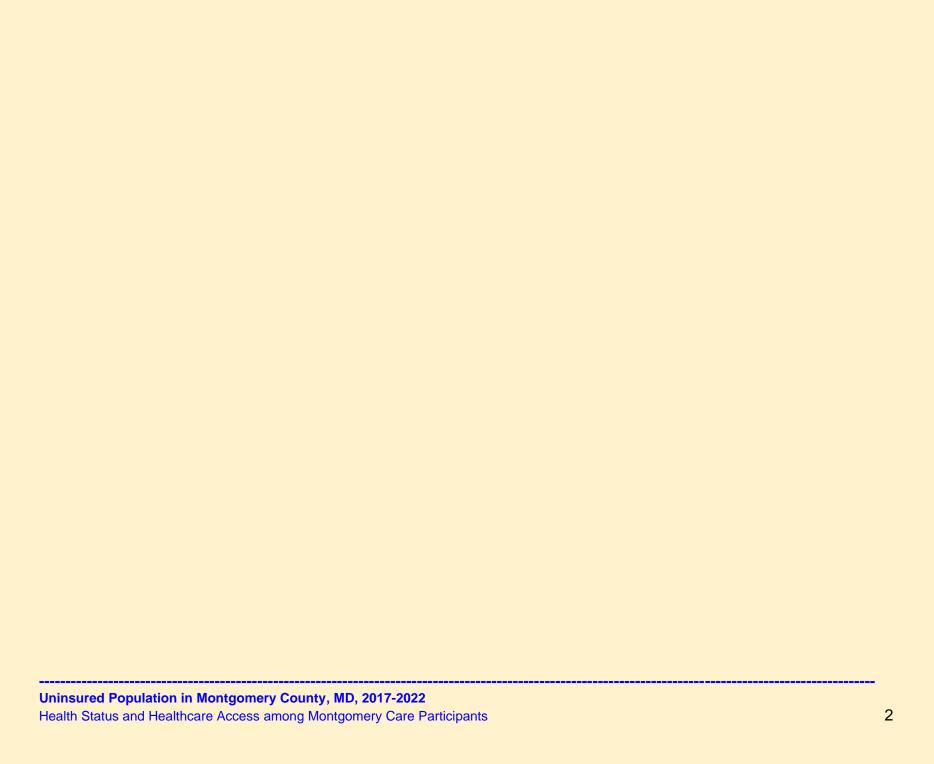
Uninsured Population in Montgomery County, MD 2017-2022

Health Status and Healthcare Access among Montgomery Care Participants





Montgomery County, Maryland
Department of Health and Human Services
Public Health Services
Health Planning and Epidemiology



Uninsured Population in Montgomery County, MD, 2017-2022

Health Status and Healthcare Access among Montgomery Care Participants

Marc Elrich, County Executive

James Bridgers, Jr., PhD, MBA, Director Department of Health and Human Services

Kisha Davis, MD, MPH, Health Officer Public Health Services

Christopher Rogers, PhD, MPH, Acting Chief Public Health Services

A Publication of the Montgomery County Department of Health and Human Services Public Health Services Health Planning and Epidemiology

401 Hungerford Drive, Rockville, MD 20850 (240) 777-1872

Email: Chunfu.liu@MontgomerycountyMD.gov Web: http://www.montgomerycountymd.gov/hhs/

September 2023

Suggested citation: Montgomery County, Maryland, Department of Health and Human Services, Health Planning and Epidemiology. *Uninsured Population in Montgomery County, MD, 2017-2022: Health Status and Healthcare Access among Montgomery Care Participants*

Uninsured Population in Montgomery County, MD, 2017-2022

Health Status and Healthcare Access among Montgomery Care Participants

PREPARED BY:

Health Planning and Epidemiology
Sara Hilsabeck, MPH, Senior Planning Specialist
Drew Burk, MPH, Data Specialist
Rita Deng, MHS, Senior Planning Specialist
Janelle Mingus, MPH, Epidemiologist I
Carmen Clarke, MPH, Epidemiologist II
Chunfu Liu, ScD, Chief Epidemiologist

University of Maryland Alyssa Precil, MPH

ACKNOWLEDGEMENT:

Data

Primary Care Coalition

Reviewers:

Public Health Services Kisha Davis, MD, MPH, Health Officer Christopher Rogers, PhD, MPH, Acting Chief

Department of Health and Human Services James Bridgers, Jr., PhD, MBA, Director

.....

TABLE OF CONTENTS

TABLE OF CONTENTS	5
LIST OF TABLES	7
LIST OF FIGURES	8
EXECUTIVE SUMMARY	10
INTRODUCTION	12
AIM	12
BACKGROUND	13
FINDINGS	18
I. Demographics	18
II. Healthcare Access	22
III. Chronic Diseases	26
Heart Disease	27
Cerebrovascular Disease	29
Chronic Lower Respiratory Disease (including COPD)	31
Cancer	33
Diabetes	37
IV. Infectious Diseases	39
Sexually Transmitted Infections	39
Tuberculosis	49
COVID-19	50
Immunizations	54
V. Behavioral Health	58
Mental Health	59
Substance Use Disorder (SUD)	61

Su	uicide Attempt/Ideation	. 63
	Maternal Health	
	LUSION	
	RENCES	
	NDIX: Codes for Health Conditions	
AFFEI	NDIA. Codes for fleatin Conditions	. 08

LIST OF TABLES

Table 1. Montgomery Cares Clinics, 2017-2022	15
Table 2. Syphilis by Sex and Year, Montgomery Cares, 2017-22	40
Table 3. Syphilis by Age and Year, Montgomery Cares, 2017-22	
Table 4. Syphilis by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Table 5. Gonorrhea by Sex and Year, Montgomery Cares, 2017-22	
Table 6. Gonorrhea by Age and Year, Montgomery Cares, 2017-22	
Table 7. Gonorrhea by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Table 8. Chlamydia by Sex and Year, Montgomery Cares, 2017-22	
Table 9. Chlamydia by Age and Year, Montgomery Cares, 2017-2	
Table 10. Chlamydia by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Table 11. HIV by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Table 12. Tuberculosis by Demographics and Year, Montgomery Cares, 2017-22	
Table 13. Suicide Attempt/Ideation by Demographics and Year, Montgomery Cares, 2017-22	

