Sheppard Pratt

2022

Community Health Needs Assessment

May 27, 2022

crescendo

Contents

Sheppard Pratt

Sheppard Pratt is America's largest private, nonprofit provider of mental health, substance use, special education, developmental disability, and social services. For the past 100 years, Sheppard Pratt has been dedicated to providing life-changing care by treating patients in hospitals, schools, community mental health clinics, and at home.[1] Today, Sheppard Pratt provides a wide-range of behavioral health services in seven counties through Maryland, specifically in Baltimore County and Baltimore City.

In addition, Sheppard Pratt collaborates with behavioral health organizations to conduct clinical trials centered around major depressive disorder, bipolar disorder, autism, schizophrenia, and Alzheimer's disease and dementia. Sheppard Pratt provides continuing education for providers, residencies and fellowships for behavioral health students, professional training, and community-wide education opportunities such as mental health first aid.

Work Group Members

Name	Title
Stacey A. Garnett	Nursing Administrator
Gregory Gattman	VP and Chief Operating Officer, Hospitals
Jeffrey J. Grossi	Chief of Government Relations
Guy J. Guzzone	Director, Community Development
Deepak Prabhakar, MD	Chief of Medical Staff; Medical Director, Outpatient Services
Jeff Richardson	VP and Chief Operating Officer, Community Services
Jennifer Wilkerson	VP and Chief Strategy Officer

This project was staffed by: Thomas Glenn, Sr. Director, Strategy and Consulting and Madeline Frazer, Administrative Fellow.

[1] Sheppard Pratt.

Mission

To improve the quality of life of individuals and families by compassionately serving their mental health, addiction, special education, and community support needs.

Value Statement

Since our founding in 1853, Sheppard Pratt has remained loyal to our Quaker heritage. The Quaker testimonies of simplicity, peace, integrity, community, and equality drive not only our core values, but our guiding principles, as well.

Core Values

To Meet a Need.
To work toward recovery of health & quality of life for people we serve

To Lead.
To continually seek & create more effective ways to serve individuals

To Care.
To employ the highest standards of professionalism, with compassion, at all times

To Respect.
To recognize & respond to the human dignity of every person

Guiding Principles

- **Integrity** - We will conduct ourselves in an ethical, honest, and forthright manner.
- **Innovation** - We will use the expertise of our staff, as well as the latest scientific advancements, to create a system that is a model for others.
- **Community** - We will work to reduce stigma to increase access to mental health services and to increase awareness of the benefits of treatment.
- **Learning** - We will enhance professional knowledge and skills through inquiry, teaching, learning, and research.
- **Value** - We will assure that the cost of our services reflects their value and we will operate in a cost-efficient way.
- **Safety** - We will provide a safe environment for consumers, volunteers, staff, and visitors.
- **Diversity** - We will foster an environment that embraces the diversity of all of our constituents.
- **Charity** - We will meet our charitable responsibilities to serve the community and to honor the intent of our donors.
- **Caring** - We will provide all of our services with compassion and sensitivity.

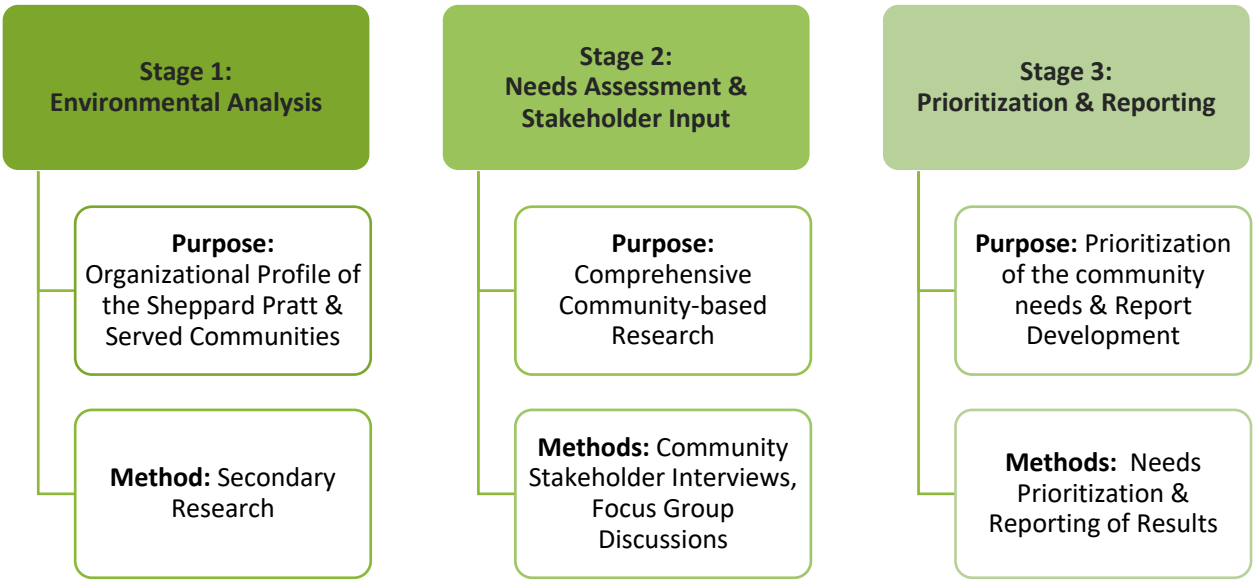
Outreach Activities Since the Previous CHNA

Through its programs and services, as well as its affiliate and partner relationships, Sheppard Pratt has provided the community with a continuum of care that includes inpatient hospitalization, partial hospitalization, intensive outpatient treatment, outpatient referrals, and housing and rehabilitation services, as needed. Over the last three years since its last community assessment, Sheppard Pratt's hospitals have:

- Provided over $14.5 million in charity care
- Fielded 38,170 through its call center and therapy referral services
- Provided care throughout 15,779 visits to its Psychiatric Urgent Care services
- Delivered over 18,722 psychiatric care services in collaboration with primary care providers
- Trained over 6,447 school staff through the Positive Behavioral Intervention System (PBIS), which engages teachers and school system staff in professional educational opportunities to better prepare them to identify students with mental health needs
- Served as Maryland's largest private operator of special education services with over a dozen schools across the state
- Conducted over $1 million in unreimbursed clinical research to advance the field of psychiatric medicine
- Educated 1,185 health professionals, including physicians, medical students, nurses, therapists, and social workers
- Provided over 11,062 free medications to patients discharged from its services
- Enrolled 3,791 individuals in smoking cessation programs
- Assisted 766 individuals with no cost insurance enrollment
- Served 2,692 patients in clinics for underinsured and uninsured
- Delivered free and low-cost community education including webinars and educational material on its website, which totaled over 166,000 distinct impressions and educational lessons
- Provided patients with over 13,000 free transportation services to ensure they receive their care
- Spend nearly 1,700 hours involved in nonprofit coalition building activities, including local, regional, and national organizations

Community Needs Assessment Methodology Components

The methodology for this community needs assessment (CHNA) includes a combination of quantitative and qualitative research methods designed to evaluate the perspectives and opinions of community stakeholders and healthcare consumers – especially those from underserved populations. The methodology utilized helped prioritize the needs and establish a basis for continued community engagement and simply developing a broad, community-based list of needs. The major sections of the methodology include the following:



One defining characteristic of this analysis and this report is that it was completed during the ongoing COVID-19 pandemic. The pandemic has caused an increase in anxiety, depression, and fear and has brought to light both the importance of and lack of behavioral health services and associated providers.

The primary research – both qualitative and quantitative – indicates that the pandemic has caused many residents to delay getting the appropriate care they needed for both management of chronic conditions and some acute conditions as well. The long-term effects on both behavioral health and society will play out over the coming years. While it is difficult to ascertain all of the community's future needs, the research suggests that Sheppard Pratt is well-positioned to support the community.

Stakeholder List

The following list of individuals participated in the Community Health Needs Assessment process.

Stakeholder Name	Organization
Sandra O'Neill, MS, LCPC	Anne Arundel Department of Health
Dr. Maura Rossman	Howard County Department of Health
Lee P. Ohnmacht, MSS, LCSW-C	Baltimore County Department of Health, Bureau of Behavioral Health
Cathy Forbes	Delegate
Carl Delorenzo	Howard County
Roe Rodgers-Bonaccorsy	Howard County Mental Health Authority
Linda Raines	Mental Health Association of Maryland
Kate Farinholt	NAMI Maryland
Rebbeca Rienzi	Family Network / Pathfinders for Autism
Jane Gehring	Child Advocacy Center
Sam Salerno, LCSW-C	Sheppard Pratt
Laura Winstead, LCSW-C	Sheppard Pratt
Laura Eskander, MD	Sheppard Pratt
Ehsan Syed, MD	Sheppard Pratt
Robert Wisner-Carlson, MD	Sheppard Pratt
Veranda Hodzic, MD	Sheppard Pratt
Jessie Stephen, MD	Sheppard Pratt
Devi Bhuyan, PsyD	Sheppard Pratt
Carrie Etheridge, LCSW-C	Sheppard Pratt
Monica Rettenmier, MD	Sheppard Pratt
Scott Aaronson, MD	Sheppard Pratt
Weronika Gondek, MD, FAPA	Sheppard Pratt

Data Limitations

Overall, Community Health Needs Assessments utilize the more up-to-date secondary data sets available. The dramatic changes throughout 2020, 2021, and continuing into 2022 caused by the COVID-19 pandemic have impacted traditional projection tools and data collection methodology. The U.S. Census American Community Survey (ACS), which provides essential detailed population-based information related to service area communities, revised its messaging, altered mailout strategies, and made sampling adjustments to accommodate the National Processing Center's staffing limitations.[2]

Additionally, the release date for data reflecting 2016 to 2020 has been delayed past the traditional December 2021 deadline. Where relevant, the impacts of new data due to the COVID-19 pandemic are noted throughout this report. In addition, in-person interviews and focus group discussions were conducted only by telephone or in a virtual setting. It is important to note that this decision may have impacted traditional in-person dynamics for the CHNA.

[2] U.S. Census Bureau.

Sheppard Pratt Service Area

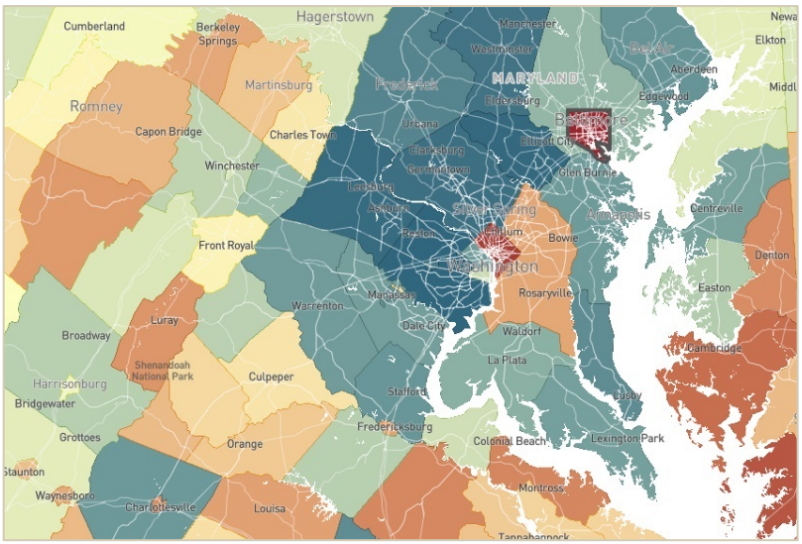
Sheppard Pratt services patients from all over Maryland and the United States. The majority of its patients are concentrated in Baltimore City, Baltimore County, and Anne Arundel County.

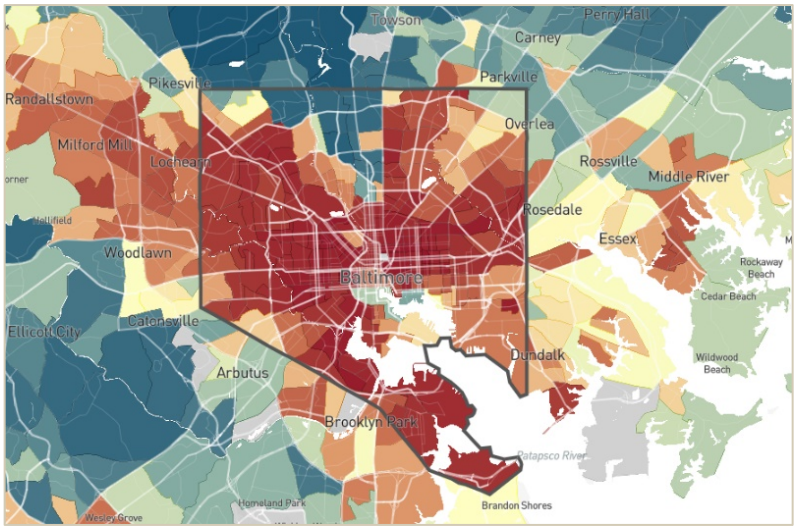
Location	Population	Percent of Maryland Population	Percent of Total 2021 Inpatient Population
Anne Arundel County	564,600	9.4%	15.7%
Baltimore County	828,637	13.8%	15.9%
Baltimore City	619,796	10.3%	27.3%
Harford County	312,495	5.2%	3.9%
Howard County	250,132	4.2%	8.0%
Montgomery County	1,043,530	17.3%	6.3%
Prince George's County	908,670	15.1%	3.5%
All Others	N/A	N/A	19.5%

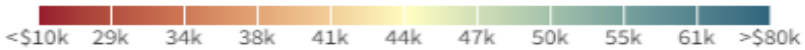
The Opportunity Atlas

The Opportunity Atlas is a useful tool for analyzing census data to track economic and social factors among individuals born in distinct geographic regions. To further illustrate the needs and disparities of Sheppard Pratt's service areas, **Exhibit 1** captures the median household incomes at age 35. Shades of blue represents higher income opportunities for children raised in a respective area, most predominent in Howard and Montgomery County. Orange and deep shades of red indiciate great economic need and lack of opportunity, as seen within the Balimore City area.

Exhibit 1: Maryland







Source: The Opportunity Atlas [3]

[3] The Opportunity Atlas, Maryland.

The Social Vulnerability Index

The Social Vulnerability Index (SVI) helps identify areas of need in the community. Developed by the Centers for Disease Control and Prevention (CDC) as a metric for analyzing population data to identify vulnerable populations, the SVI's measures are housed within the domains of Socioeconomic Status, Household Composition and Disability, Minority Status and Language, Housing, and Transportation.

This tool may be used to rank overall population wellbeing and mobility relative to county and state averages. It can also be used to determine the most vulnerable populations during disaster preparedness and global pandemics. Notable SVI characteristics seen in **Exhibit 2** are compared across the United States, Maryland, and the seven service area counties.

Exhibit 2: Social Vulnerability Index

	U.S.	Maryland	Anne Arundel County	Baltimore County	Baltimore City	Harford County	Howard County	Montgomery County	Prince George's County
Total Population	324,697,795	6,018,848	564,600	828,637	619,796	312,495	250,132	1,043,530	908,670
Below Poverty	13.4%	9.2%	5.8%	9.0%	21.2%	7.2%	5.0%	6.8%	8.5%
Unemployed	3.4%	3.4%	2.8%	3.2%	5.1%	2.8%	2.7%	3.2%	4.3%
Median Income	$62,843	$84,805	$100,798	$76,866	$50,379	$89,147	$121,160	$108,820	$84,920
Median Age	38.1	38.7	38.3	39.4	35.4	40.9	38.8	38.1	38.7
Age 65+	15.6%	15.0%	14.4%	16.8%	13.6%	15.8%	13.4%	15.0%	12.9%
Age 17 or Younger	22.6%	22.3%	22.4%	21.6%	20.7%	22.4%	24.4%	23.3%	22.3%
People with a Disability	12.7%	11.2%	11.4%	11.8%	16.5%	11.3%	8.3%	8.2%	9.6%

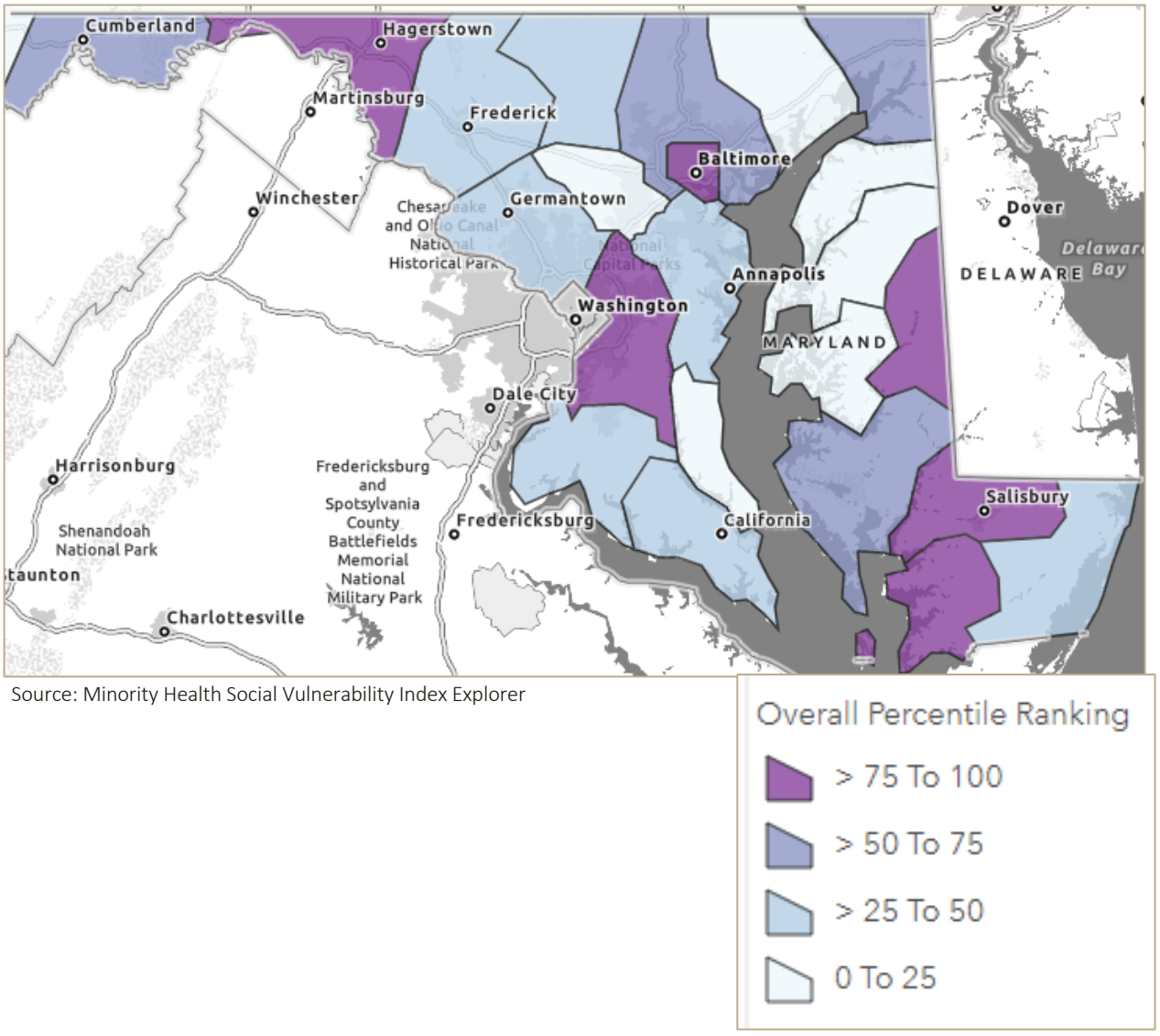
	U.S.	Maryland	Anne Arundel County	Baltimore County	Baltimore City	Harford County	Howard County	Montgomery County	Prince George's County
Single-Parent Households	6.6%	7.0%	5.9%	7.0%	10.0%	5.0%	6.3%	6.0%	8.5%
Ethnic Minority	39.3%	49.1%	31.8%	42.7%	72.5%	23.9%	48.0%	56.2%	87.3%
Do not Speak English	8.4%	7.0%	3.8%	5.2%	3.7%	2.1%	7.4%	14.3%	12.5%
Multi-Unit Housing	3.4%	1.3%	0.7%	1.1%	4.5%	0.6%	0.4%	0.5%	0.5%
Mobile Homes	5.6%	1.2%	1.5%	0.7%	0.2%	2.6%	0.9%	0.1%	0.4%
No Vehicle	8.6%	9.0%	3.6%	7.7%	28.9%	4.9%	3.8%	7.7%	8.9%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Minority Health Social Vulnerably Index

The Minority Health Social Vulnerably Index combines the 15 social factors included in the original SVI indicators above, with additional factors known to be associated with poor health outcomes. A vulnerable population means potentially greater negative effects on communities caused by external stresses such as natural or human-caused disasters, or disease outbreaks.[4] The highlighted counties represent service areas that are over 75.0 percent vulnerable. Darker colors indicate higher percentile rankings, while greater percentile values represent greater vulnerability.

