of residence to receive care, primarily at MedStar, Sibley, and George Washington. Medicaid-insured women from the same communities tend to be admitted to Howard, Providence, and UMC. A similar map (Figure 9) shows the destination for self-pay/indigent patients— covering both men and women 18–64 in order to include sufficient numbers. Again, Howard, Providence, and UMC are more prevalent destinations, though George Washington also has an area of dominance.

# **Figure 8:** Hospital Patient Discharge, Medicaid vs. Private Insurance, Females Age 18-34



Hospital Patient Discharge : Zip Code Origin / Destination and Preference % / Medicaid vs Private Insurance

Source: DC Department of Health

**Figure 9:** Hospital Patient Discharge, Self-Pay/Indigent Patients, Males and Females Age 18-34



### Ambulatory Care Sensitive Admissions

Figure 10 shows the proportion of total admissions for Ambulatory Care Sensitive (ACS) diagnoses on an

age/gender adjusted basis using the DC population overall as the reference population. ACS admissions are less a reflection of inpatient services, and more a representation of admissions that are partially preventable with access to quality primary and outpatient care. Although population based rates are often used to study total and ACS admissions, the rates calculated based on DC hospitalization data cannot be used directly, as they do not reflect admissions to facilities outside the District. As such, a proportional rate between total admissions and ACS admissions is the best indicator.





Source: DC Department of Health

The results show a fairly distinct pattern: the lowest ACS rates are in the core of the city and areas to the northwest, including Georgetown, Pallisaides, Cleveland Park and Tenleytown. There are notably higher rates encircling the core to the east, with the highest ACS proportions in the communities to the east of the Anacostia River and from the Shaw area surrounding Howard University Hospital and east. The differences in the ACS proportions between the lowest and highest areas of the District are more than double. This reinforces the idea that there is a general lack of engagement in appropriate primary care services, possibly as a result of a lack of understanding or awareness of its importance or the impacts of the underlying social determinants of health.

#### Hospital Patient Diagnoses and Service Lines

Looking at the diagnosis and service categories, as provided in the hospital discharge dataset for each zip code area, can help determine the major reasons for inpatient visits and explore how they differ between communities. There are several approaches to examining the discharge data in this way. While individual diagnoses and diagnosis-related groupings are available, they are highly fragmented views of the broader patterns. As such, this section examines the Major Diagnostic Categories (MDCs) and Lines of Service to elicit the overall patterns in the data. Additionally, the analysis ranks the MDCs and Lines of Service within each zip code based on the frequency of admissions and the total number of days admitted, which can produce different ranking results. Below are tables showing the top MDCs and Lines of Service, ordered according to the average of that category's ranking by discharges among DC zip codes (each zip code equally weighted). The rank and count based on patient days is also shown for each line and highlights the degree to which the prevalence of each category/service changes according to that metric.

In terms of MDC, admissions related to Pregnancy and Childbirth are the most common reasons for admission. These services rank an average of fifth in terms of total days, however, due to a shorter average length of stay (Table 1). Diseases of the Circulatory System account for the most days and rank second in the list of most common cause of admissions. These two diagnostic categories rank as the first two diagnostic categories in nearly every zip code in DC. Regarding the top diagnostic categories by hospital days, Mental Diseases and Disorders are the highest in several zip codes and rank nearly equally with Diseases of the Respiratory System for the second most common category by days.

Similarly, Medicine and Obstetrics make up the top two lines of service in most of the zip codes in DC based on admission frequency (Table 2). These are followed by Cardiac Care, Respiratory, and Psychiatry. Looking at total days, Medicine ranks first in most zip codes, but the second ranked service varies significantly between Psychiatry (second ranked overall by days), Obstetrics, and Surgery. These top five service lines typically represent approximately two-thirds of admissions in each zip code in the DC area.

# **Table 1:** DC Hospitals, Major Diagnostic Categories, Average Rank by Discharges

Maior Diagnostic Category	Avg. Rank by Discharge	Discharges	Avg. Rank by Davs	Davs
Pregnancy, childbirth, and the puerperium	1	9,325	5	27,040
Diseases and disorders of the circulatory system	2	8,199	1	48,181
Diseases and disorders of the respiratory system	3	6,177	3	34,210
Diseases and disorders of the digestive system	4	5,295	4	29,759
Mental diseases and disorders	5	5,094	3	35,332
Diseases and disorders of the musculosketal system and connective tissue	6	4.507	6	24.894
Diseases and disorders of the nervous system	6	4.310	5	27.356
Diseases and disorders of the kidney and urinary tract	8	3.289	9	18.767
Endocrine, nutritional and metabolic diseases and disorders	9	2,917	10	13,782
Diseases and disorders of the hepatobiliary system and pancreas	11	1,867	11	10,893
Infectious and parasitic diseases (systemic or unspecified sites)	11	2,157	8	20,866
Diseases and disorders of the skin, subcutaneous tissue and breast	11	1,847	11	9,467
Diseases and disorders of the blood, blood forming organs and immunological disorders	13	1,603	14	6,215
Injuries, poisonings and toxic effects of drugs	14	1,103	15	5,373
Alcohol/drug use and alcohol/drug induced organic mental disorders	14	1,091	16	4,396
Diseases and disorders of the ear, nose, mouth and throat	15	951	18	3,082
Diseases and disorders of the female reproductive system	17	651	19	2,478
Myeloproliferative diseases and disorders, and poorly differentiated neoplasms	18	435	16	3,622
Factors influencing health status and other contacts with health services	19	417	20	1,838
human immunodeficiency virus infections	19	492	15	4,944
Diseases and disorders of the male reproductive system	21	247	22	1,063
Newborns and other neonates with conditions originating in the perinatal period	20	302	17	3,210
Diseases and disorders of the eye	23	141	24	558
Multiple significant trauma	24	118	22	1,038
Burns	24	92	20	1,122

Source: DC Department of Health

Comited line	Avg. Rank	Discharges	Avg. Rank	Davia
Service Line	by Discharge	Discharges	by Days	Days
Medicine	1	15,019	1	74,551
Obstetrics	2	9,322	5	26,963
Cardiac Care (m)	3	5,894	4	27,958
Respiratory	4	5,531	4.3	27,376
Psychiatry	5	5,087	2.5	35,002
Neurological (m)	6	3,549	7.6	20,220
Renal / Urology (m)	8	2,874	9	15,179
Diseases and disorders of the kidney and urinary tract	8	3,289	9	18,767
General Surgery	7	3,094	5	26,836
Other Surgery	10	2,027	6	24,755
Orthopedics (s)	8	2,392	9	12,494
Cancer Care (m)	12	1,190	11	8,927
Substance Abuse	12	1,086	14	4,300
Neurological (s)	12	1,126	12	7,963
Cardiac Care (s)	13	997	12	7,657
Women's Health	17	513	20	1,561
Trauma (m)	15	743	16.9	2,602
Orthopedics (m)	16.5	522	17	2,696
Renal / Urology (s)	17	509	16	3,309
Cancer Care (s)	19	313	17	2,360
Trauma (s)	19.5	309	16	2,928
Newborn	20	301	16	3,067
OphthamImology	22	139	22	539
Dental	22	90	23	243

### Table 2: DC Hospitals, Lines of Service, Average Rank by Discharges

Source: DC Department of Health

#### Hospital Service Capacity, Distribution, and Barriers to Care

The question of whether there are hospital service gaps or a maldistribution of hospital services in DC is complicated and depends on the type of hospital service. According to the assessment's key informants and community forum participants as well as the hospital discharge data discussed above, this question is also complicated by patient perceptions of quality and other factors related to insurance coverage, managed care contracting, narrow provider panels, and administrative barriers that can dictate where a patient can or cannot access hospital services. These factors, while unrelated to absolute service capacity, can present barriers that limit access and/or prevent patients from accessing services at their preferred service location in a timely manner.

Another factor to consider when answering questions related to service gaps, unmet need, or service maldistributions is travel time or distance. When exploring these issues in DC, it is important to note that relative to national standards and benchmarks, it is difficult to make the case that travel distance or travel times presents an absolute barrier to care. DC is a relatively small geographic area, covering approximately 70 sq. miles. It is approximately 10 miles from north to south and 7 miles from east to west, which means that the longest anyone is required to travel for hospital services is 4–5 miles or less, including travel to one of the downtown DC hospitals.

While there may not be any absolute barriers to inpatient hospital services, it is important to note that not everyone in DC is equally affected by travel times and distance. Interviewees and community forum participants stated that those living on the perimeter of DC, particularly in southeast, face more significant barriers to care than those living in other areas of DC. Many of these barriers are related to travel distances, transportation barriers (particularly at rush hour), cost, and cultural/linguistic barriers. For example, residents in the Ward 8 community forum reported that it can take more than an hour on multiple bus lines to travel the 3–5 mile distance between their home and their preferred hospital in the downtown area.

Further evidence of the distances that DC residents travel to access hospital services and the potential barriers that exist is provided in Figure 11, which analyzes DC hospital discharge data by patient origin. This map shows where residents in any given DC zip code are most likely to go for hospital services. The lines on the map show where the plurality (or the largest percent) of residents in a given zip code are most likely to go for their hospital services. A thicker line indicates a higher percentage of patients going to a particular hospital. The shaded blue areas on the map represent DC's zip codes; the darker shades of blue signify high preference rates for residents. High preference rates mean there is a relatively high percentage of patients' going to the dominant hospital in a given zip code. Lighter shades of blue signify a low preference rate. This means that preference is more spread and that there is a relatively low percentage of patients from that zip code going to the dominant hospital. Note that there is considerable variation in the degree of preference, with the communities surrounding UMC, Howard, Providence, and Georgetown showing lower preference for their primary destination hospital. These patterns may be explained by geography and the availability of nearby facilities, but may also be driven by other factors as discussed below.

# **Figure 11:** DC Hospital Discharges – Destination and Preference % by Zip Code Origin



Source: DC Department of Health

Also of note is the fact that 'kernel' hospitals, symbolized as  $\bigcirc$ , are facilities where the residents of the zip code that the hospital is in use it as their primary admission destination. As one would expect, this is true for most hospitals, with the exception of Providence Hospital, where residents of zip code 20017 travel in slightly greater numbers to the larger MedStar Washington facility nearby. This analysis shows overwhelmingly that hospitals in the central downtown part of DC are the preferred hospitals for residents in most zip codes, even when residents have hospitals that are significantly closer to them or lie between them and the downtown area.

The following is a more focused discussion drawing from the quantitative and qualitative data gathered

for this assessment that clarifies the extent to which there are service gaps, maldistributions, or barriers to access with respect to hospital services in DC. This discussion is organized into three categories of service: inpatient, emergency, and outpatient services.

#### **Inpatient Services**

With respect to hospital inpatient services, there is considerable evidence to suggest that for DC overall there are no outright gaps in capacity or unmet needs for inpatient hospital services, at least when compared to national standards and benchmarks. In fact, data would suggest that there is a considerable oversupply of licensed hospital beds. In 2014, DC had the highest rate of hospital beds per 1,000 population in the nation, with a rate of 5.38.<sup>106</sup> DC's rate was more than twice the national rate of approximately 2.47 beds per 1,000 population.

Some might say that this analysis is confounded by the fact that DC is a medical hub that serves a much broader population than those living in DC. In 2014, according to DC hospital discharge data, approximately 40% of hospital discharges were related to patients who lived outside of DC. However, the high beds per 1,000 population rate combined with very low hospital occupancy rates seems to mitigate this factor and support an overall conclusion that currently DC does not face a shortage of hospital beds or unmet need in the District.

In 2014, the overall occupancy rates in DC, as articulated in average bed years, was only 53%.<sup>1</sup> This means that at any given time in 2014 only slightly over half of DC's licensed beds were being used. More specifically, hospital discharge data showed that in 2014 on average only 1,743 of DC's 3,298 hospital beds were being used at any given time. Note that licensed beds do not necessarily equate to beds in operation, but the licensed capacity is the established service limit and the parameter under the control of the DC DOH. Also, the occupancy rate in the bed years calculation represents the minimum possible measure of bed utilization, as it assumes no 'down time' in between admissions to that bed. Similarly, 100% utilization of licensed capacity is not a practical expectation. While there is no clear national standard, typically one assumes that a cushion representing 10–15% of total occupancy is necessary and that if a hospital's occupancy rate is 85–90% then the hospital is operating at or near full capacity with respect to inpatient services. The current occupancy rate of 53% is well below this standard, thus adding to the idea that, at least overall, absolute bed capacity for DC is not the primary issue.

It is important to note that three hospitals in the District appear to be operating close to capacity at approximately 75% of licensed Med/Surg classified capacity. Interestingly, the largest facility in DC, Medstar Washington Hospital Center with 775 Med/Surg classified beds, and adjacent Children's National Medical Center, are among these, along with the George Washington University Hospital.

<sup>&</sup>lt;sup>1</sup> Occupancy rates were calculated by comparing the licensed bed counts to bed utilization as reflected in the 2014 DC hospital discharge data set. This comparison is based on the most recent hospital licensing certificates from 2016, compared to bed years (inpatient days/365) from the 2014 inpatient data. According to the DC DOH, licensed bed capacity has not changed significantly between 2014 and 2016. To permit comparability between licensed bed categories and the hospital lines of service in the discharge data, crosswalk tables were created that assigned beds and discharges to common categories that would likely reflect the bed utilization to the degree possible across all institutions. See AppendixE for the crosswalk tables and AppendixF for charts of licensed beds and bed years utilized for each facility.

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Together these three hospitals represent 45% of the total Med/Surg classified beds in the District. Medstar's Georgetown University Hospital (533 Med/Surg classified beds) is the next most heavily utilized at 56%. All of the remaining facilities show Med/Surg utilization below 50% of licensed beds, including UMC (43% utilized), Providence (36% utilized), Sibley (31% utilized), and Howard (27% utilized). Overall, 55% of the Med/Surg classified licensed beds were utilized based on the direct calculations.

Ob/Gyn licensed beds showed similarly large variation in utilization. Medstar Washington and George Washington University Hospital both had utilization over 75% (78% and 76%, respectively). Sibley had 63% utilization, Providence and UMC both showed utilization in the low 30% range, and Medstar Georgetown and Howard were both at 19% utilization. Overall the Ob/Gyn bed utilization rate was 44%. Psychiatry beds showed considerably higher utilization across nearly all hospitals in DC. Overall psych beds showed 64% utilization of licensed capacity. The exception is Howard University Hospital, where utilization of its 26 licensed beds was 25%. All other hospitals had utilization above 60%, with Medstar Georgetown and Children's hospitals exceeding 70% utilization and George Washington University Hospital at 80% utilization. While Medstar Washington had the largest licensed psych bed capacity (57 beds), the psych bed capacity was generally distributed more evenly across hospitals than capacity for other services.

There are only two hospitals with Alcohol/Chemical dependency beds licensed, with Providence the largest at 31 beds and Medstar Washington at 22 beds. Interestingly, both facilities showed low utilization rates for these beds (16% and 14%, respectively). It is important to note, however, that other facilities showed low levels of admissions under the Substance Abuse line of service. Sibley, UMC, Georgetown, and Howard each showed one bed year of utilization for Substance Abuse, and George Washington showed two years of utilization. As a result, overall utilization of Alcohol/Chemical Dependency licensed beds in DC was 26%.

Despite the conclusion that there are no absolute service gaps in hospital services, there is evidence that suggests hospital beds are maldistributed, which presents barriers to access for certain segments of DC's population. These barriers, along with other administrative factors, hinder patients from accessing their preferred service provider in a timely manner. It is clear these factors and many of the core findings from this segment of the assessment augment the underlying idea that major inequities exist depending on where one lives in DC. However, it is not clear that merely redistributing hospital inpatient services will address these barriers or that the relatively incremental benefit that may result from redistributing access will add enough value to justify the expense and possible implications on the overall health system. Additional research is required to explore the specific types of investments that should be made to address the maldistribution and existing barriers.

#### **Outpatient Medical and Surgical Services**

In addition to providing inpatient and emergency services, hospitals are often the hub for a broad range of other specialized outpatient specialty and diagnostic services for those with acute, chronic, or complex illnesses or injuries. These specialized outpatient and diagnostic services are often provided directly on hospital campuses or in close proximity to hospitals. The quantitative and qualitative data collected and

analyzed for the primary care and hospital inpatient analyses have clearly shown that large numbers of patients are traveling from DC's outlying areas into central DC for care. As a result, large proportions of the population travel significant, time-consuming distances, which for many cause a barrier to care and lower engagement.

A clear finding from this assessment is the need to improve access to outpatient medical specialty care and possibly outpatient surgical services for those in DC's outlying areas, such as Wards 7 and 8. Primary care services, as well as behavioral health and post-acute services, seem well distributed and available. However, the data suggests that when it comes to services that are typically provided by hospitals, patients are opting to travel into central DC for care. Hospitals and community-based primary care providers need to work together to explore how to best enhance access to these services in more accessible community settings.

#### Hospital Emergency Services

Hospital emergency departments play a critical role in the U.S. health care system. Their primary role is to serve those with acute conditions that are either life threatening or that could lead to permanent impairment. However, hospitals also play a critical role as a provider of last resort for those who need non-emergent primary care services and either do not have a usual source of primary care in the community or are unable to access their regular primary care provider because the practice is full, not open when needed, (e.g., after-hours or weekends), or otherwise inaccessible. Recent research has also shown that emergency departments are being used increasingly as an advanced diagnostic center for primary care physicians who are not able to provide these services on their own.<sup>107</sup> Finally, some research has shown that emergency departments play an important role preventing unnecessary hospital admissions or readmission, particularly for patients with ambulatory care sensitive conditions that are typically better addressed in the primary care setting. Most emergency departments, including those in DC, are in the process or have already rolled out emergency department triage or diversion programs aimed at linking patients who are seen in the emergency department to a regular primary care provider, if they do not already have one.

Much of the discussion with respect to hospital emergency services is covered in the primary care section of the HSP as well as in the DC Primary Care Needs Assessment Report, which has been developed in parallel to the HSP.

As stated above, all eight of the ACHs in DC provide emergency services. Three of these ACSs are Trauma I verified (Children's National Medical Center, Medstar Georgetown University Hospital, and Medstar Washington Hospital Center) and are able to provide a complete array of emergency services 24 hours a day, 7 days a week, 365 days a year.

There is quantitative and qualitative data suggesting that emergency services may be overused and accessed inappropriately for non-emergent care or that care in emergency departments could be better coordinated and more integrated with other segments of the health system, particularly in the case of behavioral health and primary care. However, there is currently no data to suggest that there are major

service gaps or service surpluses in DC. Hospital emergency services were generally not referenced during the assessment's interviews or community forums, except in the context of primary care and the need to reduce inappropriate utilization.

#### Hospital Service System Challenges and Opportunities

As stated previously, hospitals are critical components of a strong health system. Historically, hospitals have focused on the treatment of acute illness or injury. However, hospitals are evolving rapidly and are developing into broad, integrated delivery systems focused on preventing illness, promoting wellness, and better managing those with chronic or complex conditions, as well as treating those in inpatient and emergency department settings. These trends have increased the emphasis on implementation of care management, care coordination, and service integration, as well as the implementation of evidence-informed strategies that decrease fragmentation, promote quality, improve patient experience, and reduce costs.

As is the case with other segments of DC's health system, there is limited evidence of absolute service gaps or unmet needs with respect to hospital services, particularly related to hospital inpatient or emergency services. While gaps may exist in medical specialty care and possibly outpatient surgical services, the gaps are focused on low-income residents who are insured by Medicaid, the DC Healthcare Alliance, or are uninsured. Findings show that there are inequities in service distribution and barriers that prevent full engagement in appropriate care for some segments of DC's population. The following are the leading challenges and opportunities borne out by the quantitative and qualitative data from this assessment.

#### Fragmentation of Services, Care Coordination, and Service Integration

One of the core findings throughout the assessment, drawn from both the quantitative and qualitative data, is that services in DC are often fragmented and uncoordinated. There are many factors involved related to information flow, referral practices, barriers to access (e.g., transportation, cost, and language/culture), limited collaboration between providers, and underlying social determinants, among others. These issues are relevant to service providers across all sectors but arguably affect hospitals more than most due to the breadth of hospital services, which increases the need to integrate and coordinate care. Hospitals can have a greater ability to impact the system and their patients, which can present both risks and opportunities. This is particularly true in light of the service delivery and payment reforms underway, which increasingly reward or penalize hospitals depending on how well they perform relative to patient outcomes and care processes.

Hospitals have made significant progress in recent years with respect to coordinating their efforts with other providers and stakeholders. For example, hospitals have worked with primary care providers to control inappropriate emergency department utilization. They have also worked with managed care organizations to manage care for high utilizers of hospital inpatient and emergency services utilization. Furthermore, hospitals have worked with various post-acute care providers to facilitate smooth care transitions. Finally, there is evidence that hospitals have worked with community-based organizations,

such as homeless organizations, to address food access and other underlying determinants through various community benefit efforts. However, there are still numerous opportunities to reduce fragmentation and better coordinate and integrate services.

#### Hospital Care Transitions and the Reduction of Inappropriate Hospital Readmissions

As will be discussed in greater depth in the next section, reducing inappropriate hospital readmissions is a critical component of improving quality of care and lowering health care spending. Improving care transitions and the ways that hospitals, patients, families or caregivers, post-acute service (PAC) providers, and other community partners work together is critical to this effort. Hospitals, in partnership with other providers, have made great strides to identify triggers of inappropriate readmissions as well as to implement initiatives that have improved care transition. Despite these efforts, transitions can be challenging. There is considerable variation regionally with respect to the rates of discharge to different PAC settings and there is even more variation with respect to discharge patterns by payer class, demographic characteristics, and other factors. Efforts need to be made to improve the care transitions process and develop data-informed pathways that promote recovery and reduce costly, debilitating, or inappropriate hospital readmissions.

#### Inappropriate Emergency Department Use and Engagement in Primary Care

Hospital emergency departments play a critical role in our health system by providing life-saving treatment to those with emergent needs. They also provide a significant amount of non-emergent primary care services to those who either do not have a regular primary care provider or who, for a variety of reasons, are unable to get the care they need. In this way, hospital emergency departments also play a critical role as part of the primary care safety net. Data from the assessment shows that DC residents use hospital inpatient and emergency department services for conditions that are better served in the primary care setting at very high rates. Continued efforts need to be made to reduce this inappropriate utilization so as to reduce the overall costs of care and promote patient engagement with a primary care medical home.

#### Access to Outpatient Medical Specialty Care Services

There is evidence of service gaps and provider shortages in medical specialty care services and possibly outpatient surgical services, particularly for low-income residents living in many of DC's most underserved communities. Low-income residents in these communities face barriers to care that limit their access and prevent them from engaging in the care they need in a timely manner. Hospitals need to work collaboratively with other service providers to expand access, better distribute services in DC's underserved communities, and reduce existing barriers to care.

#### Continued Focus on Population Health, Preventive Services, and Wellness

Hospitals are evolving rapidly into broad, integrated delivery systems that are increasingly focused on preventing illness, promoting wellness, and better managing those with chronic or complex conditions rather than being focused on simply treating those who are ill. This shift in approach should continue, and

hospitals in DC need to explore ways to expedite this shift by partnering with service providers, community organizations, managed care providers, and other stakeholders on efforts aimed at addressing social determinants of health, preventing illness, and managing chronic disease.