LIST OF FIGURES

Figure 1. Clients by Sex and Year, Montgomery Cares, 2017-22	18
Figure 2. Clients by Age and Year, Montgomery Cares, 2017-22	
Figure 3. Clients by Race/ethnicity and Year, Montgomery Cares, 2017-22	19
Figure 4. Clients by Language and Year, Montgomery Cares, 2017-22	19
Figure 5. Clients by Country of Origin and Year, Montgomery Cares, 2017-22	
Figure 6. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Gender and Year, Montgomery Cares, 2017-22	22
Figure 7. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-	-22
	22
Figure 8. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22	23
Figure 9. Percentage of Mammograms Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-22	
Figure 10. Percentage of Mammograms Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22	
Figure 11. Percentage of Pap Smears Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-22	
Figure 12. Percentage of Pap Smears Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22	
Figure 13. Clients by Chronic Condition and Year, Montgomery Cares, 2017-22	
Figure 14. Clients by Cancer Type and Year, Montgomery Cares, 2017-22	
Figure 15. Heart Disease by Sex and Year, Montgomery Cares, 2017-22	
Figure 16. Heart Disease by Age and Year, Montgomery Cares, 2017-22	
Figure 17. Heart Disease by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Figure 18. Cerebrovascular Disease by Sex and Year, Montgomery Cares, 2017-22	
Figure 19. Cerebrovascular Disease by Age and Year, Montgomery Cares, 2017-22	
Figure 20. Cerebrovascular Disease by Race/ethnicity, Montgomery Cares, 2017-22	
Figure 21. CLRD by Sex and Year, Montgomery Cares, 2017-22	
Figure 22. CLRD by Age and Year, Montgomery Cares, 2017-22	
Figure 23. CLRD by Race/ethnicity, Montgomery Cares, 2017-22	
Figure 24. Cancer by Major Type and Year, Montgomery Cares, 2017-22	
Figure 25. All Cancer by Sex and Year, Montgomery Cares, 2017-22	
Figure 26. All Cancer by Age, Montgomery Cares, 2017-22	
Figure 27. All Cancer by Race/Ethnicity, Montgomery Cares, 2017-22	
Figure 28. Female Breast Cancer by Age and Year, Montgomery Cares, 2017-22	
Figure 29. Female Breast Cancer by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Figure 30. Prostate Cancer by Age and Year, Montgomery Cares, 2017-22	36

Figure 31. Prostate Cancer by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Figure 32. Diabetes by Sex and Year, Montgomery Cares, 2017-22	
Figure 33. Diabetes by Age and Year, Montgomery Cares, 2017-22	37
Figure 34. Diabetes by Race/ethnicity and Year, Montgomery Cares, 2017-22	38
Figure 35. Common STIs by Year, Montgomery Cares, 2017-22	39
Figure 36. Chlamydia by Age Group and Year, Montgomery Cares, 2017-22	Error! Bookmark not defined.
Figure 37. HIV by Sex and Year, Montgomery Cares, 2017-22	47
Figure 38. HIV by Age and Year, Montgomery Cares, 2017-22	
Figure 39. HIV by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Figure 40. COVID-19 Testing by Sex, Montgomery Cares, 2020 to 2022	
Figure 41. COVID-19 Testing by Age Group, Montgomery Cares, 2020 to 2022	50
Figure 42. COVID-19 Testing by Race/ethnicity, Montgomery Cares, 2020 to 2022	
Figure 43. COVID-19 Diagnosis by Sex, Montgomery Cares, 2020 to 2022	
Figure 44. COVID-19 Diagnosis by Age, Montgomery Cares, 2020 to 2022	52
Figure 45. COVID-19 Diagnosis by Race/ethnicity, Montgomery Cares, 2020 to 2022	
Figure 46. COVID-19 Vaccination by Sex, Montgomery Cares, 2020 to 2022	
Figure 47. COVID-19 Vaccination by Age, Montgomery Cares, 2020 to 2022	
Figure 48. COVID-19 Vaccination by Race/ethnicity, Montgomery Cares, 2020 to 2022	
Figure 49. Influenza Vaccination by Sex and Year, Montgomery Cares, 2020 to 2022	
Figure 50. Influenza Vaccination by Age and Year, Montgomery Cares, 2020 to 2022	
Figure 51. Influenza Vaccination by Race/ethnicity and Year, Montgomery Cares, 2020 to 2022	
Figure 52. Clients by Behavioral Health Condition Diagnosis and Year, Montgomery Cares, 2017-2	
Figure 53. Clients by Behavioral Health Procedures and Year, Montgomery Cares, 2017-22	
Figure 54. Mental Health by Sex and Year, Montgomery Cares, 2017-22	
Figure 55. Mental Health by Age and Year, Montgomery Cares, 2017-22	
Figure 56. Mental Health by Race/ethnicity and Year, Montgomery Cares, 2017-22	60
Figure 57. Substance Use Disorder by Sex and Year, Montgomery Cares, 2017-22	61
Figure 58. Substance Use Disorder by Age and Year, Montgomery Cares, 2017-22	
Figure 59. Substance Use Disorder by Race/ethnicity and Year, Montgomery Cares, 2017-22	
Figure 60. Top 5 Maternal Health Diagnoses by Year, Montgomery Cares, 2017-22	
Figure 61. Top 5 Maternal Health Diagnoses by Age and Year, Montgomery Cares, 2017-22	
Figure 62, Top 5 Maternal Health Diagnoses by Race/ethnicity and Year, Montgomery Cares, 2017	7-22 65

EXECUTIVE SUMMARY

Montgomery County performs better than state and national averages on most health outcomes and health factors, although great disparities exist among population subgroups and communities. The composition of a highly diverse population in the County further complicates the issue. Certain population subgroups have a well-known higher disease burden and poorer healthcare access. It is evident from the literature that uninsured population have poorer health outcomes due to the lack of access to regular check-ups and routine health services. The evaluation of health status and healthcare access of enrollees in a safety-net program, Montgomery Cares, in Montgomery County is summarized below.

Demographics

- 1) There were 27,882 clients who were enrolled and received services from Montgomery Cares clinics from 2020 to 2022, a 10.7% decline from 31,220 clients in 2017 to 2019, likely due to the impact of the COVID-19 pandemic.
- 2) There was a 20% increase among Hispanic clients (51.8% vs. 62.2%) and a 31.3% decrease among NH-Black clients (26.2% vs. 18.0%) from 2017 to 2019 and 2020 to 2022.
- 3) The most common language spoken by clients was Spanish (59.0%), followed by English (23.7%) from 2020 to 2022. The most frequent country of which clients originated was El Salvador (25.3%), followed by Other (13.8%), Honduras (9.1%), and USA (6.4%).

Healthcare Access

- 1) From 2020 to 2022, 23% of eligible clients received a colorectal cancer screening, 29% received a Pap smear, and 41% received a mammogram screening.
- 2) The percentage of clients receiving preventive services declined from 2017-19 to 2020-22.

Chronic Disease

- 1) The leading chronic conditions among Montgomery Cares clients are heart disease (28.2%), followed by diabetes (13.0%), CLRD (3.1%), and cancers (1.0%) from 2020 to 2022. Female breast (0.2%), prostate (0.1%), and colon-rectum (0.1%) are common sites for both 2020 to 2022 and 2017 to 2019 among cancers.
- 2) NH-Black clients have both the highest prevalence of heart disease (41,422/100k) and cancers (1,677/100k); NH-Asian clients have the both highest prevalence of cerebrovascular disease (1,021/100k) and diabetes (1,9044/100k); NH-Whites (3,959/100k) have the highest prevalence of chronic lower respiratory disease from 2020 to 2022.

Infectious Disease

- 1) Other than COVID-19 (7,558/100k), the common infectious disease among Montgomery Cares clients is HIV (0.2%), followed by chlamydia (0.2%) and syphilis (0.06%) from 2020 to 2022. TB is another condition that is more prevalent among clients aged 35-64 and Hispanic clients.
- 2) NH-Black clients have the highest prevalence of HIV (659/100k) among all race/ethnicity groups from 2020 to 2022, while Hispanic clients have the highest prevalence of syphilis (58/100k) and chlamydia (242/100k). For COVID-19, while NH-Asian clients (1,779/100k) have the highest PCR testing, NH-White clients have the highest disease diagnosis (34,035/100k).
- 3) Hispanic clients have the highest influenza vaccination (10,093/100k) and NH-White clients have the lowest (3,201/100k) among race/ethnicity groups from 2020 to 2022, though there is an overall decrease than in 2017 to 2019. NH-Black clients have the highest COVID-19 vaccination (2,077/100k) and Hispanic clients have the lowest (860/100k).