Exhibit 3: Minority Health Social Vulnerably Index



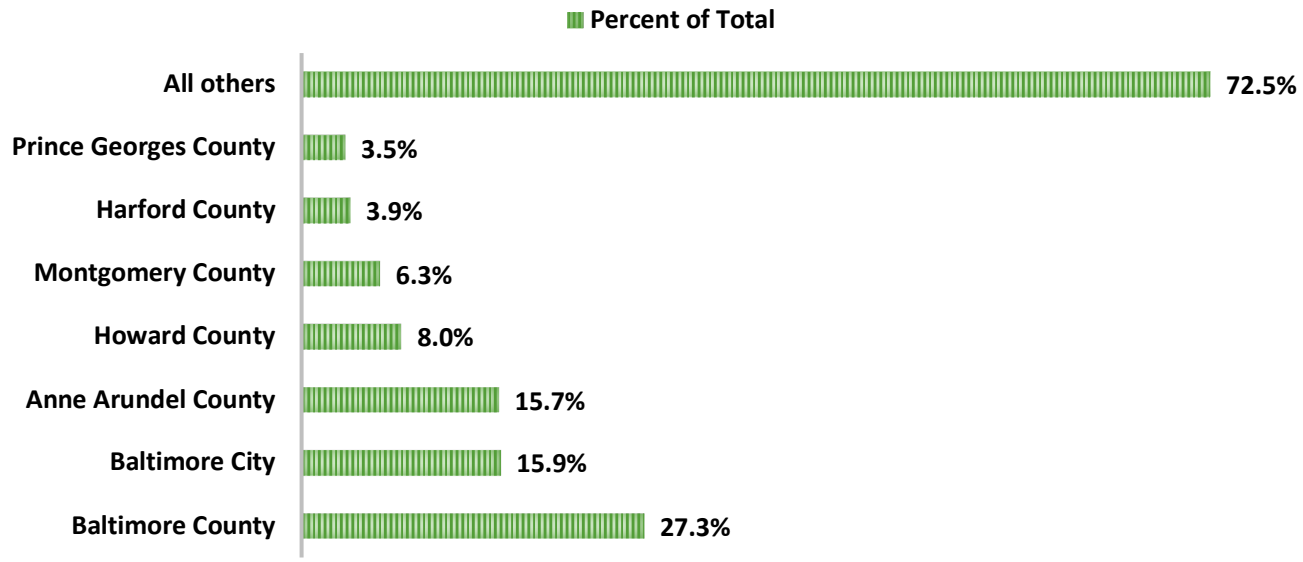
Source: Minority Health Social Vulnerability Index Explorer

[4] CDC, Minority Health Social Vulnerability Index Explorer.

Sheppard Pratt Service Use Data

Sheppard Pratt's clients are heavily divided into three groups: those living in Baltimore City (15.9% of the total), those from Baltimore County (27.3%), and the remainder from contiguous or nearby counties (Anne Arundel, 15.7%; Howard, 8.0%, Montgomery, 6.3%; and others). Nearly half (43.2%) of SP patients are from Baltimore City or Baltimore County. Patients from the DC-Metro area (e.g., Montgomery County, Prince Georges County) are commonly found among the SP patient population.

Exhibit 4: Patients by County



Location	Patient Count	Percent of Total	Cumulative Percent
Anne Arundel County	2,215	15.7%	58.9%
Baltimore County	2,234	15.9%	43.2%
Baltimore City	3,844	27.3%	27.3%
Harford County	546	3.9%	77.0%
Howard County	1,120	8.0%	66.9%
Montgomery County	880	6.3%	73.1%
Prince George's County	491	3.5%	80.5%
All Others	2,747	19.5%	100.0%

Source: Data provided by Sheppard Pratt

The primary diagnoses for Shepard Pratt patients are heavily concentrated. Although there are more than 150 primary diagnoses among IPFY20-21 patients, the most common 10 comprise nearly two-thirds (63.3%) of all patient's primary diagnosis. Depressive disorders comprise three of the most common five primary diagnoses – more than one-quarter of total patient primary diagnoses. Schizoaffective and related conditions make up three of the most common eight primary diagnoses – found with more than one in ten (10.4%) patients.

Exhibit 5: Patient Primary Diagnosis Prevalence

Top 20	Primary Diagnosis	Count	% of Total	Cumulative % of Total
1	Major depressive disorder, single episode, unspecified-F32.9	2,016	14.3%	14.3%
2	Bipolar disorder, unspecified-F31.9	1,761	12.5%	26.8%
3	Disruptive mood dysregulation disorder-F34.81	1,311	9.3%	36.1%
4	Major depressive disorder, recurrent severe w/o psych features-F33.2	976	6.9%	43.1%
5	Major depressive disorder, recurrent, unspecified-F33.9	564	4.0%	47.1%
6	Schizoaffective disorder, unspecified-F25.9	539	3.8%	50.9%
7	Schizoaffective disorder, bipolar type-F25.0	459	3.3%	54.2%
8	Schizophrenia, unspecified-F20.9	445	3.2%	57.3%
9	Major depressive disorder, single epsd, sev w/o psych features-F32.2	422	3.0%	60.3%
10	Unsp psychosis not due to a substance or known physiol cond-F29	417	3.0%	63.3%
11	Unspecified mood [affective] disorder-F39	364	2.6%	65.9%
12	Major depressive disorder, recurrent, severe w psych symptoms-F33.3	324	2.3%	68.2%
13	Bipolar II disorder-F31.81	317	2.3%	70.4%

Top 20	Primary Diagnosis	Count	% of Total	Cumulative % of Total
14	Post-traumatic stress disorder, unspecified-F43.10	310	2.2%	72.6%
15	Bipolar disorder, crnt episode manic severe w psych features-F31.2	271	1.9%	74.6%
16	Major depressive disorder, recurrent, moderate-F33.1	211	1.5%	76.1%
17	Major depressive disorder, single epsd, severe w psych features-F32.3	202	1.4%	77.5%
18	Impulse disorder, unspecified-F63.9	196	1.4%	78.9%
19	Unspecified dementia with behavioral disturbance-F03.91	140	1.0%	79.9%
20	Anorexia nervosa, restricting type-F50.01	138	1.0%	80.9%

Source: Data provided by Sheppard Pratt

Secondary diagnoses are identified with nearly all SP patients. The two most common secondary diagnoses comprise three of seven (approaching half) of all patients' conditions. Suicidal ideation is the dominant secondary diagnosis among SP patients – found among more than one-third (34.8%) of patient admissions. Substance-related issues (e.g., nicotine, opioids, and others) are seen in five of the most common 10 secondary diagnoses – representing one in six (16.8%) of all SP patients.

Exhibit 6: Secondary Diagnosis Prevalence

Top 20	Primary Diagnosis	Count	% of Total	Cumulative % of Total
1	Suicidal ideations-R45.851	1,238	8.8%	43.5%
2	Nicotine dependence, cigarettes, with withdrawal-F17.213	352	2.5%	46.0%
3	Opioid dependence, uncomplicated-F11.20	320	2.3%	48.3%
4	Urinary tract infection, site not specified-N39.0	297	2.1%	50.4%
5	Attention-deficit hyperactivity disorder, unspecified type-F90.9	284	2.0%	52.4%
6	Cocaine dependence, uncomplicated-F14.20	253	1.8%	54.2%
7	Alcohol dependence with withdrawal, uncomplicated-F10.230	238	1.7%	55.9%
8	Nicotine dependence unspecified, with withdrawal-F17.203	216	1.5%	57.5%
9	Anxiety disorder, unspecified-F41.9	211	1.5%	59.0%
10	Post-traumatic stress disorder, unspecified-F43.10	171	1.2%	60.2%
11	Major depressive disorder, recurrent, unspecified-F33.9	157	1.1%	61.3%
12	Cannabis abuse, uncomplicated-F12.10	153	1.1%	62.4%
13	Generalized anxiety disorder-F41.1	140	1.0%	63.4%
14	Major depressive disorder, recurrent severe w/o psych features-F33.2	128	0.9%	64.3%

Top 20	Primary Diagnosis	Count	% of Total	Cumulative % of Total
15	Oppositional defiant disorder-F91.3	119	0.8%	65.1%
16	Unspecified intellectual disabilities-F79	119	0.8%	66.0%
17	Unsp psychosis not due to a substance or known physiol cond-F29	118	0.8%	66.8%
18	Cannabis dependence, uncomplicated-F12.20	115	0.8%	67.6%
19	Autistic disorder-F84.0	108	0.8%	68.4%
20	Major depressive disorder, single episode, unspecified-F32.9	108	0.8%	68.4%

Source: Data provided by Sheppard Pratt

Sheppard Pratt Service Area

Demographic Profile

Sheppard Pratt provides behavioral health services in 16 counties and treats patients from across Maryland and beyond. The primary service area comprises of seven counties: Anne Arundel County, Baltimore County, Baltimore City, Harford County, Howard County, Montgomery County, and Prince George's County. For the purposes of this report, data was collected for the hospital's primary service area.

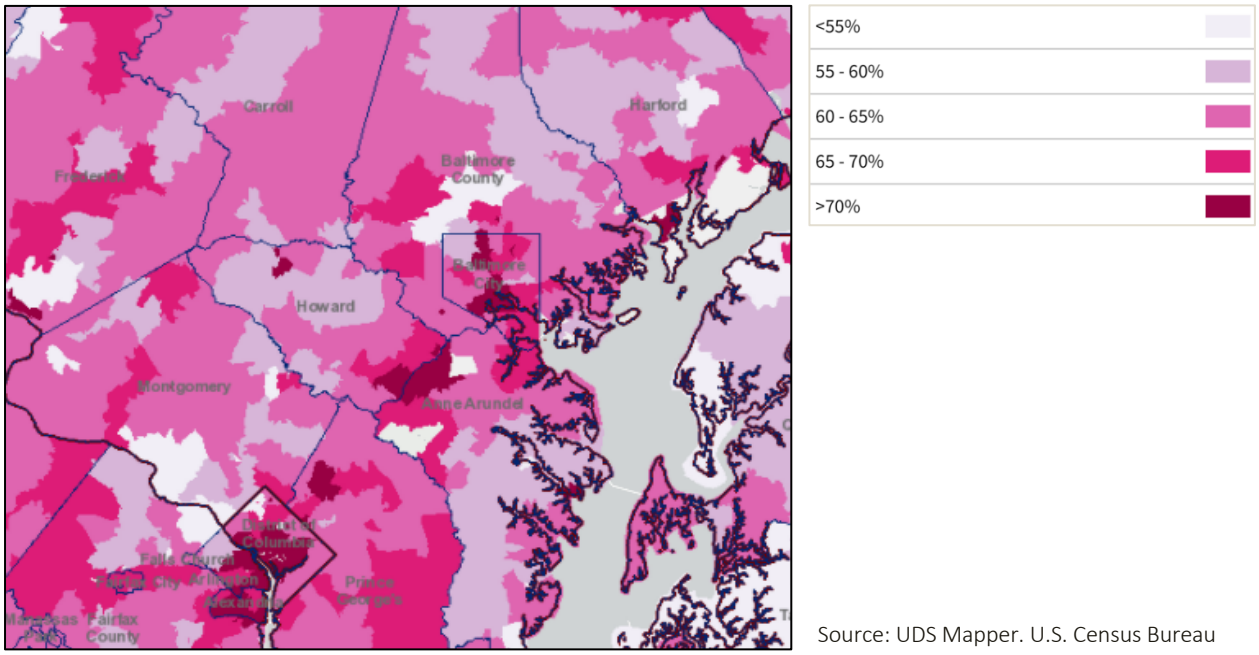
Montgomery County is the most populated county served by Sheppard Pratt, while Howard County presents the smallest of served communities. The dispersion of men and women are relatively equal across all service area counties. The map below indicates the percentage of residents between the ages of 18 to 64. Darker shades of pink indicate a higher concentration of residents within this age group.

Exhibit 7: Service Area Population

	Total Population	Male	Female
United States	324,697,795	49.2%	50.8%
Maryland	6,018,848	48.5%	51.5%
Anne Arundel County	564,600	49.5%	50.5%
Baltimore County	828,637	47.4%	52.6%
Baltimore City	619,796	47.0%	53.0%
Harford County	312,495	49.0%	51.0%
Howard County	250,132	48.9%	51.1%
Montgomery County	1,043,530	48.3%	51.7%
Prince George's County	908,670	48.1%	51.9%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Exhibit 8: Total Population Ages 18 to 64



Source: UDS Mapper. U.S. Census Bureau American Community Survey year estimates for ZCTAs, 2015-2019

The age of service area communities is an important indicator, as behavioral health service needs are unique to children, adults, as well as seniors aged 65 and older. Bracketed age-related data indicates that the service area is comprised mostly of adults between the ages of 35 and 54.

Exhibit 9: Adult Population

	20 - 24	25 - 34	35 - 54	55 - 64	65 +
United States	6.8%	13.9%	25.6%	12.9%	15.6%
Maryland	6.4%	13.8%	26.7%	13.3%	15.0%
Anne Arundel County	6.5%	14.2%	27.2%	13.2%	14.4%
Baltimore County	6.2%	13.8%	25.2%	13.6%	16.8%
Baltimore City	7.0%	19.0%	24.4%	12.7%	13.6%
Harford County	6.0%	12.4%	26.9%	14.3%	15.8%
Howard County	5.7%	12.2%	29.0%	13.0%	13.4%
Montgomery County	5.7%	12.8%	27.9%	13.1%	15.0%
Prince George's County	6.9%	14.7%	24.4%	12.8%	12.9%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Exhibit 10: Child Population

	Under 5	5 - 9	10 - 19	Under 18
United States	6.1%	6.2%	12.9%	22.6%
Maryland	6.1%	6.2%	12.5%	22.3%
Anne Arundel County	6.2%	6.1%	12.4%	22.4%
Baltimore County	5.9%	6.1%	12.4%	21.6%
Baltimore City	6.4%	6.4%	11.2%	20.7%
Harford County	5.6%	6.1%	12.9%	22.4%
Howard County	5.9%	6.8%	14.0%	24.4%
Montgomery County	6.3%	6.5%	12.6%	23.3%
Prince George's County	6.6%	6.6%	12.5%	22.3%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

- All service area counties are comprised of approximately 20.0 to 24.0 percent of children, age 18 and younger. Howard County presents a slightly larger population of children between the ages or 10 and 19.
- The quantity of adults 65 and older is in line with the national and state averages. It is important to note that while all age groups have unique and ever-changing health needs, older populations are more likely to require more healthcare services as average healthcare spending increases in tandem with age. In 2019, the average annual cost on individual health care was approximately $7,180 for ages 45 to 54, compared to approximately $13,050.[5]

[5] Peterman-KFF Health System Tracker.

The median age is useful in summarizing whether a population is aging, however it is important to note that there is more to the age structure of the population than the snapshot that median age alone can provide.[6] The median age of a community member within Shepard Pratt's service area ranges from 35.4 in Baltimore City to 40.9 in Harford County.

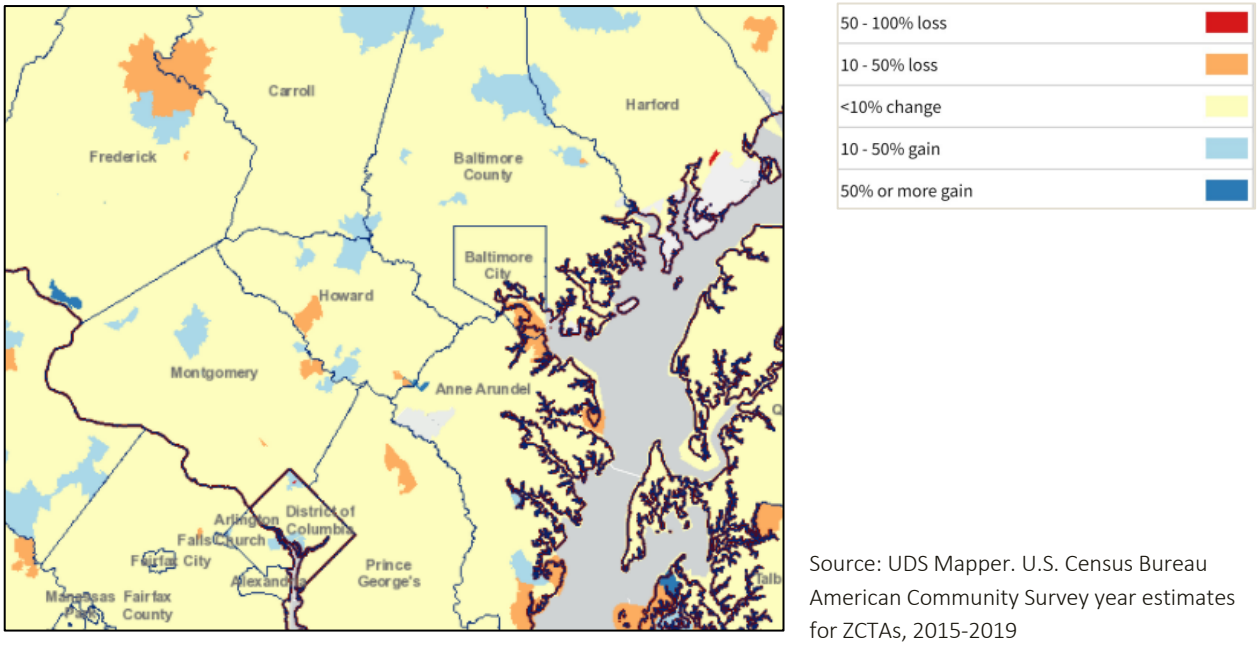
Exhibit 11: Median Age

	Median Age
United States	38.1
Maryland	38.7
Anne Arundel County	38.3
Baltimore County	39.4
Baltimore City	35.4
Harford County	40.9
Howard County	38.8
Montgomery County	38.1
Prince George's County	38.7

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

[6] U.S Census Bureau. Counties Can Have the Same Median Age But Very Different Population Distributions, 2019.