#### Administrative Barriers to Care

There is both quantitative and qualitative data to suggest that some patients are unable to access the care they need with their preferred providers due to administrative barriers related to insurance coverage, managed care contracting, insurance enrollment, or insurance renewal practices, among other factors. Efforts should be made to better understand these issues and develop policies or other initiatives that allow residents, to the greatest extent possible, to access the care they need in the right time and place.

#### Continued Participation in Health Service Delivery and Payment Reform Initiatives

Hospitals and integrated delivery systems are at the heart of health reform and the development of innovative models of care that promote quality, improve the patient experience, reduce health care costs, and lessen the burden currently experienced by service providers. DC's hospitals participate in numerous innovative service delivery and payment reform initiatives that are promoting collaboration, improving how care is delivered, and facilitating more effective ways to pay for care. However, if DC is going to improve overall health status and address the disparities and inequities that exist for many people, then hospitals need to collaborate with necessary stakeholders to continue to participate in nationally implemented initiatives.

#### Multi-sector Collaboration and Service Coordination

There is a growing appreciation and emerging evidence that shows the importance of multi-sector collaboration and community partnerships. These evidence-based programs rely on multi-sector collaboration and thoughtful coordination of a range of services. As has been discussed in past section and will be discussed in future sections, it is essential that multi-sector coalitions be developed and sustained to provide a forum to explore and implement evidence-informed strategies that improve care coordination, reduce fragmentation of services, support patient/provider communication, enhance primary care and specialty care follow-up, and promote smoother care transitions. These forums already exist to some extent in DC, but they are often isolated by sector or service provider type. These coalitions and professional organizations need to be formally brought together and encouraged to work more collaboratively.

#### PRIMARY CARE AND SPECIALTY CARE SERVICES

The DC Department of Health's Primary Care Bureau (PCB) is currently overseeing a Primary Care Needs Assessment (PCNA), which will be completed in June 2017. The PCNA will characterize DC's primary care system in significant detail, including in-depth information regarding the overall strength of the system and the extent to which there are service gaps and barriers to care for DC residents. The following is a detailed but initial review of key findings from the leading datasets. More nuanced

#### findings and conclusions will be included in the PCNA when it is released.

#### Overview of Primary Care

There is increasing awareness of the importance of a strong, patient-centered health system that is able to provide preventive, acute care, and chronic disease management services to a region's entire population. Primary care is at the heart of the health system and payment reforms that are currently underway nationally. Countless efforts over the past 20 years have been implemented to strengthen the quality and accessibility of the nation's primary care system.

There is ample research that shows the effects of primary care and its ability to prevent or manage illnesses before they become more severe and impair health status. The availability of high quality, patient-centered, and accessible primary care has clearly been shown to reduce preventable hospital emergency department visits and inpatient stays, as well as reduce the need for costly tests and specialty care services. Those with a regular primary care provider also are more likely to receive vital health education and the preventive services that are necessary to reduce illness and death. Finally, research shows that a strong primary care system enhances the performance of health systems with respect to outcomes and costs.<sup>108</sup>

It is particularly important to have a strong primary care safety net system that is able to work collaboratively across sectors (e.g., public health, community health, hospitals, behavioral health providers, post-acute providers, etc.) to engage those who are typically underserved, such as low-income individuals and families, racial/ethnic minority populations, recent immigrants/refugees, and other vulnerable populations with complex medical, behavioral, or developmental conditions.

Also at the core of a strong primary care system is the extent to which practice sites can provide a "medical home" that is capable of forming a close partnership between patients and their primary care provider so as to ensure that individuals and families are able to navigate an increasingly complex health care system. Concepts that are at the core of a primary care "medical home" are:

- Including patients in treatment decisions.
- Making care available after regular office hours, such as evenings and weekends.
- Following up with patients after an office visit to ensure patients are able to act upon and follow the guidance of their primary care provider, such as book follow-up appointments and understand prescription drug refills.
- Supporting patients with complex/chronic conditions to manage their health and reduce risk factors.
- Coordinating and integrating the full breadth of services that patients need to stay healthy and/or manage their health and well-being.

Unfettered access to primary care has shown to allow people to live longer, feel better, avoid disability and disease, and facilitate a productive, fulfilling life.

# Characteristics of Primary Care System and Core Findings Related to Access and Quality

When it comes to health care resources, DC is extremely resource rich and primary care is no exception. DC has a robust primary care network that is well-distributed throughout the District. In fact, DC has one of the strongest and most comprehensive primary care safety nets in the nation. As will be discussed below and elaborated in detail in the PCNA report, at the heart of DC's primary care system is a core set of federally qualified health centers (FQHCs), hospital-operated clinics, large and small private sector practices, and a series of organizations that provide targeted primary care services to targeted subsets of DC's population. Collectively, these primary care practice organizations provide high quality, accessible care throughout all of DC's communities. The following are brief descriptions of each of these four core components. There is exhaustive data available through the DC Primary Care Association and the Health Resources Services Agency's Bureau of Primary Care that describes the FQHC network in DC. Much less information is currently available for the other segments; however, more detailed information will be included in the PCNA.

#### • Federally Qualified Health Centers

FQHCs play a significant role in the primary care delivery system in DC. DC has a network of 9 FQHC grantees, with 56 approved service delivery locations (52 located within DC). Figure 12 shows the location of the health center organizations and their network of service delivery locations. Collectively the DC health centers saw 170,683 patients in calendar year 2015, most of whom were low-income and uninsured or on Medicaid.

Table 3 shows the demographic profile of the DC FQHC patients by organization. Note that certain health centers focus on different segments of the population. La Clinica del Pueblo and Mary's Center see the greatest portion of Hispanic/Latinx patients, while most of the other centers serve a predominately Black/African American population. Whitman-Walker focuses on Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) and HIV care—and as a result serves a smaller percentage of low-income and minority patients.



# Figure 12: FQHC Grantees and Service Delivery Sites, 2015

Hospital

Health Center Name	Total Patients	% Low Income	% Below Poverty	% Uninsured	% Medicaid/ CHIP	% Medicare	% Other Third Party	Racial and/or Ethnic Minority	Hispanic/ Latinx Ethnicity	Black/ African American
BREAD FOR THE CITY	2,488	95.17%	77.92%	21.14%	49.92%	15.80%	13.14%	96.04%	15.78%	83.26%
COMMUNITY OF HOPE	9,825	91.38%	75.10%	7.79%	70.36%	4.04%	17.81%	93.92%	11.27%	82.76%
ELAINE ELLIS CENTER OF HEALTH	1,280	87.30%	67.45%	4.45%	87.81%	3.13%	4.61%	96.67%	1.49%	95.53%
FAMILY AND MEDICAL COUNSELING SERVICE	2,326	96.13%	86.45%	26.61%	57.22%	11.74%	4.43%	98.31%	2.16%	93.54%
LA CLINICA DEL PUEBLO	3,304	94.07%	47.21%	28.57%	31.42%	7.11%	32.90%	98.88%	92.25%	38.46%
MARY'S CENTER FOR MATERNAL & CHILD CARE	36,636	98.00%	64.94%	39.10%	44.27%	1.09%	15.55%	95.04%	70.67%	22.50%
UNITY HEALTH CARE	106,469	92.91%	74.05%	13.83%	58.78%	7.61%	19.77%	97.43%	19.40%	85.31%
WHITMAN- WALKER CLINIC	8,310	66.98%	50.84%	14.87%	33.89%	11.31%	39.93%	66.85%	15.35%	50.41%

## Table 3: Demographic Profile of DC FQHC Patients by Organization

As the chart above shows, Unity Health Care is, by far, the largest FQHC organization serving the DC community, representing approximately 62% of all patients seen by DC health centers. Unity is the dominant grantee in all but one of the District's zip codes. While Unity sees the greatest number of health center patients, the majority of its patients come from the southeast region of the District, while other organizations play a relatively larger role in the central and northwest portions of DC. Mary's Center, for example, is the dominant organization serving a portion of Maryland to the northeast of DC.

#### Hospital-based outpatient clinic

In addition to the FQHC clinics, seven of the acute care hospitals that operate in DC have outpatient primary care practices that serve the DC population. These hospital-operated practices serve primarily commercially insured and Medicare populations. A number of practices, however, serve large numbers of Medicaid enrollees and, as such, are a vital component of the safety net system in DC.

#### • Private providers

In addition to the FQHC and hospital-operated clinics, there are dozens of other small and large private practices that serve residents of DC and beyond. Like hospital-operated clinics, they primarily serve commercially insured and Medicare patients, but there a small number of practices that serve large number of Medicaid patients and are an important component of the DC safety net.

#### • Categorical Service providers

Finally there is a small number of organizations that provide primary care services to very targeted subsets of the DC population, such as Whitman Walker Health that provides HIV/AIDS services (as well as comprehensive primary care services to a relatively smaller segment of DC's population), Planned Parenthood, and DC Healthcare for the Homeless Program.

#### Key Primary Care-Related Findings

#### Primary Care Access in DC for Medicaid Enrollees

A detailed examination of access to primary care for the Medicaid enrolled population in DC was undertaken, using data obtained from the DC Department of Health Care Finance (DHCF). This data consisted of claims for outpatient office visits (defined by associated billing codes) for all Medicaid and DC Healthcare Alliance enrolled members, covering the period from June 2015 to May2016. A count of Medicaid enrollees by zip code, ward, and quadrant was also obtained for the same period. The claims data obtained was analyzed to separate claims billed by primary care providers from claims billed by specialists. This determination was made using a combination of provider and billing specialty codes included in the claims file, along with taxonomy codes listed in the associated Medicare National Provider Identifier (NPI) file where the NPI of either the attending, rendering, or billing provider/organization was available (prioritized in that order). Due to issues with a portion of the claims obtained from third party administrators for managed care enrolled members, for which specialty and NPI data was not available, it was necessary to determine the primary care nature of a portion of claims (approximately 20%) based on an imputation of the provider location, derived from an analysis of the claims that had full information.

• Medicaid Coverage in DC. The District of Columbia is reliant on Medicaid for primary care access. In 2015, DC had the fourth highest portion of the population covered by Medicaid (including CHIP) among all states, covering 26% of the population based on census/CPS

portion in the country. Medicaid enrollment data obtained from DC DHCF shows even higher participation in the program, with participation of approximately 309,000, or over 45% of the population. While the census tends to undercount Medicaid for various reasons, one key structural difference is that the DHCF files include any person enrolled for any part of the year, while the census-derived data comes from a 'point in time' survey process.<sup>109</sup> These differences can be analyzed and used to further document the relationship between Medicaid and the overall population.

Figure 13 shows the distribution of the Medicaid enrolled population, per DHCF, throughout the city by zip code. One can see that rather than being confined largely to the areas with the greatest levels of low-income residents, the Medicaid population in the District is relatively widely and somewhat evenly dispersed throughout the eastern and southern half of the District. These are the lower-income portions of the District overall, and the density of Medicaid drops sharply in the notably wealthier areas to the northwest. This is likely due to the relatively high income limits on enrollment, the Alliance program, and the expansion of eligibility under the ACA which DC adopted early, beginning in 2010.



Figure 13: DC Medicaid Enrollees by Zip Code

The lower 'point in time' Medicaid data derived from the American Community Survey by zip code, represented by corresponding zip codes in Figure 14, shows that the zip codes falling within Wards 7 and 8 do show a notably higher proportional reliance on Medicaid (and other public programs such as CHIP), exceeding half of the population in these areas. Central portions of Wards 4 and 5, which show the next highest levels of Medicaid coverage, exhibit rates in the low 20%, while Medicaid reliance falls to the low single digits in the northwest area. This steep gradient in Medicaid participation, compared to the more even distribution outside of the northwest area seen in the DHCF data, may result from those at the higher-income ranges of Medicaid enrollment having a more transient relationship with the program. Under this assumption, any given enrollee would be less likely to be identified in a point-in-time survey if their duration of enrollment was shorter, compared to lower-income populations that are more consistently eligible for, and reliant on, the program. To further explore this concept, member month data will be included in the assessment once it has been received.





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Medicaid Primary Care Access and Utilization. In order to explore the provider availability and accessibility of primary care for the Medicaid population, the primary care claims data was aggregated according to the zip code origin of enrolled patients and the zip code destination of the provider at which the care was delivered. Figure 15 shows the primary zip code origin-destination (O-D) pattern seen in the data, based on the most frequent zip code in which the residents of every zip code in the district received care (the plurality destination for primary care visits from each zip code). The red star symbols are kernel zip codes, in which providers within a given zip code were the most frequent destination for primary care visits by residents living in that zip code. The arrowed lines show the most frequent destination zip code for residents of zip codes that were not kernel zips (i.e. residents most frequently received care in another zip code), with the thickness of the line showing the volume of visits following that pattern. One notes that there are relatively few 'kernel' zip codes (only three) in the DC area, and there is a strong pattern of care delivery focused on the central zips of 20009 and 20010. Nearly all zip codes in the District receive the plurality of their Medicaid primary care visits in one of these two zip codes. Zip Code 20009 contains large volume service delivery sites for several prominent Health Centers, including Unity, Mary's Center, Community of Hope, and La Clinica del Pueblo. Zip Code 20010 contains the large outpatient service sites for the MedStar Washington Hospital Physicians Group and the Children's National Medical Association practice of Children's Hospital. Note that the destination point shown for zip code 20010 in particular is the center of the area, not the center of services that are located to the east, in Ward 5, for that zip code. All practices providing Medicaid primary care visits are shown as green points overlaid on the maps.

The gravitation to the center of the city shown in the care seeking pattern belies the fact that there are Medicaid provider sites distributed throughout the city, as shown by the provider points on the map. Most of the zip codes from which the plurality of Medicaid visits are seen to be delivered in the central areas of DC do have at least some internal Medicaid provider capacity, and some, particularly in the southern and eastern areas of the District, have many sites.

Finally, Figure 15 shows fragmentation of care seeking patterns. While the primary pattern shows a consistent dominance of care from central zip codes, the shading of the zip code areas underlying the points and lines shows the relative preference for the primary care seeking pattern shown, based on the portion of Medicaid visits from that zip code that follow the primary pattern displayed. Overall preference levels for the primary pattern are low throughout DC, but one notes that the preference percent in the southern and eastern parts of the District is particularly low—with one-quarter or fewer of visits following the primary pattern. In many cases, the 'home' zip code does not even rank second. For the three zip codes comprising Wards 7 and 8 (20019, 20020, & 20032) the home zip is the third most likely destination (behind both 20009 and 20010)—with only about 15% of visits from each zip code being delivered locally. While this may be partially the result of commuting patterns and individual preference for certain providers, it appears that the dominant driver is a concentration of Medicaid accessible primary care capacity in central areas of the city.





Figure 16 shows the percent of total enrollees from each zip code that were observed to have made at least one primary care visit in the year of claims data examined. One can glean several key pieces of information from this map. First, the portion of Medicaid enrollees utilizing primary care (excluding prenatal care) is relatively low in all areas—with even the highest utilizing areas showing primary care utilization rates in only the mid to upper 50% range of enrollees. This means that large numbers of enrollees, and the majority of enrollees in some areas, are not accessing primary and preventive services in a given year. Second, the primary care utilization rates are relatively consistent in the southeastern portion of the city, where the bulk of the Medicaid population resides. Utilization of primary care services is notably lower for those enrollees living in northwestern portions of the city. This may be due to the relative lack of Medicaid providers in these areas and potentially less outreach and messaging to this thinly dispersed group of enrollees. It may also be influenced by shorter enrollment periods if they are less persistently reliant on Medicaid. Overall, the pattern of traveling to other parts of the District for primary care services does not appear to be a dominant factor in the degree to which the enrolled population actually obtains one or more primary care visits during the year.

Another view of utilization can be seen in Figure 17, which shows the number of primary care visits accessed per year. Here again there is consistency in the utilization patterns of Medicaid patients coming from the southeastern areas of the District where the bulk of the Medicaid population resides. Utilization rates were reasonably high, falling in the 3.6-4.0 range for this area of the city. Similar to the portion seeking any visits, the frequency of visits for Medicaid patients from the northwestern part of the District were marginally lower, in the 3.4-3.5 visit range. The reasons noted above may also apply to the volume of primary care sought. Here again it is noted that the fragmentation and longer distance to care does not seem to be a dominant factor resulting in low utilization rates for those that do seek primary care services.

Due to delays in obtaining the complete Medicaid claims data file and the need to conduct remedial analysis in order to impute the nature of some of the contents, the analysis of the Medicaid data presented here is not exhaustive of the planned inquiries for the data. Additional analyses hope to focus on segmenting the population according to key demographic sub-groups (children, women of childbearing age, young men, and older adults) as well as key diagnostic groups related to chronic illness. Similar analyses as those presented for the Medicaid population overall will identify potential patterns and challenges unique to these populations, which may be masked in the aggregate. Additionally, claims for dental and behavioral health services must still be processed. These efforts will further inform the final results to be compiled in the detailed Primary Care Needs Assessment.



Figure 16: DC Medicaid Enrollees, % with 1+ Primary Care Visits

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#### Primary Care Access Provided Through FQHCs

Maps 1-4, located in Appendix G, show the degree to which the FQHCs collectively served various segments of the population in 2015. The following are discussion of the extent to which FQHC's serve the overall population, low-income populations, Medicaid/DC Alliance populations, and the uninsured.

- FQHC Penetration into Total Population. Map 1 shows the percent of the total population that are served by zip code. Particularly in the poorer neighborhoods of the District, the health centers serve a sizeable portion of total residents, including 44% of residents in most of Ward 7 and almost one-third of residents in other southern and eastern zip codes. The health centers generally focus less on the total population and more on the underserved within their target communities—typically those who are low-income and on Medicaid or uninsured.
- FQHC Penetration into Low-Income Population. Map 2 shows the percent of the lowincome population served by FQHCs by zip code. Note that the numerator used for this calculation is all patients served by a given FQHC grantee—a vast majority of which, well into the 90 percentile for most grantees, are low-income. With the exception of Ward 3 and portions of Ward 2, the majority of the low-income population visited an FQHC within the year. Note that some areas appear to exceed the total population—likely due to some duplication when an individual visits more than one grantee, which can't be unduplicated.
- FQHC Penetration into Medicaid or DC Healthcare Alliance Population. Map 3 shows the extent to which FQHC grantees serve those insured by Medicaid, the Children's Health Insurance Program (CHIP), or the DC Healthcare Alliance by zip code. FQHCs serve a large percentage of this population. It is interesting to note, however, that in Ward 8 FQHCs serve proportionally less of the Medicaid population. Based on this assessment's analysis, including the Medicaid claims discussion below, this is likely the result of other hospital-based outpatient providers seeing this population.
- FQHC Penetration into the Uninsured Population. Map 4 shows the extent to which FQHC grantees serve the uninsured population. While the rate of uninsured individuals in DC is relatively low overall, there still remain notable populations that have no coverage. The table above shows that this group can represent anywhere from 5% to nearly 40% of patients seen at the health centers. The health centers serving the bulk of the uninsured population are generally located in the south and eastern portions of DC, with many areas appearing to exceed 100% service—likely due to patient overlap between organizations and potential undercounting of transiently uninsured populations in the census. Regardless, this level of service would be considered full saturation for most of the District, though there do appear to be some uninsured in the northwest portions that are not accessing care at FQHC locations.

#### Challenges and Opportunities for Medicaid Primary Care

For many reasons, the DC area is well positioned in terms of providing care to the Medicaid eligible or enrolled population. The sizeable Medicaid participation rate, generous income and family structure

thresholds, numerous providers, and long relationship with the eligible population—including groups that other states are only first reaching as part of the ACA expansion—are, in general, assets for the District in terms of reaching and engaging this population. The results do, however, point to several challenges and opportunities that could lead to improved outcomes. These include:

Rationalization and decentralization of Medicaid primary care service delivery: Although the fragmentation of care and relatively small portion of care provided in the local community does not appear to be driving forces resulting in lower service usage, the pattern observed does point to opportunities for changes that might improve the system overall. The fact that most of the available care appears to be concentrated in the central areas of the District is causing enrollees to travel considerable distances. Although public transportation is readily available, it may result in several bus or metro connections that add time and cost to those seeking care. Furthermore, the low use of local providers and low preference percent for any particular provider destination makes it difficult to optimize relationships between primary care and specialty/inpatient services. This was validated qualitatively in comments from primary care providers who felt that inpatient facilities were not consistently used, and that follow-up communication regarding inpatient and specialty care was a problem. More locally focused care delivery would facilitate the establishment of more consistent patterns in the DC neighborhoods and aid in vertical integration of care needed for steps like accountable care organizations. Consistency and integration of electronic medical record systems and bi-directional referral communications could be improved as a result, and positive community identity around services could be strengthened.

Interestingly, the patterns of hospital inpatient care admissions (presented in a separate section of this report) showed a relatively more localized pattern of care seeking for Medicaid enrollees compared to those with private insurance. This may be mediated by characteristics and perceptions of the local hospitals, as well as underlying issues with the provider panels for the Medicaid managed care products in DC. The general pattern, however, appeared more rational and favorable to vertical care integration. By acknowledging that some of the locally focused hospitals are experiencing adverse conditions, there can be movement toward strengthening resources and the primary care delivery system to become a more decentralized and dispersed model.

• Outreach to the medically isolated. While the pattern of care seeking was relatively consistent for those engaged with the primary care delivery system, the overall rate of care seeking was lower than one would hope. Routine primary and preventive care is an essential element of improving overall outcomes and lowering costs. The low portion of the enrolled population using primary care services is cause for some concern and may suggest that an increase in active outreach efforts could produce beneficial results. Again, the long enrollment history and generous income thresholds are assets that suggest engaging patients could build lasting relationships with the remaining population that is not currently connected with the delivery system. These initiatives would be complimented by efforts such as those noted above, in which care is more locally available and integrated with specialty and inpatient resources, as well as emergency departments.

• Extending resources to enrollees in lower enrollment communities. Additional analysis may prove beneficial in exploring the reasons behind apparently lower connection with, and utilization of, primary care services by enrollees residing in more affluent areas of the District. On one hand, if these enrollees have shorter duration of enrollment due to income or work situations closer to the thresholds for qualification, this pattern may have a relatively benign origin. It is true, however, that these areas also show relatively few sources of Medicaid primary care, and outreach efforts are unlikely to focus on these communities. If this is a limiting factor then increased efforts to draw these individuals into the delivery system could prove beneficial, even though the group represents a relatively smaller group of enrollees.

#### Emergency Department Utilization in DC

Data obtained from the DC Hospital Association on Emergency Department (ED) discharges was analyzed to examine how the ED was used by residents from different parts of the city. Note that the ability to fully describe ED utilization was limited by the fact that United Medical Center did not contribute data to the file and is therefore not represented in the statistics available. Furthermore, the file did not contain any visits made by DC residents to EDs outside of the District. As such, the analysis focuses on proportions within the available records rather than population level rates or patterns of access overall.