Behavioral Health

- 1) Mental health (13.8%) is the most common issue, followed by substance use disorder (2.8%), and suicide attempt (0.1%) from 2020 to 2022.
- 2) Hispanic clients (12,748/100k) have the highest prevalence of mental health condition; NH-White clients (5,392/100k) have the highest prevalence of substance use disorder from 2020 to 2022.

Maternal Health

- 1) The top 5 maternal conditions originating in the perinatal period or pregnancy, childbirth, and the puerperium are uncomplicated pregnancy, delivery or puerperium (3.2%), spontaneous abortion and complications of spontaneous abortion (0.2%), complications specified during the puerperium (0.2%), Other specified complications in pregnancy (0.1), and gestational weeks (0.1%) from 2020 to 2022.
- 2) Clients aged 20-29 (9,142/100k) have the highest prevalence of maternal health diagnoses among all age groups, and aged 40+ (827/100k) have the lowest from 2020 to 2022.
- 3) Hispanic clients (5,382/100k) have the highest prevalence of maternal health diagnoses, while NH-Asian clients (802/100k) have the lowest from 2020 to 2022.

INTRODUCTION

Uninsured populations have overall poorer health outcomes than those insured, due to a lack of regular check-ups and access to healthcare services (Tolbert, Orgera, Damico, 2020). In 2021, approximately 6.7% of the Montgomery County population was without health insurance, a decrease from 8.4% in 2017 (United States Census Bureau, 2021). Although Montgomery County has a greater proportion of uninsured residents than the state of Maryland (6.0%), the percent uninsured in Montgomery County is lower than that of the U.S (8.8%). The percent uninsured in Montgomery County varies across population subgroups by race and ethnicity. As of 2021, Hispanic residents have the highest percent uninsured (19.2%), while non-Hispanic white residents have the lowest (2.0%).

Montgomery Cares is the one of the safety-net programs established to provide primary and preventive services to uninsured County residents in Montgomery County, Maryland. Montgomery Cares is 100% funded by the County and is a public-private partnership that includes 11 safety-net primary care clinics as of year 2023, 6 hospitals, Department of Health and Human Services (DHHS), Primary Care Coalition (PCC), and volunteer health practitioners and other community-based organizations. Examples of types of services provided by Montgomery Cares include medical check-ups, sick visits, medications, laboratory tests, X-Rays, flu shots, access to a specialist, behavioral health care, and oral health care. The DHHS Office of Eligibility and Support Services (OESS) conducts eligibility screening for the Montgomery Cares program. The eligibility of enrolling in Montgomery Cares program includes residency of Montgomery County, 18 years or older, without health insurance, and with an income at or below 250% of the Federal Poverty Level.

Montgomery County is the most populous county in Maryland. It also has a very diverse population with a trend towards becoming more diverse over time. As certain population subgroups have much higher percentages of uninsured, as well as much higher disease burden among population subgroups, the challenge remains on addressing great health disparities and improving population health in the County. Montgomery County has had the highest overall health outcomes ranking in Maryland since 2014, based on the County Health Rankings by the Robert Wood Johnson Foundation. However, ongoing efforts are needed to make improvements in the areas of access to healthcare, health inequities, and unhealthy behaviors.

This report summarizes findings of health status and healthcare access of Montgomery Cares enrollees from 2017 to 2019 and 2020 to 2022 to facilitate the comparison of before and during COVID-19 pandemic. There were 10 clinical organizations participated in Montgomery Cares between 2017 and 2022. The report includes sections on demographics, healthcare access, major health topics pertaining to chronic disease, infectious disease, behavioral health, and maternal health.

AIM

This report seeks to answer the following research questions:

- A. What are the health needs of the Montgomery Cares population in terms of disease burden and service utilization?
- B. How do the health needs differ within the Montgomery Cares population?
- C. How do the health needs of the Montgomery Cares population compare to the insured population?

BACKGROUND

A literature review was conducted using the PubMed search engine and a combination of the following Medical Subject Headings (MeSH) terms: "Medically Uninsured", "Morbidity", and "Health Status Disparities". Articles focusing on populations within the United States, in the English language, and published no earlier than 2015 were selected for review. This search yielded 104 results which were narrowed to 51 articles after title review. Additionally, a supplemental search was conducted to gather information not found in the original search. The phrases "health needs for the uninsured vs insured" and "effects of Medicaid expansion" from 2015 and to present were searched using Google Scholar, which yielded three articles. Furthermore, data from the United States Census Bureau was accessed to gather additional demographic information regarding the uninsured population.

According to American Community Survey data, between 2010 and 2021, Hispanics and American Indians/Alaska Natives have consistently had the highest uninsured rate across all racial/ethnic groups, with whites and Asians having the lowest rates. This is consistent with the demographic distribution of uninsured populations in Maryland. The geographic distribution of uninsured populations is important to note, as trends from 2019 to 2021 indicate that southern states have higher uninsured rates (12.6%), followed by the West (7.8%), Midwest (5.8%), and Northeast (4.5%) in 2021, according to the National Center for Health Statistics. States grouped into the southern region include Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas. A contributing factor to the high uninsured rate in the South is that states which did not expand Medicaid have higher proportions of individuals with no health insurance coverage compared with expanded states (Akinyemiju, Jha, Moore, & Pisu, 2016). Regarding sex, men are more likely to be uninsured than woman, as of 2021 (American Community Survey). Relative to insured adults, uninsured adults are younger and have lower family income (National Health Interview Survey, 2020). Uninsured individuals tend to be of low SES with less than a high school education (U.S Census Bureau).

Mortality and morbidity rates for uninsured adults are higher than adequately insured adults. Studies have shown that uninsured adults have an increased risk of presenting with advanced stage and grade of cancer and more elevated tumor marks. These findings were apparent in a study that analyzed the impact of insurance on breast, colorectal, prostate, and cervix cancers. Results indicated that uninsured adults were more likely to present with advanced diseases in these cancer types and that Medicaid coverage or no coverage was associated with overall worse survival (Amini, et al., 2016). In another study, Adler Jaffe et al. (2019) found that the median overall survival for hepatocellular carcinoma (HCC) was statistically higher for privately insured individuals than for Medicaid-insured or

uninsured individuals. Uninsured HCC cases were more than twice as likely to die as those with private insurance. Markt et al. (2016), reported that uninsured men and those with Medicaid had a higher risk of death from germ cell tumors (GCT) compared to traditionally insured men. Specifically, uninsured men had an 88% increased risk of GCT-specific mortality. Their findings suggested that uninsured men were more likely to present with later stage of disease with worse tumor characteristics. A 2021 study by Akinyemiju, Jha, Moore, & Pisu (2016), found that compared to expanded states, the average number of comorbidities in the uninsured population was significantly higher in non-expanded states. The comorbidities consist of high blood pressure, high cholesterol, heart attack, asthma, cancer, kidney disease, diabetes, and many more chronic conditions. Results from this study showed that individuals who are uninsured, poor, and belong to a racial minority group are more likely to reside in non-expanded states. An important finding to note is that the literature focused more on the disparities in the health outcomes between the uninsured/low income and the insured populations, rather than disparities in the prevalence or incidence of disease.