Exhibit 12: Change of Total Population, 2017 to 2019



Source: UDS Mapper. U.S. Census Bureau American Community Survey year estimates for ZCTAs, 2015-2019

- **Exhibit 12** displays population gain and loss between 2017 to 2019. Orange shaded areas indicate a ten to 50.0 percent population decline, while the light and dark blue indicates a 10 to 50 percent or more increase. Yellow shaded areas indicate a change of less than 10.0 percent.

Research suggests that racial and ethnic minority populations experience disparities when accessing mental health and substance use treatment, are also less likely to seek treatment overall.[7] Sheppard Pratt's service area has some racial and ethnic diversity, which is a critically important factor to incorporate into delivering culturally competent behavioral health care.

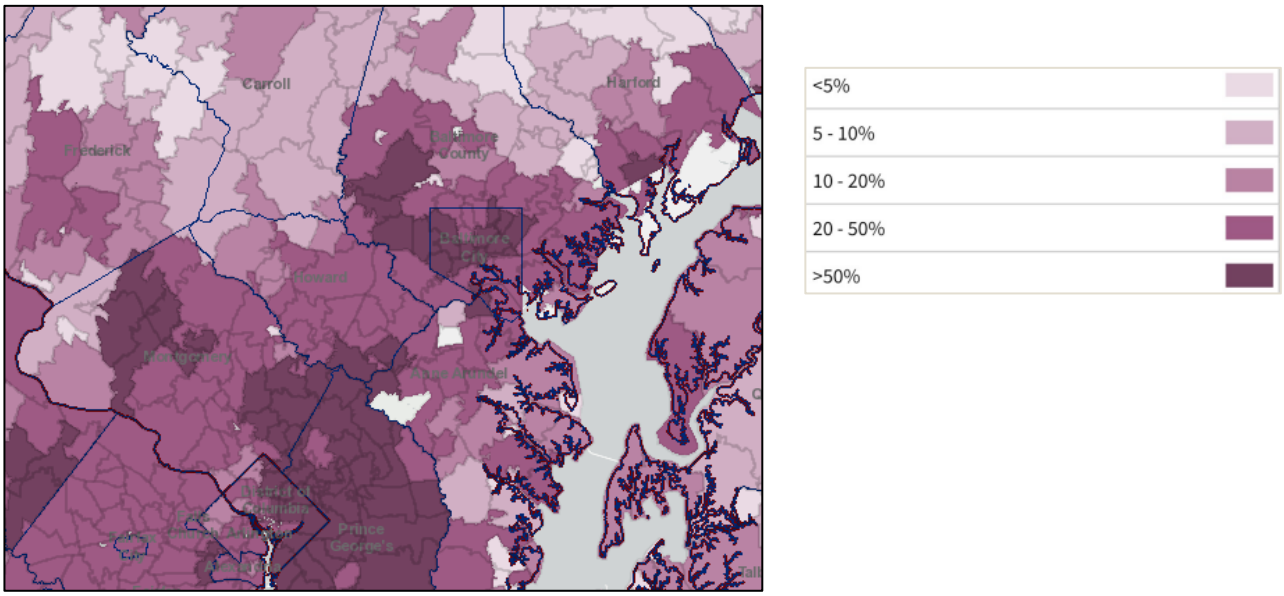
Exhibit 13: Population by Race & Ethnicity

	White	African American / Black	American Indian & Alaska Native	Asian	Other
United States	60.7%	12.3%	0.7%	5.5%	0.2%
Maryland	50.9%	29.4%	0.2%	6.2%	0.3%
Anne Arundel County	68.2%	16.3%	0.1%	3.7%	0.3%
Baltimore County	57.3%	28.5%	0.2%	6.0%	0.2%
Baltimore City	27.5%	61.8%	0.2%	2.6%	0.4%
Harford County	76.1%	13.5%	0.2%	2.6%	0.2%
Howard County	52.0%	18.5%	0.2%	18.0%	0.5%
Montgomery County	43.8%	17.9%	0.1%	14.7%	0.6%
Prince George's County	12.7%	61.7%	0.2%	4.1%	0.4%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

[7] Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report, February 2021.

Exhibit 14: Ethnic Minority Population



Source: UDS Mapper. U.S. Census Bureau American Community Survey year estimates for ZCTAs, 2015-2019

- Maryland presents a higher percentage of those identifying as African American or Black compared to the United States – a nearly 20.0 percent difference. Maryland also has a slightly greater population who identify as Asian, including Howard and Montgomery County which also present a relatively higher population of those who identify as Asian within the service area.

The population of residents born in Maryland and service area counties present an additional layer of ethnic and racial diversity. In Prince George's County as well as Baltimore City the population consists of over 50.0 percent of residents who were not U.S. citizens at the time of data collection. There are concentrations of counties within the service area that 25 to 50 percent bilingual.

Exhibit 15: Foreign-Born Population

	Total Population	Foreign-born population	Naturalized U.S. citizen	Not a U.S. citizen
United States	324,697,795	44,011,870	49.6%	50.4%
Maryland	6,018,848	912,887	51.6%	48.4%
Anne Arundel County	564,600	48,232	55.7%	44.3%
Baltimore County	828,637	104,659	53.7%	46.3%
Baltimore City	619,796	49,588	41.1%	58.9%
Harford County	312,495	13,271	70.7%	29.3%
Howard County	250,132	67,408	61.3%	38.7%
Montgomery County	1,043,530	337,188	54.3%	45.7%
Prince George's County	908,670	206,277	42.9%	57.1%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Exhibit 16: Language Spoken

	Total Population, Age 5 +	English only	Language other than English	Speak English less than very well
United States	304,930,125	78.4%	21.6%	8.4%
Maryland	5,653,980	81.0%	19.0%	7.0%
Anne Arundel County	536,096	88.6%	11.4%	3.8%
Baltimore County	779,029	85.2%	14.8%	5.2%
Baltimore City	569,973	90.1%	9.9%	3.7%
Harford County	238,091	92.6%	7.4%	2.1%
Howard County	299,917	74.6%	25.4%	7.4%
Montgomery County	977,513	58.8%	41.2%	14.3%
Prince George's County	848,758	72.7%	27.3%	12.5%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Social & Physical Environment

Educational Achievement

Education shapes employment opportunities and related benefits. By understanding the differences in levels in education based on race and ethnicity, communities can begin to address the disparities to improve overall wellness. Additionally, this data may highlight an unequal distribution of academic resources such as school funding, teacher supply, and/or access to technology may be identified for future services. The percent of the population with no high school diploma in Baltimore City is nearly double of the population statewide (10.1%, 5.8%, respectively).

Exhibit 17: Population With No High School Diploma

	No High School Diploma
United States	6.9%
Maryland	5.8%
Anne Arundel County	5.3%
Baltimore County	5.4%
Baltimore City	10.1%
Harford County	5.1%
Howard County	5.1%
Montgomery County	3.8%
Prince George's County	6.4%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Exhibit 18: High School Diploma or Higher Level Degree by Race

	White	Black or African American	American Indian & Alaska Native	Asian	Other
United States	92.9%	86.0%	80.3%	87.1%	62.7%
Maryland	93.8%	90.2%	75.9%	90.2%	55.2%
Anne Arundel County	94.2%	91.8%	81.8%	87.4%	65.6%
Baltimore County	92.9%	92.6%	77.6%	86.4%	68.0%
Baltimore City	90.9%	83.0%	77.9%	91.2%	66.5%
Harford County	93.0%	92.3%	89.0%	93.4%	72.2%
Howard County	97.4%	96.2%	99.4%	93.4%	89.7%
Montgomery County	97.8%	92.7%	69.5%	91.3%	60.3%
Prince George's County	94.3%	93.3%	66.8%	88.5%	44.3%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Employment & Income

Employment is an important factor within the behavioral healthcare sphere, as more and more employees are leaving their jobs for mental health reasons, including those caused by workplace factors like overwhelming and unsustainable work.[8]

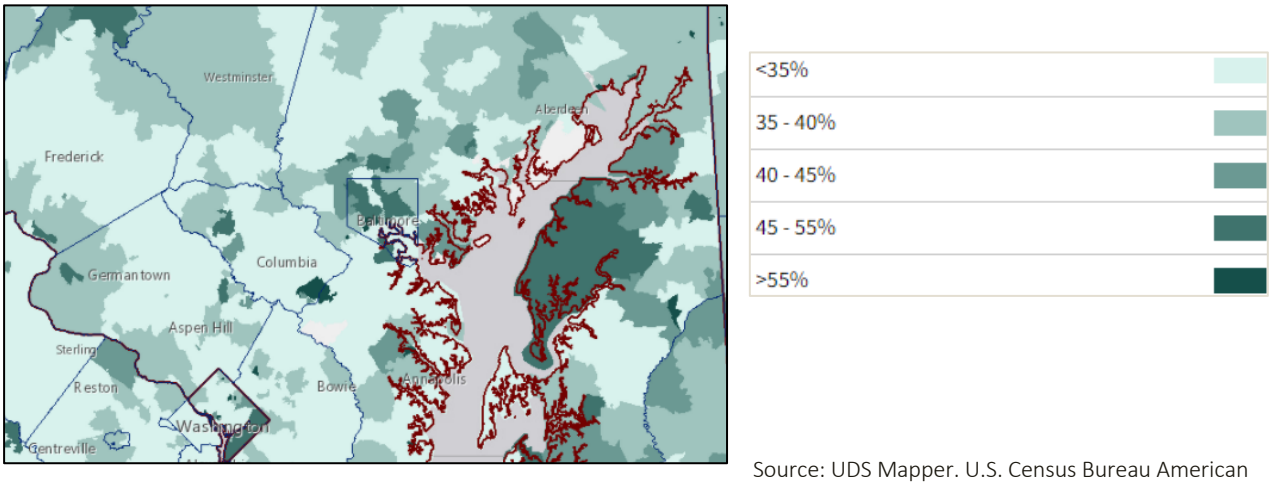
Exhibit 19: Annual Unemployment Rate

	2019	2020	2021
United States	3.7%	8.1%	5.3%
Maryland	3.6%	6.7%	5.8%
Anne Arundel County	3.0%	5.8%	4.7%
Baltimore County	3.6%	8.8%	5.7%
Baltimore City	5.0%	6.8%	7.6%
Harford County	3.2%	5.8%	4.8%
Howard County	2.7%	5.2%	4.3%
Montgomery County	2.9%	6.3%	5.5%
Prince George's County	3.7%	8.2%	7.5%

Source: See footnote.[9]

[8] Harvard Business Review. It's a New Era for Mental Health at Work, October 2021
[9] U.S. Maryland 2019, U.S. Maryland 2020, 2021. County-level, 2019 & 2020. County-level, 2021.

Exhibit 20: Unemployed Population



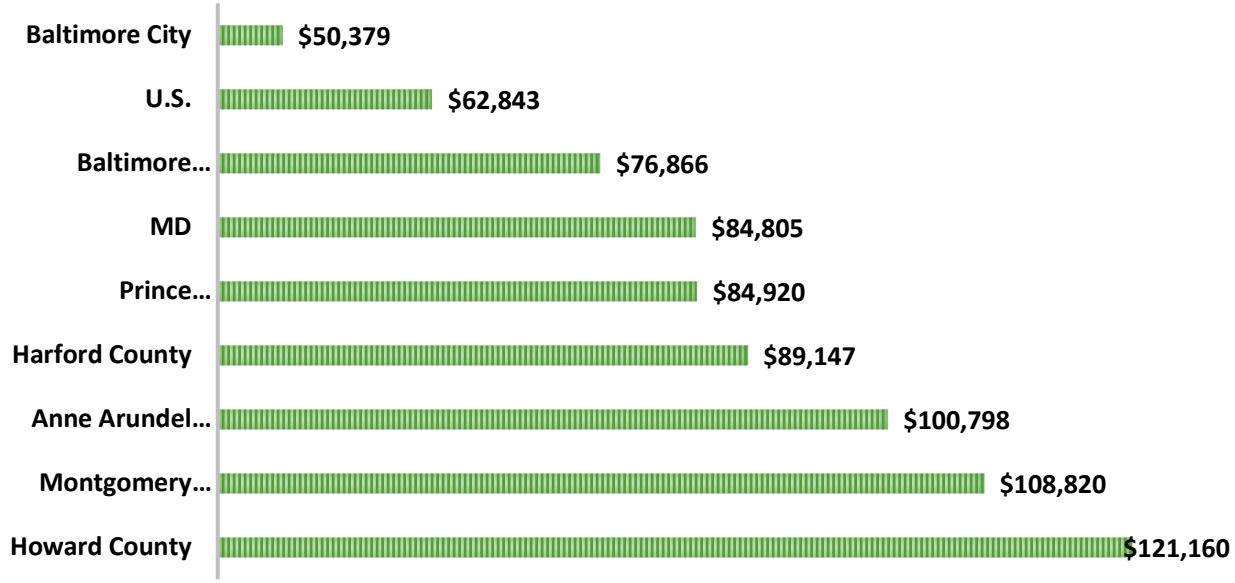
Source: UDS Mapper. U.S. Census Bureau American Community Survey year estimates for ZCTAs, 2015-2019

- November preliminary data indicates that Maryland gained 8,400 jobs and the unemployment rate decreased to 5.4 percent - the lowest unemployment rate since the beginning of the COVID-19 pandemic.
- Since the beginning of 2021, Maryland has gained a total of 91,000 jobs. Maryland added jobs more than twice as quickly as the rest of the U.S. The Trade, Transportation, and Utilities sector recovered all jobs lost due to the pandemic. [10]

[10] Nottingham. Maryland gained 8,400 jobs, the unemployment rate fell to 5.4 percent in November, December 2021

Economic stability is a known social determinant of health as people living in poverty are less likely to have access to health care, healthy food, stable housing, and opportunities for physical activity. Research suggests that low-income status is associated with adverse health consequences, including shorter life expectancy, higher infant mortality rates, and other poor health outcomes. **Exhibit 21** reveals a wide diversity of socioeconomic status within service area counties.

Exhibit 21: Median Annual Household Income



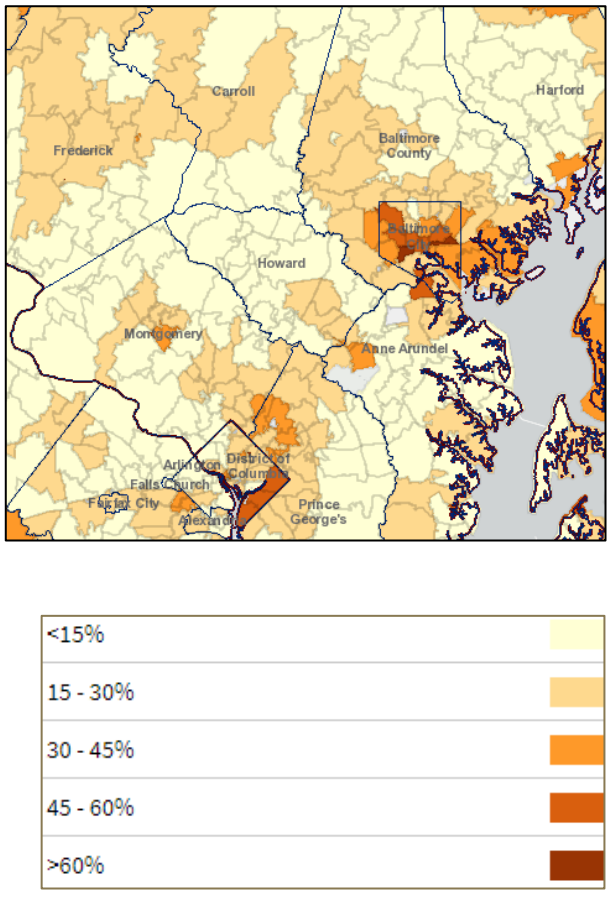
United States	$62,843
Maryland	$84,805
Anne Arundel County	$100,798
Baltimore County	$76,866
Baltimore City	$50,379
Harford County	$89,147
Howard County	$121,160
Montgomery County	$108,820
Prince George's County	$84,920

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

- The average household income for counties ranges from approximately $50,370 in Baltimore City to over $120,000 in Howard County and nearly $110,000 in Montgomery County. Over half of the population in Harford, Montgomery, as well as Anne Arundel County earn an annual income of over $100,000.

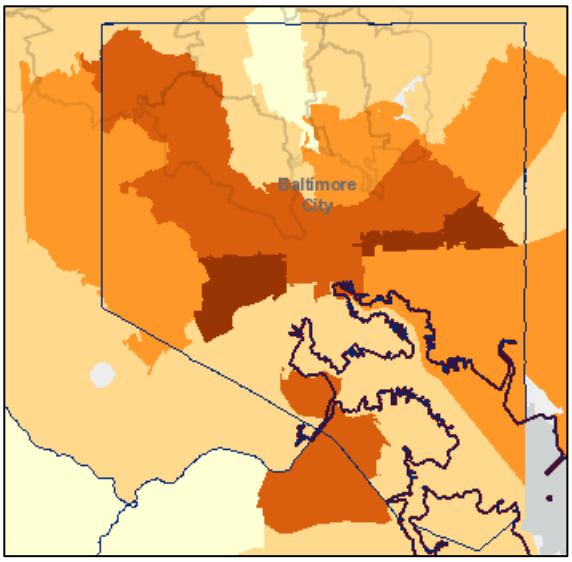
Disadvantaged Communities

Behavioral health equity is the right to access quality health care for all populations regardless of the individual's socioeconomic status, sexual orientation, race, ethnicity, gender, or geographical location including access to prevention, treatment, and recovery services for mental and substance use disorders.[11] The map below displays the population living 200 percent below the Federal Poverty Level, or in low-income communities. This data isolates communities that experience inequities within the behavioral healthcare system.



Areas with the highest concentrated percentage of low-income residents include town of Edgewood and Gunpowder in Harford County, Fort George in Anne Arundel County, Gaithersburg in Montgomery County, as well as other locations shaded in deeper shades of orange.

Exhibit 22: Low-Income Communities



Source: UDS Mapper, American Community Survey (ACS) five-year estimates for ZCTAs, 2014-2018 (U.S. Census Bureau)

[11] SAMHSA. Behavioral Health Inequity, 2021.

There are clear disparities between race and poverty within the service area as more people who identify as Black or African American, American Indian and Alaskan Native, as well as those who identify as another race experience higher rates of poverty compared to the white population.

Exhibit 23: Poverty by Race

	White	Black or African American	American Indian & Alaska Native	Asian	Native Hawaiian & Other Pacific Islander	Other
United States	11.1%	23.0%	24.9%	10.9%	17.5%	21.0%
Maryland	6.7%	13.3%	15.1%	7.0%	7.1%	14.5%
Anne Arundel County	4.7%	10.0%	14.6%	4.2%	2.3%	11.9%
Baltimore County	7.5%	10.9%	12.9%	9.5%	6.2%	25.8%
Baltimore City	12.5%	25.6%	34.8%	19.1%	31.9%	23.9%
Harford County	5.8%	13.8%	10.5%	2.9%	0.0%	13.2%
Howard County	3.3%	9.6%	4.4%	5.1%	0.0%	6.6%
Montgomery County	4.3%	10.8%	6.9%	5.9%	8.2%	14.6%
Prince George's County	8.9%	7.4%	24.0%	8.9%	10.0%	12.4%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Housing

Indicators related to household composition and housing-related finances are important factors to review, as children living in single-parent households are at a higher risk for adverse health outcomes, including mental illness, substance use disorders, depression, suicide as well as unhealthy behaviors like smoking and excessive alcohol use. Self-reported health has been shown to be worse among lone mothers than for mothers living as couples, even when controlling for socioeconomic characteristics. [12]

Exhibit 24: Household & Family Size

	Average household size	Average family size
United States	2.62	3.23
Maryland	2.67	3.26
Anne Arundel County	2.64	3.16
Baltimore County	2.58	3.20
Baltimore City	2.45	3.42
Harford County	2.67	3.14
Howard County	2.77	3.26
Montgomery County	2.79	3.35
Prince George's County	2.86	3.53

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

[12] County Health Rankings & Roadmaps. Children in Single-Parent Households.