Figure 18 shows the portion of ED visits by residents of each zip code for which the primary discharge diagnosis was among the list of Ambulatory Care Sensitive diagnoses—a set of conditions for which research has demonstrated that primary care access and quality can partially avoid ED and inpatient admissions. The pattern is similar to that found when analyzing inpatient admissions with ACS diagnoses, in which the communities in southern and eastern DC show notably higher portions of ED visits for these diagnoses—exceeding 20% of all visits to the ED. By contrast, the percentage of ED visits for ACS conditions in the northwest areas of DC was notably lower—with rates approximately half of the rates found in the areas where ACS use of the ED is most prevalent. This finding may be even more notable when one considers that UMC, the only ED across the river in Wards 7 and 8, is not included. One might assume that the local ED would be a more likely place to seek routine care. Rather than describing ED care directly, these results point to the fact that primary care in these most impacted sections of the city is not fully accessible, or not performing optimally in preventing medical complications.

### Figure 18: DC Medicaid Enrollees, Primary Care Visits Per Patient



# **DC Emergency Visits**

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#### Primary Care System Challenges and Opportunities

The following is a brief review of the leading primary care system challenges and opportunities that are impacting consumer engagement, access to care, cost, and quality. This list was compiled based on a review of the quantitative and qualitative findings from this assessment, as well as a review of relevant academic and gray literature.

#### Service Capacity and Barriers to Care

DC has a large and robust primary care network that is well-distributed throughout the District. So far there is limited evidence of major gaps in capacity. The PCNA may bear out targeted gaps either geographically or with respect to specific demographic components, but overall there is strong evidence that absolute capacity is not a constraining factor. On the other hand, there is evidence to suggest that due to perceptions of quality, consumer preferences, and administrative barriers related to insurance coverage and MCO contracting, some residents in DC, particularly those in underserved communities, face barriers that could be hindering their access and engagement in primary care. As was the case for hospital services, large numbers of the population are opting to travel long distances to seek primary care services and as a result face transportation barriers. Many of the assessment's community forum participants referenced that it was not uncommon for them to spend upwards of an hour or more traveling to their primary are appointments.

#### Lack of Engagement in Care (Need for Outreach and Education)

Lack of appropriate engagement in primary care is one of the leading findings from this assessment. One of the most notable points of evidence in this regard is the fact that only approximately 50% of Medicaid enrollees did not have a primary care visit between June 2015 and May 2016. Further evidence is simply the high rates of chronic disease and the high rates of ambulatory care sensitive conditions that are seen in DC hospital inpatient and hospital emergency department settings. The rates of diabetes and other chronic diseases are two to three times higher in many of DC's underserved communities compared to the population overall. Furthermore, more than 30% of the inpatient stays for residents of Ward 7 and 8 are for ambulatory care sensitive conditions. Considerable efforts need to be made to engage residents throughout DC, and especially in many of DC's most underserved communities.

#### Lack of Coordination and Service Integration

As has been discussed in other segment of the HSP, there is both quantitative and qualitative data that points to the need for care coordination and service integration. Despite the tremendous amount of resources that exist in DC, rates of mortality and morbidity are still very high, and there are disparities in access and health outcomes. Community forum participants cited challenges in navigating the system. Considerable efforts have been made to (1) coordinate care transitions from the hospital to post-acute settings, (2) integrate behavioral health and other specialized services into primary care settings, (3) coordinate care for those with complex/chronic conditions that are high hospital utilization, and (4) provide navigation and other case management services in hospital emergency department settings. However, these efforts need to continue and be enhanced so that all of the available resources can be fully leveraged.

# Lack of Education and Awareness of Risk Factors, Barriers to Care, and Underlying Social Determinants of Health

One of the leading findings from the key informant interviews and community forums conducted for this assessment was the need for a comprehensive Districtwide educational and awareness campaign regarding: (1) DC's major health issues, (2) key risk factors to chronic disease and wellness, (3) the importance of appropriate engagement in primary care, (4) the impact of behavioral health, and (5) the impact of social determinants of health. Evidence has shown that when people have a greater understanding of these issues they are more likely to engage in appropriate care and lead healthier lives. Primary care providers also need to take steps to better understand what issues are most affecting their patients with respect to barriers to care, risk factors, and social determinants of health.

#### Health Literacy and Communication

There is extensive research showing the challenges associated with low health literacy and the opportunities that can be realized when patients are able to understand and act on the information communicated by physicians, nurses, care managers, and other clinical and non-clinical providers. Too often information is provided using language that contains medical jargon and is too complex for most patients to understand. Furthermore, it is often communicated in an untimely, rushed, culturally inappropriate, intimidating, and disorganized manner. Participants in the Spanish-speakers forum discussed the particular challenges they face when accessing services without bilingual and culturally competent providers. It is clear that low health literacy is strongly correlated with adverse health outcomes, especially during transitions of care.

#### Gaps or Barriers Related to Medical Specialty Care Services

One of the only areas where the assessment identified a shortage or capacity gap is with respect to medical specialty care services, particularly for low-income residents insured by Medicaid, the DC Healthcare Alliance, or who are uninsured. Efforts need to be made to explore how FQHCs and other primary care practices can work collaboratively with hospitals and other medical specialty providers to expand access to medical specialty services. It is especially important that those who have complex or chronic conditions or who live in areas that face the greatest disparities have access to specialty care services.

#### **Overutilization of Hospital Emergency Department Services and High Rates of Ambulatory Care Sensitive Condition in Hospital Inpatient Settings**

As referenced earlier in this section and in the Hospital section of the HSP, there are very high rates of ambulatory care sensitive conditions in hospital emergency department and inpatient settings. This means that a large proportion of patients are seen in hospital settings for conditions that could be avoided or prevented if patients were better engaged and served in the primary care setting.

# Implementation of Evidence-based Programming and Service Provider Training/Capacity Building

Most of the core primary care providers have received primary care medical home (PCMH) recognition from various accrediting agencies such as the National Council for Quality Assurance (NCQA) and The
Joint Commission. In general there is a very high level of care and quality provided across DC's primary care network. Nonetheless, efforts need to be made to ensure that primary care practice sites are implementing evidence-informed strategies and protocols related to patient engagement, behavioral health integration, chronic disease self-management support, and the treatment of chronic disease.

### Collaboration and Service Coordination Within and Across Sectors

There is a growing appreciation and emerging evidence that shows the importance of multi-sector collaboration and community partnerships. Strengthening DC's primary care system will rely on multi-sector collaboration and thoughtful coordination or integration of services. Evidence from the key informant interviews from this assessment pointed to the need for collaboration within and across sectors. The high levels of competition among organizations must be addressed so that services can be properly planned and coordinated. It is essential that multi-sector coalitions be developed and sustained to provide a forum to explore and implement evidence-informed strategies that improve care coordination, reduce fragmentation of services, support patient/provider communication, enhance primary care medical and specialty care follow-up, and promote smoother care transitions. These forums already exist to some extent in DC but they are often isolated by sector or service provider type. These coalitions and professional organizations need to be formally united and encouraged to work more collaboratively.

### BEHAVIORAL HEALTH SERVICES (MENTAL HEALTH AND SUBSTANCE USE)

According to the federal Substance Abuse and Mental Health Services Administration (SAMHSA), an estimated 18% of United States residents have experienced some form of mental illness in their lifetime, and an estimated 8% have had a substance use disorder in the past year.<sup>110</sup> In adults, anxiety disorders, major depression, bipolar disorder, and schizophrenia are the leading mental health issues.<sup>111</sup> In children and youth, anxiety disorders, adjustment or disruptive disorders (e.g. attention-deficit/hyperactivity disorder (ADHD), and mood disorders are significant issues.<sup>112</sup> With respect to substance use, alcohol, opioid and prescription drug abuse, and marijuana use are the leading issues for both adults and children.<sup>113</sup> One may refer to the Behavioral Health section in Chapter 2 for greater clarification on the burden of behavioral health on DC residents.

The quantitative data compiled for this assessment was corroborated by input gathered from the assessment's key informant interviews and community forums. Interview and community forum participants were emphatic that the burden of behavioral health was one of the leading, if not the single leading, health issues affecting DC residents.

This section will review existing quantitative data and findings from the assessment's interviews and community forums to assess overall behavioral health capacity, and will explore the strengths and weaknesses of the existing behavioral health service system. This section will first characterize the behavioral health system in DC and explore whether the broad range of services provided by the public and private sectors are adequately distributed and have the capacity to address the existing burden of behavioral health. Included in this section will be a review of service utilization data from the DC Department of Behavioral Health (DC DBH) that characterizes who is being served, as well as data on

expenditures by payer, and services provided. These data will facilitate discussions on issues related to the burden of behavioral health, consumer engagement, and capacity. Finally, this section will review quantitative and qualitative findings to identify and clarify the impact that a broad range of health systems issues have on consumer engagement, access to care, and the quality of care.

### Characteristics of DC's Public and Private Behavioral Health System

The full public and private system of care that exists to address the burden of mental health and substance use in DC is expansive, complex, and difficult to delineate. Fundamental to understanding the make-up and complexity of the system, as well as many of the health system challenges that will be discussed in this section, is the fact that the provision of behavioral health care services has been historically seen as the responsibility of state and local governments. Accordingly, there is a large and robust behavioral health service system in DC that is largely funded through public insurance expenditures and other local funds. This public system is operated or heavily subsidized by the DC DBH. It provides a broad range of preventive, acute, long-term, and intensive services and serves as a safety net for many of DC's most vulnerable residents. This system serves primarily 1) low-income populations who are either uninsured or insured by Medicaid, and 2) older adults insured either solely by Medicare, or by Medicare and Medicaid (dually insured). The DC DBH service sites and programs, described in detail below, serve patients with mild to moderate acute and often intermittent issues, but the bulk of the services provided to these populations are to those with serious and persistent mental illness or those with chronic substance abuse issues.

There is an expansive and fragmented private system of care made up of hundreds of individual and small group practices that provide a range of assessment and treatment services. These programs and services are funded by private insurance plans or directly by consumers with out-of-pocket-funds. Historically, due to concerns stemming from stigma associated with behavioral health, the high cost of care, and the perceived lack of effective, evidence-informed programs, insurance benefits and coverage for behavioral health issues have been less comprehensive than the benefits or coverage policies for physical illnesses. In 1996, the Mental Health Parity Act (MHPA) was signed into United States law, which required that annual or lifetime dollar limits on mental health benefits be no lower than any such dollar limits for medical and surgical benefits offered by a group health plan or health insurer. As a result, states and other jurisdictions like DC have instituted behavioral health "parity laws" that have improved access to care, but do not ensure full and adequate access, particularly in the private market where many providers do not accept any form of health insurance. For those who are not eligible for public sector assistance programs, there are often uneven benefits and a shortage of providers willing to accept insurance, which limits access and engagement in appropriate care, as only a limited portion of consumers have the means to independently engage in and sustain care over time.

In 2014, 62% of mental health service expenditures in the United States were paid for by public funders. Medicaid programs accounted for the largest percentage, covering 30% of all expenditures, followed by Medicare (15%), and other state/local funding (13%) (Figure 19). These proportions are expected to remain stable through 2020.<sup>114</sup> The remaining 38% of mental health expenditures were paid for by private payers. In this case, private insurance plans accounted for 25% of total expenditures, followed by

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consumer out-of- pocket spending (10%), and other private contractual payments (3%).



## FIGURE 19: Distribution of Mental Health Spending by Payer

### DC Department of Behavioral Health System

The DC DBH delivers a broad range of behavioral health services that promote recovery, respect cultural and linguistic diversity, and are choice-driven, meaning that services are carefully tailored to consumer needs and desires. These services are provided through an extensive system of community-based service sites that provide diagnostic/assessment services, counseling, medication, intensive day treatment, and crisis/emergency services. These individualized behavioral health services are supported through rehabilitation programs, peer support and recovery networks, supportive employment opportunities, housing assistance, and a range of community housing alternatives that link consumers to systems of care and promote recovery.

### Mental Health Rehabilitation Service (MHRS) System

Mental health services are provided through the DC Mental Health Rehabilitation Services (MHRS) system, which in 2016 included 46 provider sites distributed throughout DC (Figure 20). These service sites provided a broad array of services including:

• **Diagnostic**/ **Assessment:** Intensive clinical and functional evaluation of a consumer's mental health condition that results in the issuance of a Diagnostic Assessment Report with recommendation for service delivery. This provides the basis for the development of an

While DC-specific data was not available, there is no reason to expect that DC would differ largely from the national distribution.

Source: DC Department of Behavioral Health

Individualized Recovery Plan (IRP) for adults or an Individualized Plan of Care (IPC) for children and youth.

- **Medication/ Somatic Treatment:** Treatment services through medical interventions, including physical examinations; prescription, supervision, or administration of mental health-related medications; monitoring and interpreting results of laboratory diagnostic procedures related to mental health-related medications; and medical interventions needed for effective mental health treatment provided through individual or group intervention.
- **Counseling:** Individual, group, or family face-to-face services for symptom and behavior management; development, restoration, or enhancement of adaptive behaviors and skills; and enhancement or maintenance of daily living skills.
- **Community Support:** Rehabilitation supports considered essential to assist the consumer in achieving rehabilitation and recovery goals.
- **Crisis/ Emergency:** Face-to-face or telephone immediate response to an emergency situation involving a consumer with mental illness or emotional disturbance that is available twenty-four hours a day, seven days a week.
- **Day Services:** Structured clinical program intended to develop skills and foster social role integration through a range of social, psycho educational, behavioral, and cognitive mental health interventions.
- **Intensive Day Treatment:** Structured, intensive, and coordinated acute treatment program that serves as an alternative to acute inpatient treatment or as a step-down service from inpatient care, rendered by an interdisciplinary team to provide stabilization of psychiatric impairments.
- **Community-Based Intervention:** Time-limited intensive mental health intervention services delivered to children, youth, and adults and intended to prevent the utilization of an out-of-home therapeutic resource by the Consumer (i.e., psychiatric hospital or residential treatment facility).
- Assertive Community Treatment (ACT): An intensive, community-based mobile clinical service for adults with serious and persistent mental illness who have histories of non-compliance with traditional outpatient services.

# **FIGURE 20:** Distribution of Mental Health Rehabilitation Service Providers



Source: DC Department of Health and DC Department of Behavioral Health.

### Substance Use Disorder (SUD) Service System

Substance use services are provided through the DC Substance Use Disorder Services system, which in 2016 included 57 provider sites distributed throughout DC (Figure 21). These service sites provide a continuum of quality substance abuse prevention, treatment, and recovery support services, including:

- **Prevention Services:** Educating consumers and providing critical information to reduce factors that increase the risk of alcohol, tobacco, and other drug use and abuse among children and youth, as well as promoting the likelihood of healthy, drug-free youth and their families.
- **Treatment Services:** Outpatient, intensive outpatient, residential, detoxification, and stabilization, and medication assisted therapy.
- **Recovery Support Services:** Wrap-around services, such as care coordination, mentoring, coaching, educational support, job readiness, and training, public transportation, and other services to support recovery.



### FIGURE 21: Distribution of Substance Use Disorder Providers

Source: DC Department of Health and DC Department of Behavioral Health.

The following are key characteristics of the patients served by DC DBH's services sites and programs. This data is drawn from the DC DBH MHEASURES Report, which is a report developed by DC DBH twice a year. The January 2016 MHEASURES Report can be found on the DC DBH website.

### MENTAL HEALTH REHABILITATION SERVICES

- In 2015, DC DBH provided mental health services to a total of 23,390 consumers; 3,562 patients received both mental health and substance use services.
- Of the 23,390 consumers who received mental health services, 19,117 (82%) were adults (18+ years old) and 4,273 (18%) were children/ adolescents (0-17 years old).
- Of the 23,390 consumers who received mental health services, 20,930 (89%) received initial and ongoing assessment and treatment services, 3,149 (13%) received specialty services, 2,862 (12%) received intensive community-based services, 2,690 (12%) received crisis and emergency services, and 1,028 (4%) received transitional support services. (Please note: Many patients received multiple types of services, so percentages exceed 100%.)
- In 2015, a total of \$102,630,716 in mental health claims expenditures were made; approximately 91% of these claims were submitted to Medicaid, while the remaining was to other public and private payers.
- In 2015, of the 19,117 adults (18+ years old) that were provided mental health services, 17,378 (91%) of these consumers had a severe and persistent mental illness (SPMI) and 1,739 (9%) had a non-SPMI. Similarly, of the 4,273 children/youth (0-17 years old) that were provided mental health services.

### SUBSTANCE USE DISORDER SERVICES

- In 2015, DC DBH provided substance use services to 8,853 consumers.
- Of the 8,853 consumers who received substance use services, 8,499 (96%) were adults (21+ years old) and 354 (4%) were children/adolescents (0-20 years old).
- In 2015, the DC DBH has substance use service expenditures totaling \$20,506,287. A total of \$19,437,616 of these expenditures was for adults (21+ years old) and \$1,068,671 of these expenditures was for children/youth (0-20 years old).
- Of the \$20,506,287 in expenditures, 36% went to fund intensive residential programs, 26% went to fund medication-assisted programs, and 21% went to fund other outpatient services. The remaining 17% of funds went to support withdrawal management (7%), adolescent treatment (5%), and other undisclosed services (5%).

### Behavioral Health System Challenges and Opportunities

The following is a brief review of the leading behavioral health system challenges that are impacting consumer engagement, access to care, cost, and quality. This list was compiled based on a review of the quantitative and qualitative findings from this assessment as well as a review of the recent, relevant academic and gray literature.



### Service Capacity and Barriers to Care

Those with behavioral health conditions face unique and often extreme barriers that limit access and hinder engagement in care. Evidence of these barriers is clear, as numerous studies show that more than 50% of those who have mental health and substance use problem are not engaged in needed services.<sup>115</sup> The leading factor associated with access to care is the capacity and distribution of providers and service sites. As detailed above, the DC DBH operates and supports robust networks of mental health and substance abuse service sites that are well distributed throughout DC, including in Wards where there is the highest need, that provide a comprehensive array of assessment, treatment, and supportive services. This sentiment is corroborated by 2014 data compiled by Mental Health America, which reports on

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population to mental health provider rates in the United States overall and by State and other jurisdictions, including DC. In 2014, DC had the second highest patient to mental health provider ratio among all 50 states and jurisdictions; the term mental health provider includes psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care.<sup>116</sup> Nationally, there is one mental health provider for every 529 individuals. The state rate of mental health workforce rates range from 200 to 1 in Massachusetts to 1,200 to 1 in Alabama; in comparison, DC's rate is 230 to 1. Similar data for substance use providers is not available, but Figure 21 shows that substance use disorder service sites are well distributed. Based on discussions with behavioral health experts in the District, there was a clear sentiment that capacity and service distribution were not the leading challenges and barriers to care with respect to behavioral health.

Other barriers cited by interview and community forum participants as well as the bodies of literature are: (1) provider/service capacity and shortages, (2) financial barriers, (3) transportation, (4) behavioral health education and awareness, (5) social stigma associated with behavioral health, (6) lack of health literacy, and (7) racial/ethnic, linguistic, and cultural barriers. Many of these barriers are broader system-level challenges and are discussed in-depth below. Others, including transportation, lack of health literacy, and racial/ethnic, linguistic, and cultural barriers, are associated with the social determinants of health that were discussed in detail in Chapter 2.

### Fragmentation of Services, Care Coordination, and Service Integration

One of the most common themes from the interviews and community forums was the extent to which the heath system in DC was fragmented and challenging to navigate; however, this issue is not unique to DC, and there are many examples of well-coordinated programs and services that operate within the health system. Nonetheless, there was a clear sentiment that health care services of all types need more streamlined integration and coordination. Key informants stated that service providers often focus on addressing individual components of a person's illness over addressing the whole-person in an integrated and coordinated fashion. This issue is particularly challenging for those with chronic and/or complex medical and behavioral health conditions, as they are more likely to need to juggle multiple services and providers across a number of different service sectors (medical services, behavioral health services, social services, etc.).

Interview and community forum participants spoke of their and/or their patient's challenges accessing care, and timely and accessible follow-up services. Discussion related to care coordination and service integration were wide ranging and included conversation around the need for: (1) care transitions programs to promote more coordinated care for patients after discharge from the hospital inpatient setting or emergency department, particularly for older adults and those with chronic/complex conditions, (2) enhanced targeted efforts, combined with intensive care management programs, for frequent flyers in the hospital or those with chronic/complex conditions, (3) behavioral health integration in primary care and other settings to improve access and care coordination, (4) supportive or transitional housing initiatives for those with behavioral health issues or chronic/complex conditions, particularly those who are homeless or unstably housed, (5) intensive primary care-based chronic disease programs, focused on self-management support, and (6) patient navigator or community health worker programs that provide

outreach, social service case management, and other supportive services to assist consumers to address barriers and promote engagement in care.

### **Behavioral Health Stigma**

There is a growing understanding of and appreciation for the impact that the stigma associated with behavioral health (mental illness and substance use) has on consumers, which prevents them from seeking and accessing treatment. In some cases, stigma may affect an individual's beliefs about their own mental health and may hinder them from recognizing their illness, seeking help or support, and fully engaging in needed assessment, treatment, and supportive services. In other cases, consumers who are open about their behavioral health issues may face discrimination, ridicule, and adverse treatment from family, friends, and employers. Public and provider education campaigns that reduce the social stigma associated with behavioral health must be developed and implemented to combat these issues.

### Lack of Education and Awareness of Behavioral Health Issues

As discussed previously, for those with mental health and substance abuse issues, lack of engagement in care is a major issue when discussing the burden of behavioral health. More than 50% or more of those with a mental health diagnosis or substance use disorder do not receive the treatment they need.7 One of the primary reasons for this is the lack of education, awareness, and understanding about the signs, symptoms, risk factors, underlying determinants, causal factors, and consequences of behavioral health issues. Physical injuries and illnesses are generally well-understood and socially acceptable; this is not often the case for those with behavioral health issues, which are often harder to recognize, easily dismissed, misinterpreted, and stigmatized. Behavioral health issues may not be recognized by the individual - a person may assume for years that their emotional or mental status is "normal" and grow increasingly more isolated. If one does not know the signs and symptoms of their condition, they are unlikely to seek treatment or other supportive services.

### Workforce Shortages, Training, & Implementation of Evidence-based Programming

Throughout the United States, including DC, there are major shortages of clinical providers across all service types and specialties. Specific shortages vary by specialty and by region, but behavioral health provider shortages are often particularly extreme, especially with respect to psychiatrists and substance use specialists (e.g., Suboxone providers, develop- mental psychologists, etc.) due to low wages, heavy caseloads, and the stigma associated with both having behavioral health issues, and working with people who do. As discussed above, DC has one of the best population to behavioral health provider ratios in the country. In DC, there are 230 residents for every one behavioral health provider. The national average is approximately 500 residents per provider, and only Massachusetts has a better ratio than DC. Nonetheless, key informants stated that there is a shortage of psychiatrists, particularly child psychiatrists. According to the Health Resources and Services Administration, in 2012, approximately 100 million Americans lived in federally designated Mental Health Professional Shortage Areas; in contrast, approximately 50 million Americans lived in similarly-designated primary-care medical shortage areas.<sup>117,118</sup>

Ensuring that service providers receive regular training to maintain or update their skills and to ensure that they are practicing evidence-based medicine and current protocols is also essential and challenging. In DC, there are major challenges with respect to recruiting bi-lingual and bi-cultural providers capable of providing linguistically and culturally sensitive services to DC's large foreign born populations, many of whom are recent immigrants.