Results from the literature indicate that uninsured adults are less likely to visit outpatient services and adhere to medication management. Olfson et al. (2022), examined insurance status and healthcare service use patterns. Compared to people with continuous coverage, uninsured adults were less likely to have gone to at least one outpatient substance use treatment visit. They were also less likely to have received treatment for mental illnesses. Among hypertensive patients, uninsured adults were less likely to receive antihypertensive medications than adults with continuous or discontinuous coverage. The same results were reported in another study that examined the impact of insurance status on healthcare use and medication management. Uninsured adults with hypertension experienced barriers in receiving care, such as regular check-ups, and complying with recommend treatment plans. They were 61% less likely to report antihypertensive medication use and 75% less likely to report visiting a doctor in the past year (Fang, Zhao, Wang, Ayala, & Loustalot, 2016). These results suggest that the cost of care is prioritized over the need for care in uninsured adults.

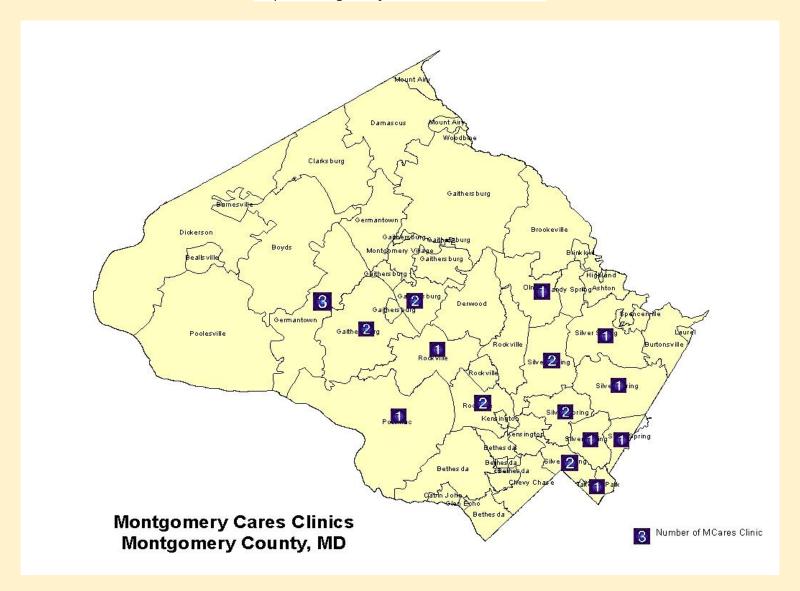
As seen with the Affordable Care Act, Medicaid expansion resulted in improved access and lower cost of care. For example, studies show that medical coverage expansion provides greater access to screening services, such as mammograms and colonoscopies. Additionally, expansion is associated with reduced spending on chronic disease management, improvement in health overall, and better quality of life (Mazurenko, Balio, Agarwal, Carroll, & Menachemi, 2018). One study found that expansion of insurance, to those that were otherwise uninsured, improved treatment rates for hypertension. These researchers projected Medicaid expansion could prevent 95,000 to 222,000 CVD-related deaths among nonelderly hypertensive patient in their cohort (Li, Bruen, Lantz, & Mendez, 2015). There is a small body of research that discusses the impact of Medicaid expansion in Maryland, which took place in 2014. Most of the research assesses the impact of expansion on emergency care utilization but it remains unclear if there is an association. The safetynet Montgomery Cares program ensures that primary and preventative care is available to all residents of Montgomery County, including individuals who remain without healthcare coverage despite Maryland Medicaid expansion.

Table 1. Montgomery Cares Clinics, 2017-2022

	Clinic Name	Address	
Aspen Hill			
	Holy Cross Hospital Health Center Aspen Hill	13975 Connecticut Avenue Suite 250 Aspen Hill, MD 20906	
	Mobile Medical Care – St. Mary Magdalene Episcopal Church	3820 Aspen Hill Road Aspen Hill, MD 20906	
Gaithersburg	Ерізсораї Спитст		
Cartifersburg	Chinese Culture and Community Service	9318 Gaither Road, Suite 205 Gaithersburg, MD 20878	
	Center/Pan Asian Volunteer Health Clinic		
	Holy Cross Health Center	702 Russell Avenue Suite 100 Gaithersburg, MD 20877	
	Mercy Health Clinic	7 Metropolitan Court Suite 1 Gaithersburg, MD 20878	
	Mobile Medical Care Episcopal Church of the Ascension	202 South Summit Avenue Gaithersburg, MD 20877	
Germantown			
	Holy Cross Health Center (no longer at this location as of 2023)	12800 Middlebrook Road, Suite 206 Germantown, MD 20874	
	Mobile Medical Care The Upcounty Clinic	19735 Germantown Road Germantown, MD 20874	
	Mobile Medical Care Korean Community Service Center / KAMMSA	19735 Germantown Road Germantown, MD 20874	
Olney			
	Proyecto Salud Medstar Montgomery General Hospital Campus	18111 Prince Philip Drive Suite 312 Olney, MD 20832	
Potomac			
	Mobile Medical Care Ibn Sina Clinic at Islamic Education Center	7917 Montrose Road Potomac, MD 20854	
Rockville			
	Mansfield Kaseman Health Clinic Community Ministries of Rockville	8 West Middle Lane Rockville, MD 20850	
	Mobile Medical Care Women's Clinic at Rollins Avenue	981 Rollins Avenue Rockville, MD 20852	
	Mobile Medical Care Rollins Avenue	981 Rollins Avenue Rockville, MD 20852	
Silver Spring			
	CCI Health & Wellness Services	8630 Fenton Street, 12th Floor Silver Spring, MD 20910	

	Holy Cross Health Center	7987 Georgia Avenue Silver Spring, MD 20910
	Mary's Center Clinic	8709 Flower Avenue Silver Spring, MD 20901
	Mobile Medical Care East Montgomery County Service Center	3300 Briggs Chaney Road Silver Spring, MD 20904
	Mobile Medical Care Long Branch Community Center	8700 Piney Branch Road Silver Spring, MD 20903
	Muslim Community Center Medical Clinic	15200 New Hampshire Avenue Silver Spring, MD 20905
	Catholic Charities Medical Clinic at McCarrick Center (no longer participating as of 2023)	12247 Georgia Avenue Silver Spring, MD 20902
Takoma Park		
	CCI Health & Wellness Services	7676 New Hampshire Avenue Suite 220 Takoma Park, MD 20912
Wheaton		
	Proyecto Salud Wheaton	11002 Veirs Mill Road, Suite 700 Wheaton, MD 20902

Map 1. Montgomery Cares Clinics, 2017-2022



FINDINGS

I. Demographics

There were 27,882 clients who were enrolled and received services from Montgomery Cares clinics 2020 to 2022, a 10.7% decline from 31,220 clients in 2017 to 2019, likely due to the impact of the COVID-19 pandemic. A comparison of changes in the demographic distribution of clients reveals while there were no noticeable changes in sex and age (Figure 1, Figure 2). However, there was a 20% increase among Hispanic clients (51.8% vs. 62.2%) and a 31.3% decrease among NH-Black clients (26.2% vs. 18.0%) from 2017 to 2019 to 2020 to 2022 (Figure 3).