Exhibit 25: Select Housing Characteristics

	Single Parent Households	Median Home Value	Homeowner Cost Burden	Renter Cost Burden	Vacant Housing Units
United States	6.6%	$217,500	27.8	49.6	12.1%
Maryland	7.0%	$314,800	27.5	49.7	9.9%
Anne Arundel County	5.9%	$361,200	25.8	46.9	6.5%
Baltimore County	7.0%	$261,500	26.0	49.5	7.0%
Baltimore City	10.0%	$160,100	31.1	51.2	18.7%
Harford County	5.0%	$293,400	24.1	49.9	6.2%
Howard County	6.3%	$455,700	24.0	43.4	4.5%
Montgomery County	6.0%	$484,900	27.2	50.6	4.7%
Prince George's County	8.5%	$302,800	32.3	51.3	6.5%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

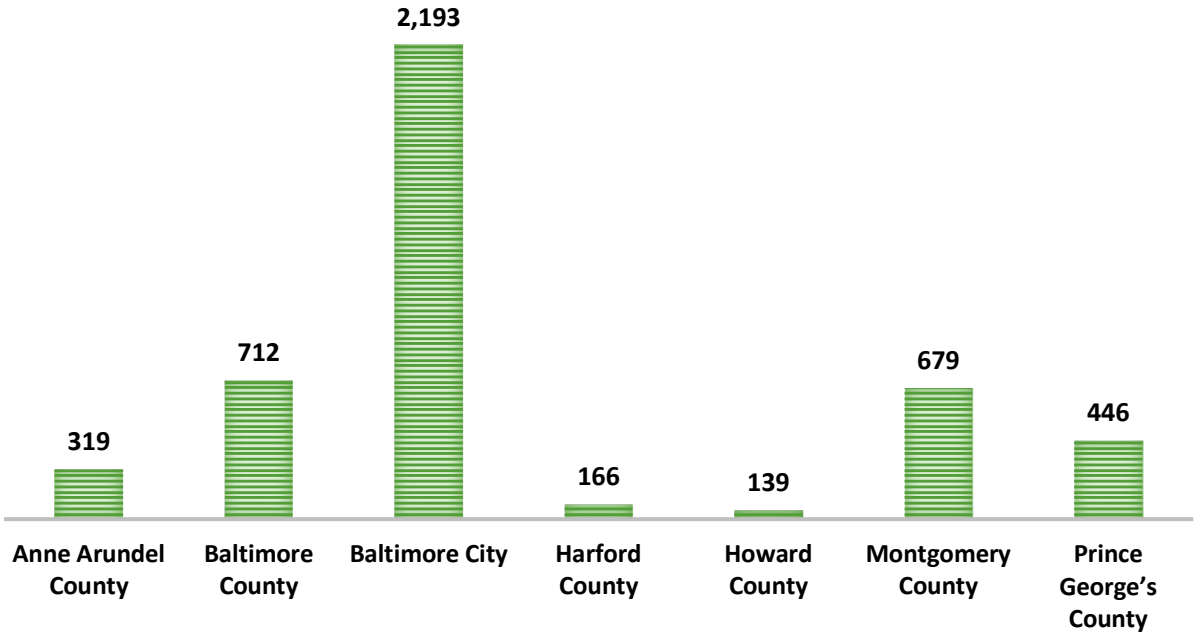
- Nearly half 48.7 percent of households in Sheppard Pratt's service area are single-parent households – exceptionally higher in Baltimore City and Prince Georges County.
- The average home value in Maryland is higher compared the U.S, and values range dramatically throughout service areas from $160,100 in Baltimore City to $484,900 in Montgomery County.

Housing Insecure Communities

People who are experience housing insecurity are at elevated risk for experiencing substance use disorders, mental disorders, trauma, medical conditions, employment challenges, and incarceration.[13] The Point-in-Time (PIT) Count is a federally mandated survey conducted annually which seeks to determine how many people are experiencing homelessness on any given night. **Exhibit 26** displays the total number of people considered to be homeless in 2020. It is important to note that data from the 2020 PIT count was gathered in January of 2020, prior to the COVID-19 outbreak. Additionally, the sheltered community includes those being housed in an Emergency Shelter or Transitional Housing (Safe Haven programs are included in the Transitional Housing category).

Populations in Baltimore County, Baltimore City, as well as Montgomery County face more housing insecurity in comparison to other service area counties.

Exhibit 26: Point in Time Count



	Sheltered	Unsheltered	Total
Anne Arundel County	229	90	**319**
Baltimore County	496	216	**712**
Baltimore City	1,895	298	**2,193**

[13] SAMHSA. Behavioral Health Services For People Who Are Homeless, 2021.

Harford County	153	13	**166**
Howard County	99	40	**139**
Montgomery County	567	103	**679**
Prince George's County	375	91	**446**

Source: Mayor's Office of Homeless Services. Point in Time County, 2020 [14]

Service Area Resources

While the exact number of permanent support housing (PSH) options per county are unknown, Maryland's Interagency Council on Homelessness has made increasing PHS and Rapid Re-housing services for all communities statewide as this model has demonstrated both cost and outcome effectiveness and has become the principal public health paradigm to address homelessness in communities across the country.[15]

Opportunity Zones

Opportunity Zones highlight economically-distressed communities where at least 20 percent of the population is living in poverty and the median family income is no greater than 80 percent of the area median.[16]

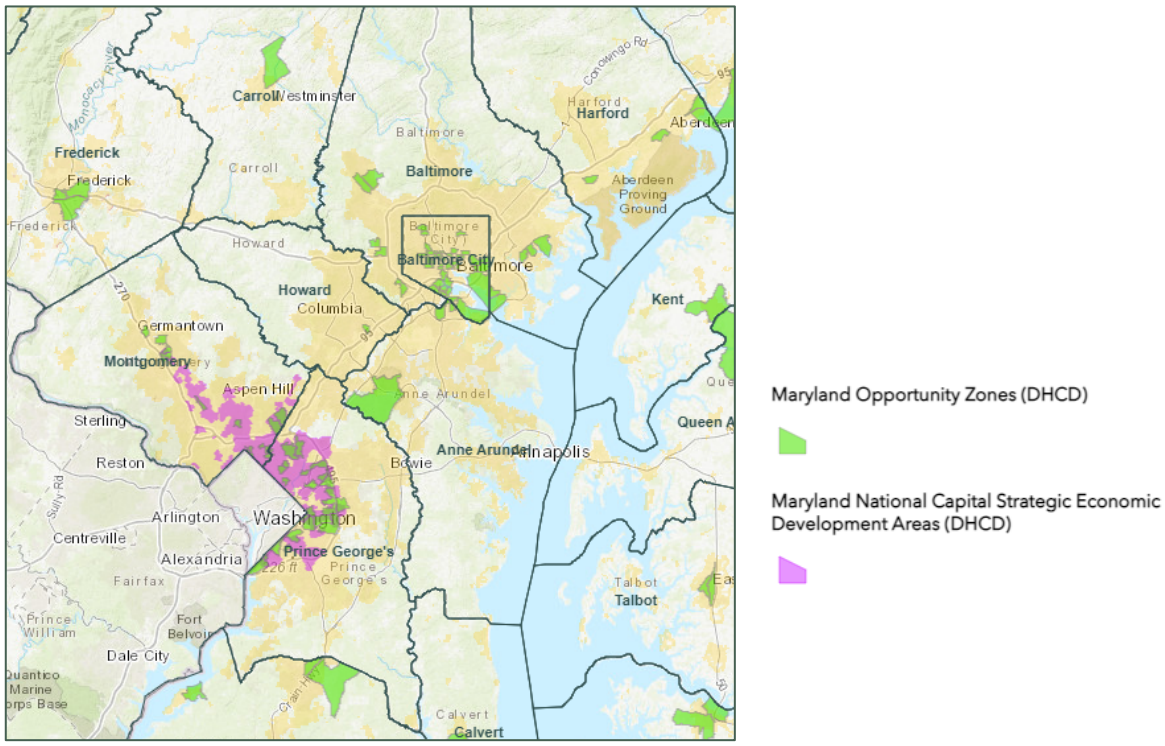
Permanent supportive housing is an intervention that combines affordable housing assistance with voluntary support services to address the needs of chronically homeless people.

The services are designed to build independent living and tenancy skills and connect people with community-based health care, treatment, and employment services.

- ***National Alliance to End Homelessness***

[14] Mayor's Office of Homeless Services. Point in Time County, 2020.
[15] Homeless Services Framework. Maryland's Interagency Council on Homelessness, 2019.
[16] Maryland Department of Housing & Community Development, Frequently Asked Questions.

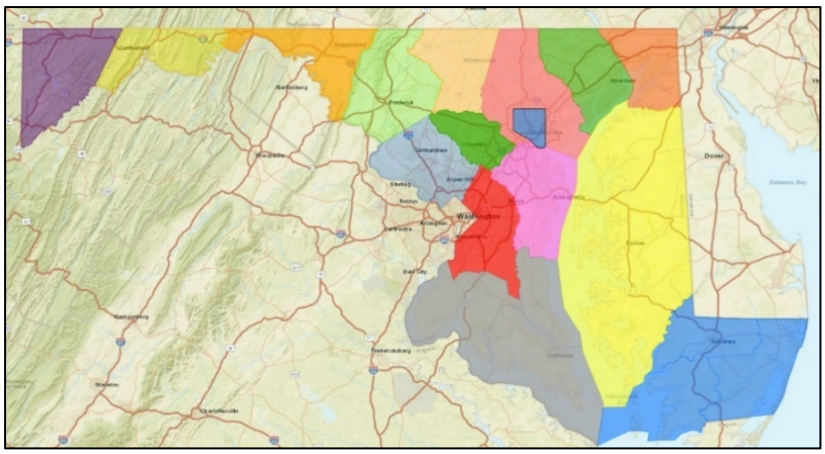
Exhibit 27: Opportunity Zones Within Sheppard Pratt's Service Area



Source: Maryland Department of Housing & Community Development. Neighborhood Revitalization Mapper

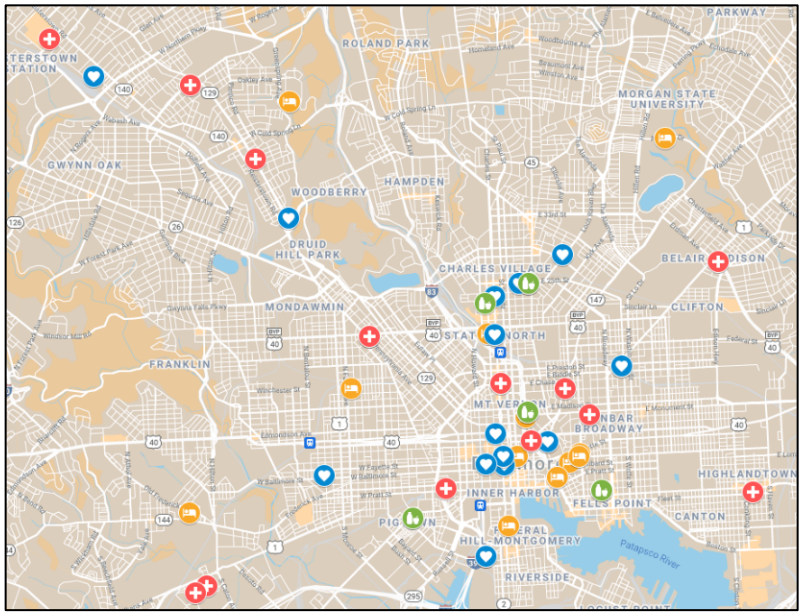
To address housing-related inequities, Maryland has developed tools to help housing insecure people connect to services and resources throughout the state and within high priority populations as mentioned above. The map below indicates community organizations that take lead in providing resources for this population through the state's Continuum of Care (CoC), a regional or local planning body that coordinates housing and services funding for homeless families and individuals.[17] **Exhibit 28** provides a snapshot of an interactive map from the Baltimore City Mayor's Office of Homeless Services indicating locations of resources such as food, legal services, showers, clothing, health care, another services.

Exhibit 28: Maryland Community Services Locator [18]



Source: Maryland DHHS. Maryland Community Services Locator

Exhibit 29: Baltimore Resource Map[19]



Source: City of Baltimore. Mayor's Office of Homeless Services Resource Map

[17] National Alliance to End Homelessness. What is a Continuum of Care (CoC)?, 2010.
[18] Maryland DHHS. Maryland Community Services Locator.
[19] City of Baltimore. Mayor's Office of Homeless Services Resource Map.

Crime & Violence

Historically, people with a mental health disorder have been branded as being more likely to commit an act of violence or other crime. Research has begun to identify the root cause of why people with serious mental illnesses may be prone to violence while others may not.[20] The increasing number of individuals with mental health and substance use conditions in the criminal justice system has enormous fiscal, health, and human costs.

According to the 2019 Maryland Vital Statistics Report, the mortality rate due to homicide increased slightly from 9.3 in 2018. Although not included within this assessment, the Vital Statistics report also shares that the homicide rate for Non-Hispanic Black African American males was 49.0 per 100,000 population, which is 20 times higher than the rate among Non-Hispanic White males.

Exhibit 30: Homicide Rate [21]

	Homicide Rate Per 100,000 People
Maryland	10.1
Anne Arundel County	4.7
Baltimore County	11.2
Baltimore City	44.4
Harford County	***
Howard County	***
Montgomery County	2.4
Prince George's County	10.1

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

[20] American Psychological Association. Mental Illness & Violence: Debunking Myths, Addressing Realities, 2021.
[21] ***Rates based on < 20 events in the numerator are not presented since such rates are subject to instability.

Exhibit 31: Trend of Homicides in Maryland by Race & Ethnicity

Per 100,000	2017	2018	2019
All Races	10.2	9.3	10.1
White	2.3	2.3	1.8
Black or African American	25.6	23.0	26.0
Hispanic	5.5	4.1	5.7

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

- The homicide rate in Baltimore City is approximately four times higher compared to the state rate (44.4, 10.1, respectively). Maryland has experienced no decrease in the homicide rate by race or ethnicity within the three-year span, except for residents identify as white which has declined by 0.2 percent.

There was an overall decline in juvenile arrests in from 2019 to 2020 (127,748, 178,890). The juvenile arrest rate indicates the number of arrests of youth between the ages of 10 and seventeen for violent and non-violent offenses, per 10,000 youth.

Exhibit 32: Juvenile Arrests

Per 10,000	2018	2019
Anne Arundel	382.0	425.5
Baltimore City	314.9	274.5
Baltimore County	489.7	523.3
Harford	306.3	230.1
Howard	173.5	182.8
Montgomery	182.6	159.6
Prince George's	100.7	119.2

Source: The Annie E. Casey Foundation, 2021 Maryland KIDS COUNT Data Book

Exhibit 33: Juvenile Recidivism

Per 10,000	2018	2019
Anne Arundel	42.4%	33.3%
Baltimore City	53.0%	50.9%
Baltimore County	55.9%	52.5%
Harford	45.0%	48.3%
Howard	56.0%	61.9%
Montgomery	49.4%	54.9%
Prince George's	27.8%	40.9%

Source: The Annie E. Casey Foundation, 2021 Maryland KIDS COUNT Data Book

- The rate of juvenile arrests increased in Anne Arundel, Baltimore, Howard, and Prince Georges County between 2018 and 2019. Baltimore County presents the highest juvenile arrest rate within the service area, 523 arrests per 10,000 youth aged 10 to 17.
- Recidivism refers to subsequent juvenile delinquent or criminal involvement of youth released from committed residential programs or youth placed on probation.

Approximately 20 percent of intimate partner violence victims have reported experiencing a new onset of psychiatric disorders such as major depressive disorder, generalized anxiety disorder, and posttraumatic stress disorder, and a wide range of substance use disorders.[22] Due to COVID-19, domestic violence victims are facing an increased range of mental health challenges, as lockdowns forced people to work and spend more time at home, cramped and isolated conditions are leaving victims, predominantly women, with little chance to leave or seek protection from abusers.[23]

Exhibit 34: Domestic Violence Protective Order

	January 2019				January 2021			
	Men	**Women**	**Unknown**	**Total**	**Men**	**Women**	**Unknown**	**Total**
Maryland	73.7%	24.5%	1.8%	**2,045**	73.2%	24.7%	2.0%	**1,187**
Anne Arundel County	74.9%	24.6%	06%	**167**	76.3%	21.6%	2.2%	**139**
Baltimore County	71.1%	24.9%	4.0%	**253**	73.1%	25.2%	1.7%	**238**
Baltimore City	76.0%	22.6%	1.4%	**279**	67.7%	27.2%	5.2%	**232**
Harford County	31.3%	68.8%	0.0%	**80**	82.4%	17.6%	0.0%	**74**
Howard County	86.3%	13.7%	0.0%	**51**	75.0%	23.4%	1.6%	**64**
Montgomery County	77.6%	22.0%	0.5%	**214**	77.7%	24.4%	0.9%	**220**
Prince George's County	70.7%	25.2%	4.2%	**457**	70.9%	26.5%	2.6%	**426**

Source: State of Maryland. Administrative Office of the Courts, Domestic Violence Monthly Summary Reporting [24]

[22] American Psychiatric Association, Intimate Partner Violence.
[23] The Baltimore Sun. The warnings came true: Domestic violence has spiked in Baltimore area amid pandemic, data and experts reveal, April 2021.
[24] State of Maryland. Administrative Office of the Courts, Domestic Violence Monthly Summary Reporting.

- The data presents that protective orders caused by domestic violence incidents have decreased between 2019 and 2021, however it is important to note that the pandemic has most certainly created more barriers for reporting.

Investigative response is the Child Protective Services' (CPS) response to cases where Alternative Response is not sufficient. Alternative Response is a type of response to low risk child abuse and neglect allegations, where rather than investigating a family and naming a caretaker as a maltreater, the Local Department of Social Services partners with the family to complete a comprehensive assessment of: (1) Risk of harm to the child; (2) Risk of subsequent child abuse or neglect; (3) Family strengths and needs; and (4) The provision of or referral for necessary services. When alternative responses are not suitable, an investigation needs to occur into whether a child's caretaker abused or neglected them.