Finally, agencies must be vigilant in their efforts to update their programming to incorporate evidencebased interventions and ideas that promote engagement, patient-centered- ness, efficiency, and overall quality and the effectiveness of care. In the realm of behavioral health, some of the leading trends in evidence-based care include (1) peer support programs, (2) primary care and behavioral health integration, (3) supportive/transitional housing programs, (4) community health worker programs, (5) hospital-based care transition and emergency department triage programs, (6) intensive care management, patient navigator, and chronic-disease self-management support programs, (7) community health worker programs, and (8) crisis support services.

### Health Information Technology, Health Information Exchange, and Information Sharing

Behavioral health providers face unique challenges as they seek to adopt electronic health records systems (EHRs) and participate in health information exchanges (HIE) and "Meaningful Use."<sup>119</sup> The challenges may be extreme but the necessity is clear - better care coordination and seamless integration of services require that clinical and patient information flow freely across sectors and between service providers. According to a recent study by the Commonwealth Foundation, 97% of U.S. hospitals and 74% of U.S. physicians have implemented interoperable electronic health records, but only 30% of behavioral health providers have done so.<sup>120</sup>

The major challenges in this area include (1) the inability of health information technology (HIT) systems to effectively capture clinical behavioral health information in a structured and standardized format, (2) the limited use of clinical decision support tools, and (3) the "siloed" nature of physical health, mental health, and substance abuse care. These issues hinder care coordination, service integration, quality, cost reductions, and advances in patient satisfaction.

### **Behavioral Health Parity**

There is a great deal of literature that shows that those who are uninsured or underinsured are more likely to face barriers to care and disparities in health outcomes. Historically, coverage for behavioral health services has been much less comprehensive for mental health and substance abuse issues than it has been for physical health.<sup>121</sup> In 1996, The Mental Health Parity Act (MHPA) was signed into law, which requires annual or lifetime dollar limits on mental health benefits to be no lower than any such dollar limits for medical and surgical benefits offered by a group health plan or health insurance issuer offering coverage in connection with a group health plan.<sup>122</sup> Prior to MHPA and similar legislation, insurers were not required to cover mental health care, which limited access to behavioral health services. When parity is achieved, it means that if a plan's benefits cover unlimited doctor visits for a

chronic condition, like diabetes, then they must also offer unlimited visits for mental health conditions, such as depression or schizophrenia. It is important to note that parity does not guarantee that one will get good mental health coverage; if the health insurance plan is limited, then mental health coverage will be similarly limited, even in jurisdictions with strong parity laws, or in plans that are subject to federal parity.<sup>123</sup> Great strides have been made to ensure parity in health care coverage when it comes to behavioral health services, but work is still needed to ensure that the law is applied to maximize impact.

### **Financial Barriers**

Barriers that impact access, quality, and consumer engagement in care fall into two major categories; one is related to the financial costs of accessing behavioral health services, which can be a major deterrent for consumers and contribute to limited access and engagement in appropriate care. The other is more systemic and is related to how behavioral health services are funded and paid for in the United States. Both types of barriers have tremendous impacts on how likely individuals are to have access to the care they need in a timely, coordinated, and sustainable manner.

- **Barriers Related to Cost of Care.** Those who live in poverty or in low-income brackets are often eligible for heavily subsidized services that may alleviate significant portions of the cost of care or ease financial burdens. However, the cost of co-pays, transportation, child care, and medications, combined with lost wages and other employment concerns, can present as overwhelming barriers to care. If an individual is not eligible for free or discounted services, the costs associated with care may be even more extreme, as many private providers do not accept insurance and require cash payments.
- **Barriers Related to Financing, Funding, and Billing.** As discussed above, the siloed nature of physical health, mental health, and substance abuse care has been a major barrier to coordination and integration of services, and has effects on program success and efficiency. Great efforts have been made to better integrate services and to blend funding streams, but the nature of the sub-systems of care are deeply entrenched. In October 2013, DC government created the Department of Behavioral Health and merged the agencies that provided mental health and substance use services into a single agency. Research shows that integrated treatment leads to reduced substance use, improved psychiatric symptoms and functioning, decreased hospitalization and overall improved quality of life. Without integrated treatment, one or both disorders may not be addressed properly.

Another significant financial barrier to providing behavioral health services is the inability for many providers to bill for services due to licensure and credentialing issues and other administrative burdens. Value-based payment models may alleviate this issue, to some extent, as the Accountable Care Act continues to roll out. In the meantime, it can be very difficult to navigate insurance company billing policies and establish the practice-level processes and systems that facilitate billing and payment. A recent study examining delivery of behavioral health care in Patient Centered Medical Homes reported that lack of reimbursement was the greatest barrier to mental health and substance use care. Current feefor-service (FFS) codes are inadequate for reimbursing providers utilizing integrated behavioral health

specialist consultation.

### Multi-Sector Collaboration and Service Coordination

Increasingly, cross or multi-sector collaborations and community partnerships are being used to address deeply-entrenched and complex social problems like behavioral health. Although there are numerous examples of organizations making singular bold actions that have had major impacts on complex community problems, there is increasing acceptance of the idea that no single organization, government department, or program can solve these issues. There are many examples in the sphere of behavioral health where these multi- sector collaborations have shown to be essential and extremely effective, especially in (1) the integration of primary care medical and behavioral health services, either within a primary care clinic or behavioral health clinic, (2) community-based care transitions program models, particularly those focusing on transitioning those behavioral health conditions, (3) intensive care management services, (4) transitional housing programs, and (5) Health Care for the Homeless programs. These evidence-based programs rely on multi-sector collaboration and thoughtful coordination or integration of a range of services.

### Monitoring, Evaluation, and Measurement

In order to maximize the strength and impact of any health system, one must develop mechanisms that allow for examination and prioritization of quality prevention, treatment, and recovery elements at all levels (system, provider/practice, and consumer/ patient). These monitoring, evaluation, and performance improvement tasks allow policy makers and program administrators to assess and plan for the triple aim of improved quality, reduced cost, and better engagement in care. These efforts include (1) the selection of a series of process and outcome measures, (2) tracking systems to monitor and evaluate the data collected, (3) performance improvement processes that apply the data to improve program operations, and (4) reporting and dissemination efforts that allow one to disseminate results, share lessons learned, inspire improvements. DC DBH's MHEASURES Report provides a wealth of data on patients served and service utilization to describe the services that are provided by its network of mental health and substance use providers. The DC Department of Health also does a good job at tracking health outcomes, risk factors, and broader claims and utilization data. However, generally speaking, there is a limited amount of population-based behavioral health data that can be used by service providers, program administrators, and policy makers to track the burden of behavioral health and improve system outcomes and performance.

### POST-ACUTE CARE SERVICES

Post-acute care (PAC) providers—including long-term care hospitals (LTCHs), inpatient rehabilitation facilities (IRFs), skilled nursing facilities (SNFs), and home health agencies (HHAs)—play a critical role in the health system. This core set of PAC providers helps to ensure that patients receive the care they need to recover from illness, injury, or surgical procedures and transition back to either their own home or to another community setting, typically after being discharged from the hospital. Furthermore, PAC services play a critical role in helping patients who are ill or face trauma maximize their

independence; maintain connection with their family, friends, or community; facilitate their physical and emotional recovery; and allow them the chance to lead healthy and fulfilling lives. Ensuring an adequate supply of high quality PAC services that span the full spectrum of services and settings is a critical aspect of a strong, patient-centered health system, and these services are instrumental in controlling health care costs.<sup>124</sup> The importance of focusing on care transitions and ensuring a strong continuum of community-based services to promote post-acute recovery and prevent acute inpatient hospitalizations, including hospital readmissions, was one of the leading discussion points and priorities cited by service providers and other stakeholders interviewed for this assessment.

Nationally, spending on PAC services accounts for a large proportion of total spending. In 2013, Medicare spending on PAC services totaled \$59 billion and accounted for 11% of total Medicare spending.<sup>125</sup> Spending at SNFs accounted for nearly half of all spending (49%), followed by spending from HHAs, IRFs, and LTCHs (see Figure 22). Furthermore, in 2013, 22% (approximately 8 million discharges) of all inpatient hospital discharges were discharged to the four leading PAC settings mentioned above (HHA, SNF, IRF, and LTCH), 70% of these discharges were discharged to patients' homes, and the remaining 8% were discharged to other settings.<sup>126</sup>



FIGURE 22: Medicare Spending on PAC by Sector

The most common discharge setting was HHAs, accounting for 50% of all U.S. PAC discharges in 2013.<sup>127</sup> Discharges to SNFs was the second most common discharge setting with 40%, followed by discharges to IRFs (7%) and those to LTCHs (2%) (Figure 23).



### FIGURE 23: US Hospital Discharges by Discharge Setting (2013)

Source: HCUP, https://www.hcup-us.ahrq.gov/reports/statbriefs/sb205-Hospital-Discharge-Postacute-Care.pdf

In 2014, DC's discharge patterns differed from the U.S. distribution: approximately 17% of all DC hospital discharges were discharged to the four leading PAC settings, and approximately 75% of these discharges were discharged to the home. The remaining 8% were discharged to other settings. Similar to national data, the most common discharge setting for DC patients was HHAs, which accounted for 44% of all hospital discharges, followed by SNFs (41%), IRFs (13%), and LTCH facilities (2%) (Figure 24).<sup>128</sup> The key differences between the U.S. and DC hospital PAC discharge patterns were that (1) DC hospitals discharged a larger percentage of patients to home without PAC services compared to hospitals nationally, and (2) of those patients discharged to IRF settings. The percentages of PAC patients discharged to SNFs and LTCHs were the same for DC and the United States.

### Figure 24: DC Hospital Discharges by Discharge Setting (2014)



Source: DC Hospital Discharge Data, 2014. From the DC Hospital Association

With respect to severity of illness for the patient's hospital stay just prior to PAC discharge, nationally, those discharged to LTCHs had the highest severity scores, followed by SNFs and IRFs, and then HHAs (see Figure 25). The leading conditions that resulted in PAC discharges were total hip/knee replacement, septicemia or severe sepsis, heart failure, stroke, and pneumonia.



### Figure 25: National Hospital and PAC Severity of Illness in Prior Hospital Stay

Source: American Hospital Association, http://www.aha.org/research/reports/tw/15dec-tw-postacute-adden.pdf.

Between 2001 and 2013, Medicare PAC spending more than doubled from \$26.9 billion in 2001 to \$59 billion in 2013, as referenced above.<sup>129</sup> One of the leading consequences of poor, uncoordinated PAC services is inappropriate hospital readmissions within 30 days of an initial hospital discharge. These readmissions have been identified as one of the leading reasons for the increasing cost of health care in the United States. Taking steps to ensure that patients and caregivers have the information they need to manage the recovery process and coordinate PAC services, including primary care and other specialty care follow-up services, is critical to smoothing care transitions and reducing inappropriate readmissions. These factors illustrate why managing PAC services and hospital care transitions, including the costs associated with this care, have become so central to health reform efforts.

The following are other PAC-related highlights nationally.

• Medicare is the dominant payer, illustrating the reality that older adults are leading drivers when it comes to PAC services. Approximately 70% of those discharged to PAC settings were 65 years old or older. The rates of discharge to PAC were 41.7% for Medicare, 11.7% for private insurance, 8.1% for Medicaid, and only 4.8% for uninsured stays.<sup>130</sup> In DC, the impact of older

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adults is slightly less but they still account for the vast majority of PAC referrals. The average age of a nursing home admission in DC is 77, which is comparable to the U.S. average of 78.

- Home health agency services are becoming increasingly important when exploring changes and improvements to the PAC system. In 2013, HHA discharges accounted for 50% of all discharges nationally but only 30% of total PAC expenditures. Alternatively, 40% of all PAC discharges were to SNFs and yet these discharges accounted for 50% of total expenditures.<sup>131</sup>
- Improving care transitions from the hospital to PAC settings is critical to health reform, as these transitions represent a key cost and quality driver. Twenty-two percent of all hospital discharges nationally were discharged to PAC settings. Hospital stays discharged to PAC settings were much longer and more costly than those with routine discharges (7.0 days vs. 3.6 days; \$16,900 vs. \$8,300, on average). Furthermore, in 2013 the Institute of Medicine study identified PAC utilization and spending patterns as being responsible for 73% of the variation in national Medicare spending.<sup>132</sup>
- Rates of discharge to PAC varied considerably across nine census divisions. The Mid-Atlantic region had the second highest rate of discharge to PAC settings. However, DC's rate was considerably lower than the Mid-Atlantic rate. New England had the highest rate of discharge to PAC. Approximately 33% of all inpatient stays were discharged to PAC settings in 2013. The Mid-Atlantic region, which includes DC, had the second highest rate of discharge to PAC with 28% of inpatient stays. However, DC's rate was only 17%.<sup>133</sup>
- The top 10 conditions and procedures accounted for 37% of all stays with discharges to PAC, highlighting the importance of managing some conditions that are the key drivers. The 10 most common conditions and procedures had a high rate of discharge to PAC, most between 40-70%.<sup>134</sup>

### Characteristics of the District of Columbia's Post-Acute Care System

Much like the behavioral health system, there is an expansive and complex network of providers that provides a range of acute rehabilitation and long-term care services throughout the nation as well as in DC. These providers are diverse in size and setting and serve patients in hospital, community-based, and home-based settings. As discussed above, the PAC system is made up of four types of core service providers—HHAs, SNFs, IRFs, and LTCHs—and in DC there is a robust, well-distributed, and relatively stable set of service providers across these categories. DC's core service providers are supported by a series of additional PAC service providers, including adult day centers, home care agencies, assisted living facilities, palliative care providers, and other community-based providers that provide a broad range of long-term services and supports. The following is a summary of the core PAC services as well as the other longer-term supportive services.

#### **Core PAC Service Providers**

Throughout the United States, SNFs, IRFs, and LTCHs (often more generically called nursing homes), along with HHAs, provide a varied range of skilled nursing, rehabilitation, and long-term care services and are the primary recipients of PAC referrals from hospitals, other clinical settings, or in some cases directly from the community. The number of nursing homes at the state and national level has remained relatively stable over the past 10 years. In 2004 there were 16,032 licensed nursing homes in the United States. In 2014, this number declined to 15,640, only a slight 2.4% decline.<sup>135</sup> The number of available nursing home beds is well-controlled by market forces and local referral rates, evidenced by stable, relatively predictable referral and occupancy rates on a state by state basis. Occupancy rates range from 64% to 92%, with the majority around 85%. Nationally, the average nursing home bed occupancy rate decreased slightly from 83% in 2010 to 82% in 2014.<sup>136</sup> The number of nursing home beds per 1,000 population in 2014 was 5.3 beds for all ages, 37.8 beds for the over 65 year old population, and 284.3 beds for the over 85 year old population. With respect to the distribution of these facilities, according to Medicare Payment Advisory Commission (MedPAC), in 2015 over 88% of Medicare beneficiaries lived in counties with three or more SNFs and less than 1% of beneficiaries lived in counties without a SNF.<sup>137</sup>

SNFs, IRF, and LTCH services in DC are provided by a relatively stable, well distributed system of nursing homes and other types of providers that collectively provide a range of skilled nursing, inpatient rehabilitation, and long-term care services. Most of these organizations provide a broad range of services but the specific scope and service capacity depends on the organization. More specifically, the core PAC service system in DC includes two licensed freestanding LTCH facilities, 18 nursing homes (more accurately termed as SNFs), one inpatient acute rehabilitation hospital (MedStar National Rehabilitation Hospital), inpatient and outpatient physical rehabilitation networks, and 38 HHAs. The following is a more detailed description of DC's PAC service system, along with information on services provided, capacity, and distribution. A map showing the distribution of components of DC's PAC providers by category is included in Figure 26.



### Figure 26: Distribution of DC Post-Acute Care Providers

Source: DC Department of Health.

- **Long-Term Care Hospitals (LTCHs).** LTCHs treat a patient population that are typically ٠ more ill than patients treated in other short-term acute-care settings. Patients served in LTCHs may require care due to a terminal condition, a severe disability, an illness or injury, or the infirmity of old age. Many LTCH patients are transferred there from an intensive or critical care unit. LTCHs specialize in treating patients who may multiple chronic or complex conditions, but who may improve with time and care, and may eventually return home. LTCHs provide services such as respiratory therapy, head trauma treatment, and pain management. These facilities may be freestanding, co-located on the campuses of acute care hospitals (ACHs), or may be hospitals within hospitals (e.g., specialized hospital units or SNFs). To qualify as an LTCH, a facility must meet the same conditions as a regular ACH. Since most LTCH patients are more ill than patients discharged to other post-acute venues, their average length of stay is longer, averaging 26.5 days for Medicare FFS beneficiaries nationally in 2013.<sup>138</sup> In DC, Bridgepoint Healthcare is the only LTCH provider and currently operates out of two freestanding facilities. As discussed above, approximately 2% of PAC discharges are discharged to LTCH settings in DC.
- Inpatient Rehabilitation Facilities (IRFs) and Skilled Nursing Facilities (SNFs). IRFs and SNFs are freestanding community-based facilities that provide a range of acute rehabilitation and long-term care services to patients recovering from an acute illness, injury, or a surgical procedure. SNFs and IRFs furnish short-term skilled nursing or rehabilitation care services, typically for those who have been discharged from the hospital with an injury (e.g., hip and knee replacements) or from medical conditions (e.g., stroke and pneumonia). The most common services provided in SNFs and IRFs are physical and occupational therapy and speech-language pathology, as well as provision of prosthetic and orthotic devices. There are currently 18 nursing homes (SNFs) in the District, and they are well distributed geographically. As discussed above, 41% of PAC discharges in DC are discharged to SNFs and 13% are discharged to IRFs. MedStar National Rehabilitation Hospital is the District's only inpatient rehabilitation hospital, though there are other acute inpatient rehabilitation facilities throughout the District.
- Home Health Agencies (HHAs). HHAs provide post-acute services to persons who are homebound and need skilled nursing or therapy. Services provided by HHAs mirror those provided in SNFs and include skilled nursing, physical therapy, occupational therapy, speech therapy, aide services, and medical social work. Other custodial care or supportive services may be provided by personal care attendants (PCAs) that are not required to have clinical training. These staff members assist patients with activities of daily living (ADLs) such as bathing, dressing, eating, and mobility. Patients discharged to HHAs tend to have lower severity scores than those discharged to SNFs, IRFs, or LTCHs. As discussed above, in 2014, 43% of DC's PAC discharges were discharged to HHAs. For most payers, HHA services do not need to be preceded by a recent hospital stay to qualify for payment; in 2013, only 33% of national home health episodes were preceded by a hospital or other post-acute stay in a SNF, IRF, or LTCH. HHAs are increasingly being used by primary care providers, other clinical providers, and caregivers to encourage patients to maintain independence in the home, avoid institutional care,

and prevent more costly inpatient and nursing home stays. In DC, there are 38 HHAs that provide services throughout the city.

As of 2016, there are 18 nursing home facilities that are well distributed and collectively operate 2,578 beds.<sup>139</sup> According to CMS's 2015 Nursing Home Data Compendium, which includes data for the 19 facilities that were operating at the time, the average occupancy rate for DC's nursing home beds was 89%. This rate was slightly higher than the national rate of 82% and very similar to the rates in Maryland (88%) and Virginia (87%). With respect to nursing home beds per 1,000 population, DC's nursing home beds per 1,000 population (all ages), compared to 5.3 beds per 1,000 for the nation, 4.7 for Maryland, and 6.2 for Virginia. For District's 65+ population, there were approximately 37.8 nursing home beds per 1,000, which mirrored the national rate (37.8) and was slightly higher than the rates in Maryland (35.4) and Virginia (29.5). For the population 85 years and older, there were approximately 263.9 nursing home beds per 1,000 population, matching the rate in Maryland, slightly higher than the national rate (284.3).

In 2014, the re-hospitalization rate for those served in DC's nursing homes was 18.2%, which was slightly higher but comparable to the national rate of 17.5%. This rate was also comparable to rehospitalization rates for Maryland and Virginia, which were reported at 17.7% and 17.6% respectively. With respect to the rate of "discharge to the community" and the "use of off-label antipsychotics," two other quality measures regularly tracked by the American Healthcare Association, DC's rates were comparable to rates nationally and in Maryland and Virginia. With respect to patient characteristics, the 19 nursing homes operating in DC in 2014 served 5,938 patients through 4,375 admissions. The average patient age was 77, compared to 78 nationally, 76 in Maryland, and 78 in Virginia. Fifty-six percent of patients in DC nursing homes had dementia, compared to 55% of patients nationally. The average number of ADL dependencies in DC (7.2) was comparable to the national average (7.8) and averages in Maryland (7.6) and Virginia (7.3). Finally, there was considerable variation with respect to the percentage of admissions that were greater than 100 days; in DC, 79% of nursing home admissions were greater than 100 days, compared to 51% nationally, 41% in Maryland, and 43% in Virginia, making DC's rate 50% higher than the national rate. See Figure 27 for data.

2014		District of	Maryland	Virginia	United
Nursing		Columbia States			
Nursing Home Facility Characteristics           # of Nursing Llows Facilities         10+         220         200         10-000					15624
# of Nursing Home Facilities		191	220	200	100
Average Bed Size		146	123	113	108
Total # of Nursing Home	e Beas	2,774±	28,044	32,544	1,688,472
Average Occupancy Rat	e	89%	88%	88%	82%
# of Nursing Home	Total	4.3	4.7	6.2	5.3
beds per 1,000	65+	37.8	35.4	29.5	37.8
population	85+	263.9	263.9	239.8	284.3
	Nursing	Home Employ	ee Character	istics	
Total Employees		3,772	34,141	36,578	1,817,738
Direct Care Staff		2124	18,523	20,063	1,008,655
Registered Nurses		390	3,025	2,000	128,806
Licensed Practical Nurse	es	398	4,217	5,639	226,322
Nurses Aides		1,336	11,281	12,424	653,527
	Se	lected Quality	Measures*		
Rehospitalization Rate		18.2	17.7	17.6	17.5
Discharge to Community Rate		60.5	66.5	66.2	64.0
Off-Label Antipsychotic Use		14.5	14.0	17.0	17.1
Nursing Home Patient Characteristics					
Total # of Patients		5,958	80,541	91,269	4,004,317
Total # of Admissions		4,375	78,128	85,477	3,607,376
Average Age of Admiss	ion	76.8	76.2	77.7	77.6
Average # of ADL Depe	ndence	7.2	7.6	7.3	7.8
for Admissions**					
% with Dementia		56.2	53.6	54.6	54.7
Nursing Home Patient Payer Mix					
Medicare		12.5	19.4	17.8	14.1
Medicaid		79.9	61.1	59.1	61.7
Other		7.7	19.5	23.1	24.2
±These figures represent the number of DC facilities and nursing home beds as of 2017. All other figures in the table					
represent data from 2014.					
(Short Stav) – 2015Q3. Discharge to Community (Short Stav) – 2015Q2. Antipsychotic (Long Stav) – 2015Q3					
**Activities of Daily Living (ADL) score is based upon the four "late loss" ADLs (bed mobility, transfer, toilet use, and					
eating). Individual ADL scores range from 0 (least dependent) through 16 (most dependent). This calculation is a					
component for placement in all RUG-IV groups.					