Figure 1. Clients by Sex and Year, Montgomery Cares, 2017-22

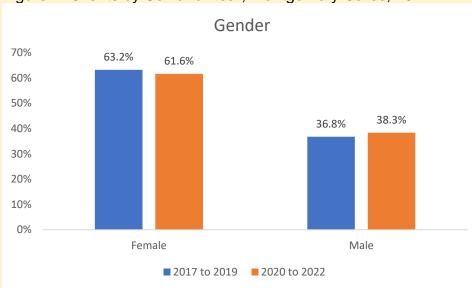
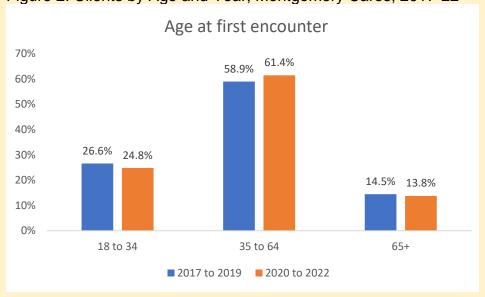


Figure 2. Clients by Age and Year, Montgomery Cares, 2017-22



The most common language spoken by clients was Spanish (59.0%), followed by English (23.7%) and other (6.2%) from 2020 to 2022 (Fig). However, there was a 21.6% increase in Spanish (48.5% vs. 59.0%), a 12.2% decrease in English (27.0% vs. 23.7%) and a 45.1% decrease in other languages (11.3% vs. 6.2%) from 2017 to 2019 to 2020 to 2022 (Figure 4).

Figure 3. Clients by Race/ethnicity and Year, Montgomery Cares, 2017-22

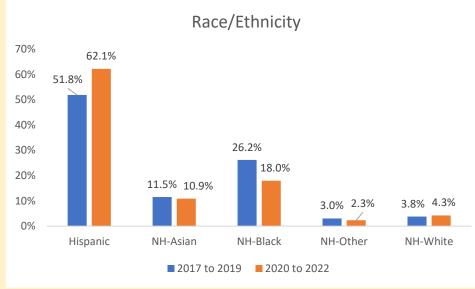
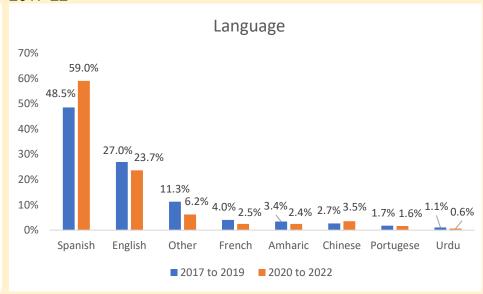
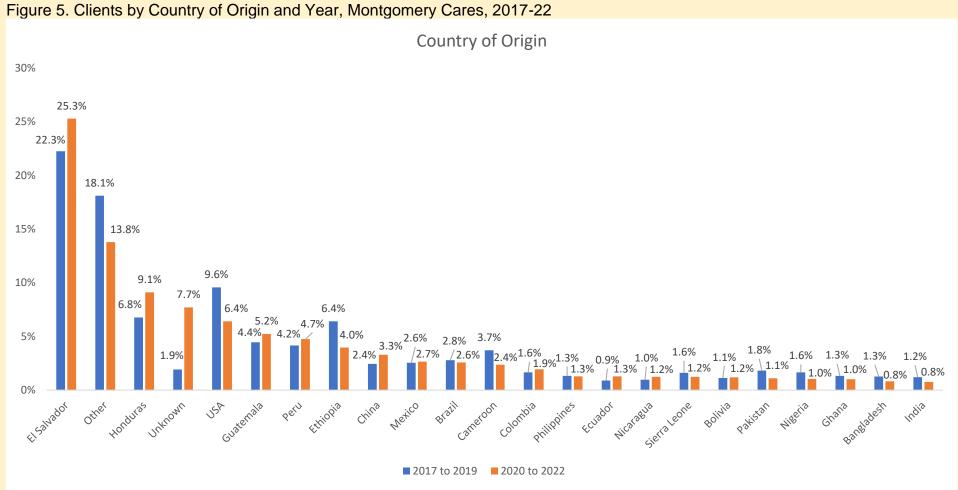
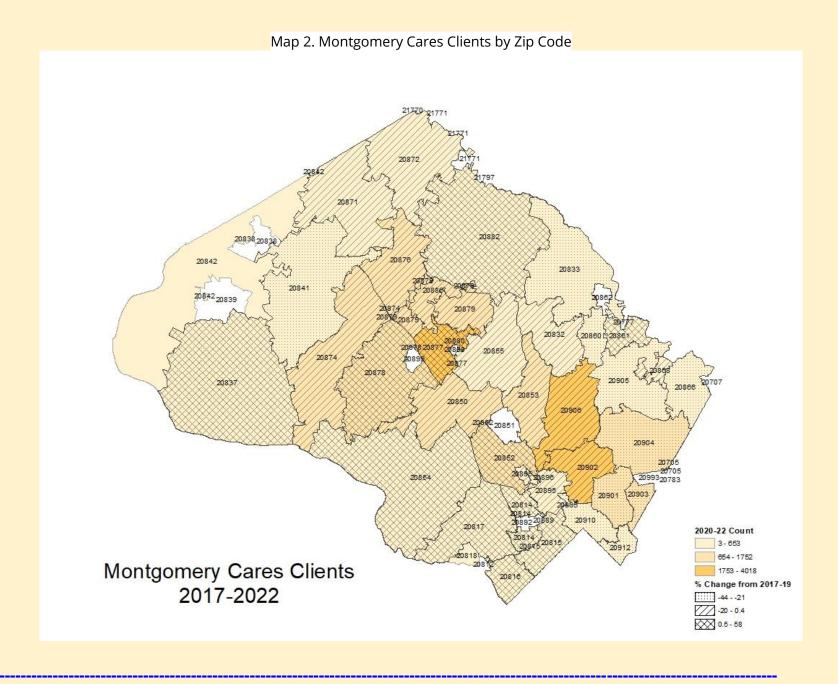


Figure 4. Clients by Language and Year, Montgomery Cares, 2017-22



The most frequent country from which clients originated was El Salvador (25.3%), followed Honduras (9.1%), and USA (6.4%) from 2020 to 2022. A combination of other countries of origin comprised 13.8% of clients, with no single country comprising more than 1% of clients. There was a 13.5% increase in El Salvador (22.3% vs. 25.3%), a 33.3% decrease in USA (9.6% vs. 6.4%), and a 33.9% increase in Honduras (6.8% vs. 9.1%) from 2017 to 2019 to 2020 to 2022 (Figure 5). There was a 23.8% decrease in other countries of origin (18.1% vs. 13.8%).





II. Healthcare Access

Colorectal Cancer Screenings

There were 2,977 of 13,008 eligible clients (23%) who received a colorectal cancer screening through the Montgomery Cares program from 2020-2022, an approximate 8% decline from 4,486 of 14,611 eligible clients who received a colorectal cancer screening from 2017-2019. This trend is consistent for both males and females with a roughly 7-8% decline in colorectal cancer screenings from 2017-2019 and 2020-2022 (Figure 6).

However, there are minor discrepancies over time for the percentage of screenings among clients by race and ethnicity. From 2017-2019 to 2020-2022, there was an 8% decrease in screenings among Hispanic clients, a 9% decrease among non-Hispanic White clients, an approximate 11% decrease among non-Hispanic Black clients and non-Hispanic Asian clients, and a 10% decrease among non-Hispanic clients of other races (Figure 7).