Exhibit 35: Children Who Are Subject to a Child Protective Services Investigated Report

	2019	2020
Maryland	12,168	7,986
Anne Arundel County	1,284	775
Baltimore County	2,938	1,721
Baltimore City	1,076	714
Harford County	799	535
Howard County	276	188
Montgomery County	1,167	731
Prince George's County	1,435	1,043

Source: The Annie E. Casey Foundation, 2021 Maryland KIDS COUNT Data Book

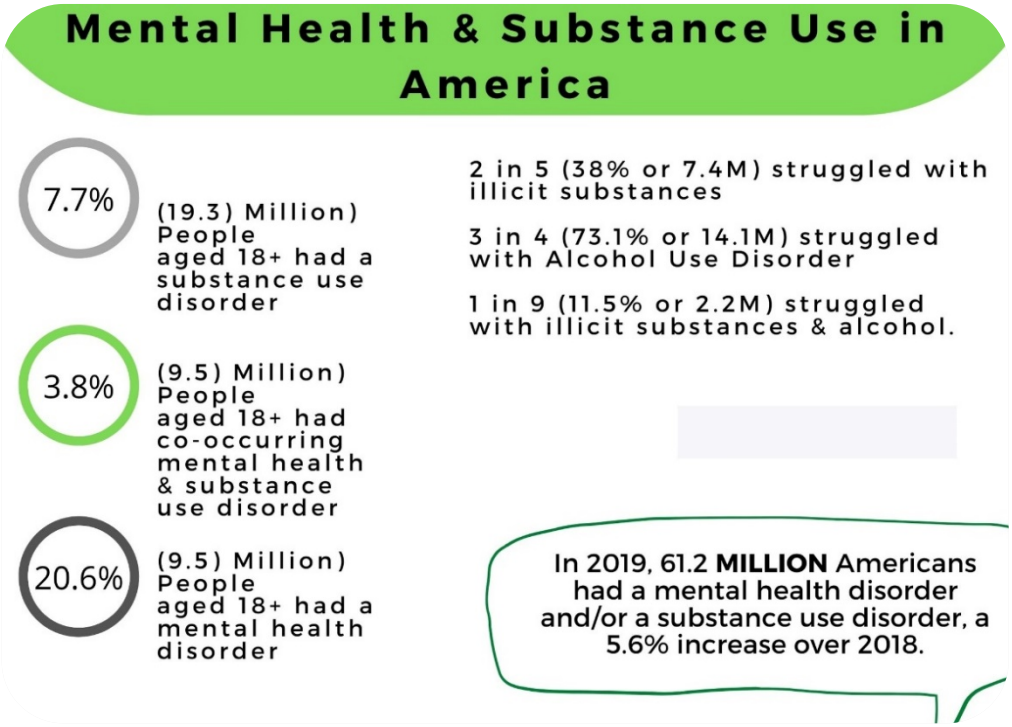
- Overall cases of invested cases of child abuse by CPS has seemingly declines between 2019 and 2020, however similar to reports of domestic violence, the pandemic has created challenges in reporting as well as how CPS conducts investigations.

Behavioral Health

Behavioral Health is the promotion of mental health, resilience, and wellbeing; the treatment of mental and substance use disorders; and the support of those who experience and/or are in recovery from these conditions, along with their families and communities. Behavioral health conditions and the behavioral health field have historically been financed, authorized, structured, researched, and regulated differently than other health conditions.[25]

Mental health and substance use disorders affect people of all ages, genders, races, and ethnic groups. Before COVID-19, out of the 330.1 million people living in America, nearly one in five (61.2 million) was living with a mental illness[26] and/or substance use disorder[27] which is a 5.9 percent increase from the prior year. Of these people, 25.5 percent (13.1 million) are experiencing a severe mental illness, which can be defined as an individual over 18 having (within the past year) a diagnosable mental, behavior, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities.[28]

Exhibit 36: National Behavioral Health



Source: SAMHSA Presentation of The National Survey on Drug Use & Health, 2019

[25] SAMHSA, Behavioral Health Integration.
[26] Any Mental Illness (AMI) is defined by SAMSHA as "having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder. Any mental illness includes persons who have a mild mental illness, moderate mental illness, and serious mental illness."
[27] The National Survey on Drug Use and Health, 2019.
[28] Mental Health and Substance Use Disorders. SAMHSA, 2020.

Mental health days measures the average number of mentally unhealthy days reported in past 30 days. In 2018, more residents in Baltimore City and County, as well as Harford County reported experiencing more poor mental health days within the service area. Mental Health America provides state-by-state rankings on a selection of indicators to reflect mental health trends.[29] The higher the rank shown in the exhibit refers to a higher prevalence of the measure. This data was collected through 2019 and is the most recent available data to report comparative baselines for the needs and systems that were in place prior to the COVID-19 pandemic.

Exhibit 37: Self-Reported Poor Mental Health Days Among Adults

	Poor Mental Health Days
United States[30]	3.8
Maryland	3.7
Anne Arundel County	3.7
Baltimore County	4.1
Baltimore City	4.9
Harford County	4.0
Howard County	3.4
Montgomery County	3.4
Prince George's County	3.8

Source: County Health Rankings & Roadmaps, 2018

[29] Mental Health America, 2021.
[30] U.S. Data refers to top performer nationwide.

Exhibit 38: Adult Mental Health Trends in the Past Year

2021 Mental Health Indicators	United States	Maryland	Rank
With any mental illness	19.0%	17.0%	**3**
Diagnosed with a substance use disorder	7.7%	6.9%	**7**
Have had serious thoughts of suicide	4.3%	4.1%	**7**
With a mental illness who are uninsured	10.8%	7.0%	**13**
With any mental illness who did not receive treatment	57.0%	59.1%	**39**
Reported an unmet need for treatment	23.6%	25.2%	**33**
With a cognitive disability who could not see a doctor due to cost	28.7%	27.5	**29**

Source: Mental Health America. Ranking the States, 2021

- Maryland holds the third-largest population of adults diagnosed with any mental illness in the past year, as well as the seventh highest population of adults diagnosed with a substance use disorder and have experienced serious suicidal ideations within the past year. Nearly 60 percent of Maryland residents with a mental illness did not receive treatment, slightly higher than the national average while a quarter of the population reported an unmet need for treatment.

It is important to note that while mental health and substance use trends during the COVID-19 pandemic continue to emerge, historical trends provide a helpful baseline snapshot for future comparisons.

More women in Maryland have experienced mental health disorders compared to men. This trend has been increasing steadily. In 2019, mood disorders (Bipolar, Depressive, Personality, and Schizophrenia / other Psychotic disorders) accounted for approximately 50 percent of mental health disorder diagnoses. While both trauma and stress-related disorders as well as anxiety disorders accounted for nearly 39 percent of all mental health diagnoses statewide and have steadily increased since 2014.

Exhibit 39: Five-Year Trend of Mental Health Diagnosis in Maryland

	2014	2015	2016	2017	2018	2019
Male	46.4%	46.1%	45.3%	46.1%	46.0%	45.6%
Female	53.6%	53.9%	54.7%	53.9%	54.0%	54.4%
Mental Health Diagnosis*						
Trauma & Stressor-Related Disorders	16.6%	16.9%	16.7%	17.3%	18.0%	18.3%
Anxiety Disorders	13.2%	15.5%	17.3%	18.3%	19.6%	20.4%
Attention-Deficit/Hyperactivity Disorder	15.5%	15.3%	16.0%	15.7%	15.7%	15.6%
Mood Disorders						
Bipolar	21.3%	17.6%	13.4%	13.0%	13.0%	12.9%
Depressive Disorders	27.6%	30.0%	28.3%	28.6%	29.0%	29.8%
Personality Disorders	†	†	†	†	†	†
Schizophrenia & Other Psychotic Disorders	9.1%	8.6%	8.6%	8.1%	7.9%	7.6%
Other Mental Health Disorders**	10.1%	10.3%	13.8%	13.5%	13.1%	12.8%

Source: SAMHSA. Mental Health Annual Report Use of Mental Health Services: National Client-Level Data, 2014 – 2019 [31]

† Less than 1 percent of individuals.

**"Mental health diagnosis" includes all mental health diagnoses, which is up to three diagnoses reported for each individual. For this reason, the numbers may not sum to total.*

*** "Other mental disorders" includes all other mental health diagnoses & diagnoses not included in another diagnostic category; it excludes alcohol/substance-related diagnoses.*

[31] SAMHSA. Mental Health Annual Report Use of Mental Health Services: National Client-Level Data, 2014 – 2019.

In 2019, there were approximately 656 deaths due to suicide in Maryland of all ages, a four person increase from 2018.

Exhibit 40: Suicide Rate [32]

	Per 100,000
United States [33]	13.9
Maryland	10.3
Anne Arundel County	13.7
Baltimore County	10.7
Baltimore City	9.0
Harford County	11.4
Howard County	8.3
Montgomery County	7.5
Prince George's County	6.6

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

Exhibit 41: Suicide Rate by Race & Ethnicity

Per 100,000	2017	2018	2019
All Races	9.9	10.2	10.3
White	13.7	14.5	14.2
Black or African American	5.6	5.2	6.1
Hispanic	3.6	4.4	4.9

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

[32] ***Rates based on <20 events in the numerator are not presented since such rates are subject to instability. Data includes all ages.
[33] Morbidity and Mortality Weekly Report. Change sin Suicide Rate, February 2021.

- The age-adjusted mortality rate for suicide in 2019 was 10.3 per 100,000 population in 2019, nearly 25.0 percent higher compared to 8.4 in 2010.
- Anne Arundel, Howard, and Harford County, present higher suicide rates than the statewide average, indicating a potential need for increased suicide prevention measures and/or education
- In 2019, the suicide rate for those identifying as white was over two times that of those identifying as Black or African American, identifying a disparity between suicidal ideations and race.[34]

[34] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System, September 2021.

Youth Behavioral Health

The 2022 State of Mental Health In America Report found that youth's mental health is worsening, as 15.1 percent of youth in the country have severe major depression, compared to 9.2 percent in 2021. Only 27.0 percent of youth with severe depression receive any form of treatment, and in communities with little access to care – only twelve percent of youth receive consistent care.[35] Before COVID-19, mental health challenges were the leading cause of disability and poor life outcomes in youth, as up to one in five children ages three to 17 in the United States reported a mental, emotional, developmental, or behavioral disorder.[36]

The table below indicates the percentage of youth who were served by Maryland's State Mental Health Authority between July of 2018 and June of 2019. More children and young adults were served by state mental health authorities compared to the United States percentages in mostly every age group.

Exhibit 42: Youth Served by the State Mental Health Authority

Ages	United States	Maryland
0 - 12	16.0%	20.3%
13 - 17	12.2%	13.6%
18 - 20	4.7%	5.1%
21- 24	5.7%	5.6%

Source: SAMHSA Uniform Reporting System. State Mental Health Measures, 2019

Exhibit 43: Prevalence of Select Mental Health Disorders

Ages 3 to 17	United States	Maryland
Mental, Emotional, Developmental, or Behavioral Disorder	22.6%	22.4%
Autism / Asperger's	2.9%	3.0%
ADD / ADHD	8.9%	9.1%
Medication For ADD / ADHD	91.1%	90.9%

[35] Mental Health America. The State of Mental Health in America, 2022.
[36] U.S. Department of Health & Human Services. U.S. Surgeon General Issues Advisory on Youth Mental Health Crisis Further Exposed by COVID-19 Pandemic, 2021.

Source: National Survey of Children's Health, 2019-2020

- Approximately 22.0 percent of children between the age of three to 17 have a mental, emotional, development, or behavioral disorder. Maryland has a slightly higher population of children with Attention Deficit Hyperactivity Disorder (ADHD / ADD), with nearly 91.0 percent of this population on some form of medication.

The National Survey on LGBTQ+ Youth Mental Health 2020 shares that 48.0 percent of LGBTQ+ youth engaged in self-harm in the past 12 months, and that rate rises to over 60.0 percent for transgender and non-binary youth. [37] Over a quarter of the high school population who identify as gay or lesbian have considered suicide in the past year (during the 12 months before the survey), this percentage is twice as high as heterosexual high school students. Additionally, by analyzing suicide ideations by race and ethnicity highlights disparities in the state of Maryland, as students who identify as multi-racial are more likely to have suicidal ideations (25.6%).

Exhibit 44: High School Students Who Seriously Considered Attempting Suicide by Race & Ethnicity

	Considered Suicide
Total	18.0%
Heterosexual	13.6%
Gay or Lesbian	28.5%
Bisexual	46.1%
Gay, Lesbian, or Bisexual	44.4%
Not Sure	25.8%

Source: Maryland Youth Risk Behavior Survey, 2019 [38]

[37] Governor's Commission on Suicide Prevention. Maryland's State Suicide Prevention Plan, 2020.
[38] Maryland Youth Risk Behavior Survey, 2019.

Exhibit 45: High School Students Who Seriously Considered Attempting Suicide by Sexual Identity

	Considered Suicide
Total	18.0%
American Indian or Alaskan Native	16.7%
Asian	15.5%
Black or African American	17.8%
Native Hawaiian or Other Pacific Islander	16.4%
White	17.8%
Multiple Races	25.6%
Hispanic	17.3%

Source: Maryland Youth Risk Behavior Survey, 2019

Exhibit 46: Adult & Youth Mental Health Trends in the Past Year

	United States	Maryland	Rank
With at least one major depressive episode	13.8%	13.0%	**11**
Have had a major depressive episode who did not receive mental health services	59.6%	41.3%	**4**
Diagnosed with a substance use disorder	3.8%	3.3%	**4**
Children with private insurance that did not cover mental or emotional problems	7.8%	7.2%	**24**
Students identified with emotional disturbance for an individualized education program	7.6%	7.6%	**24**

Source: Mental Health America. Ranking the States, 2021

Nationally, the number of youth experiencing major depressive episode increased by 206,000 from 2020 to 2021. This indicator is important to note as childhood depression is more likely to persist into adulthood if gone untreated. Maryland presents the fourth largest population of youth diagnosed with a substance use disorder in the past year. The youth ranking data also implies that Maryland has the fourth largest population of residents under 18 years old who did not receive treatment for a major depressive episode.

Exhibit 47: Adult & Youth Mental Health Trends in the Past Year

	United States	Maryland	Rank
With at least one major depressive episode	13.8%	13.0%	**11**
Have had a major depressive episode who did not receive mental health services	59.6%	41.3%	**4**
Diagnosed with a substance use disorder	3.8%	3.3%	**4**
Children with private insurance that did not cover mental or emotional problems	7.8%	7.2%	**24**
Students identified with emotional disturbance for an individualized education program	7.6%	7.6%	**24**

Source: Mental Health America. Ranking the States, 2021

Exhibit 48: Self-Reported Lifetime Substance Use by High School Students

	Marijuana[39]	Pain Medicine[40]	Cocaine	Heroin	Methamph-etamines	Ecstasy (MDMA)
United States	5.6%	14.3%	3.9%	1.8%	2.1%	3.5%
Maryland	6.4%	14.6%	4.8%	3.7%	3.7%	4.9%
Anne Arundel County	6.4%	14.2%	5.4%	4.4%	4.8%	5.8%
Baltimore County	5.7%	15.1%	4.0%	3.7%	3.0%	4.3%

[39] Tried once before age 13.
[40] Students who have taken prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it. Codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.

Baltimore City	13.8%	21.0%	9.2%	8.7%	8.2%	9.7%
Harford County	5.4%	12.4%	4.1%	2.3%	2.7%	3.6%
Howard County	3.7%	12.0%	3.2%	2.1%	1.9%	2.9%
Montgomery County	3.8%	11.4%	3.2%	2.0%	1.8%	3.2%
Prince George's County	7.4%	19.0%	5.6%	4.3%	5.2%	5.7%

Source: Maryland Youth Risk Behavior Survey 2019

- The data in **Exhibit X** below reinforce the need for evaluated evidence-based substance use prevention interventions not only during high school years but beginning in early education. Pain medication is the most frequent substance used or misused by high school students statewide and nationwide.[41]

Substance Use Disorder

Alcohol

Maryland's 2020 Unintentional Drug- and Alcohol-Related Intoxication Death report shares that the number of alcohol-related deaths sharply increased by 34.0 percent between 2019 and 2020 statewide. The latest report shares that alcohol-related deaths in 2020 rose in every age group and also increased among both men and women, 34.0 percent among men and 33.0 percent among women.

Alcohol-related deaths increased in every county, except for Baltimore City. Research has begun to synthesize substance and alcohol use data collect throughout the COVID-19 pandemic. Preliminary data indicates that people with anxiety and depression are more likely to report an increase in drinking during the COVID-19 pandemic than those without mental health issues.[42] This data holds great value when projecting the immediate and future needs of communities served by Sheppard Pratt.

Exhibit 49: Number of Alcohol-Related Intoxication Deaths

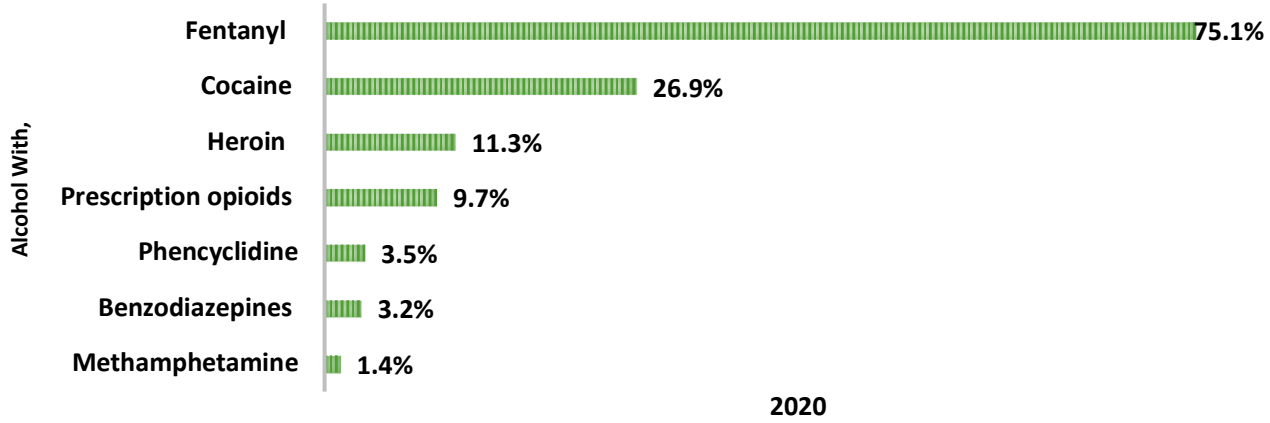
	2019	2020
Anne Arundel County	34	49
Baltimore County	53	91
Baltimore City	165	160

[41] SAMHSA, Prevention of Substance Use and Mental Disorders.
[42] Preventive Medicine Journal. Increased alcohol use during the COVID-19 pandemic: The effect of mental health and age in a cross-sectional sample of social media users in the U.S., April 2021.

Harford County	11	16
Howard County	4	11
Montgomery County	19	43
Prince George's County	39	59

Source: Maryland Department of Health. Unintentional Drug & Alcohol-Related Intoxication Deaths in Maryland Annual Report, 2019 & 2020

Exhibit 50: Combinations of Substances, Unintentional Alcohol-Related Intoxication Deaths 2020



Source: Maryland Department of Health. Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland Annual Report, 2020

Incidence of Overdoses & Overdose Deaths

The table below indicates trends of overdose deaths between 2018 and 2020. Since 2018, Maryland has experienced a nearly 20 percent increase in unintentional overdose deaths related to both prescription opioids and alcohol while heroin-related overdose deaths have steadily declined. Cocaine-related overdoses experienced a decrease between 2018 but increased by over 200 deaths in the following year. Maryland's opioid dashboard indicates that the 2017 – 2019 average mortality rate from all substance use-related deaths were nearly double in Baltimore City compared to all other county rates.

Exhibit 51: Three-Year Trend of Unintentional Overdose Deaths in Maryland

	2018	2019	2020
Heroin	830	726	548
Prescription Opioids	379	369	453
Alcohol	472	423	566
Benzodiazepines	127	107	114
Cocaine	891	869	921
Fentanyl	1,888	1,927	2,342
Total	**4,587**	**4,421**	**4,944**

Source: Maryland Department of Health Vital Statistics. Unintentional Drug and Alcohol-Related Intoxication Deaths[43]

Exhibit 52: Mortality Rate for Overdose Deaths

2017 to 2019	Per 100,000
Anne Arundel County	40.0
Baltimore County	46.6
Baltimore City	95.5
Harford County	41.2
Howard County	14.0

[43] Maryland Department of Health. Unintentional Drug and Alcohol-Related Intoxication Deaths, 2020.