# Figure 27: Nursing Home Characteristics

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#### **Other PAC Service Providers**

In addition to this core set of providers, there are other facilities that provide long-term custodial care and supportive services to those who are no longer in need of intense skilled nursing or rehabilitation. These agencies provide integrated services within the home or in home-like settings in ways that promote independence and encourage the involvement of a resident's family, neighbors, and friends. There is a network of palliative care providers that serve those who are coping with chronic or complex illnesses, injuries, or surgical procedures and need long-term services and support to manage their symptoms, coordinate treatments, and navigate the complexities of their care. Additionally, there are five hospice agencies that provide palliative care services to patients who are terminally ill and their families and caregivers. Finally, there is a broad network of clinical and non-clinical providers and community-based organizations that support the core PAC service organizations and provide an array of social service, case management, recreational, and other community health services that are integral to the care transition and PAC process. A more detailed description of these providers is included below.

• Assisted-Living Facilities or Communities. Assisted living facilities or communities provide a housing option for older adults who want to live in a home-like setting but may need help with dressing, bathing, eating, or other activities of daily living. They also may need basic nursing or medical supports but do not require the intensive medical and nursing care provided in a nursing home. Assisted living facilities provide a broad range of personalized, integrated services depending on an individual's needs, ranging from housing, custodial/supportive services, health care, and other personal assistance services. These services are provided in an integrated way that promotes independence and encourages the involvement of a resident's family, neighbors, and friends. There are currently 10 licensed assisted living facilities in DC that combined have 700 beds. At any given time approximately 480 of these beds are occupied for an average occupancy rate of 69%.

It is important to note that assisted living facilities tend to serve those who are more affluent. Nationally, the average monthly cost for a one-bedroom unit is over \$4,000 per month. In DC the average monthly cost for a one-bedroom unit is considerably higher than the national rate and the rates for surrounding states. In DC, only 7% of residents rely on Medicaid for their long-term care. Fifty-two percent are over the age of 85 and the remaining 48% range from roughly 60 to 84 years old.<sup>140</sup>

• Hospice and Palliative Care. While palliative care and hospice care have similar goals, it is important to note that they are different. Hospice care is a form of comfort care that is geared specifically to those who are terminally ill. Like palliative care, hospice care is geared towards supporting patients and caregivers by coordinating services and managing a patient's symptoms, but is not meant to be curative. Hospice care is tailored to those who are at the end of life and is meant to guide patients and their families, friends, and caregivers through the death, dying, and grieving process.

Palliative care is emerging as a key component of the PAC continuum, either as a direct PAC

referral or as a critical component of services provided in different settings. It focuses on the symptoms of a disease and its associated treatments and helps patients to manage a broad range of issues including pain, depression, anxiety, fatigue, nausea, and loss of appetite. Other services may include medication management, triage services to prevent unnecessary hospitalization, and practical navigation support. Palliative services are typically managed by a team of providers who work in collaboration; the team often includes physicians, nurses, and other medical and non-medical service providers. Unlike hospice care, palliative care services are not provided only to those who are chronically ill or who have limited life expectancy; some of the most common recipients of palliative care services are those recovering from difficult medical treatments or surgeries, such as spinal cord trauma victims or cancer patients.

### **Conclusions**

Findings from this assessment suggest that the current PAC service capacity is adequate to meet the current market demand, which is generated by both the population and the hospital sector through its discharge patterns. According to key informants interviewed, hospital discharge planners may occasionally not be able to meet a patient's exact desires with respect to a specific location; however, this was not common and overall, capacity was not considered to be a problem. Key informants further suggested that the leading challenges with respect to PAC services were primarily related to care coordination, integration of services, information sharing, and other system issues.

It should also be noted that nationally, the population of older adults (65 years old or older) is projected to more than double between 2010 and 2050 from 40.2 million to 88.5 million. Moreover, the "oldest old," those who are 85 years old or older, is expected to triple during roughly this same period, from 6.3 million in 2015 to 17.9 million in 2050.<sup>141</sup> Older adults, particularly those who are 85 years old or older, have the highest disability rate and therefore the highest need for PAC services. Given these demographic trends and the intense efforts currently underway to refine the care transition process and reduce inappropriate hospital readmissions, it is possible that PAC utilization trends may change, and SHPDA should carefully monitor demand and capacity moving forward.

### Post-Acute Care System Challenges and Opportunities

While current supply and capacity issues are not the leading concerns in DC, there are a range of issues that need to be addressed to increase the quality and efficiency of PAC services. The following are the leading challenges and opportunities drawn from the quantitative and qualitative data from this assessment.

### Fragmentation of Services, Care Coordination, and Service Integration

One of the most common themes from the interviews and community forums was the extent to which the heath system in DC was often fragmented and challenging to navigate. Interviewees and forum

participants noted this especially for PAC services and the management of those with chronic or complex conditions, particularly after an acute episode of service.

Hospitals and other PAC settings have made great strides with respect to care transitions and are implementing or taking steps to implement evidence-based programs that have and will likely continue to enhance discharge and care planning processes (e.g., detailed care plans, coaches/navigators, behavioral health specialists, etc.), improve primary care and specialty care follow-up (e.g., enhanced primary care follow-up, home-visits, telehealth, etc.), facilitate better communication between patients and clinicians regarding medication and other aspects of treatment (e.g., Re-Engineered Discharge (RED) Initiative, online patient portal, peer-to-peer counselors, navigators, etc.), avoid unnecessary visits to the emergency department after discharge (e.g., after-hours nurse call lines, nurse practitioner coverage/triage in nursing home settings, enhanced protocols for ambulance/EMS transfers, etc.), and allow patients to better anticipate and manage possible complications during the transition process (e.g., identification of red flags, detailed care plans, telehealth, etc.).

In 2013, as reported by the Centers for Medicare and Medicaid Services (CMS), the national hospital readmission rate fell by 10%, from approximately 19.5% to 17.5%.<sup>142</sup> Current data is likely to suggest further declines. Despite these efforts, discharge processes are still often poorly coordinated, proper follow-up is not well-facilitated, and patients struggle to interpret and act upon the guidance provided by their clinicians. These efforts must include PAC service providers and other community-based organizations, and hospitals need to increase their efforts in establishing cross-sector partnerships and collaborations in order to continue to improve care coordination and service integration.

### Patient, Family, and Caregiver Engagement

There is a robust body of research and experience detailing the impact of systematically including patients, families, and caregivers in the PAC transition process. This involvement is critical to facilitating quality and patient-centered care, ensuring smooth care transitions, and reducing inappropriate hospital readmissions.<sup>143</sup> As mentioned above, focusing on care transitions and ensuring a strong continuum of community-based services to promote care coordination was one of the leading discussion points and priorities cited by community residents, service providers, and other stakeholders interviewed for this assessment. A clear part of this feedback was the importance of engaging the community and involving patients, family members, and caregivers in care planning activities.

Hospitals, health systems, and their partners need to focus on adopting best practices with respect to patient, family, and caregiver engagement, including (1) incorporating patient and family engagement into the mission/vision statements and overall strategic plans of those involved in the care transition process, (2) incorporating patient, family, and caregiver stories into staff training and patient/family education materials, (3) engaging Patient and Family Advisory Councils (PFACs) in a discussion about care transitions and best practices with respect to patient/family engagement, (4) conducting training at all levels (leadership, operational, and clinical staff) on the importance of patient and family engagement, and (5) developing clinical protocols and motivational interviewing practices that promote

self-management support and family/caregiver involvement. Numerous studies have shown the positive impact that family/caregiver involvement and patient-centered care has on patient satisfaction, patient engagement, length of stay, and cost.<sup>144</sup>

### Health Literacy and Communication

There is extensive research showing the challenges associated with low health literacy and the opportunities that can be realized when patients are able to understand and act on the information communicated by physicians, nurses, care managers, and other clinical and non-clinical providers. Too often information is provided using language that contains medical jargon and is too complex for most patients to understand. Furthermore, it is often communicated in an untimely, rushed, culturally inappropriate, intimidating, and disorganized manner. Participants in the Spanish-speakers forum discussed the particular challenges they face when accessing services without bi-lingual and culturally competent providers. It is clear that low health literacy is strongly correlated with adverse health outcomes, especially during transitions of care.<sup>145</sup>

These issues highlight the importance of implementing evidence-informed strategies across settings that are culturally and linguistically appropriate; that provide clear, actionable information at the outset of the inpatient stay and throughout the PAC service continuum; and that promote trust and two-way communication between the patient and provider. Best practices addressing health literacy and cultural challenges include clear communication techniques like using simple familiar language, segmenting information into small sections, and confirming understanding using the "Teach-back" method. There are also systemic strategies that incorporate health literacy principles into their design and have been shown to decrease readmissions, such as the Re-Engineered Discharge (RED) toolkit.<sup>146</sup>

The Agency for Healthcare Research and Quality (AHRQ) has developed a document titled Ten Attributes of Health Literate Healthcare Organizations. These are standards and strategies that can enable health care organizations to provide truly patient-centered care by making it easier for patients to access the services, engage with their providers, understand the information given to them, and take action to improve and maintain their health.

### **Evidence-Based Pathways and Referral Patterns**

There is considerable variation regionally with respect to the rates of discharge to different PAC settings and there is even more variation with respect to discharge patterns by payer class, demographic characteristics, and other factors. These referral and discharge patterns to specific facility types are not well understood and this assessment was not designed to fully explore the implications and consequences of these patterns in DC. However, nationally, the literature suggests that PAC referral and discharge patterns to specific types of service providers are often associated with factors that are not necessarily related to quality, cost, and patient preference, but rather by factors associated with provider experience, contractual relationships, informal relationships between discharge planners and PAC providers, and facility expertise with certain types of diagnoses. An analysis by MedPAC suggests that similar patients are treated in different settings with varying degrees of impact or quality and at widely varying costs to the Medicare program.<sup>147</sup> Hospitals, Accountable Care Organizations (ACOs), and PAC providers have developed and/or are in the process of developing protocols, guidelines, and tools to better guide the discharge and care transition process to improve quality and patient satisfaction as well as reduce inappropriate hospital readmissions and overall cost. These efforts should continue and could have an impact on PAC supply and capacity.

### Root Causes for Poor Care Transitions and Hospital Readmission

There are a range of factors that contribute to poorly coordinated, ineffective care transitions and ultimately high inappropriate hospital readmission rates. These factors vary considerably from market to market, hospital to hospital, and even community to community. It is critical that hospitals and PAC providers across the continuum understand the range of factors and, to the extent possible, the root causes of these poor care transitions. The root causes that are most often identified are (1) poor communication between patients, family members, caregivers, and patients' clinical and non-clinical service providers, (2) poor coordination, lack of teamwork, and lack of direct accountability for who is responsible for managing the care transition process, (3) inadequate amount of time and lack of standardized procedures regarding the initial care transition hand-off, (5) lack of patient education and health literacy, (6) conflicting or confusing medication regimens, and (7) unclear instructions about follow-up care. Efforts need to be made to identify the underlying issues related to poor care transitions. A Districtwide assessment conducted collaboratively could promote a collective understanding of these issues and promote collaboration.

### Multi-Sector Collaboration and Service Coordination

As discussed previously, there is a growing appreciation and emerging evidence that shows the importance of multi-sector collaborations and community partnerships. With respect to PAC services, these partnerships are critical to coordinating the broad array of services that are required to ensure that patients are well-supported during their recovery from injury or illness as they transition from the hospital to various PAC setting and eventually back to their homes. Once back in their homes, patients often continue to need a broad range of supportive and community services as well as assistance from family and friends. Furthermore, evidence suggests that patient follow-up with their primary care provider and other specialty medical care providers are critical to a full recovery and to avoiding inappropriate hospital readmissions. These evidence-based programs rely on multi-sector collaboration and thoughtful coordination or integration of a range of services. It is essential that multi-sector coalitions be developed to implement evidence-informed strategies that improve care coordination, reduce fragmentation of services, support patient/provider communication, enhance primary care medical and specialty care follow-up, and promote smoother care transitions. These forums already exist to some extent in DC but they are often isolated by sector or service provider type. These coalitions and/or professional organizations need to be formally brought together and encouraged to work more collaboratively.

### Health Information Technology, Health Information Exchange, and Information Sharing

Like behavioral health providers, PAC providers often face unique challenges as they seek to adopt electronic health records systems (EHRs) and participate in health information exchange (HIE). Research has shown that better care coordination and seamless integration of services require that clinical and patient information flow freely across sectors and between service providers.

It is clear that better care coordination and seamless integration of services require that clinical and patient information flow freely between service providers and across sectors. The major challenges include (1) the inability of HIT systems to effectively capture and share clinical and non-clinical information in a structured and standardized format, (2) the limited use of clinical decision support tools, and (3) the "siloed" nature of physical health, behavioral health, and oral health data as well as other clinical and non-clinical data. These issues and others hinder care coordination, service integration, quality, cost reductions, and advances in patient satisfaction.

### Monitoring, Evaluation, and Measurement

In order to maximize the strength and impact of any health system, including DC's PAC service system, one must develop mechanisms that allow one to examine and prioritize quality prevention, treatment, and recovery elements at all levels. These monitoring, evaluation, and performance improvement tasks allow policy makers and program administrators to assess and plan for the triple aim of improved quality, reduced cost, and better engagement in care. These efforts include (1) the selection of a series of process and outcome measures, (2) tracking systems to monitor and evaluate the data collected, (3) performance improvement processes that apply the data to improve program operations, and (4) reporting and dissemination efforts that allow one to disseminate results, share lessons learned, and develop improvements. CMS captures a wealth of data on PAC facilities, patients served, and service utilization. However, similar to the behavioral health system, there is a need to more carefully use and analyze this data to track outcomes and identify evidence-based practices that lead to greater independence, improve health status and quality of life, and reduce costs.

### **Reduction of Inappropriate Hospital Readmissions**

Reducing inappropriate hospital readmissions is a critical component of improving the quality of care and lowering health care spending. Improving care transitions and the ways that hospitals, patients, families and caregivers, PAC service providers, and other community partners work together is critical to this effort. Hospitals and PAC service providers have made great strides to identify triggers of inappropriate readmissions as well as the strategies for improvement, but continued efforts are needed. Many of the challenges referenced above in this section are at the heart of reducing inappropriate readmissions.<sup>148</sup>

# STRATEGIC RECOMMENDATIONS

# Priority Area 1: Health System Strengthening

Primary Care		
Key Evidence	<ul> <li>Distribution, capacity, and quality are not the leading concerns for primary care services</li> <li>Most critical barrier to care and engagement in appropriate and timely primary care the social determinants of health. There is a need for engagement through outreach, education, and screening.</li> <li>Lack of care coordination and service integration</li> <li>More than 20% of all hospital discharges in Wards 5, 7, and 8are for</li> </ul>	
	ambulatory care sensitive conditions that are preventable through timely and appropriate primary care	
Recommendations/	ommendations/Goals Objectives/Strategies	
1. Promote engagement in appropriate, quality, and timely primary care services, including preventive, acute,		Develop a community education and awareness campaign that promotes awareness of the leading social determinants of health and risk factors.
and chronic disease management services.		Implement screening for social determinants of health in community-based settings (e.g. poverty, housing, transportation, education, food insecurity, etc.)

1. Promote engagement in appropriate, quality, and timely primary care services, including preventive, acute, and chronic disease management services (continued)	Reduce barriers to care related to scheduling and availability of appointments (e.g., open access scheduling, evening/weekend hours, patient navigator programs, etc.) Expand primary care capacity in targeted ways based on findings from on-going primary care assessment. Promote the use of community health workers, patient navigators, and/or community health educators who can engage community members, address risk factors, and
	Enhance primary care operations to improve patient
	satisfaction.
2. Promote a comprehensive approach to integrating medical and behavioral health services in primary care medical	Promote universal education and screening activities in primary care medical settings for mental health and substance abuse issues.
and behavioral health outpatient clinics.	Promote the bi-directional integration of medical and behavioral health services in outpatient settings through co- located and enhanced referral models.
3. Promote evidence-informed programs	Support evidence-informed service integration, care
to address those with the leading chronic and/or complex conditions (e.g. cancer,	coordination, and self-management support programs.
cardiovascular disease)	
4. Reduce inappropriate emergency department utilization.	Support evidence-informed programs in ED and primary care settings that raise awareness and educate patients on appropriate use of ED services and link patients to a medical home (e.g. ED navigator and triage programs.)
5. Increase availability of high-quality	Promote collaborations between DC's hospitals and safety
medical specialty services for low-income	net providers that address barriers and service gaps to
individuals and families.	medical specialty care services.
	Support evidence-informed programs that enhance access to
	high-quality medical specialty care services for uninsured
b. Reduce barriers for private practitioners	Address billing and payment policies that discourage private
to serve medicaid patients.	insured
	insurca.

<b>Behavioral Healt</b>	h		
Key Evidence	<ul> <li>Distribution mental heal</li> <li>Critical nee promote en</li> <li>Broad range impact of se</li> <li>Mental heal barriers to c</li> <li>Need for ed leading beh</li> <li>Need for ev</li> </ul>	<ul> <li>Distribution and capacity of services are not the leading concerns for mental health or substance use sectors</li> <li>Critical need for outreach, education, and universal screening to promote engagement tin care</li> <li>Broad range of system and structural challenges that limit access and impact of services</li> <li>Mental health and substance use services are "siloed," leading to barriers to care and poor care coordination</li> <li>Need for education on impacts, risk factors, signs, and symptoms of leading behavioral health issues</li> </ul>	
	chronic and	complex conditions to support recovery and independence	
Recommendations/	Goals	Objectives /Strategies	
1. Reduce stigma around behavioral health issues.		Implement a broad awareness/education campaign addressing the impacts, risk factors, signs, and symptoms of the leading behavioral health issues (i.e., depression, anxiety, alcohol, and opioid use.)	
2. Promote engagement in care for those with mental health and substance use issues		Enhance cross-sector collaboration among community based behavioral health, medical, social service, community health organizations.	
		Support initiatives that link those with mental health and substance use issues to high-quality and appropriate services regardless of where they enter the health system (e.g., single- point of entry, 2-1-1, case management, universal screening initiatives, etc.)	
3. Strengthen DC's be service system.	havioral health	Promote the bi-directional integration of medical and behavioral health services in outpatient settings.	
		Address barriers between DC's core primary care service providers and the DC Department of Behavioral Health's Mental Health Rehabilitation Service (MHRS) and Substance Use Disorder (SUD) sites. Support program and policy initiatives that integrate DC's behavioral health and substance use service delivery and payment systems. Strengthen recruitment of high-quality psychiatrists and psychiatric nurse practitioners.	

3. Strengthen DC's behavioral health	Support school-based evidence-informed programs that
service system (continued)	address behavioral health issues amongst children and
	adolescents.
4. Promote evidence-informed, multi-	Support evidence-informed, multi-sector collaboratives that
sector strategies for those with	expand access to transitional/supportive housing for those
chronic/complex behavioral health issues	most at-risk (e.g., homeless, mentally ill, those recovering
to support recovery and independent	from substance use, disabled adults, etc.).
living.	

Hospital and Surgical Services		
Key Evidence	<ul> <li>Distribution and capacity are not the leading concerns for hospital and surgical services; distances relative to national standards are not extreme.</li> <li>Quality of services provided are not concerns, except in targeted cases</li> <li>Hospitals in downtown DC are the preferred hospitals for those in most wards and zip codes</li> <li>Differential patterns of hospital utilization for privately insured and Medicaid insured patients</li> <li>Chronic/complex conditions (heart disease, respiratory disease) and mental health conditions are the leading hospital conditions by discharge status</li> </ul>	
Recommendations/	Goals	Objectives /Strategies
1. Enhance access and address barriers to hospital inpatient, medical specialty, and outpatient surgical services for residents in targeted communities.		Explore ways to address barriers to care or utilization patterns related to insurance coverage, MCO contracting, and other administrative barriers that are not patient- centered.
		Explore possibility of establishing an emergency services, urgent care, surgical center, and/or outpatient medical facility in targeted communities.
		Continue to analyze hospital inpatient capacity and service utilization data to determine the extent to which there are (or will be) service gaps or maldistributions that hinder timely, appropriate access to quality care.
2. Reduce inappropriat	te ED utilization.	Support evidence-informed programs in ED and primary care settings that raise awareness/educate patients on appropriate use of ED services and that link patients to a medical home (e.g., ED navigator and triage programs.)

3. Promote well-coordinated, patient-	Conduct a District-wide root cause analysis for inappropriate
centered care transitions that enhance	readmissions and poor care transitions.
patients' recovery, increase independence,	
and reduce inappropriate hospital	
readmissions.	
3. Promote well-coordinated, patient-	Support evidence-informed, multi-sector collaboratives that
centered care transitions that enhance	expand access to transitional/supportive housing for those
patients' recovery, increase independence,	most at-risk (e.g., homeless, mentally ill, those recovering
and reduce inappropriate hospital	from substance use, disabled adults, etc.).
readmissions (continued)	Promote multi-sector collaboration to improve care
	coordination and enhance care transitions.
	Implement evidence-informed post-acute care service
	pathways that enhance recovery, increase independence, and
	reduce inappropriate hospital readmissions.

Post-Acute Care Services			
Key Evidence	• Distribution and capacity are not the leading concerns for post-acute care services		
	• The discharge distribution of DC hospitals mirrors national and state trends; most patients are discharged to the home with no post-acute services.		
	<ul> <li>Medicare is leading utili</li> </ul>	the dominant payer, illustrating that older adults are the zers when it comes to primary care services	
	• Rates of discharge to post-acute care varied considerably across nine census divisions; the Mid-Atlantic region has the second highest rate of discharge to PAC settings		
	• The top 10	The top 10 conditions and procedures accounted for 37% of all PAC	
	stays, highlighting the importance of care management.		
Recommendations/Goals Objectives/Strategies		Objectives / Strategies	
1. Promote well-coordinated, patient-		Conduct a DC root cause analysis for inappropriate	
centered care transitions that enhance		readmissions and poor care transitions.	
patients' recovery, inc	rease independence,	Promote multi-sector collaboration to improve care	
and reduce inappropria	ate hospital	coordination and enhance care transitions.	
readmissions.		Implement evidence-informed post-acute care service	
		pathways that enhance recovery, increase independence, and	
		reduce inappropriate hospital readmissions.	
		Enhance care coordination between hospital discharge	
		planner primary care providers, and outpatient medical	
		providers to promote better follow-up after discharge.	

Strengthen recruitment and retention of geriatric primary care specialists.
Promote evidence-informed initiatives that enhance
communication and address health literacy barriers for
patients during the discharge process.