Figure 6. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Gender and Year, Montgomery Cares, 2017-22

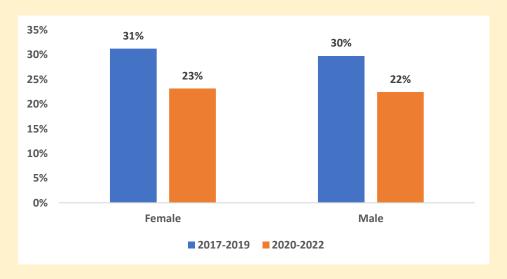
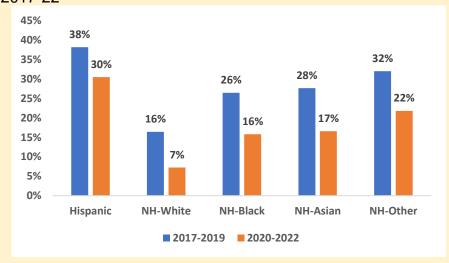
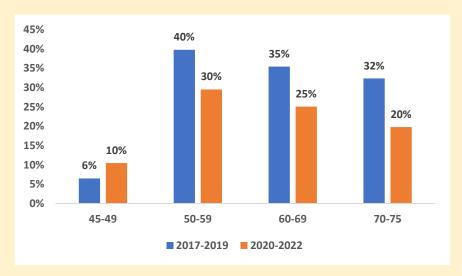


Figure 7. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-22



Furthermore, there are notable discrepancies over time for the percentage of screenings among clients by age group. From 2017-2019 to 2020-2022, there was a 4% increase in screenings among clients aged 45-49, a 10% decrease among clients aged 50-59 and clients aged 60-69, and an approximate 13% decrease among clients aged 70-75 (**Error! Not a valid bookmark self-reference.**).

Figure 8. Percentage of Colorectal Cancer Screenings Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22



Breast Cancer Screenings

There were 2,432 of 5,986 eligible clients (41%) who received a mammogram through the Montgomery Cares program from 2020-2022, a roughly 4% decline from 3,325 of 7,306 clients that received a mammogram from 2017-2019.

Across different races and ethnicities, the results for the percentage of mammograms among clients were varied. From 2017-2019 to 2020-2022, there was a 4% decrease in mammograms among Hispanic clients and non-Hispanic Black clients, a 12% decrease among non-Hispanic White clients, an approximate 5% decrease among non-Hispanic Asian clients, and a 1% increase among non-Hispanic clients of other races (Figure 9Error! Reference source not found.).

Minor differences exist over time for the percentage of mammograms among clients by age group. From 2017-2019 to 2020-2022, there was a 4% decrease in mammograms among clients aged 50-59, a 3% decrease among clients aged 60-69, and a 5% decrease among clients aged 70-75 (Figure 10).

Figure 9. Percentage of Mammograms Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-22

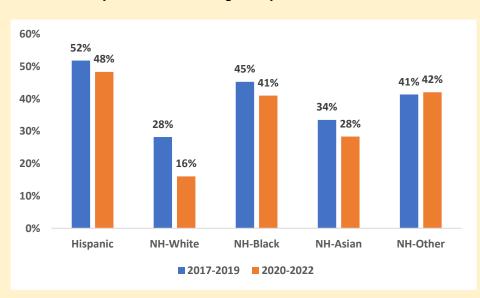
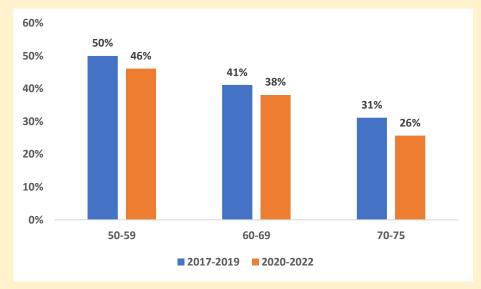


Figure 10. Percentage of Mammograms Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22



Cervical Cancer Screenings

There were 4,229 of 14,507 eligible clients (29%) who received a Pap smear through the Montgomery Cares program from 2020-2022, an approximate 8% decline from 6,170 of 16,573 clients that received a Pap smear from 2017-2019.

Similar to the findings related to mammograms, there are some distinct differences over time for the percentage of Pap smears among clients by race and ethnicity. From 2017-2019 to 2020-2022, there was a 14% decrease in Pap smears administered among Hispanic clients, a 9% decrease among non-Hispanic White clients, a nearly 4% decrease among non-Hispanic Black and non-Hispanic Asian clients, and an 8% increase among non-Hispanic clients of other races (Figure 11Error! Reference source not found.).

The percentages of Pap smears administered over time among clients by age group are also declining. From 2017-2019 to 2020-2022, there was a nearly 7% decrease in Pap smears among clients aged 21-29 and clients aged 60-65, a 12% decrease among clients aged 30-39, an approximate 8% decrease among clients aged 40-49, and a 6% decrease among clients aged 50-59 (Figure 12).

Figure 11. Percentage of Pap Smears Among Eligible Clients by Race/Ethnicity and Year, Montgomery Cares, 2017-22

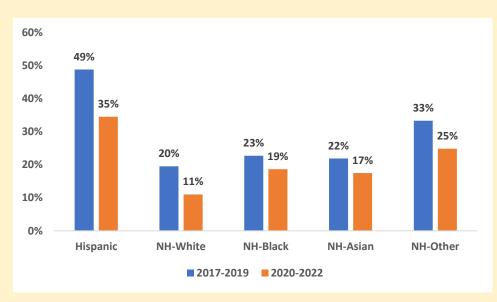
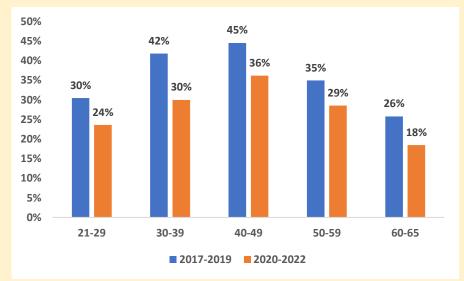


Figure 12. Percentage of Pap Smears Among Eligible Clients by Age Group and Year, Montgomery Cares, 2017-22



III. Chronic Diseases

The leading chronic conditions among clients in Montgomery Cares are heart disease (28.2%), followed by diabetes (13.0%), Chronic Lower Respiratory Disease (CLRD) (3.1%), and cancers (1.0%) from 2020 to 2022. Similar estimates are also observed from 2017 to 2019 (Figure 13). Among cancers, female breast (0.3%), prostate (0.2%), and colon-rectum (0.1%) are most common sites for both 2020 to 2022 and 2017 to 2019 (Figure 14).