Montgomery County	9.7
Prince George's County	11.7

Source: Maryland Opioid Dashboard, Opioid Operational Command Center (9/27/2021)

The Opioid Epidemic

In November of 2021 the United States surpassed 100,000 overdose fatalities in one year. Data indicates that overdose deaths from opioids increased to 75,673 in the 12-month period ending in April 2021, up from 56,064 in 2019. Overdose deaths from synthetic opioids, primarily fentanyl, and psychostimulants such as methamphetamine also increased in the 12-month period ending in April 2021[44] In Maryland, opioid-related deaths have increased since 2015 and continues to climb.

Exhibit 53: Total Number of Opioid-Related Deaths

	2015	2016	2017	2018	2019	2020	Total
Maryland	1,089	2,089	2,282	2,406	2,379	2,799	**13,044**
Anne Arundel County	112	195	214	241	208	251	**1,221**
Baltimore County	220	336	367	388	350	394	**2,055**
Baltimore City	393	694	761	888	914	1,028	**4,678**
Harford County	50	84	101	101	87	84	**507**
Howard County	26	46	51	41	37	57	**258**
Montgomery County	70	102	116	89	105	139	**1,252**
Prince George's County	70	129	167	127	146	203	**842**

Maryland Department of Health, Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2020

[44] CDC, National Center for Health Statistics. Drug Overdose Deaths in the U.S. Top 100,000 Annually. November 2021.

Exhibit 54: Opioid-Related Fatal Overdoses Year to Date Comparison

January – June 2020 vs. 2021	2020	2021	Count Change	Percent Change
Maryland	1,204	1,217	13	1.1%
Anne Arundel County	103	115	12	11.7%
Baltimore County	178	184	6	3.4%
Baltimore City	434	485	51	11.8%
Harford County	34	44	10	29.4%
Howard County	27	14	(-)13	(-)48.1%
Montgomery County	51	60	9	17.6%
Prince George's County	87	75	(-)12	(-)13.8%

Source: Maryland Opioid Dashboard, Opioid Operational Command Center (9/27/2021)[45]

[45] Maryland Opioid Dashboard.

Exhibit 54 indicates the number of physicians, physician assistants, and nurse practitioners with a waiver to provide Medication-Assisted Treatment (MAT) for Opioid Use Disorder per 100,000 population.

Exhibit 55: Medication-Assisted Treatment Provider Rate

	Per 100,000	Number of Providers
Anne Arundel	18.6	106
Baltimore County	32.4	268
Baltimore City	79.5	484
Harford County	25.8	65
Howard County	30.1	96
Montgomery County	15.3	160
Prince George's County	21.5	195

Source: UDS Mapper. Substance Abuse & Mental Health Services Administration, October 2021

Exhibit 56: Retail Opioid Dispensing Rate

Per 100	2018	2019
Anne Arundel	61.4	49.3
Baltimore City	48.5	71.7
Baltimore County	63.5	44.8
Harford County	64.6	39.2
Howard County	31.5	28.3
Montgomery County	29.9	27.3
Prince George's County	34.2	26.4

Source: UDS Mapper. Centers for Disease Control & Prevention, Opioid Overdose, U.S. Prescribing Rate Maps

Co-Occurring Disorders

In 2020, approximately 6.7 percent, or 17 million adults, were diagnosed with a major depressive episode and a substance use disorder and nearly three percent, or 644,000 youth, between the ages of 12 to 17 were diagnosed with a major depressive episode and a substance use disorder in the past year.[46] Individuals with co-occurring disorders are often times referred to as an induvial with a dual diagnoses. People with a coexistence of both a mental illness and a substance use disorder is referred to as a co-occurring disorder. Co-occurring disorders can also exist in individual with multiple mental health disorders, such as bipolar and ADHD.

Three main pathways can contribute to the comorbidity between substance use disorders and mental illnesses:[47]

Common risk factors can contribute to both mental illness and substance use and addiction.

Mental illness may contribute to substance use and addiction.

Substance use and addiction can contribute to the development of mental illness.

In 2019, a quarter of the adult population in Maryland were living with co-occurring disorders, indicating that 25 percent of adults statewide had more than one mental health disorder, substance use disorder, or one of each. Alarmingly, nearly 20 percent of children in Maryland were living with a co-occurring disorder.

Exhibit 57: Co-Occurring Mental Health & Substance Use Disorders

2019	United States	Maryland
Adults	28%	25%
Children	5%	28%

Source: SAMHSA Uniform Reporting System. State Mental Health Measures, 2019

[46] Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health.
[47] National Institute on Drug Abuse. Research Report Common Comorbidities with Substance Use Disorders Research Report. Why is there comorbidity between substance use disorders and mental illnesses? 2020.

Access & Behavioral Healthcare Workforce

Insurance Status

The Agency for Health Care Research and Quality indicates that access to health care consists of four main components. [48]

Coverage	Facilitates entry into the health care system. Uninsured people are less likely to receive medical care & more likely to have poor health status.
Services	Having a usual source of care is associated with adults receiving recommended screening & prevention services.
Timeliness	Ability to provide health care when the need is recognized.
Workforce	Capable, qualified, culturally competent providers.

Within the service area, approximately 40.7 percent of residents do not have health insurance, predominantly in Price George's and Montgomery County. Access to behavioral health care in these communities may be more challenging than others within the service area.

Exhibit 58: Insurance Status

	Total Population	With health insurance coverage	With private health insurance	With public coverage	No health insurance coverage
United States	319,706,872	91.2%	67.9%	35.1%	8.8%
Maryland	5,920,779	93.9%	74.5%	32.3%	6.1%
Anne Arundel County	547,742	95.6%	82.2%	27.8%	4.4%
Baltimore County	819,867	94.8%	75.1%	33.1%	5.2%
Baltimore City	600,459	93.4%	57.9%	46.0%	6.6%
Harford County	249,491	96.6%	81.6%	29.9%	3.4%

[48] AHRQ. Chartbook on Access to Health care

Howard County	315,151	96.1%	84.5%	23.4%	3.9%
Montgomery County	1,034,552	92.9%	77.4%	26.8%	7.1%
Prince George's County	901,883	89.9%	69.7%	31.9%	10.1%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

Behavioral Health Care Workforce

There is a maldistribution of behavioral health care providers nationwide.[49] Secondary data and qualitative interviews suggest that Sheppard Pratt is experiencing a similar workforce shortage in behavioral health. National projections indicate an immense shortage of mental health and substance use treatment providers to meet the demand in 2030. Mental health provider shortages result in reduced access to care, high burnout rates among providers, and long waits for necessary treatment.

Exhibit 58 indicates that in Maryland, there are approximately 360 mental health providers per resident – a better ratio than the United States in general. The ratios represent the number of individuals served by one mental healthcare provider for the county if the population was equally distributed across all mental health providers.

Exhibit 59: Mental Health Provider Ratio to Resident

	Mental Health Providers
Maryland	360:1
Anne Arundel County	490:1
Baltimore County	310:1
Baltimore City	200:1
Harford County	500:1
Howard County	320:1
Montgomery County	300:1
Prince George's County	630:1

Source: County Health Rankings & Roadmaps, 2020

[49] Mental Health America. The State of Mental Health in America, 2020

The Health Professional Shortage Area (HPSA) Find tool can be utilized to identify counties and states with the most severe provider shortages for a select variety of health care disciplines. [50] Each facility receives a score ranging from 0 to 26, and the higher the score indicates the greater the priority.

Exhibit 60 indicates that as of September 2021, Federally Qualified Health Centers within Maryland were experiencing a shortage of approximately 48 mental health professionals, meeting nearly 22.0 percent of the state's mental health needs (and needing an additional 76 full-time).

Exhibit 60: Behavioral Health Professional Shortage Areas

	Population of Designated HPSAs	Total MH Provider Shortage Areas	Percent of Need Met [51]	Practitioners Needed
United States	129,640,558	5,390	28.1%	6,559
Maryland	1,293,314	48	21.9%	76

Source: Kaiser Family Foundation, Mental Health Care Health Professional Shortage Areas, September 2021

Psychiatric Hospitals in Maryland

Eastern Shore Hospital Center (Dorchester County)

Thomas B. Finan Hospital Center (Allegany County)

Clifton T. Perkins Hospital Center (Howard County)

Spring Grove Hospital Center (Baltimore County)

Springfield Hospital Center (Carroll County)

[50] The Health Professional Shortage Area Tool.

[51] The percent of need met is computed by dividing the number of psychiatrists available to serve the population of the area, group, or facility by the number of psychiatrists that would be necessary to eliminate the mental health HPSA (based on a ratio of 30,000 to 1 (20,000 to 1 where high needs are indicated)).

Exhibit 61: Service Area Mental Health Provider Shortages

County	Designation Type	HPSA Score	Year of Shortage Designation
Anne Arundel County	Federally Qualified Health Center	**13**	2002
Baltimore County	Low Income Population	**20**	2020
Baltimore City	Federally Qualified Health Center	**23**	2003
	Federally Qualified Health Center	**19**	2008
	Federally Qualified Health Center	**19**	2002
	Federally Qualified Health Center	**22**	2003
	Federally Qualified Health Center	**21**	2003
	Federally Qualified Health Center	**21**	2003
Montgomery County	Federally Qualified Health Center	**22**	2019
	Federally Qualified Health Center	**18**	2016
Prince George's County	High Needs	**14**	2021
	Federally Qualified Health Center	**23**	2002

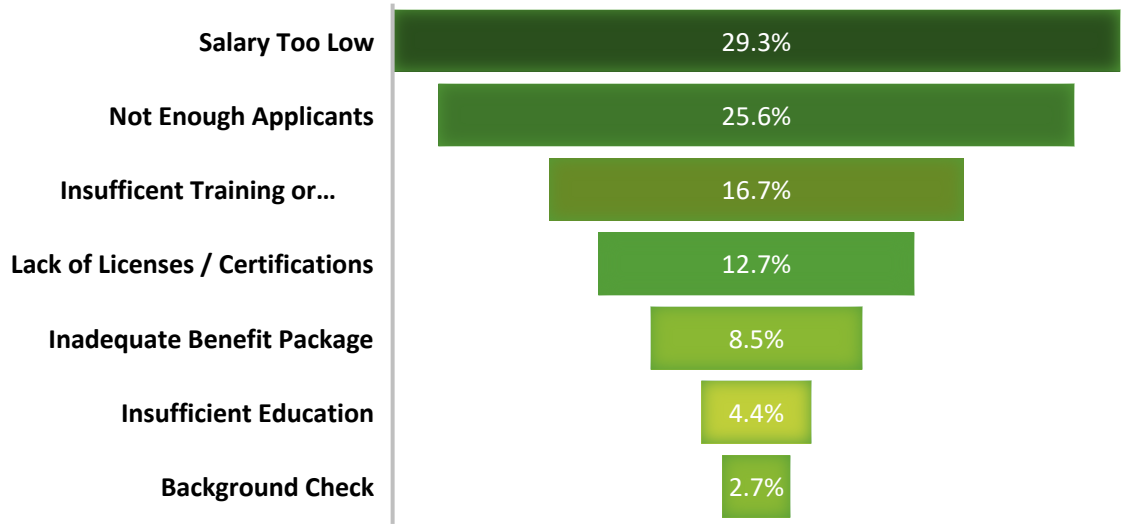
Source: National Health Service Corps, The Health Professional Shortage Area Find Tool

Maryland Behavioral Health Workforce Survey

In 2020, the Maryland Department of Health Behavioral Health Administration contracted with the University of Maryland Baltimore Systems Evaluation Center to conduct a survey of the behavioral health workforce to collect data to learn more about recruitment and retention issues statewide.

Interviews were held with both state and local health officials, professional organizations, and other community stakeholders to learn more about workforce-related issues through an on-line survey with one set of questions geared towards agency administrators and staff. Data collected between September and November 2019 resulted in representation from all Maryland jurisdictions and both mental health and substance use disorder treatment providers.[52]

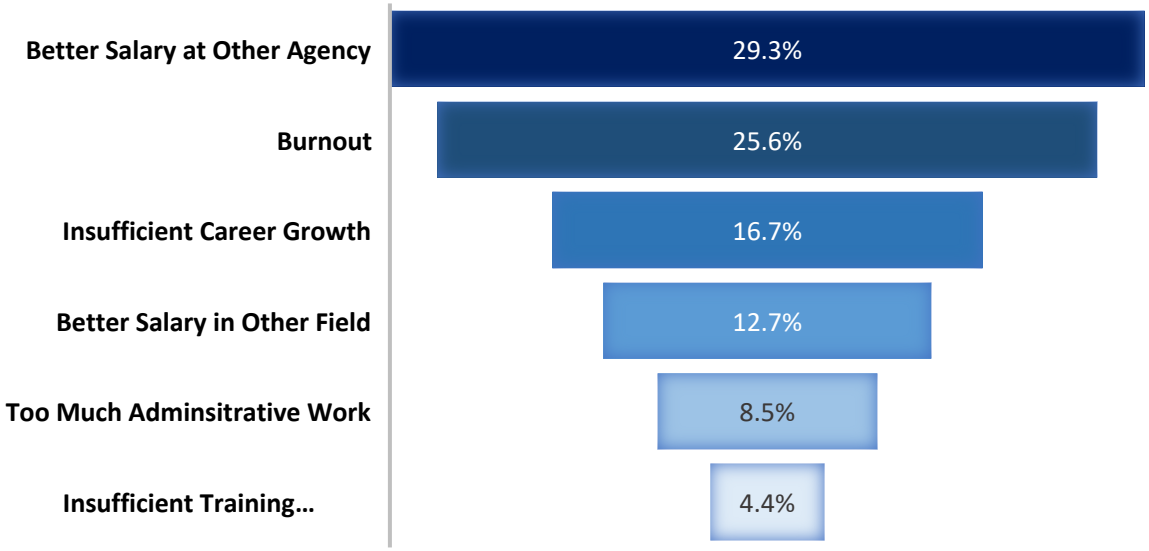
Exhibit 62: Top Reported Hiring Problems



- Low salary was the most commonly reported hiring problem reported by agency administrators, followed by not enough applicants.
- Among Staff responses, low salary was the 2nd most common reported reason for staff to consider leaving both their agency and the behavioral health field, with only 'burnout' being a more common reason for leaving either.

[52] The Maryland Department of Health Behavioral Health Administration, Maryland Behavioral Health Workforce Survey – Results Summary.

Exhibit 63: Top Staff Retention Problems At Agencies



- Insufficient training or experience was found to be the 3rd most reported hiring problem at agencies, but as shown in Figure 3, it was not often reported as a retention problem.
- Staff did not frequently report too few training opportunities as a reason they would consider leaving their agency. However, in several of the pre-survey stakeholder interviews, interviewees mentioned increasing training opportunities as a way to improve staff retention.
- Being able to get a better salary at another agency and 'burnout' were reported by Admins as the top 2 retention problems.
- 'Burnout' was found to be somewhat more of a problem in rural agencies.
- Staff turnover was a commonly reported problem at agencies, with 20 percent of Admins reporting an annual staff turnover rate of 10 percent or more for each paid staff position.
- Turnover was reported to be somewhat higher in rural areas. Additionally, over 55 percent of Admin responses indicated they did not have enough staff to provide quality care for each staff position.

Qualitative Data Summary

The qualitative primary research stage included stakeholder interviews and focus group discussions across the service area. There were 11 one-on-one interviews that lasted approximately 30 minutes in length, although some community members chose to share a great deal of information and exceeded 30 minutes. The interviews provided the opportunity to have in-depth discussions about community social, health and service issues with individuals able to provide insight regarding health services and access needs.

In addition, there were three virtual focus group discussions that used a similar interview guide (see Appendix) that covered the participants' broad perceptions of community needs. The focus groups enabled the participants to highlight areas of consensus as to what they see as the biggest community health needs facing the community.

In total across both qualitative research styles over 45 individuals provided input from the following segments:

- **Sheppard Pratt leaders, physicians, and social workers**
- **Healthcare service providers, including local Health Departments**
- **Community service organizations**
- **Mental Health consumers and advocates**
- **Social service providers**

The combination of qualitative individual interviews and focus group discussions resulted in a consensus of several top areas of need that can be described as Qualitative Themes.

High-Level Action Areas & Observations

Sheppard Pratt is the nation's largest private, nonprofit provider of mental health, substance use, special education, developmental disability, and social services primarily serving residents of Maryland. Qualitative research was heavily focused around mental health topics; however, other areas of need were identified that impact a person's mental well-being. The following table illustrates the way qualitative discussion yielded six core areas of need. These top areas of need are presented in full in the following pages.

The following illustration shows the core areas of need in alphabetical order (not prioritized).

Behavioral Health Provider Capacity

The COVID-19 pandemic has exacerbated existing and created new challenges to America's health care system since it began in March 2020. One of the most pressing challenges is the mental health crisis that is affecting the nation, including Sheppard Pratt's service area. During the pandemic, approximately four in 10 adults in the United States have reported symptoms of anxiety or depressive disorder compared to about one in 10 adults in 2019[53].

The increase of individuals experiencing mental health symptoms has led to an increase in demand for mental health services across the country and locally in Maryland. While the number of individuals seeking the mental health care they may need can be considered a good thing, the secondary impact is long wait lists to see providers, limited number of providers, and potential provider burnout. The shortage of mental health providers across the country is not new. Approximately 122 million Americans, or 37% of the population, live in a mental health professional shortage area defined by the Health Resources and Services Administration (HRSA)[54].

Staffing shortages within the Sheppard Pratt health system and throughout the community was identified as one of the top themes during stakeholder interviews and focus groups. The lack of providers, especially for children/adolescents and specialty providers, has become one of the biggest barriers for individuals accessing behavioral health services. The demand for services is so high that many providers either have long waiting lists or are not accepting patients. Additionally, due to the increase patient panels and rising patient acuity, many providers are experiencing provider burnout and leaving the field. Several stakeholders have also indicated that some providers within the Sheppard Pratt service area are at or near retirement which could lead to further capacity challenges ahead.

Select insights from stakeholders on staff shortages, long wait times, and provider burnout include the following:

- *"Retention in the workforce is a huge problem. We've lost so many therapists that were specialty provider, especially trauma informed care for the LGBTQ community."*
- *"People don't like to work with this [Intellectual and developmental disability] population. Some of them are extremely unbearable. The levels of aggression have increased throughout the last few years. The staff is at very high risk for getting injured. It's the burn out as well. The pandemic is just another wave hitting an already complex system plus the rate of retirement."*
- *"The providers out there are so overwhelmed with their current case load. It is difficult to find someone in the area taking new patients. Specialists like DBT certified therapists, counselors, specialty type treatment - you are lucky to find someone that accepts insurance or you will pay out of pocket."*
- *"The nursing shortage is such a real thing. It's scary when we have staff that don't normally work on the unit and don't know the population. We have to explain to patients why they are not*

[53] KFF. The Implications of COVID-19 for Mental Health and Substance Use.
[54] USA Facts. Over One-Third of Americans Live in Area Lacking Mental Health Professionals.

being told things that aren't the most accurate. We don't have people committed to being here or are needing time off because of the stress of the job."