# Priority Area 2: Health Systems and Structures

Health Systems and Structures				
Key Evidence	• DC has a robust health care service system that would benefit from multi-sector collaboration and an alignment of strategic priorities			
	• Continuous and systematic collection and analysis of health-related data will refine District- and sector-wide planning, implementation, and evaluation efforts			
	• Informants identified hospital utilization.	• Informants identified low health literacy as a key driver of inappropriate hospital utilization.		
	• The "siloed" nature of	of physical health, behavioral health, and other		
	forms of clinical and	non-clinical data hinder care coordination, service		
Recommendations/Goals		Objectives / Strategies		
1. Promote multi-secto across service system	or collaboration within and s and sectors.	Support and facilitate strategies that promote multi- sector collaborative planning.		
		Establish multi-sector, District-wide priorities and develop detailed action plans.		
		Drive accountability by tracking and monitoring impact.		
2. Enhance population health surveillance.		Promote efforts that compile and disseminate quantitative population health-related data (i.e., HP2020, DC Health Matters, YRBS/BRFSS).		
		Facilitate a comprehensive collaborative needs assessment involving public/private partners.		
		Adopt specific measures to track the progress and impact of community health strategies.		
3. Promote health literacy "universal precautions"		Support initiatives that improve supportive systems		
to improve health outc	comes.	(e.g., transportation, scheduling, insurance enrollment, etc.)		
		Support initiatives that improve spoken and written		
		communication between patients and providers.		

Recommendations/Goals	Objectives / Strategies
	Support initiatives that empower system navigation
	and self-management.
4. Enhance health information exchange and	Promote the implementation and use of electronic
technology systems in the District and surrounding	health record and other HIT systems for clinical
region.	and non-clinical partners to promote practice-level
	outreach, care management, and follow up.
	Promote the implementation and use of electronic
	health record and other HIT systems for clinical
	and non-clinical partners to promote information
	sharing, care coordination, and overall population
	health management with a particular focus.
5. Support workforce training and capacity building	Promote initiatives that raise awareness and build
efforts.	capacity among health care, social service, and
	other community-based health organizations with
	particular focus on the impact and importance of
	SDOH, evolving service delivery and payment
	reform efforts, the impact of behavioral health, and
	evidence-informed place based strategies.
6. Explore sustainable financing structures to	Utilize CON-related requirements or conditions
address SDOH, barriers to access and engagement,	(e.g., new CHI funding stream, conditions for
care coordination, and service integration.	approval), community benefit funding, alignment
	of government programs and investments, payment
	reform/value-based payment, and private
	foundation or corporate support.
## Priority Area 3: Community Health Improvement

Community Health Improvement		
Key Evidence	• The social determinants of health (housing, income, education, and access to affordable and nutritious foods) are root causes of disparities to care	
	• Particular inequities communities	and disparities for residents in targeted
	• Issues of racism (over cultural differences of	ert and perceived), prejudice, discrimination, and leter many from engaging in care
	<ul> <li>Major opportunities coordination, multi-s</li> </ul>	within community engagement, service ector collaboration, and care transitions
Recommendations/	Goals	Objectives / Strategies
1. Promote health equity by implementing policies and practices across all sectors that aim to address social determinants of health, improve health		Develop community education and awareness campaigns that promote awareness of the leading social determinants of health and risk factors.
outcomes, and reduce disparities.		Implement screening for social determinants of health in community-based settings.
		Develop a diverse multi-sector collaborative of residents, providers, and community organizations, building on existing structures, to address social determinants of health, guide community health improvement efforts, and promote cross sector collaboration.
		Promote collaboration and integration of cross- sector activities by supporting a "Health in All Policies" approach.
		Create Health Equity Zones that foster community engagement, coordination of community health investment, and the development of evidence- informed programming in targeted communities. Implement targeted evidence-based programs for special populations with chronic and/or complex conditions to encourage self-management, support, and effective engagement in appropriate care.
2. Support initiatives thousing.	o expand affordable and safe	Support existing initiatives that advocate for the production and/or preservation of affordable housing for low and moderate income individuals and families.

Recommendations/Goals	Objectives / Strategies
2. Support initiatives to expand affordable and safe	Promote policies and programs that develop,
housing (continued)	maintain and/or enhance supportive/transitional
	housing for special populations (e.g., homeless,
	mentally ill, those in substance use recovery,
	persons with disabilities, etc.)
	Support initiatives that improve and protect
	existing housing stock to prevent unhealthy
	housing conditions.
3. Promote economic prosperity for low-income	Support initiatives that promote high quality public
individuals and families.	education across the spectrum (e.g., elementary,
	middle school, high school, vocational, and college
	settings).
	Support initiatives that expand opportunities for job
	training.
	Diversify employment opportunities.
4. Expand access to affordable and nutritious foods	Promote integration and collaboration across
to promote healthy eating and reduce food	existing community programs to maximize
insecurity.	resources.
	Support existing and new evidence-informed
	programs that promote healthy eating and enhance
	access to nutritious food.
	Support the Capital Area Food Bank in efforts to
	provide food and education to residents in need.
5. Promote healthy aging.	Support community education and awareness
	campaigns that foster healthy aging and
	independent living.
	Promote cross sector collaboration and
	coordination across the older adult service network.
	Support evidence-informed programs that address
	leading health issues for older adults (e.g., falls
	prevention, depression/social isolation, substance
	use, cardiovascular disease, diabetes, etc.).
	Support evidence-informed programs and policies
	that improve care transitions from the hospital and
	other acute care settings to the home.

# **CERTIFICATE OF NEED**

#### **Certificate of Need Legislative Provisions**

D.C. Official Code § 44-406 establishes the Certificate of Need (CON) process, requiring that *...all persons proposing to offer or develop in the District a new institutional health service, or to obligate a capital expenditure to obtain an asset to be located in the District shall, prior to proceeding with that offering, development, or obligation, obtain from the SHPDA a certificate of need that demonstrates a public need for the new service of expenditure. Only those institutional health services or capital expenditures that are granted a certificate of need shall be offered, developed, or obligated within the District.* 

The State Health Planning and Development Agency, established by D.C. Official Code § 44-402, is responsible for the administration, operation and enforcement of the Certificate of Need (CON) program. The goal of the SHPDA is to ensure the availability of quality, affordable and accessible health care services to all residents, and the CON process gives the SHPDA the opportunity to consider the needs, interests, and concerns of stakeholders and the community at large.

D.C. Official Code § 44-403 establishes an advisory council, known as the Statewide Health Coordinating Council (SHCC), and comprised of volunteer consumers and public and private sector health providers. In its dual role as both an advisory and policymaking body, the SHCC works closely with the SHPDA to develop the Health Systems Plan and make recommendations on applications for certificates of need. The SHCC meetings serve as a public forum by which widespread citizen participation is promoted and solicited for input into the health planning process.

Working in collaboration, the SHPDA and the SHCC strive to:

- Improve the health of District of Columbia residents;
- Increase the accessibility, acceptability, continuity, and quality of health services;
- Restrain increases in health care costs;
- Prevent unnecessary duplication of health resources; and
- Maintain and enhance competition in the health service area.

The CON review process is a public process that involves input and participation by the general public. Members of the public are afforded the opportunity to comment on CON applications in support of or in opposition to proposed projects. Prior to submitting the CON application, Applicants are required to inform the Advisory Neighborhood Commissions in their service area about the proposed project. Applicants are also required to inform the general public of the CON review process by publishing a notice in a newspaper of general circulation, so members of the public are made aware of services that will be established in their neighborhood. The process gives the SHPDA the opportunity to consider the needs, interests, and concerns of stakeholders and the community at large.

#### **Use of Plan in Defining CON Health Priorities**

The District's CON program serves not only to guide capital and service-related investments, but also to promote health equity, strengthen the health system, and improve population health. The SHPDA has gathered and synthesized quantitative and qualitative data related to community characteristics, at-risk or vulnerable population segments, barriers to care, social determinants of health, health status trends, and health-related disparities and inequities. These data have informed development of the District of Columbia's Health Systems Plan (HSP) and Primary Care Needs Assessment (PCNA). Using the HSP and PCNA as guides, Applicants should demonstrate how proposed projects advance health priority areas.

#### **Certificate of Need Criteria and Corresponding Requirements**

The SHPDA and SHCC shall determine that an Applicant has sufficiently demonstrated need when applications contain clear and convincing evidence that the proposed project meets each of the six criteria defined in this section, including:

- 1. Need
- 2. Accessibility
- 3. Quality
- 4. Acceptability
- 5. Continuity and Coordination of Care
- 6. Financial Impact

The burden of demonstrating ability to achieve each of these criteria rests on the Applicants. Written commitment to each of the criteria will not be considered adequate. To achieve clear and convincing evidence, Applicants should submit detailed documentation and descriptions of proposed projects.

Applicants should use benchmarks and performance measures that: 1) are of importance to consumers,

providers, and health officials; 2) are endorsed by a local or nationally recognized organization engaged in health care, and 3) are appropriate for the proposed project.

Where appropriate, Applicants are encouraged to use the following recognized standards:

- Agency for Healthcare Research and Quality (AHRQ). Under the Department of Health and Human Services, AHRQ is charged with improving the safety and quality of America's healthcare system. AHRQ has developed and continues to develop numerous standards. The following are notable examples.
  - National Guideline Clearinghouse: Evidence-based clinical practice guidelines.
  - Quality Indicators: Indicators that use readily available hospital data including Inpatient Quality Indicators (IQI), Prevention Quality Indicators (PQI), Patient Safety Indicators (PSI) and Pediatric Quality Indicators (PDI).
  - Consumer Assessment of Healthcare Providers and Systems (CAHPS): Patient surveys and tools rating healthcare experience and to advance patient-centered care.
- Centers for Medicare & Medicaid Services (CMS). CMS has worked with leaders and stakeholders across sectors to develop quality measures that are meaningful to patients, consumers, and physicians, and reduce collection burden and cost, while moving toward more consistent measure collection across the health care system.
- National Committee for Quality Assurance (NCQA). An independent non-profit, NCQA has developed a series of measures and standards to promote high quality care.
  - Patient-Centered Medical Home (PCMH): a primary care model that focuses on care coordination and communication.
  - Accreditation and Certification: standards and guidelines including physician evaluation and a review oversight committee. Examples of Accreditation and Certification programs include Disease Management, Care Management, Multicultural Health Care, and Wellness and Health Promotion.
- National Quality Forum (NQF). A non-profit membership based organization, convincing public and private experts to establish national health care priorities and goals to ensure that care is safe, effective, patient-centered, timely, efficient, and equitable. NQF measures can be used by Applicants to demonstrate quality. Measures range from type of service (e.g. All-Cause Admissions and Readmissions) to diagnosis (e.g. Behavioral Health, Cancer, Cardiovascular) and system-level impact (e.g. Cost and Resource Use and Disparities).
- Institute for Clinical and Economic Review (ICER) Value Assessment Framework. The ICER framework incorporates "Long-Term Value" and "Short-Term Affordability" domains. Long-term value is based on clinical comparative effectiveness, incremental costs for improvement in clinical outcomes over the long-term, other advantages and benefits that may not have been considered in comparative effectiveness studies, and contextual considerations such as ethical or legal issues. The short-term affordability domain assesses the impact on total health

care expenditures and provides an algorithm for establishing value-based price benchmark. Applicants are encouraged to use ICER Evidence Reports and Proven Best Choices Guides.

• Choosing Wisely. This initiative promotes discussions between providers and patients to ensure the right care is delivered at the right time, avoiding wasteful or unnecessary medical tests, treatments, and procedures. Choosing Wisely® produces evidence-based standards identifying inappropriate treatment.

The process for reviewing applications and applying criteria will vary based on the specific type of project proposed. Where appropriate, the SHPDA and SHCC will differentially weigh criteria and will incorporate assessment methods developed by other states in regulating CON. When conducting batched reviews or otherwise simultaneously reviewing similar projects, applications addressing health priority areas described earlier in this chapter will be given preference.

The following are definitions and requirements of the six criteria the SHCC and SHPDA will use to assess applications.

#### Need

Need is defined as the insufficient supply of specific health services and resources given the health status and corresponding healthcare needs of a population. The District of Columbia should have adequate total health services and resources, and these should be equitably distributed throughout the District. The need for health services and resources is not based on economic demand or personal desire, as these can lead to potentially unnecessary or inappropriate care.

As new models of care emerge that are better able to meet SHPDA goals, the assessment of total demand for any given resource or service will account for the new model of care. The burden of demonstrating need for services, and the appropriate model of care, rests on the Applicants.

Applicants should also note that need and accessibility (detailed in the following section) are closely linked – insufficient access to specific health resources and services in a specific area can result in unmet need in that area.

#### **Requirements**

CON Applicants shall demonstrate unmet need among the proposed target population by including the following in their application:

- 1. Describe the target population and estimate the total number of patients who need the service. Detail the methodology and assumptions used.
- 2. Describe the unmet need of the target population.
- 3. Explain why current providers cannot meet the need for service by either:
  - a. Describe the existing service landscape for the proposed service area, including existing providers, capacity, and services provided.
  - b. Demonstrate that existing availability of such services does not adequately meet demand

for services. This may include substandard performance of existing providers or limited accessibility (as defined in the accessibility criteria that follows)

- 4. Explain how the proposed service plans to meet the identified need, while also avoiding unnecessary duplication of services.
- 5. CON Applicants requesting expansion of services should demonstrate that current utilization of services meets or exceeds system-wide capacity, and that there is a need for additional capacity within the immediate service area.

When reviewing comparative applications during batched review, Applicants who propose to locate their services in underserved areas of the District, as defined in the HSP, will be given priority over other Applicants.

#### Accessibility

Accessibility is defined as the ability for an individual or group to access specific services or resources. Accessibility includes financial, spatial, physical, temporal and accommodative factors. Barriers to accessibility include, but are not limited to, the following examples:

- Financial barriers provider's lack of insurance participation, affordability and cost of services.
- Spatial barriers location of available services is unreasonably distanced from the populations served and lack of reasonable transportation options.
- Physical barriers ADA non-compliant buildings, surrounding streets and grounds that hinder ease in reaching available services (e.g. highway or busy freeway, hills, railroad tracks).
- Temporal barriers hours of operation that are not appropriate for a given population, travel times via various transportation modes to reach the location of services, and patient wait times for rendering services,.
- Accommodative barriers cultural or linguistically inappropriate/inadequate administrative systems, care provision, facilities, or patient/provider relationships.

#### **Requirements**

Applicants must demonstrate how the proposed project will lower barriers to accessibility by including the following in their application:

- 1. Identify common or specific barriers to accessibility for the population served and the project, and demonstrate how the proposed project will reduce barriers to accessibility. Applicants should demonstrate strategies to address known or likely barriers, such as:
  - a. Demonstrating that financial requirements will not be a barrier to services for persons that are uninsured or underinsured (e.g. providing alternative payment methods, referring patients to resources for financial assistance).
  - b. Locating services in areas that are conveniently accessible by multiple modes of transportation.
  - c. Designing facilities to meet ADA requirements.
  - d. Demonstrating the patient intake and registration process do not place an undue burden

on individuals seeking care and do not discourage individuals from obtaining care.

- e. Describing hours of operation and wait times that are convenient to the target population.
- f. Describing procedures for providing translation, sign language interpretation, and/or interpreter capabilities for the major languages of non-English-speaking patient populations and ensure staff is aware of the cultural mores of the population.
- 2. For projects including construction that could impact the delivery of existing health care services, provide evidence that the Applicant has adequately planned for any temporary move or relocation of any facility or service and a construction mitigation plan demonstrating how Applicant will assure patient protection from noise, dust, etc., and to the extent possible, continuation of services during any proposed construction period.
- 3. Demonstrate that processes are in place to ensure that services are not denied and individuals are not discouraged from receiving care based on age, sex, race, creed, religion, sexual orientation, color, national origin, socioeconomic status, legal status, disability, prior hospitalization, diagnosis, prognosis, organizational affiliation, ability to pay, or payer source.
- 4. Demonstrate that services are accessible regardless of payer type, including:
  - a. A written commitment to serve individuals covered by Medicare and Medicaid. Existing health care providers should also include documentation demonstrating that services have, in fact, been provided to individuals covered by Medicare and Medicaid.
  - b. Meeting Medicaid and Medicare standards for services that are reimbursable and secure and maintain Medicaid certification.
  - c. Maintaining written policies governing provision of services without charge for indigent patients in accordance with the uncompensated care obligation under D.C. Official Code § 44-405 (a).
  - d. Providing a written commitment that services will be offered at a standard that meets or exceeds the District requirements for uncompensated care. In considering applications batched for review, the SHPDA may give favorable consideration to whichever of the Applicants historically has provided the higher annual percentage of uncompensated care and the higher annual percentage of services to Medicare and Medicaid.

To demonstrate accessibility, Applicants should include clear and convincing evidence for each of the requirements above. For example, to demonstrate temporal accessibility, Applicants should include hours of operation and a description of how these hours will meet the needs of their patient panel.

#### Quality

Quality is defined as both the extent to which health services and resources improve target health outcomes, and the degree to which services and resources are consistent with current professional knowledge. The higher the quality of health care services, the higher the level of excellent and the better the associated health outcomes.

Quality is often linked to cost, and Applicants must demonstrate strategies to improve quality while reducing costs (see the sixth criteria, *Financial Impact* – Section 3: Cost containment and reasonableness of expenditures and costs). While there is sometimes a tradeoff between quality and cost, waste in health

care (for example, overuse of technical equipment and certain medical procedures such as unneeded surgeries) often drives up cost while leading too poor outcomes. See the Financial Impact section for more information on this relationship.

Quality must be demonstrated in three domains: 1) infrastructure and resources, 2) the process of delivering services, and 3) the outcomes resulting from service delivery.

#### **Requirements**

CON Applicants shall demonstrate how the proposed service demonstrates quality of care by including the following in their application:

- 1. Infrastructure and resources include factors such as:
  - a. Qualifications of the organization applying for CON
    - i. Demonstrate, with clear evidence, the qualifications, experience and track record of the organization in providing the proposed services.
    - ii. Identify the standards and requirements Applicants plan to meet.
  - b. Qualifications of staff for proposed project
    - i. Provide a written policy for providing appropriate medical supervision for staff and overall patient care. A Medical Director, or designated supervisor, must oversee and coordinate the provision of medical care in the facility or service.
    - ii. Demonstrate that staff is certified by the appropriate licensing authorities and professional bodies and that policies are in place to provide continuing education programs for staff and volunteers to keep pace with health care advancements.
    - iii. Demonstrate that adequate staffing plans are in place to meet locally and/or nationally recognized standards for quality care.
    - iv. Demonstration of malpractice insurance consistent with industry standards.
    - v. Existing providers shall identify any outstanding health care licensure deficiencies, citations or accreditation problems as well as a mitigation plan.
    - vi. Demonstrate that qualifications for practice will be continuously updated to keep pace with advancements in health care knowledge and techniques.
  - c. Physical infrastructure and clinical equipment
    - i. Demonstrate that proposed projects include appropriate infrastructure and equipment to deliver high quality care.
  - d. Volume of relevant services
    - i. Demonstrate the ability to achieve the volume necessary to provide quality services. For many surgical procedures and medical conditions, higher volume (either at the clinical or entity level) is associated with high quality and better outcomes.<sup>149</sup> This connection between volume and quality is most pronounced for newer or less frequent procedures or conditions.
  - e. Implementation of health information technology
    - i. Demonstrate the adoption of appropriate health information technology (HIT). Research has shown that adoption of HIT can reduce medical errors and adverse events, improve patient engagement, improve coordination of care, and facilitate

treatment protocols. Effective use of HIT can be demonstrated through Office of the National Coordinator for Health Information Technology (ONC) certification.

- 2. Process of delivery services includes factors such as:
  - a. Individual care plans
    - i. Describe process for developing and maintaining individualized care plan for all patients that is reviewed and revised on a regular basis by all providers of care.
    - ii. Demonstrate that care plans are consistent with required licensure and certification to ensure the provision of an entire range of services, including services required after discharge from an inpatient facility.
    - iii. Describe policy for providing or formally arrange for any service deemed as a necessary component of the individualized care plan.
  - b. Quality assurance mechanisms
    - i. Demonstrate development of a quality improvement plan that clearly indicates responsibility and accountability and defines a process for ongoing evaluation and assessment.
    - ii. Describe policy for implementing a Continuous Quality Improvement (CQI) process into their organizational structure and service delivery system that:
      - 1. Establish a quality improvement plan and staff to coordinate and implement the CQI process.
      - 2. Involve interdisciplinary teams of treatment staff and management to monitor administrative and patient records to ensure compliance with key quality indicators of care and provide appropriate training of all personnel.
      - 3. Monitor utilization of services and treatment outcomes.
      - 4. Document all findings and corrective actions.
  - c. Consistency and accuracy of services provided.
    - i. Demonstrate compliance with all federal and District health and safety regulations, applicable Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and other appropriate national accrediting organization standards, and applicable local certification standards.
  - d. Implementation of evidence-informed standards of care
    - i. Demonstrate that care will incorporate effective, evidence-informed, care and treatment models. Evidence-informed projects and strategies that are proven, rooted in clinical or service provider experience, and take into consideration the interests and needs of the target population.
- 3. Health outcomes include factors such as:
  - a. Health status indicators, and
    - i. Applicants are encouraged to report health status indicators where appropriate and available.
  - b. Treatment indicators such as rate of infections, medical errors, and readmission rates
     i. Report on applicable treatment indicators.
- 4. To demonstrate quality, Applicants should include clear and convincing evidence for each of the

requirements above. For example, Applicants should provide descriptions of clinical pathways, nationally recognized health status indicators, and architectural plans.

#### Acceptability

Acceptability is patient's experience of and satisfaction with their health care. Unlike other CON standards, acceptability includes individual and group perceptions and addresses societal and consumer perceptions of available medical care. For example, accessibility might address whether a building is on a transit route, but acceptability addresses whether the population served perceives that they can easily travel to receive services. Acceptability includes equity across patient characteristics (such as age, sex, race, insurance provider, etc.).

#### **Requirements**

Applicants must demonstrate how their proposal will test for and achieve acceptability among the proposed target population by including the following in their application:

- 1. Demonstration of how rights and integrity of patients are respected, including activities such as:
  - a. Provide an adopted Patient's Bill of Rights, and describe how patients and family/caregivers will be informed about their Patient's Bill of Rights, including providing individual copies and posting the information in visible locations.
  - b. Demonstrate how policies and services enhance the privacy and dignity of patients.
  - c. Demonstrate procedures to ensure patient confidentiality.
  - d. Demonstrate that Applicant has adequate knowledge and understanding of the cultural and linguistic preferences of the target population and how these accommodations will be made to address the cultural and linguistic preferences for the proposed services.
  - e. Demonstrate that the selection of treatment and the availability of support services should be conducive to patient cooperation and participation, such as how the religious needs of each patient and their caregiver are accommodated.
- 2. Demonstration of a process for patient engagement, describing activities such as:
  - a. How patients and family/caregivers will be informed about their condition and care, and how patients and family/caregivers can participate in care planning, review and evaluation of services, and the selection of treatment.
  - b. How patients and family/caregivers should be provided with simple, understandable information about fees, billing procedures, scheduling of appointments, contacting the unit after hours, and grievance procedures.
  - c. How community participation is encouraged and achieved.
- **3.** Demonstration of how patient and community satisfaction is solicited, gained and is assessed, describing activities such as:
  - a. Publicized grievance procedures for patients, caregivers and staff that permits expression of concern without fear of reprisal and procedures to monitor the effectiveness and timely resolution of grievances
  - b. Established procedures for the assessment of service acceptability as viewed by patients and the community.

c. Applicants are required solicit community feedback by informing the general public by publishing a notice in a newspaper of general circulation, and to write letters to the Advisory Neighborhood Commissions (ANCs) in their service area about the proposed project before they submit their CON applications.