Figure 13. Clients by Chronic Condition and Year, Montgomery Cares, 2017-22

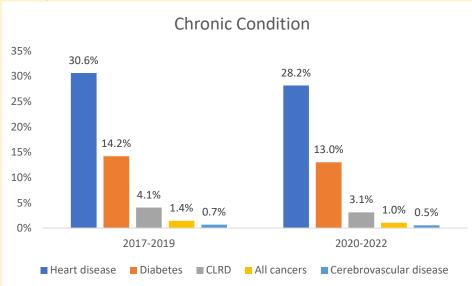
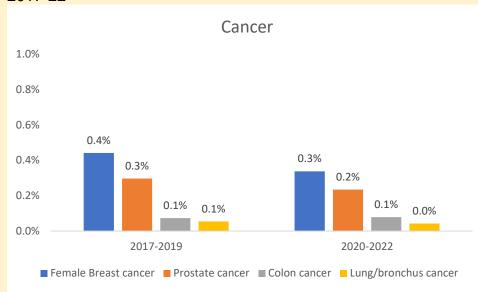


Figure 14. Clients by Cancer Type and Year, Montgomery Cares, 2017-22



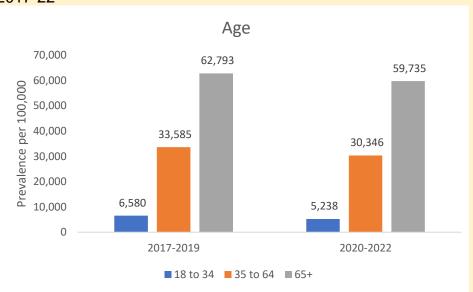
Heart Disease

Men (30,751/100k) have higher prevalence of heart disease than women (26,569/100k) among Montgomery Cares clients from 2020 to 2022 (Figure 15). A similar pattern is observed from 2017 to 2019. Clients 65+ (59,734/100k) have the highest prevalence of heart disease among all other age groups from 2020 to 2022 (Figure 16).

Figure 15. Heart Disease by Sex and Year, Montgomery Cares, 2017-22

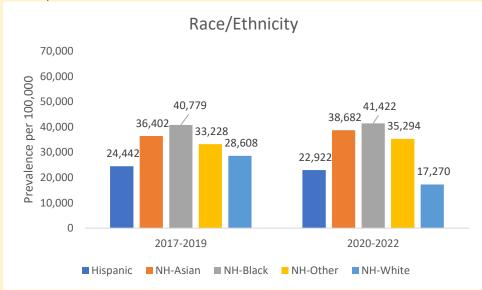
Gender 70,000 60,000 per 100,000 50,000 40,000 33,031 30,751 29,256 Prevalence 26,569 30,000 20,000 10,000 0 2017-2019 2020-2022 ■ Female ■ Male

Figure 16. Heart Disease by Age and Year, Montgomery Cares, 2017-22



Among population subgroups pertaining to race/ethnicity, NH-Black clients (41,422/100k) have the highest prevalence of heart disease, followed by NH-Asian clients (38,682/100k), Hispanic clients (22,922/100k), and NH-White clients have the lowest (17,270/100k) from 2020 to 2022. The same pattern is also observed from 2017 to 2019 (Figure 17).

Figure 17. Heart Disease by Race/ethnicity and Year, Montgomery Cares, 2017-22



Cerebrovascular Disease

Men (739/100k) have a higher prevalence of cerebrovascular disease than women (430/100k), among Montgomery Cares clients from 2020 to 2022 (Figure 18). The same pattern is observed from 2017 to 2019. Clients 65+ (1,848/100k) have the highest prevalence of cerebrovascular disease among all other age groups from 2020 to 2022 (Figure 19).

Figure 18. Cerebrovascular Disease by Sex and Year, Montgomery Cares, 2017-22

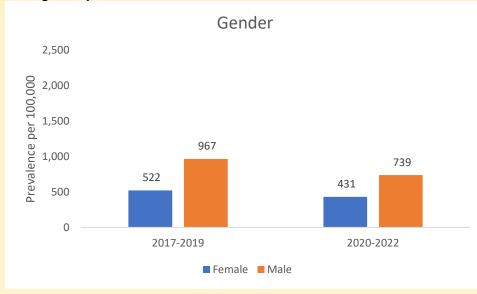
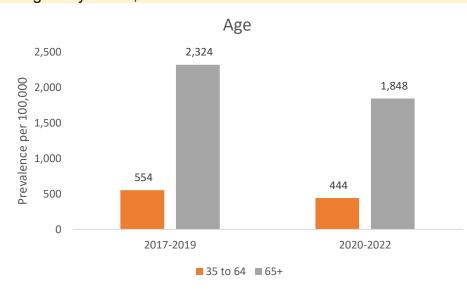
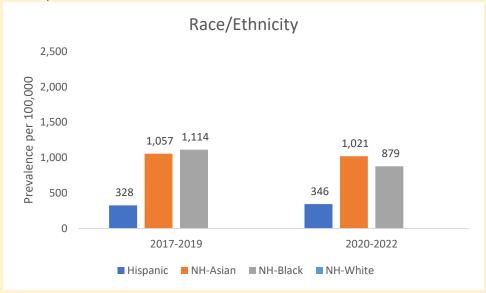


Figure 19. Cerebrovascular Disease by Age and Year, Montgomery Cares, 2017-22



Among population subgroups pertaining to race/ethnicity, NH-Asian clients (1,021/100k) have the highest prevalence of cerebrovascular disease, followed by NH-Black clients (878/100k), and Hispanic clients (346/100k) from 2020 to 2022. From 2017 to 2019, NH-Black clients (1,114/100k) have the highest prevalence of cerebrovascular disease and followed by NH-Asian clients (1,056/100k) and Hispanic clients (327/100k) have the lowest (Figure 20).

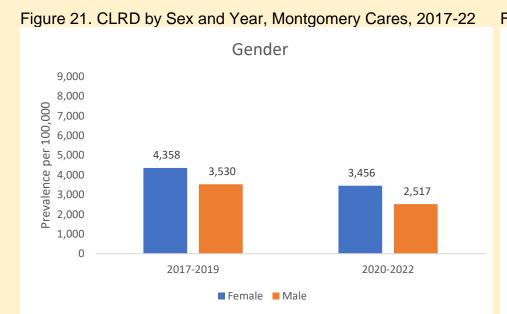
Figure 20. Cerebrovascular Disease by Race/ethnicity, Montgomery Cares, 2017-22

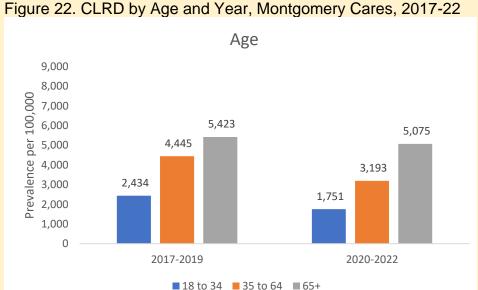


^{**}NH white are not shown due to small cell counts.

Chronic Lower Respiratory Disease (including COPD)

Women (3,455/100k) have higher prevalence of CLRD than men (2,516/100k) among Montgomery Cares clients from 2020 to 2022 (Figure 21). The same pattern is observed from 2017 to 2019. Clients 65+ (5,075/100k) have the highest prevalence of CLRD among all other age groups from 2020 to 2022 (Figure 22).





Among population subgroups pertaining to race/ethnicity, NH-White clients (3,959/100k) have the highest prevalence of CLRD, followed by NH-Asian clients (3,855/100k), NH-Black clients (3,335/100k), and Hispanic clients (2,822/100k) have the lowest from 2020 to 2022. For NH-White clients, there is a substantial decrease from 2017 to 2019 (8,270/100k) to 2020 to 2022 (3,959/100k). From 2017 to 2019, the prevalence of chronic lower respiratory disease among NH-White clients (8,270/100k) are much higher than those in other race/ethnicity groups (Figure 23).