- *"There are some units that used to have three social workers and now functioning with two. Someone goes on vacation or gets sick it's an issue."*
- *"Providers are burned out. Telehealth has reduced no shows which exhausts everyone."*
- *"Even pre pandemic people struggled with finding services. If you have insurance, you get a list of providers - and someone you love needs help you will call that list of providers and you hit a lot of dead hits. It's not easy to find a provider let alone to match the person's needs. My friend called every provider on the list for her child and no one is taking new patients and where do you go next? As a mother you want to find someone that will call for your child and you're dialing and dialing and you get to the bottom of the list and what do you next? We need more diverse of providers. If someone needs medication, having someone in their treatment plan that can actually prescribe medication - they are stretched so thin."*
- *"By the numbers, I think we have an adequate number of providers - it just all depends on insurance and the complicated network of providers - particularly for mental health. When I needed a mental health provider in network there was no one accepting new patients. It is impossible to get a timely appointment. I fear that there's not going to be any workforce - we haven't grown our workforce for those aging up and need care. Boomers will be retiring from the medical field and I'm not sure were going to have adequate capacity to take care their patients."*

Access to Mental Health Services for Children / Adolescents

The mental health crisis in America is affecting all age groups, however, the situation is dire for the youth of America. In an op-ed in The Hill written by Mitchell J. Prinstein, the chief science officer of the American Psychological Association, he said "to address this crisis, we must acknowledge that our youth mental health system is fundamentally flawed."[55] Suicide rates for children 10 to 18 have climbed significantly since 2007, and it is the second leading cause of death behind unintentional injuries for individuals aged 10 to 24 years old.

More and more youth are experiencing symptoms of anxiety, depression, and other mental health conditions due to the stress brought on by COVID-19 and the struggle for racial justice. Additionally, more than 140,000 children in the United States have lost a primary and/or secondary caregiver to COVID-19. The rising need for mental health services for youth led the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association to release a joint Declaration of a National Emergency in Child and Adolescent Mental Health in October 2021[56].

[55] The Hill. US Youth Are in a Mental Health Crisis – We Must Invest in Their Care. https://thehill.com/opinion/healthcare/591777-us-youth-are-in-a-mental-health-crisis-we-must-invest-in-their-care/.
[56] American Academy of Pediatrics. AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health. https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/

Stakeholders in the Sheppard Pratt service area express the growing need for youth mental health substance use services. The number of child and adolescent-focused providers is very limited and there are often long wait lists, or the provider does not accept insurance. There are also limited number of programs and beds in outpatient and residential programs for children, so they are often "stuck" in inpatient services while they wait for a spot in a program to open. Inpatient mental health beds for youth are limited across the state. It's not uncommon for youth to be housed in a hospital's emergency department for several days until a bed opens elsewhere.

Schools are trying their best to address mental health needs within the school system, but school resources are often understaffed, underqualified, and underfunded to meet the growing needs of the students. Acuity of behavioral health issues have also increased. Several stakeholders have said that parents either are not recognizing the symptoms or bring their child to treatment when they are extremely sick. Additionally, specialty services for youth, such as Autism, often have long wait lists and limited providers and programs.

Select insights from stakeholders on access to mental health services for children and adolescents include the following:

- *"It's even more difficult to find outpatient therapy appointments. We have a lot of self-harming adolescents who need referrals and finding competent people to work with them. We also have a large LGBTQ+ population and its growing. We have a six month waitlist just for outpatient therapy. There are a lot of children between the stages of hospitalization and outpatient."*
- *"Maryland has no in-home care services so when kiddos are done with the day program there's no one to check in with them."*
- *"There are no [available] residential facilities [for children], even if they are approved it takes a month or two to move and they are taking up an acute bed in the ER. A large number of child psychiatrists are retiring. There are a lot of lower-income families and as an outpatient provider, there are some services, but they've had huge loses of people working with the families."*
- *"Compared to adolescents, for kids aged 11 and under, parents are less willing to hospitalize their child. We have a lot of patients who relapse immediately because incompetent outpatient providers and a lack of wrap around services. They end up coming back when this could have been prevented."*
- *"We are seeing more acute patients. For eating disorders, kids are extremely sick when they come to us, and parents aren't aware their kid is that sick. The illness is being recognized later in the process compared to before the pandemic."*
- *"Kids are stuck in units waiting for placements and out of state placement is a nightmare. Lack of RTCS - There are beds open, but they have to accept the kids. There are more and more complicated cases and they can't treat these kids. There's a kid right now in our adolescent unit that's been here for a full year but no RTC that will touch him because of his sexual behavior acting out at home but no charges have been brought so he has nowhere to go. You need to get three state agencies to pay to get him to another state. It's a legal travesty and an ethical issue."*

- *"Finding mental health beds for youth is incredibly hard. You can be waiting in the ED for days and they need treatment immediately."*
- *"The first waitlist for [Autism-related] state funded services is about eight years long. If you receive a diagnosis at age two, the waiver will provide early intervention services at age 12. All the early intervention benefits don't even happen because the child is past those critical years. Families need to access services elsewhere under private insurance and Medicaid, but Medicaid has very small provider network. Paying out of pocket is nearly impossible."*
- *"Schools are trying the best they can, but they are also being asked more and more to address children's social needs. But you can't teach kids if their basic needs aren't being met."*
- *"Historically there have been no inpatient substance use disorder (SUD) treatment for youth. If they have significant SUD, it's almost impossible. I don't see any MAT treatment for youth. There is a substance abuse exposure program for infants because we have such a high percentage of addicted mothers. The county as a whole has really been affected by the corridors in Baltimore city pushing outwards."*
- *"[There is a lack of] beds for children and teens. A child I know was in the ED for a couple of days because there was nowhere to get help and there seems to have wait lists for that. I represent a more suburban population and in the foster care system in the state, kids are put into the hospital with mental crisis or physical illness, and they need treatment coming out of the hospital and there are no beds available. We stopped transferring kids out of states, but they didn't create more beds."*

Access to Mental Health Services for Adults

Access to mental health and substance use services for adults is similar in many ways as youth and adolescents, however, the needs is not as severe. There are more providers that see adults than children and adolescents but wait lists for certain provider licenses and programs can still be long. Stakeholders have also indicated that the acuity of patients seeking help has increased over the course of the COVID-19 pandemic and there is not enough qualified staff in both the outpatient and inpatient setting to meet the growing need. Common barriers identified as challenges adults may experience when accessing behavioral health services include financial, long wait times, and care coordination.

Unlike some states in the country, Medicaid in Maryland for mental health services is generally adequate. It's often commercial insurance plans that don't have adequate or affordable coverage of outpatient and inpatient services. Additionally, some providers don't even take health insurance requiring individuals to pay out of pocket for services. On the inpatient side, when patients are ready to enter outpatient or wraparound services, care coordination can be challenging as insurance often doesn't cover that service and patients and/or their caregivers are often the ones that must serve as the care coordinator to ensure that patient receives the care they need.

Additionally, services for individuals with co-occurring mental health and substance use disorders is challenging to find as many providers will only treat one condition. For older adults who may be experiencing a mental health condition, accessing mental health services can be difficult as their

providers might not recognize the difference between age-related health conditions, such as dementia, and mental health conditions, such as depression.

Select insights from stakeholders on access to mental health services for adults include the following:

- *"A lot of the problems patients face are related to community issues and the way the payment systems are [in Maryland]. That is quite challenging to see in an inpatient model. The time to coordinate care if very hard to find. The billing changes last year did help but the time is still lacking because there's so much of a need right now. we're communicating with families and referring to other providers and it's hard to find the time to care for patients - it takes more of a team."*
- *"We need more step down services and more patient settings. The integration is some of the poorest I have been for co-occurring services. If you show up dealing with substance use, they won't deal with mental health issues. If you show up with mental health issues, they aren't equipped to deal with substance use."*
- *"We've had a lot of patients that have lost providers. Really complex patients who need higher levels of care."*
- *"We have a lot of patients we want to refer to IOP and the waitlist for this to months to years and the best thing we can do is start a referral process. A lot of folks want a step down day program and its challenging to find those resources."*
- *"Patients we are getting now are so complex compared to before the pandemic. People are needing more combinations of medications as well."*
- *"Primary care physician may not recognize depression and early dementia in older adults. In our system we have yet to develop a robust partial hospital and outpatient services, so they are coming into our setting after hospitalization."*

Access to Mental Health Crisis Care

Crisis services are an integral component of addressing mental health in communities across the country. When people struggle to access community-based outpatient mental health services, they may experience a crisis and enter the "system" through a hospital emergency department, walk-in clinic, or law enforcement. Mental health emergencies typically constitute between five and 15 percent of all 911 calls[57]. While the service area does have crisis response teams and crisis mental health beds, capacity is limited.

Additionally, several stakeholders stated that local police officers are often reluctant to bring people experiencing a mental health crisis to services. The new national 988 national mental health emergency line is scheduled to be implemented in July in the Sheppard Pratt service area. The implementation of the new crisis line is going to require significant public awareness campaigns to ensure the general public is aware of the new number to call.

[57] NASMHPD. Cops, Clinicians, or Both? Collaborative Approaches to Responding to Behavioral Health Emergencies.

Select insights from stakeholders on access to mental health crisis services include the following:

- *"[There is a] difficulty getting patient hospitalized even when an emergency petition is completed by a licensed medical professional and help with law enforcement - more that police has been reluctant to take person in."*
- *"I have another position where I work in a crisis program. We get calls all the time I can't get to my therapy appointments, or I can't afford it and it is easier to talk over phone because it is free."*
- *"For crisis beds, case management Medicaid is wonderful but most private insurances don't pay for those services."*
- *"Most counties like Baltimore City have crisis response. Police see what is going on. Sometimes now there is a push for the diversion project going on. 911 will transfer calls to crisis services before they call emergency services. If police don't see an issue, they won't do anything. Some psych patients can pull it together, so the family members go down and petition. ED or Crisis clinic is how they get to us."*
- *"Early detection, intervention, and diversion of criminal justice - providing effective services that are accessible for a wide range of people and affordable payment is urgent as well."*
- *"Share the Help line - from there [people are] able to access Baltimore Crisis Response, Inc. (BCRI) or other community partners. Part of the challenge is so many decentralized lines. We run a warm line and not hot line. We refer out to a hot line if in crisis. 988 is the number to call in crisis that is being implemented in July. We're connected to local BRCI and EMS but need more awareness of it. It's going to take a big part of the behavioral health community to promote this one centralized number - people often get confused on who to call in crisis."*

Mental Health and Substance Use Stigma

In 2019, an American Psychiatric Association national poll revealed that mental health stigma is a major challenge in the workplace[58]. Only one in five workers reported feeling completely comfortable talking about mental health challenges and there was a generational divide. Millennials were almost twice as likely as baby boomers to be comfortable discussing their mental health. A 2020 national survey of individuals aged 14 to 22-years old found that 90 percent of youth experiencing symptoms of depression research mental health issues online. While mental health stigma is still prevalent, especially in some sub-populations, it appears that due to work from local health departments and community partners coupled with the COVID-19 pandemic, Maryland residents are more open to discussing mental health challenges. However, there is still much work to be done. Additionally, several stakeholders also expressed that there is a stigma around Sheppard Pratt or a fear of receiving care from Sheppard Pratt due to mental health stigma.

[58] American Psychiatric Association. Stigma, Prejudice and Discrimination Against People with Mental Illness.

Select insights from stakeholders on mental health and substance use stigma include the following:

- *"I think [stigma] is very much prominent. Especially with the population, so many people are reluctant to come here because of the name of the facility. I can't tell you how many times I hear 'oh I am nervous I don't know what to tell so and so or what to tell my job and I don't want them to get a letter from Sheppard Pratt'."*
- *"Over the past five years the health department and others have focused on behavioral health and have made an effort to create awareness of the importance of mental wellness and recognize when help maybe needed. We are making progress in people recognizing the importance of mental wellness and when they're [experiencing] mental health issues and when to seek treatment. Now we have more people recognizing that they may need assistance - but that's created a bottleneck in getting appointments."*
- *"The pandemic has the media talking more about mental health and the outcomes. But I don't think it really has translated into our community to openly talk about mental health issues, especially in the workplace. There are concerns around employers or colleagues. [Stigma is] more prevalent in certain racial and ethnic communities, but it varies widely by race and ethnicity and professions. There's progress that has been made but more work is needed."*
- *"Having worked in this field for 30 years, I think stigma has improved. COVID has helped people be more open about talking about. I think we are making slow gradual progress. There are populations that merit attention. LGBT youth are disproportionately and inadequately addressed. Progress has been made quickly but much more to do. There is cultural difference in some groups - they perceive mental health differently. We went to some churches and mental health isn't in their vocabulary, but they talk about it in different terms. Some of the immigrants were from Africa and struggle talking about it. It's good to think strategically on how to address it - who should lead from the front and help from behind? Older adults are an area that is more stigma - generational attitudes."*
- *"There's still stigma. It's two steps forward and one step back. Spotlight on mental health challenges as it relates to pandemic, but comfort level in talking about mental health has made some progress but there are still challenges. Simone Biles spoke up, but kids and adults are still stigmatized. Not sure if people want someone with a behavioral health issue living next door to them."*
- *"There's a stigma around Sheppard Pratt. Most people think Sheppard Pratt is where the 'real crazy' people go. People just don't know what Sheppard Pratt actually does."*

Social Determinants of Health

Social determinants of health (SDoH) are conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, well-being, and quality of life

outcomes[59]. Social determinants of health include factors such as housing, transportation, education and job opportunities, violence, and more.

Sheppard Pratt's service area includes some of the wealthiest and impoverished zip codes in the country. Housing is a huge challenge for many patients. While Baltimore and surrounding areas do offer public transportation, transportation is often a barrier to accessing services. During the pandemic, access to internet and technology began an emerging issue, especially for accessing telehealth appointments and school.

Select insights from stakeholders on social determinants of health include the following:

- *"We offer transportation and vans to drive people to the eastern shore and we do our best to accommodate that but other than Baltimore City there's no working transportation system we just don't have that infrastructure."*
- *"Housing is one of the tops concerns and requests when they come in. A lot of patients are in here because they aren't in a support system."*
- *"We have a lot of folks who get bare minimum social security checks - $800 a month and are expected to pay rent, food, etc. Many come in and say they can't afford housing because they are on a fixed income. Even with SNAP it's hard. We can refer them to other organizations."*
- *"Broadband: We're trying to increase access to expand access to broadband – it's pockets of communities that don't have it."*
- *"Housing is a really big issue – especially for people with mental health conditions. Trying to find housing is virtually impossible for ppl with mental health. It's a great need."*
- *"What I hear is we're 98 percent full with a two percent vacancy rate. There are not many places where you even rent. Howard County has a great program for eligible residents to purchase homes."*
- *"If you were to look at social determinants of health, it's going to be people who live in our east corridor - that's a low income area and Columbia (central). There are about two to three low-income areas in the county."*
- *"If they are in Baltimore City, the access of care and transportation-related challenges are more difficult for communities of color."*

[59] Healthy People 2030. Social Determinants of Health. https://health.gov/healthypeople/priority-areas/social-determinants-health

Community Survey

The community survey was completed by 685 individuals across the service area. Approximately 25% of the survey respondents were aged 55 to 64, 21% aged 65 and older, and 20% aged 45 to 54. The remaining 34% were between the ages of 18 and 44. Over 75% of the survey respondents were Caucasian, 15.6% black of African American, and the remaining 9% identified as American Indian, Asian, Hispanic, or other races. Over 70% of survey respondents were female and 24% were male.

When asked about the top needs in the community, 56.5% of the survey respondents identified support services for families of people struggling with mental health or substance issues as the top need in the Sheppard Pratt service area. Other top needs include services for homelessness, counseling services for children and adults among other needs.

Which of the following issues do you feel need more focus by the community?	
Need	**Percent saying, "Much more needed"**
Support services for families of people struggling with mental health or substance issues	56.5
Homelessness	51.4
Counseling services for adolescents / children	50.2
Better communications between providers for patients seeing multiple caregivers	50.1
Housing for incomes of all ages	49.2
Counseling services for adults	48.5
Crisis Care Programs for behavioral health (including substance use disorders)	48.5
Integrated care for people requiring medical / physical health, as well as behavioral health and substance use care	47.8
Support groups, counseling, or other information to help with day-to-day issues	47.0
School-based behavioral health education and early intervention	46.0
Early intervention for substance use disorders	44.3
Domestic violence resources	44.1
School-based behavioral health services	43.9
Affordable quality child care	42.8
Caring for aging parents and resources to help	42.5
Sources to obtain affordable, nutritious food	42.2
Transitions of care services for people moving from one level of care to another	40.6
Transportation services for people needing to go to healthcare appointments	39.6
Post-addictions treatment support programs	39.5
Job readiness (i.e., training, resources)	38.7
Support for single-parent households	38.3
Medical Assisted Treatment (MAT) for opioid addiction; suboxone	33.9

Parenting classes	33.0
Detox services for people misusing drugs	31.3

Survey respondents were asked to indicate if several mental health-related challenges became more of an issue over the course of the COVID-19 pandemic. Over 60% of respondents indicated that they experienced more anxiety and panic has a result of the pandemic. Many also experienced depression, financial stress and pressure, and challenging family relations. Approximately one in three survey respondents experienced increasing feelings of suicide over the course of the pandemic.

	More of an Issue
Anxiety and Panic	60.8
Depression	57.2
Financial Stress and Pressure	48.5
Challenging Family Relations	45.5
Feelings of Suicide	27.1
Problematic Romantic Relationships	23.6
Substance Abuse	18.4
Racial-based Violence	12.2
Gender-based Violence	9.7

Was There a Time You Didn't Seek Care When You Should Have?	
Yes	42.4%
No	57.6%

Over 42% of survey respondents reported that they didn't seek care when they need care in the recent years. The most common results why the survey respondent didn't seek care are below.

	Percentage of Respondents on Why They Did Not Seek Care
Feeling that care may not help	16.1
It took too long to see a doctor or therapist	15.9
Not sure where to go for help	10.4
Could not afford it/Did not have insurance	10.7
Hard to get time off from work/worry about losing a job	7.7
Worry that it may cause others to have bad thoughts about me	5.8
Appointments are at bad times	5.6
Worried that others will find out about it	4.3
Had no transportation to get to where I needed to go	3.3
Childcare/Hard to find a babysitter	1.9
I do not think it's really a problem	1.6

Needs Prioritization Process

Prioritizing the needs identified through qualitative and quantifiable data is a unique process essential to building consensus between internal organizational leadership and staff, community members, and partnering agencies on which interventions to initiate and implement within service areas. This process incorporates the following research to inform the list of needs:

Through a two-phase modified Delphi Technique needs prioritization process, the Sheppard Pratt leadership team has identified the following top community needs.

Top Needs
Crisis Care Programs for behavioral health (including substance use disorders)
Support services for families of people struggling with mental health or substance issues
Staff shortages (including providers, nurses, support staff)
Community-based counseling services for adolescents / children
Awareness of resources and services in the community
Early intervention for substance use disorders
Mental health and SUD services for children / adolescents, including mental health beds, co-occurring MH and SUD, etc.
Resources and services for adults with co-occurring MH and SUD issues
Community-based counseling services for adults
Intermediate level of mental health care for adults, including adult mental health beds
Affordable housing and services for people experiencing homelessness with mental health challenges
School-based behavioral health education and early intervention and services
Diversity in behavioral health providers (i.e., race/ethnicity, LGBTQ+, etc.)
Integrated care for people requiring medical / physical health, as well as behavioral health and substance use care and Care Coordination
Transportation services for people needing to go to healthcare appointments
Medical Assisted Treatment (MAT) for opioid addiction; suboxone
Transitions of care services for people moving from one level of care to another
Commercial insurance coverage of behavioral health services
Resources and services for people with IDD
Mental health stigma reduction
Detox services for people misusing drugs or alcohol
Recovery programs for people with SUD (i.e., peer support, AA/NA)

Appendices

Appendix A: Additional Secondary Data Tables

Appendix B: Stakeholder Interview Guide

Appendix C: Community Survey Questions

Appendix A: Additional Secondary Data Tables

Health Status Profile

Mortality & Morbidity

Morbidity refers to the percent or number of persons who are ill, while mortality rates measure the frequency of occurrence of death in a defined population during a specified interval.[60] The average length of life for residents within Sheppard Pratt's service area counties ranges from 72 years old to approximately 85 years old. Between 2019 and 2020, life expectancy decreased by three years for the Hispanic population (81.8 to 78.8), by 2.9 years for the non-Hispanic black population and by 1.2 years for the non-Hispanic White population.