To demonstrate acceptability, Applicants should include clear and convincing evidence for each of the requirements above. For example, copies of letters sent to ANCs, satisfaction surveys, care plan templates, etc.

#### Continuity and Coordination of Care

Continuity is the structuring, coordination and delivery of services to ensure appropriate care is provided on a continuous basis across one or more settings. It is measured by the ease in which individuals move between required elements of the system and the degree to which the elements are integrated. Continuity of care should not be obstructed because of the source of care or method of payment.

#### **Requirements**

Factors used to evaluate continuity of care include:

- 1. Care coordination
  - a. Applicants shall demonstrate written policies and procedures for internal communication and service coordination.
  - b. Applicants shall demonstrate staffing patterns consistent with the Department of Health or national standards to ensure continuity of care for all patients at optimal levels.
  - c. Applicants must demonstrate that they have adequate resources and procedures to monitor patient progress, and as necessary, provide follow-up care.
  - d. Applicants shall demonstrate that services are coordinated and interlinked with other nonclinical providers and human service delivery systems in the community to promote holistic care of the individual.
- 2. Referral process
  - a. Applicants shall demonstrate referral agreements to connect patients with appropriate services, and include provisions for linkages to primary, secondary, and tertiary levels of care as needed.
  - b. Applicants shall demonstrate written policies and guidelines making referrals.
  - c. Applicants should develop formal agreements with providers who see uninsured patients so that they have admitting privileges to hospitals.
- 3. Discharge planning and safe transitions
  - a. Applicants shall demonstrate written policies and procedures for discharge planning and follow-up care, including how patients and families are educated prior to discharge on the practices to be followed for patients at home.
  - b. Applicants shall demonstrate that medical records and information system enable transfer of health information, physically and/or electronically, from one service provider to another, and procedures for confirmation of receipt. Records should include, at minimum,

written summaries of care rendered as well as current patient care data.

- c. Applicants shall demonstrate procedures for follow-up with patients after discharge including phone calls, visits, and medical reconciliation as appropriate.
- d. Applicants that include hospitals shall demonstrate develop formal agreements with providers who see uninsured patients so that they have admitting privileges to hospitals.

To demonstrate continuity of care, Applicants should give clear and convincing evidence for each of the requirements above. For example, copies of referral agreements, databases to support clinical and nonclinical referrals, written procedures for care transitions, and discharge plan templates.

#### Financial Impact

Financial impact is defined as the full breadth of financial and economic consequences resulting from the provision of health care services. For the purpose of CON application review, there are three elements of financial impact:

- *The financial feasibility of the proposed project*. The SHPDA aims to ensure that D.C. residents have consistent and predictable access to high quality services, from providers that are financially sound and can thrive in the healthcare market. Providers that cannot achieve long-term viability will lead to disruptions in patient care and reduce stability of the health system. However, financial feasibility should not be at the expense of the District' underserved residents, and viability should be demonstrated in conjunction with the financial capacity and commitment to serving Medicaid patients as described in the *Accessibility* criteria.
- *The financial viability of the D.C. health system as a whole*. The entrance or growth of a new health care provider can also have a significant impact on existing providers in the market, either by duplicating or disrupting existing services or resources. While the SHPDA encourages innovation in the market that can lead to lower cost, better quality care, these benefits must justify and compensate for any negative impact on existing providers. A primary goal of CON oversite is to avoid duplication of services.
- *The total cost of health care.* Health care costs are projected to reach 20% of the United States' gross domestic product (GDP) by 2025.<sup>150</sup> These runaway costs are unsustainable and come at the cost of other essential programs. Further, waste in health care, including unnecessary treatment and technology, has been linked to lower health outcomes. Any new project must be assessed in terms of the contribution to meeting the SHPDA's goals of containing costs and reducing waste.

#### **Requirements**

Applicants shall demonstrate:

- 1. Financial feasibility
  - a. Submit a detailed explanation of the capital expenditure associated with the project.
  - b. Demonstrate the availability of funds for capital expenditures and operating needs as well as the immediate and long-term financial projections of the costs of and charges for providing health services of the project.

- c. Demonstrate the sources and amounts of funding for proposed projects which may include borrowing details; lease and purchase arrangements, and other financial requirements as may be requested by the SHPDA.
- d. Provide information on the financial viability of the Applicant, such as audited financial statements.
- e. Provide information on the anticipated effects, consequences, as well as benefits of the proposed project on the financial viability of the Applicant going forward.
- f. Submit a projected manpower budget specifying the personnel required for the staffing of the proposed project and a plan for the recruitment and training of personnel.
- g. Provide full disclosure of all entities, subsidiaries, or persons within a legal chain of control and such other relevant information as may be deemed
- 2. Impact on other providers
  - a. Describe the projected impact of the proposed project on existing providers and the health care delivery system as a whole. Address the potential for adverse consequences including duplication of services, fragmentation of the delivery system, and the financial viability of other healthcare providers.
- 3. Cost containment and reasonableness of expenditures and costs
  - a. Demonstrate an active intent to contain costs of construction, equipment, expansion, or renovation of a facility. At a minimum, costs should be consistent with similar facilities and services in the D.C. metropolitan area.
  - b. Demonstrate that less costly alternatives are not feasible or appropriate for the target population.
  - c. Demonstrate that investment in the proposed project will contribute to the SHPDA's goal of improving quality while reducing costs. What are the likely opportunity costs of investing in this project, and how do the benefits outweigh the costs?
  - d. For large capital expenditures, Applicants are encouraged to develop a consortia approach or other resource sharing arrangements in the provision of costly new services.

#### Compliance

The Applicant shall provide sufficient evidence of compliance and good standing with federal, state, and local laws and regulations, including, but not limited to all terms and conditions of each previous Certificate of Need granted to the Applicant, and with all commitments made that earned preferences in obtaining each previous Certificate of Need. If Applicant is out of compliance, Applicant will provide the SHPDA with a written notice and explanation as to why the conditions or commitments were not met. SHPDA will review demonstration of compliance in consultation with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the proposed project.

#### Service Definitions and Guidance

In conducting Certificate of Need oversight and planning, the SHPDA and SHCC are faced with the challenge of updating guidance to meet both the health priorities of the District and to adapt to the evolving health care delivery system. The SHPDA has identified the need to develop guidance for emerging and existing services that will inform CON application review and enable the SHPDA and

SHCC to meet health objectives for the District in this changing landscape.

This guidance will provide clarity for CON application and review, particularly as evolving services blur the lines of how care is provided across the care continuum. Emerging models of care offer great promise in addressing health care disparities. To ensure health priorities and goals are met, including fostering health equity, the SHPDA may convene service-specific work groups and develop detailed servicespecific guidance to be incorporated into future updates to the Healthy Systems Plan. Many states convene workgroups or task forces, which are often comprised of key stakeholders, such as representatives of regional health planning agencies, payers, industry experts, and healthcare providers, academic medical community, and government agencies. These workgroups develop, update, and validate CON criteria; provide technical knowledge and expertise to develop service-specific guidance to inform a CON Applicant's process; and develop guidelines and standards to facilitate the review of proposed projects. Developing similar workgroups in D.C. could ensure that service-specific guidance is appropriate and District-specific.

The SHPDA and SHHC have developed the following guidance as a starting point. In the future, the SHPDA and SHCC may convene corresponding workgroups to develop more detailed guidance.

#### Primary Care

Primary care has been identified as a priority area requiring additional criteria for Applicants seeking to open or expand primary care services. Primary care is a critical component of the health system, and foundational to achieving high quality, cost-effective health care. The goal of this guidance is to ensure access to appropriate, high quality, and timely services that are well integrated into a full continuum of care.

Primary care providers are considered the first line of defense in the diagnosis and treatment of common illnesses and health problems. Through preventive services such as screenings, immunizations, and counseling, primary care providers play an important role in ensuring that people receive appropriate and high quality care that results in the early detection of problems, appropriate referrals for services, and better health overall.

#### Definition

An individual, or group of individuals that is the primary point of contact into a health service system, providing first contact and continuing care for an undiagnosed sign, symptom or health concern; provides longitudinal comprehensive, person-focused (not disease-oriented or organ-specific) care; provides care for all but very uncommon or unusual conditions, including illness prevention and health maintenance; and coordinates or integrates other health services as they relate to the patient's care, regardless of where the care is delivered or who provides it.

#### **Requirements**

In addition to meeting the general CON criteria, Applicants seeking to start or expand primary care services should:

- Demonstrate that patients are screened for social determinants of health (e.g. poverty, housing, transportation, education, food insecurity, etc.) and describe the services provided or referrals made to address these factors.
- Describe strategies for mitigating barriers to care related to scheduling and availability of appointments (e.g. open access scheduling, evening/weekend hours, patient navigator programs, etc.).
- Demonstrate the use of a nationally recognized primary care model such as Patient Centered Medical Home (PCMH) certification.
- Describe the process for screening for mental health and substance abuse issues and integrating behavioral health services into care delivery.
- Submit a plan for integrating primary care with the full continuum of care through the use of trained, specialized staff such as navigators, community health workers, and care managers.
- Demonstrate tools and procedures used to raise awareness and educate patients on appropriate use of ED services and provide link to appropriate services (e.g. ED navigator and triage programs.).

#### **Urgent Care Centers**

Urgent care has been identified as a priority service area requiring additional criteria for Applicants seeking to open or expand urgent care facilities and services to ensure that they provide high quality care and predictable services that reinforce, rather than disrupt, the continuum of care.

The first urgent care centers opened in the 1970s. Since then this sector of the health care industry has expanded to over 8,000 centers nationwide. Many of these centers have been started by physicians in response to the need for convenient access to unscheduled medical care. Other centers have been opened by hospital systems, seeking to attract patients. Much of the growth of these centers has been generated by the expectation that urgent care centers will have lower cost than hospital emergency department. In fact, many managed care organizations (MCOs) now encourage their customers to utilize the urgent care option.

Urgent care services are usually intended to provide services to patients with non-emergent conditions. Many emergency room visits are for non-emergent conditions, which likely could be better treated in an urgent care setting. In Maryland, for example, studies show that more than one-third of all emergency room visits were for non-emergent or emergent but primary care treatable conditions. As a result, urgent care centers are usually designed to address the needs of patients who cannot wait to be seen in primary care settings but whose condition does not warrant a visit to the emergency room. While urgent care centers are like emergency rooms in that they provide prompt, unscheduled access to patients, their low acuity make them similar to sick visits in primary care settings.

Urgent care centers tend to be located in metropolitan areas in high concentration population centers that enable a steady supply of patients to be seen without appointments and at non-traditional hours. Urgent

care centers tend to take many forms of reimbursement, including private insurance, public insurance, self-pay or coverage by employers, but there is little evidence that urgent care centers provide a notable amount of uncompensated care. The SHPDA requires that health care facilities report the amount of uncompensated care they provide.

After a review of the literature and discussing the issue with professionals in various states, it appears that there is no standard definition for an urgent care center. Currently, the Urgent Care Association of America (UCAOA), working in conjunction with the Joint Commission, is developing a definition that will detail hours of operation and scope of services. Additionally, in late 2007 the UCAOA awarded a grant to a research team out of Harvard University/Massachusetts General Hospital to conduct the first-ever national benchmarking survey. The analysis of the survey is not yet completed and will not be available to the public for some time.

Similarly, a survey conducted by SHPDA staff of other states to determine how urgent care centers are regulated and monitored, found that the centers are not required to obtain a Certificate of Need. Urgent care centers are seen as extensions of the physician's office and therefore are only subject to physician licensure requirements. Unless an urgent care center provides radiology services or laboratory testing, it appears that most states do not regulate them at all. In New Jersey and Illinois, naming rights laws have been passed to alter the name of urgent care centers to make sure that the public does not confuse urgent care with emergency care.

While there is a need for urgent care services to patients outside the hospital setting, efforts must be made to ensure that these new services will be available to all patients, regardless of insurance status. Federal law mandates that emergency room services be available to all people whether or not they have the ability to pay. As a result, patients receive care in emergency rooms regardless of their financial condition, and research suggests that many patients use the emergency room as their sole health care provider. Whether the intent of urgent care centers is to reduce overcrowding in emergency rooms, to increase access in underserved areas, or to relieve the burden of primary care facilities, urgent care centers should be accessible to all, including the uninsured and underinsured, if they are to meet improve access to care, reduce pressure on emergency departments, and reduce the total cost of care.

To be effective, urgent care centers must be integrated into the overall health care delivery system and develop clear mechanisms for ensuring continuity of care with the medical home and for referring patients to other levels of care based on acuity. At a minimum, the facilities should be required to establish linkages and relationships with specialty physicians, primary care facilities and hospitals. Consideration should also be given to the ownership structure of the facilities. Determinations should be made on the potential advantages and disadvantages if the facilities are free-standing, part of a primary care facility, affiliated with hospitals, owned by proprietary companies, or operated by physicians in private practice.

There are a few fundamental questions that must be raised regarding the establishment of urgent care centers:

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- Who are the patients that need urgent care services?
- How does an urgent care center differ from a primary care facility, an emergency room and a physician's office?
- What is the acuity level of the patients to be treated at an urgent care center?
- What should be the qualifications and expertise of the staff at an urgent care center?
- What are the health care services that are provided at an urgent care center?
- Will they provide services to all people with any illness or any complaint?

Given the fact that there is no clear definition of an urgent care facility, the District of Columbia now has the opportunity to set the terms and conditions for establishing urgent care services. The District should clearly define the level and scope of the services to be provided in these facilities, the patients to be served, and the appropriate staffing levels. The location of the services, the hours of operation and the level and kind of laboratory testing and radiology services that should be available must also be considered. Before final determinations are made on which models meet the needs of District residents, however, it may be prudent to introduce the services in steps through pilot programs. After some period of operation, the programs should be evaluated on their effectiveness in meeting the need, accessibility, quality, continuity of care, and financial feasibility requirements of the care to be provided; criteria utilized in the certificate of need process.

In April 2013, the SHPDA approved two certificate of need applications for the establishment of urgent care facilities by MedStar Health, Inc./MedStar Urgent Care, LLC, d/b/a MedStar PromptCare. One of the facilities is located at 1805 Columbia Road, N.W. and the other one at 228 7th Street, S.E. The facilities were established to provide services to patients with acute illnesses and injuries. Services are to be provided on a walk in basis and appointments are not necessary. The facilities will have extended hours, on-site x-ray machines and laboratory testing. The services are co-located with primary care facilities.

#### Definition

Urgent care is the delivery of episodic, ambulatory care in a facility dedicated to the provision of medical services outside of a hospital emergency department, usually on an unscheduled, walk-in basis. Urgent care services are medically necessary services which are required for an illness or injury that needs immediate attention but is not serious enough to require a trip to the emergency room. Urgent care is primarily the immediate diagnosis, treatment, management, or monitoring of acute and chronic disease, during extended working hours. Urgent care services include, at a minimum, treatment for lacerations, fracture repair, on-site diagnostics and point-of-care testing.

#### **Requirements**

Applicants seeking to start or expand urgent care services should:

- Demonstrate that the hours of operation extend beyond traditional primary care hours.
- Provide a report of patient satisfaction measurements and scores to demonstrate that services are patient-centered. Describe the process for measuring patient satisfaction.

- Demonstrate that the staffing levels, training and credentials are appropriate for providing urgent care services.
- Demonstrate how the proposed services will target non-emergent medical needs, reducing avoidable emergency department visits.
- Demonstrate how continuity of care is supported, and in particular, describe how follow-up care is coordinated with primary care.

#### **Emergency Departments**

- Emergency departments have been identified as a priority service area requiring additional criteria for Applicants seeking to open or expand emergency department (ED) facilities and services. SHPDA's goal in developing this guidance is to support site of care optimization, with non-emergency needs addressed in primary and urgent care settings, and focusing emergency departments on high acuity, emergency services.
- Throughout the nation, visits to the ED for non-emergent and preventable conditions are common and growing, signaling limited access to primary care providers and patient demand for more timely, convenient, and accessible care. As models of urgent care and primary care are improved, it is anticipated that the role of EDs will change over time. Focusing more on high acuity patient needs, hospitals should have the capability to provide a minimum standard of care to address more complex emergent needs, including emergency preparedness and infectious disease epidemics (e.g. decontamination rooms). Applicants should articulate how they are responding to the changing healthcare landscape and that emergency departments are being used for appropriate services.

#### Definition

Any department or facility that meets at least one of the following requirements:

- 1. It is licensed by Washington, D.C. as an emergency room or emergency department, regardless of whether it is (a) a hospital-associated ED that is located either on or off the main hospital campus or (b) is a freestanding emergency department.
- 2. It is held out to the public (by name, posted signs, advertising or other means) as a place that is specially equipped or staffed, or provides care for emergency medical conditions on an immediate or emergent basis, without requiring a previously scheduled appointment, 24 hours a day, seven days a week, 365 days a year; or
- 3. It provides at least one-third of all of its outpatient visits for the evaluation and treatment of emergency medical conditions on an immediate or emergent basis without requiring a previously scheduled appointment

#### **Requirements**

In addition to meeting the general CON criteria, Applicants seeking to start or expand emergency medical services should:

- Demonstrate that assessed need does not include patients that could more appropriately be seen in a lower acuity setting like primary or urgent care.
- Demonstrate policies that support patient care management to avoid preventable ED visits (e.g. coordination of follow-up care in a more appropriate setting).
- Describe processes for monitoring, evaluating and reducing potentially avoidable emergency department visits and report performance.
- Provide policies related to emergency preparedness, including decontamination training requirements for staff. Demonstrate Applicant has the minimum capabilities for decontamination or clearly describe plans to acquire such capabilities (e.g. active Hazmat teams, decontamination rooms, etc.).

#### Home Health

Home health has been identified as a priority service area requiring additional criteria for Applicants seeking to open or expand home health services. SHPDA's goal in developing this guidance is to ensure access to high quality home health providers.

Home health care services are provided for the purpose of promoting, maintaining, or restoring health, maximizing the level of independence, and minimizing the effects of disability and illness. With the continued increase in the cost of institutional care and the number of sick and aged patients who need long-term care, the need for home health care services have been growing. The services provided range from some assistance with the activities of daily living to skilled nursing care and therapeutic services. The prevalence of chronic illnesses increases with age and older patients use home care services at higher levels.

Over the years, with the increase in demand for the services and the proliferation of providers, the provision of home health care services has been vulnerable to fraud, waste and abuse. Questions have been raised nationally and in the District regarding billing for services that were not medically necessary or were not provided at all.

In the District of Columbia, for example, the D.C. Department of Health Care Finance (DHCF) in 2014 suspended several home healthcare agencies because of very credible and systemic allegation of fraud. At that time DHCF had an enrollment of approximately 10,000 beneficiaries. But after the investigations the number of eligible beneficiaries receiving home care services was reduced by about 50%. It was determined that many of the patients that received care in 2013 were either fraudulent or ineligible for services.

Some of the suspended agencies have been reinstated and the SHPDA, in the last two years, has approved 10 new home health care agencies. Currently, there are 38 licensed home care agencies and an additional three are in the process of obtaining their license.

In 2014, DHCF established its own home healthcare agency in order to provide services, on a temporary basis, to patients who were served by the suspended agencies. After the SHPDA approved additional

home health agencies, DHCF has closed its facility in April, 2017.

This suggests that the main issue confronting the District is not the question of shortage of providers but that of the quality and integrity of the services provided. As a result, it is important to make sure that new home health care providers clearly demonstrate that they will be able to provide high quality services.

Home health includes a broad range of medical care and support services to patients who are recovering from a hospital stay, or are disabled, chronically ill, or need therapeutic treatment. Home health can support adherence to prescribed medications, facilitate treatment plans, and can contribute to reducing total health care costs, most notably by reducing avoidable hospital readmissions.

SHPDA recognizes the need for all residents to have access to high quality home health providers that have a demonstrated track record of providing person-centered home care and personal care aid services. With ongoing payment reform efforts, it is also important to identify providers who have a track record that demonstrates their capacity to bill across a diverse payer base including Medicare, Medicaid and private pay.

#### Definition

D.C. Official Code §4099.1 defines home health agency (HHA) as "a public agency or private organization, or a subdivision of an agency or organization, that is primarily engaged in providing skilled nursing services and at least one (1) other therapeutic service to individuals in their residences, that has at least one (1) employee in addition to the proprietor if the agency is a sole proprietorship. This term does not include an entity that provides only housekeeping services."

#### Requirements

In addition to meeting the general CON criteria, Applicants seeking to start or expand home health services should:

- Clearly define the scope and level of services and identify the target population;
- Demonstrate how the quality of care will be consistent with CMS and D.C. licensing regulations, for Home Health Agencies participating under Medicare, include Home Health Compare (HHC) Star Ratings;
- Demonstrate that the Applicant will be able to be accredited by appropriate accreditation agencies;
- Clearly define the roles and responsibilities of personnel and identify the necessary qualifications and credentials required for the provision of high quality services;
- Demonstrate their understanding and experience with the health care delivery system in the District in general and the underserved and minority groups in particular;
- Demonstrate track record and qualification in the provision of the proposed services.
- Demonstrate the capacity to bill across a diverse payer base.

• Demonstrate how continuity of care is supported, and in particular, transitions from an emergency department.

#### Non-Emergent Medical Transport

- Non-emergent medical transport has been identified as a priority service area requiring additional criteria for Applicants seeking to open or expand medical transport services. SHPDA's goal in developing this guidance is to ensure access to high quality medical transport providers.
- Transportation is an important facilitator in accessing care and is a critical component of the continuum of care as patient move between facilities and different levels of care. Further, the lack of transportation was cited for having a significant impact on access to health services and as a determinant of whether an individual or family had the ability to access basic resources.

#### Definition

Any privately-owned vehicle that meets at least one of the following requirements:

- 1. It is held out to the public (by name, posted signs, advertising or other means) as an ambulance or medical transportation that is specially designed, modified or equipped for use as a means of transporting patients in a medical non-emergency,
- 2. It provides transportation to and from medical services on a non-emergent basis.

Non-emergency medical transport services do not include the emergency medical services provided in response to emergency medical situations.

#### **Requirements**

In addition to meeting the general CON criteria, Applicants seeking to start or expand non-emergency medical transport services should:

- Demonstrate processes that ensure transportation staffing and equipment are appropriate for the level of intensity and needs of the individual (e.g. how vehicles equipped with specific medical equipment will be used when necessary, while vehicles without medical equipment will be used for basic transportation).
- Demonstrate how proposed services will improve care coordination between health institutions.
- Provide policies related to emergency preparedness, such as reciprocal agreements with other providers in the target service area, or plans to develop such an agreement.
- Demonstrate plans to obtain the certifications and staffing levels appropriate for the services proposed. Applicants with a history of providing non-emergency medical transport services should provide certifications and describe how they were appropriate for the level of services provided.
- Applicants seeking to open or expand non-emergent medical transport services should ensure that they have appropriately equipped vehicles to meet the transportation needs of individuals across the range of services provided. This includes not using more equipment than necessary for non-

medical transport and having adequate equipment when needed.

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#### Appendix A: Health Systems Plan Key Informant Interviewees

Dr. Anneta Arno, Director, DC Office of Healthy Equity Jacqueline Bowens, President/CEO, DC Hospital Association (Member of SHCC) Robert Brandon, Robert M. Brandon and Associates (Member of SHCC) **Clarence Brewton**, Vice President of Regulatory Compliance at MedStar Health Pierre Cartier, Program Manager, Oral Health Program at DC DOH Karen Dale, Executive Director, Amerihealth Vanessa Damesyn-Sharpe, Executive Director, DC Health Care Association **Suzanne Fenzel**, former Deputy Director, DC Department of Behavioral Health Michael Ferrell, Executive Director, DC Coalition for the Homeless Joshua Ghaffari (Program Mgr.) and Tonya Stern (Deputy Dir.), DC Office of Planning Bob Gilbert, President, MedStar Ambulatory Services Stephen Glaude, President/CEO, Coalition for Non Profit Housing George Jones, CEO, Bread for the City Michael Kharfen, Senior Deputy Director, HAHSTA Christopher King. Director of Master's Program at Georgetown Tonya Kinlow. VP of Community Engagement and Advocacy, Children's Hospital Sharon Lewis, Deputy Director, Health Regulation & Licensing Howard Liebers, Department of Insurance Dr. Yavar Moghimi, Behavioral Health Medical Director, Amerihealth **Steve Nash**, Stoddard Baptist Home Foundation (Member of SHCC) Chioma Nwachukwu, DC Board of Nursing Dr. Lavdena Orr, Medical Director, Amerihealth Ruth Pollard, Asst. VP of Community and Government Relations, Providence Hospital Nancy Roman, CEO, Capitol Area Food Bank Jacqueline Reuben, Chief Epidemiologist, DC Hospital Association Sarah Roque, Public Health Analyst, DC Fire and EMS Department Dr. Tanya Royster, Director, DC Department of Behavioral Health Claudia Schlosberg, Director of Health Care Policy, Department of Health Care Finance Dr. Sanjay Seth, Executive Vice President, Health EC Aarti Subramanian. Vice President and CFO, Psychiatric Institute of DC John Sumner, Statistician, Department of Health Care Finance Dr. Raymond Tu, GWUH/Medical Society Charletta Washington, COO, United Medical Center Dr. Jacqueline Watson, Chief of Staff at DC DOH Jim Wotring, Deputy Director, DC Department of Behavioral Health

#### Appendix B: Data Limitations

Assessment activities of this nature face limitations with respect to both quantitative and qualitative data collection. With respect to the quantitative data compiled for this project, the most significant limitation was the availability of timely data. Relative to most states and jurisdictions throughout the United States, the District does an exemplary job of making comprehensive data available at zip code, ward, and District-wide levels.

The breadth of available demographic, socioeconomic an epidemiologic data was more than adequate to facilitate an assessment of community characteristics, social determinants of health, and health status. The JSI team compiled this information from existing quantitative data sources, including Healthy People 2020, the Behavioral Health Risk Factor Surveillance Survey (BRFSS), the DC Healthy Communities Collaborative CHNA, and the US Census Bureau.

In assessing the strength of DC's health system, a broad range of utilization, capacity, and claims data were compiled and analyzed to assess service gaps or shortages, unmet need, and the distribution of services across the District. We have applied the most robust analyses possible to assess need, demand, and supply of health services, but it should be noted that these types of assessments are inherently challenging, as it is difficult to precisely calculate need, demand and capacity. Provider capacity assessments rely on licensure or survey data, which is often dated or incomplete. Assessing need and demand is more of an art than a science, as one typically must rely on utilization data to estimate these figures. JSI has explored service distribution and analyzed patient origin/destination analyses with respect to hospital inpatient and primary care services. These analyses, combined with educated, but subjective, assumptions regarding the patterns of care allow us to make some judgments on need, demand, and service capacity considerations. We stand by our findings and believe they provide valuable information that can be used to guide sound policy and programs; nonetheless, there are clear limitations to our data.

For all data sets, JSI used the most recent data available. However, it should be noted that data sets from 2015 and earlier may not reflect the most recent trends in health statistics.

With respect to qualitative data, information gathered through key informant interviews and community forums engaging service providers, health department officials, community stakeholders, and/or community residents provided valuable insights on major health- related issues, barriers to care, service gaps and at-risk target populations. Overall, nearly 100 people were involved in this effort through our activities. While this level of engagement is a considerable achievement, it is still a small sample compared to the size of the resident and service provider populations overall. While every effort was made to advertise the community forums and to select a broadly representative group of stakeholders to interview, the selection or inclusion process was not random. Additionally, community forums did not exclude participants if they did not live in the particular regions where the meetings were held, so feedback by meeting does not necessarily reflect the needs or interests of the areas in which the meetings were held.

# Appendix C: Data Placemats DC Community Characteristics

# #1 highest educational attainment rate (2015) #4 low gender wage gap (2015)

**#16** unemployment insurance coverage (2015)

#43 individuals living in poverty (2015) #45 children in poverty (2015)

 #47 high school students graduating on time (2014)

#49 obese children (2011)

**#5 l** high unemployment and income inequality (2015)

# DC Demographic Profile

## Race (2015)

DC is one of the most diverse places in the nation! However, residential segregation based on race is a concern in DC.



# LGBT Community

DC is home to the largest percentage of residents who identify as lesbian, gay, bisexual, or transgender (LGBT), at 10%. (2012)

<b>15%</b> of high school students		
identify as LGBT or questioning:		
<b>3%</b> identify as lesbian		
<b>%</b> identify as gay		
<b>9%</b> identify as bisexual		
<b>3%</b> identify as questioning		

# Age (2015)

The age distribution of DC overall mirrors the distribution of the US as a whole, with a slightly smaller young (under 18 years) population (18%) compared to the US (24%).



Nearly half of the transgender population earns less than \$10,000 a year compared to 11% of DC residents overall. Trans women of color tend to earn even less. (2013)





# Gender (2015)

DC overall, and particularly Wards 3, 5, 7, and 8, is disproportionately female, While the US skews slightly female (50.8%) DC is less balanced at 53%.





According to the Human Rights Campaign, DC supports all nine of their top issues, including:

- I) Statewide housing laws and policies
- 2) Statewide employment laws and policies
- 3) Marriage equality and other relationship recognition laws
- 4) State hate crime laws
- 5) Statewide public accommodations laws and policies
- 6) Statewide school anti-bullying laws and policies
- 7) Statewide school non-discrimination laws and policies
- 8) Transgender healthcare
- 9) Gender marker change on identification documents

# Socioeconomic Profile of DC

DC faces major economic and education discrepancies between its wards and races.





attainment.

#### DC Ward I Ward 2 Ward 3 Ward 4 Ward 5 Ward 6 Ward 7

Unemployment

DC's overall unemployment rate has decreased since 2011.



Compared to the 2x higher in Ward 7 national average, **3x** higher in unemployment is Ward 8

But major discrepancies in unemployment between wards persist. (2015)



Where is my ward?

Many DC residents use public transportation daily, but may never have a reason to look at a map of the DC wards.

Take a peek at the map to find where you live and your ward number.

#### Education (2015)

In wards with higher percentages of minorities, residents tend to have lower levels of educational



# **Education & Workforce**

**#I** in total public school enrollment, with 79% of DC students enrolled in public schools.

**#I** in enrollment in pre-K programs for 3-4 year olds (75%).

**#7** in fastest growth in job creation between 2009 and 2014 (7.9%).

# Education

#### Attendance

For the 2014–2015 school year, DC had 90% overall school attendance, falling short of its 95% target.

# 85,403

students were enrolled in 2014–2015 at DC Public Schools (DCPS).

# **Teachers**

DC Public Schools attract highly qualified teachers, and prioritize placement in high-poverty schools, where 94% of teachers at high-poverty schools are highly qualified, meaning they have subject matter expertise and is certified in the area he or she teaches.



All Schools Low-Poverty High-Poverty Schools Schools % of teachers who are highly qualified

27% of DC's Elementary Teachers & 37% of Secondary Teachers have their Masters degree.

# **Test Scores**

Across demographic groups, DC students have shown improvements in math and reading scores on the CAS since 2007— as high as a 22% increase in math scores for Hispanic students.

Despite these gains, DC students' average scores on nationally standardized tests are below the national average.

# Reading Math

## High School Graduation Rates

The high school graduation rates across demographic groups in the DC Public Schools fall short of the national average (79%), which reached a record high in 2013. Of the race categories, Black students have the lowest rate at 64%.



#48 in unemployment rate for October 2016 (6.1%).



#### Change in Graduation Rates

While Public Charter Schools maintain higher graduation rates than the DCPS overall, the 4-year graduation rate dropped from 2012 to 2014.



# Workforce

#### Labor Force

The number of people in the labor force has increased from 2010 to 2014. In the same period, the raw number of unemployed persons in the district has declined from 326,000 in 2010 to 294,000 in 2014.



#### **Employment by Industry**

In 2015, Government was the District's largest industry, accounting for almost 237,000 jobs.



#### **Growing Sectors**

In 2015, most of the positions employers were hiring for fell into the sectors identified below. These sectors are predicted to be the top 10 fastest growing sectors between 2015–2025.



#### **Employment by Education**

In 2014, college graduates were two times more likely to be employed than someone with less than a high school diploma.



#### form of postsecondary education. (2016)

#### Unemployment

From 2010 to 2014, unemployment in the District decreased by 1.6%, from 9.4% to 7.8%. In the same period, youth unemployment (ages 16-19) dropped by more than half (from 50% to 20%).



## Unemployment by Race

All races saw declines in unemployment from 2010 to 2014. The greatest gains were in the Hispanic population, where unemployment declined by 4.5%.

These gains were smaller than in the larger US population (particularly for blacks and whites), though this may be partially attributed to the relatively stagnant unemployment rate in the District overall.


# DC Barriers to Access & Health Disparities

All DC residents do not have equal opportunity for good health.

DC residents, particularly residents of color, face barriers to accessing care, including income, transport, and access to insurance.

These disparities limit residents' access to resources that promote good health – like health care, neighborhoods with quality housing and reduced air pollution, and time for self care.

Because of these limitations, lowincome groups are at a higher risk of developing chronic illnesses, behaviors that perpetuate negative health outcomes, and worse maternal and child health outcomes. These health inequities are avoidable.

#### Median Household Income (2015)

The median household incomes in Wards 5,7 and 8 are below the DC average.



Families living in Ward 8 make **3 times less** than families living in Ward 3.

#### **27%** of DC residents with a disability are unemployed. (2014)

#### Adults in DC Living in Poverty (2014) Children in DC Living in Poverty (2014) A higher percentage of the black children live A higher percentage of the black population in poverty compared to other racial groups live in poverty compared to other racial

groups and DC overall.



For a DC resident, a yearly income of \$23,340 was 200% of the poverty level. Almost I in 3 DC residents live below this threshold. (2014)

97%

have

health

#### Transportation (2016)

How easy is it to walk, bike, or take the bus or Metro to run daily errands? With 100 as most accessible, how does your Ward score?



# 38% of DC residents rely on public transportation to commute to work. (2014)

Metro cut its service hours to midnight for Safe Track renovations, limiting transportation options for residents whose jobs require them to work past midnight.







#### Access to Health Insurance



# Insurance coverage is lowest among DC Hispanic/Latinx

residents. (2014)

Only 7% of employed DC residents lack health insurance. (2014)

Hispanic/Latinx

# **Disparities in Health Outcomes**

Barriers to care often disproportionately impact minority groups and result in disparities in health outcomes. Minority populations have worse health outcomes than white DC residents, from birth to the burden of chronic diseases in adulthood.

## Maternal and Child Health (2013)

Rates of infant mortality and preterm births were higher in DC's black population, followed by the Hispanic/Latinx population, compared to the white population.



# Chronic Diseases (2011-2014)

DC's black adult population has rates of chronic diseases compared to the white population: more than double the rate for diabetes and hypertension. Data from 2013.



Adult heart disease mortality rate (per 100,00 population)

Ranked 39<sup>th</sup> for lowest rate of adult diabetes (8.5% of adults in 2015)

This scale shows how DC ranked compared to the 50 states on different measures.

### Children's Oral Health (2012)

The percent of children (1-17 years) with a toothache, decayed teeth, or an unfilled cavity is four times higher in minority populations.



#### Asthma Hospitalizations (2014)

In DC, 15.4% of black adults, and 7.6% of white adults suffer from asthma. Asthma-related inpatient and emergency department hospitalizations were highest in Wards 7 and 8.



#### Inadequate Sleep by Education & Income (2014)

Around I in 3 DC residents is "sleep deprived" with less than 7 hours of sleep in a night.

A greater proportion of residents with less than college graduate education. and residents with annual incomes less than \$25,000 experience inadequate amounts of sleep (less than 7 hours).

#### Heart Disease Mortality

Heart disease mortality rates in DC's black population have decreased since 2012. DC is on track to meet its Healthy People 2020 goal of 128!



#### In 2015, DC was ranked 41st for lowest rate of adult hypertension (29.4%)



<sup>%</sup> of adults who had less than 7 hours of sleep

# Healthy Eating & Active Living in DC

#### How Does DC Rank?

DC is leading the nation! DC has a low percentage of adults who are obese (particularly Hispanic and white adults), and a low percentage of adults who are physically inactive.

Even with these successes, disparities still exist for black adults, elders, and children, as illustrated in the scale to the right.

DC is ranked #2 nationwide for lowest percentage of obese adults and #4 for lowest percentage of physically inactive adults.

Those are great numbers to be proud of. However, disparities still exist. Rates of adult obesity and physical inactivity are higher in the black population, Wards 7 and 8, among people with less than a high school education, and among people with annual incomes less than \$25,000.

The percent of obese adults is much lower in DC compared to the national average. DC is on track to hit its 2020 goal of 19.2%.

### Adult Obesity in DC & the US (2015)



% of adults who are obese





# Health of Young People

**I** in 5 DC youth (10-17 years) **is obese**. (2011)



DC ranked #49 nationwide for the lowest percentage of obese youth (10-17 years). (2011)

# **4.4%** of low-income children (2-4 years) in DC are obese. (2012)

Children and teenagers who are low-income and Hispanic/Latinx or black face particular disparities.

A greater percentage of Hispanic/Latinx and black teens in DC are overweight compared to white teens. (2015)



**70%** of DC teens do not participate in the CDC recommended 60 minutes of physical activity on 5 or more days per week. (2015)

# Accessing Healthy Food

# **Full-Service Grocery Stores**

Between 2010 and 2015, the number of full-service grocery stores increased in Wards 1, 4, 5, and 6. During that time, the number of full-service grocery stores decreased in Wards 2, 3, 7 and 8.



# **SNAP** Participation

#### Wards 5, 7, and 8 have

the most people participate in SNAP (food stamps), which makes it easier for them to get fresh and healthy foods. (2015)

25.5% of DC's children

are **food insecure**, compared to 20.9% for the US overall. (2014)



DC has many parks, recreation centers, pools, and cooling spaces. Which of these resources do you have in your community?





terms of the percentage of residents who bike, walk, or take public transportation to work. (2014)

# Parks & Recreation (2014)

# Housing & Homelessness in DC

#### Access to Affordable Housing





DC has one of the lowest rates in the nation for unsheltered people in families: 0%.

In the past 5 years, the number of homeless veterans has dropped by 37%.

DC ranks as the fourth most expensive rental market in the country for a one bedroom apartment (behind San Francisco, New York, and Boston respectively)

Highest increase from 2007–2014 in the nation in the number of homeless families.

#### **Rental Assistance to DC Families**

As house prices and rents skyrocket, DC families increasingly rely on multiple types of housing assistance. Across these programs, \$417 million in federal rental assistance funding was brought into DC in 2014.







The number of rental units at \$800 per month or under declined by 42% in the past decade.

The median price of a one bedroom rental in DC is

per month, resulting in fewer low-income units. (2015)

As rents rise around DC, the average incomes for the bottom 40 percent of renters did not increase at all, leaving more households reliant on rental assistance. (2010)

What kinds of households are receiving federal assistance? (2014) 28% are 17% are elderly childless adults 60% 80% 100%

#### Homelessness



# What are the health costs of homelessness?

More than \$19 million in emergency services per year are spent to care for the DC homeless. (2015)

4,702

Uses of the ER

Ambulance rides to the hospital

Inpatient hospitalizations

1.696

Uses of a crisis service (suicide prevention)

### Homeless Veterans

While the number of homeless individuals has increased in the last five years, the number of homeless veterans has declined by 37%.



#### Homelessness by Race



Racial inequalities persist: 3 in 4 homeless individuals are black in DC. (2014)

#### Homeless Families

Between 2007-2014. DC had the largest change of any state/district in the US in the number of homeless people in families: an increase of 137%.

#### What's the cost of a solution?

The per-person cost of permanent and supportive housing is less than half the per person cost of emergency services.



# \$100 million Committed by Mayor Muriel Bowser to invest in solutions to homelessness (2015)

# Safety & Violence in DC

# How is DC doing this year?

The figures show the number of different kinds of crimes reported at the same point in 2015 and 2016.

Getting better		Betting v	vorse	
Offense	2015	2016	% change	
Homicide	110	98	-11%	
Sex abuse	239	238	0%	
Assault w/ dangerous weapon	1,672	1,707	2%	
Robbery	2,277	2,155	-5%	
Violent Crime (total)	4,298	4,198	-2%	
Burglary	1,655	1,469	-11%	
Motor vehicle theft	2,069	1,762	-15%	
Theft from auto	7,871	7,139	-9%	
Theft (other)	9,628	9,700	١%	
Arson	11	4	-64%	
Property Crime (total)	21,234	20,074	-5%	
All crime (total)	25,532	24,272	-5%	

### Hate Crimes

Hate crimes are on the rise in DC. The number of hate crimes increased by 64% in 2016 compared to 2015.



#### Homicides

DC's homicide rate remains consistently higher than the US. It declined until 2012 and has increased since then.



In 2014, the homicide rate in the US was 5.1 per 100,000, and it has already met its 2020 target of 5.5. In 2014, DC's rate was 14, and its on track to meeting its 2020 target of 10.4

#### DC: 14

Homicide rate per 100,000

Between 2014 to 2015, the homicide rate increased in most wards and throughout DC overall. Wards 6 and 8 had the greatest increase in homicide rates.



85%

of homicide victims

were black males.

(2015)

# Suicide Rate

The suicide rate in DC is significantly lower compared to the US, though it has increased since 2013.



# **Youth Violence**

More DC high school students experience violence compared to US students overall, though fewer DC high school students are electronically bullied or feel sad or hopeless. (2015)

Detained

Committed





Among youth, the majority detained or committed to institutions are black males. Detained juveniles are awaiting sentencing and committed juveniles are under the custody of DC Youth Rehabilitation Services. (2014)



#### Incarceration Rate (2016)

The US has the highest incarceration rate compared to all other countries, and DC's incarceration rate per 100,000 is the highest in the world.



DC is ranked **#3** for total correction rate. (2016)

#### Race of Inmates (2016)

The majority of the inmate population is black: nearly 90% of incarcerated individuals in DC.

3.4% a 5% are Hispar 89% o inmate

#### 3.4% are white.

5% are Hispanic/Latinx.

89% of DC inmates are black.

#### Incarcerated Individuals

The number of individuals incarcerated in a DC Department of Corrections (DOC) facility has decreased since 2011, but showed a slight uptick in 2016.





**71%** of male and **84%** of female inmates remain in custody for less than 6 months. (2016)



#### Incarceration by Gender (2016)

There are more incarcerated males compared to females. This is especially true for individuals younger than 21 years old.



#### Law Enforcement (2015)

DC is ranked **#I** for number of police officers per 10,000 residents (56.9), over twice the rate in San Francisco (25.9).

Since 2015, DC has deployed more than 1,200 body-worn cameras to officers.



#### Appendix D: DC Hospital Service Area Maps



#### Children's National Medical Center: Patient Discharge Service Area by Zip Code



George Washington University Hospital: Patient Discharge Service Area by Zip Code



Howard University Hospital: Patient Discharge Service Area by Zip Code

MedStar Georgetown University Hospital: Patient Discharge Service Area by Zip Code





MedStar Washington Hospital Center: Patient Discharge Service Area by Zip Code



#### Providence Hospital: Patient Discharge Service Area by Zip Code



#### Sibley Memorial Hospital: Patient Discharge Service Area by Zip Code



United Medical Center: Patient Discharge Service Area by Zip Code

Appendix E: Hospital Bed Category Aggregation and Line of Service Crosswalk

Bed Category Aggregation			
License Category	Bed Category		
Med/Surg	Med/Surg		
ICU/CCU	Med/Surg		
Ob/Gyn	Ob/Gyn		
Nursery	Med/Surg		
NICU	Med/Surg		
Pediatric	Med/Surg		
Alc/ChemDependency	Alc/ChemDependency		
Rehab	Rehab		
Psych	Psych		

Line of Service Crosswalk to Bed				
Category				
Line Of Service	Bed Category			
Medicine	Med/Surg			
General Surgery	Med/Surg			
Newborn	Med/Surg			
Other Surgery	Med/Surg			
Psychiatry	Psych			
Cardiac Care (m)	Med/Surg			
Respiratory	Med/Surg			
Obstetrics	Ob/Gyn			
Neurological (m)	Med/Surg			
Cardiac Care (s)	Med/Surg			
Neurological (s)	Med/Surg			
Orthopedics (s)	Med/Surg			
Renal / Urology (m)	Med/Surg			
Cancer Care (m)	Med/Surg			
Trauma (s)	Med/Surg			
Renal / Urology (s)	Med/Surg			
Cancer Care (s)	Med/Surg			
Trauma (m)	Med/Surg			
Substance Abuse	Alc/ChemDependency			
Orthopedics (m)	Med/Surg			
Women's Health	Ob/Gyn			
Ophthalmology	Med/Surg			
Dental	Med/Surg			
Miscellaneous	Med/Surg			

#### Appendix F: DC Hospital Licensed Bed Capacity and Utilization













#### Appendix G: DC FQHC Penetration Maps Map 1: FQHC 2015 Program Penetration Total Population



#### **FQHC** Penetration



- FQHC Grantee
  - FQHC Service Delivery Site



#### **FQHC** Penetration





FQHC Grantee

FQHC Service Delivery Site

### Map 3: FQHC 2015 Program Penetration Medicaid/Publicly Insured Population



#### **FQHC** Penetration





FQHC Grantee

FQHC Service Delivery Site

## Map 4: FQHC 2015 Program Penetration Uninsured Population



#### **FQHC** Penetration





FQHC Grantee

FQHC Service Delivery Site