Exhibit 64: Life Expectancy

	Years of Life
United States	78.8[61]
Maryland	79.2
Anne Arundel County	79.3
Baltimore County	78.1
Baltimore City	72.8
Harford County	72.0
Howard County	83.2
Montgomery County	85.1
Prince George's County	79.1

Source: Maryland Department of Health, Maryland Vital Statistics Annual Report 2019[62]

[60] Mortality Frequency Measures
[61] NCHS Data Brief. Mortality in the United States, 2019
[62] Maryland Department of Health. Maryland Vital Statistics Annual Report, 2019

Exhibit 65: Self-Reported Poor Mental & Physical Health Days Among Adults

	Poor Physical Health Days
United States[63]	3.2
Maryland	3.4
Anne Arundel County	3.2
Baltimore County	3.6
Baltimore City	4.3
Harford County	3.6
Howard County	2.6
Montgomery County	2.9
Prince George's County	3.5

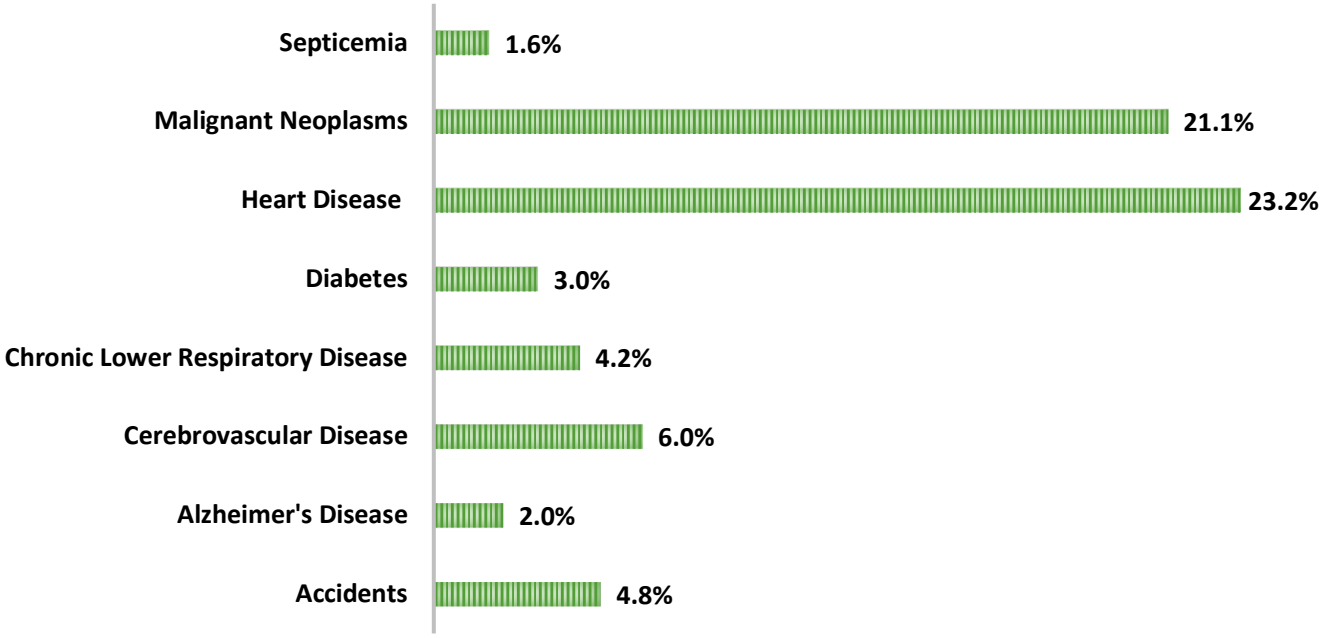
Source: County Health Rankings & Roadmaps, 2018

- Baltimore County, Baltimore City, and Harford County residents reported experiencing more poor mental health days than the state and national average.

[63] U.S. Data refers to top performer nationwide

In 2019, heart disease remained as the leading cause of death Maryland residents (23.2 percent of all deaths). The age-adjusted mortality rate was 159.5 per 100,000 population, 12.0 percent lower than the rate a decade ago. The second leading cause of death in 2019 was malignant neoplasms[64], responsible for 21.1 percent of all deaths. The age-adjusted mortality rate for cancer was 144.6 per 100,000 population in 2019, a 4% decrease compared to the 2018 rate.

Exhibit 66: Leading Causes of Death in Maryland



Cause of Death, 2017-2019	Percent of Deaths
Accidents	4.8%
Alzheimer's Disease	2.0%
Cerebrovascular Disease	6.0%
Chronic Lower Respiratory Disease	4.2%
Diabetes	3.0%
Malignant Neoplasms	21.1%
Septicemia	1.6%

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

[64] National Cancer Institute, Malignant Neoplasm

Exhibit 67: Causes of Death by County

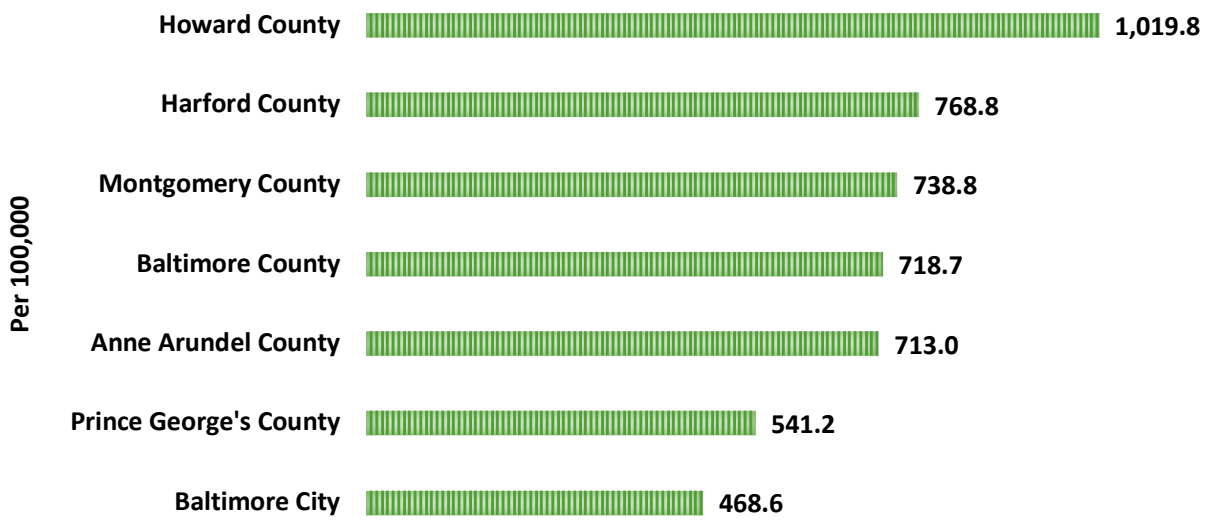
Death Rate Per 100,000	All Causes	Heart Disease	Cancer	Accidents	Cerebrovascular Disease
Maryland	713.0	161.9	148.6	36.4	40.7
Anne Arundel County	718.7	158.1	150.5	37.5	49.8
Baltimore County	768.8	179.4	159.9	43.0	44.6
Baltimore City	1,019.8	223.6	190.8	58.7	53.9
Harford County	738.8	162.6	150.9	37.1	37.8
Howard County	541.2	114.2	118.7	22.7	35.1
Montgomery County	468.6	95.3	109.4	22.0	23.3
Prince George's County	179.5	174.0	150.4	31.1	48.4

Death Rate Per 100,000	Chronic Lower Respiratory Disease	Diabetes	Alzheimer's Disease	Influenza & Pneumonia	Septicemia
Maryland	30.0	20.1	15.5	13.0	12.1
Anne Arundel County	35.9	16.7	16.8	14.0	12.1
Baltimore County	30.4	18.1	15.1	14.2	11.8
Baltimore City	33.7	32.8	11.9	16.7	21.7
Harford County	38.9	17.4	14.8	16.0	9.7
Howard County	15.6	13.9	16.9	7.5	7.2
Montgomery County	14.9	10.9	11.9	10.5	9.3
Prince George's County	21.8	27.5	16.3	13.1	14.1

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019

Exhibit 68: Total Deaths by County

Source: Maryland Department of Health. Maryland Vital Statistics Annual Report, 2017-2019



Appendix B: Stakeholder Interview Guide

Introduction

Good morning [or afternoon]. My name is [*Interviewer Name*] from Crescendo Consulting Group. We are working with Sheppard Pratt to conduct a community health needs assessment.

The purpose of this conversation is to learn more about the strengths and resources in the community as well as collect your insights regarding behavioral health and healthcare-related needs, ways that people seek services, ongoing impacts of the COVID-19 pandemic, and to identify service gaps and ways to better meet the needs of the community. We are also very interested to hear your insights about equal access to healthcare services and challenges or advantages that some communities may experience, if any.

We will describe our discussion in a written report; however, individual names will not be used. Please consider what you say in our conversation to be anonymous.

Do you have any questions for me before we start?

Ice-breaker / Self-introduction Question

Please tell me a little about yourself and ways that you like to interact with the community where you live [where appropriate, "… and the populations your organization (or you) serves."].

Access and Availability of Services

1. When you think of the good things about living in this community, what are the first things that come to mind? *[PROBE: things to do, green spaces, strong sense of family, cultural diversity]*

2. Generally, what are some of the challenges to living here?

3. What would you say are the two or three most urgent healthcare-related needs in the community? *[PROBE: obesity, diabetes, depression]*

Affordability of mental health, substance use, Health Care and Basic Needs

4. To what degree are community members or families struggling with finding and accessing quality mental health or substance use healthcare? [*PROBE: are there certain types of care or providers that are more difficult to find?]*

    To what degree is quality mental healthcare or treatment for substance use available?

    Does access or quality available for both adults and adolescents/children exist?

    How are people accessing care, for example, virtual/telemedicine, face-to-face?

    Are healthcare services equally available to everyone? Are there any barriers in access to services based on economic, race / ethnicity, gender, or other factors?

    To what degree do providers care for patients in a culturally sensitive manner?

5. Has the acuity of mental health and/or substance use changed in your community since the beginning of the COVID-19 pandemic?

6. Is school-based mental health care available in the schools for children and adolescents?

7. If someone is experiencing a mental health crisis, what resources or services are available in the community? Does it work well? If not, what is missing? Is follow-up care provided after stabilization?

8. What is access to primary care and physical specialty care like in your community? *[PROBE: Do most people have access to a PCP?]*

9. Is respite care available in the community? *(For example, is housing and other services available for someone who is experiencing homelessness after they are discharged from the hospital?)*

Stigma and prevention

10. What is your community's perception of mental health and substance use? How, if any, has the perception changed over time?

11. What types of prevention programs are available in your community (e.g., drug and alcohol, mental health, etc.)?

12. Do you feel that there is any stigma around mental health and/or substance user providers?

Health Equity

13. Health equity is an important consideration. First, what does health equity mean to you?

14. How can you improve current services for marginalized or hard-to-reach populations – Priority Populations -- in your community?

15. What are some of the community-level actions that can be done to provide for community mental health and wellbeing more equitably?
    a. Are there any 'low hanging fruit' that could be addressed quickly?

Social determinants of health

16. How difficult is it to find safe and affordable housing in your community? Name some of the greatest challenges.

17. Describe the job market in the area before the pandemic and currently. *[PROBES: Generally, are "good" jobs here, and can people get them? Is it easy to find a full-time job with good pay, benefits, and retirement?]*

18. Do you feel there is good access to broadband and high-speed internet in the region? What are some of the challenges to not having good, reliable internet?

19. How would you describe access to healthful, affordable food? What are some features or services that are working well? Where are the service gaps? What communities face unique challenges?

If transportation has not come up yet.

20. Does everyone typically have reliable transportation to work, the grocery store, doctors, school? If not, are there services in the community that help those without a vehicle?

21. How easy is it for families to find affordable and safe childcare in the area? What are some of the challenges or barriers?

Vulnerable Populations

22. What are some of the biggest needs for those who are more vulnerable than others? How does the community support them? *[PROBE: veterans, new Americans, seniors, people living with disabilities]*

IMPACT OF COVID-19

23. What are one or two ways that COVID-19 has impacted the community the most? *[PROBE: community well-being, social impacts, education, or the economy]*

    a. Which of these do you think will be short-term effects (e.g., "After COVID is behind us, so will the effects") or long-term effects (e.g., "The impact will be long-lasting.")?

24. How do you think COVID-19 will impact health behaviors and how people interact with the healthcare system or providers, such as for screenings or routine services, vaccine perceptions, virtual healthcare, or others?

b. How, if at all, has COVID-19 affected trust of healthcare providers or systems and the public health system?

Enhancing Outreach and disseminating Information

25. When community members need help, who do they tend to turn to for assistance (healthcare-related, community services, or otherwise)? [*PROBE: friends and family, Town Hall, local Health Department, their doctor, churches*]

26. How do community members generally learn about access to and availability of services in the area (e.g., on-line directory; social media; hotline; word of mouth)? What method tends to work the best or worst?

    a. What do you think are some challenges to spreading awareness and understanding of the availability of services and ways to access them? What might help overcome the challenges?

27. What types of activities would best reach those more vulnerable parts of community? (people experiencing homelessness, people living with disabilities, or other diverse or hard-to-reach populations)

MAGIC WAND QUESTION

28. If you could do one thing to make your community a better place, what would it be?

Appendix C: Community Survey Questions

Introduction and Objectives

Thank you for taking this brief survey on behalf of Sheppard Pratt Health System. The purpose of the survey is to better understand your thoughts about behavioral health needs (including substance use needs) and services in the area. The survey will take about 10 minutes, and your comments will be kept confidential.

We appreciate you sharing your thoughts to help us improve our services!

1. **Which of the following issues do you feel need more focus by the community?** Please rate the following issues on a 1 to 5 scale -- where 1 means that **No More Focus** is needed and **5 is Much More Focus Needed**

NEEDS	**No More Focus Needed (1)**	**(2)**	**Neutral (3)**	**(4)**	**Much More Focus Needed (5)**	**Do not know**
Counseling services for Adults						
Counseling Services for adolescents / children						
Early intervention for Substance use disorders						
Medical Assisted Treatment for Opioid Addiction; suboxone						
Post-Addictions Treatment Support Programs						
Support services for families of people struggling with mental health or substance issues						
Transitions of care services for people moving from one level of care to another						
Better communications between providers for patients seeing multiple caregivers						
Integrated care for people requiring medical / physical health, as well as behavioral health and substance use care						
School-based behavioral health services						
School-based behavioral health education and early intervention						
Detox services for people misusing drugs						
Support groups, counseling, or other information to help with day-to-day issues						
Crisis Care Programs for behavioral health (including substance use disorders)						
Caring for aging parents and resources to help						

Parenting Classes						
Support for single-parent households						
Transportation services for people needing to go to healthcare appointments						
Sources to obtain affordable, nutritious food						
Affordable quality childcare						
Homelessness						
Housing for incomes of all ages						
Domestic violence resources						
Job readiness (i.e., training, resources)						

2. **Of all the issues, what do you think are the top one or two greatest health issues in the community?**

3. **Have any of the following healthcare issues changed for you or a family member during the pandemic period (March 2020 to present)?**

NEEDS	NOT AN ISSUE before or since the pandemic	Yes, this is MORE of an issue now than before the pandemic	Yes, this is LESS of an issue now than before the pandemic	This is an issue, but it is NO MORE and NO LESS of an issue now than before the pandemic
Depression				
Challenging family relations				
Problematic romantic relationships				
Financial stress and pressure				
Feelings of suicide				
Anxiety and panic				
Substance abuse				
Gender based violence				
Racial based violence				

4. **What other issues have impacted your life due to the pandemic? [Open ended question]**

5. **In the past 12 months, have there been times when you or a family member needed mental health or substance use help but chose NOT to seek it?**
   - ☐ Yes
   - ☐ No

6. **If YES, why did you NOT get care? (Check all that apply)**
   - ☐ Could not afford it/Did not have insurance
   - ☐ It took too long to see a doctor or therapist
   - ☐ Childcare / Hard to find a babysitter
   - ☐ Hard to get time off from work/worry about losing a job
   - ☐ Worry that it may cause others to have bad thoughts about me
   - ☐ Feeling that care may not help
   - ☐ Worried that others will find out about it
   - ☐ Not sure where to go for help
   - ☐ I do not think it is really a problem
   - ☐ Appointments are at bad times
   - ☐ Had no transportation to get to I would have needed to go
   - ☐ Other (please specify)

7. **How familiar are you with Sheppard Pratt Health System?**
   - ☐ Very familiar
   - ☐ Somewhat familiar
   - ☐ Not very familiar
   - ☐ I am employed or affiliated with Sheppard Pratt Health System
   - ☐ Not familiar at all

8. **In the past two years which, if any, Sheppard Pratt Health System services have you used, and what was your overall level of satisfaction (if you used the service)?**

NEEDS	NO, I have NOT USED the service	YES, I use the service and was VERY SATISFIED	YES, I use the service and was SOMEWHAT SATISFIED	YES, I use the service and was SOMEWHAT DISSATISFIED	YES, I use the service and was VERY DISSATISFIED
Crisis services or the hotline					
Support services for people experiencing homelessness					

Mental health services for adults					
Mental health services for children					
Substance use disorder treatment services					
Residential programs					
Services for veterans					
School-based services					
Housing and homelessness services					

9. **Which of the following sources do you normally use to find out about healthcare providers, clinics and healthcare agencies, hospitals, or other community service providers? (Select all that apply)**

   - ☐ A hospital's website
   - ☐ Friends and relatives
   - ☐ Healthcare.gov
   - ☐ Medical websites such as WebMD or Mayo Clinic
   - ☐ Physician or other healthcare worker
   - ☐ Social media
   - ☐ Television
   - ☐ Word of mouth
   - ☐ Online search engine

The following are a few of demographic questions that help us groups the responses later.

10. **What zip code do you live in?**

11. How old are you?
    - ☐ Under 18
    - ☐ 18 – 24
    - ☐ 25 – 34
    - ☐ 35 – 44
    - ☐ 45 – 54
    - ☐ 55 – 64
    - ☐ 65+

12. **What is the highest grade or year in school you completed?**
    - ☐ Less than high school
    - ☐ Graduated high school
    - ☐ Some college or vocational training
    - ☐ Graduated college (4-year bachelor's degree)

- ☐ Completed Graduate or Professional school (Masters, PhD, Lawyer)

13. What is your race/Ethnicity? (CHECK ALL THAT APPLY)

- ☐ Black or African American
- ☐ American Indian
- ☐ Asian
- ☐ Caucasian
- ☐ Hispanic
- ☐ Two or More Races
- ☐ Other

14. Which of the following ranges best describes your total annual household income last year?

- ☐ Less than $25,000
- ☐ $25,000 to $50,000
- ☐ $50,000 to $75,999
- ☐ $75,000 to $100,000
- ☐ $100,000 or more

15. **Gender: How do you identify?**

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary/Other
- ☐ _____

THIS COMPLETES THE SURVEY – THANK YOU FOR YOUR PARTICIPATION!!