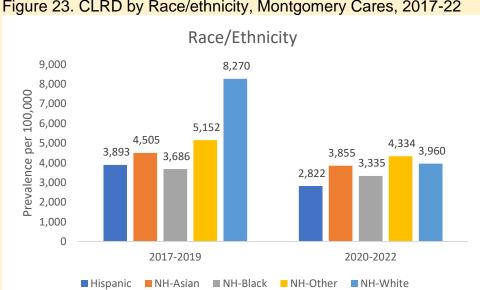


Figure 23. CLRD by Race/ethnicity, Montgomery Cares, 2017-22

Cancer

Female breast cancers (0.3%) are the most common cancers, followed by prostate (0.2%), colon/rectum (0.1%), and lung from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 24). While women (1,093/100k) have higher overall cancer burden than men (973.0/100k) from 2020 to 2022, men have higher burden from 2017 to 2019 (Figure 25).

Figure 24. Cancer by Major Type and Year, Montgomery Cares, 2017-22

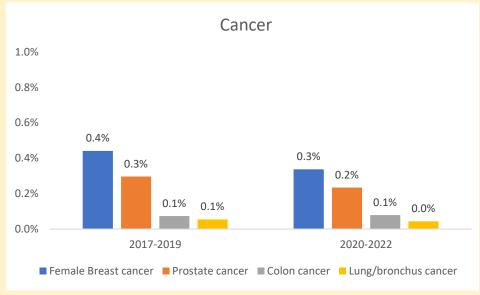
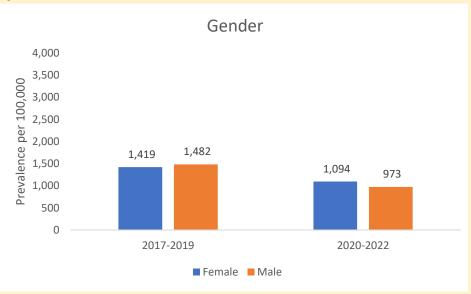


Figure 25. All Cancer by Sex and Year, Montgomery Cares, 2017-22



Clients 65+ (2,524/100k) have the highest prevalence of cancers among all other age groups as expected, followed by aged 35-64 (1,062/100k), and aged 18-34 (188/100k) from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 26). Among population subgroups pertaining to race/ethnicity, NH-Black clients (1,677/100k) and NH White clients (1,600/100k) have the highest cancer burden, while Hispanic clients (750/100k) have the lowest from 2020 to 2022. From 2017 to 2019, NH-White clients have the highest cancer burden (2,700/100k), while Hispanic clients have the lowest (1,168/100k) (Figure 27).

Figure 26. All Cancer by Age, Montgomery Cares, 2017-22

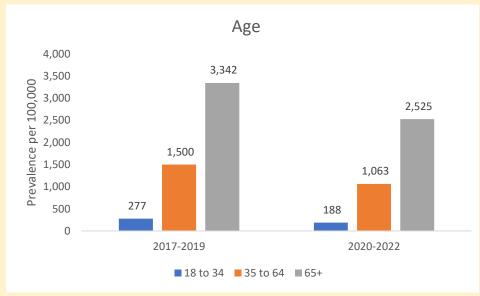
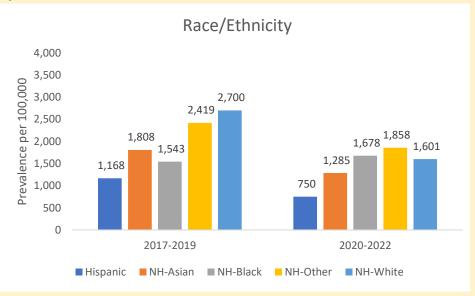


Figure 27. All Cancer by Race/Ethnicity, Montgomery Cares, 2017-22



Female Breast Cancer

Age group 65+ (442.5/100k) has the highest prevalence of female breast cancer among Montgomery Cares clients from 2020 to 2022, followed by age group 35-64 (233.5/100k). The same patterns are observed from 2017 to 2019 (Figure 28). Among population subgroups pertaining to race/ethnicity, NH-Black clients have the highest prevalence (419.4/100k), and Hispanic clients have the lowest rate (127.0/100k) from 2020 to 2022. From 2017 to 2019, Hispanic clients also have the lowest prevalence (185.4/100k), however NH-Asian clients (472.8/100k) have the highest rate (Figure 29).

Figure 28. Female Breast Cancer by Age and Year, Montgomery Cares, 2017-22

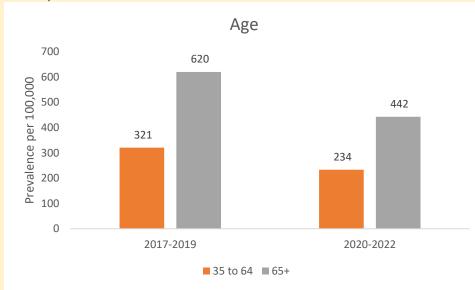
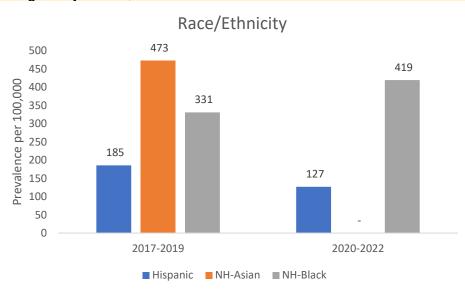


Figure 29. Female Breast Cancer by Race/ethnicity and Year, Montgomery Cares, 2017-22



^{**18} to 34, NH-White, NH-Other, and NH-Asian (2020-2022 only) are not shown due to small cell counts.

Prostate Cancer

Age group 65+ (494.5/100k) has the highest prevalence of prostate cancer among Montgomery Cares clients from 2020 to 2022. The same pattern is observed from 2017 to 2019. Although the prevalence is higher (553/100k) (Figure 30). Among population subgroups pertaining to race/ethnicity, NH-Black clients (339.5/100k) have the highest prevalence during both 2017 to 2019 and 2020 to 2022 (Figure 31).

Figure 30. Prostate Cancer by Age and Year, Montgomery Cares, 2017-22

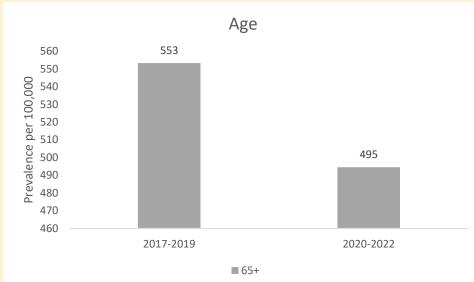
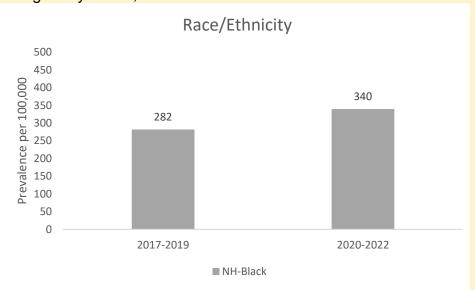


Figure 31. Prostate Cancer by Race/ethnicity and Year, Montgomery Cares, 2017-22



^{**}Age group 35-64 and other race/ethnicity groups are not shown due to small cell counts.

Diabetes

Men (15,043/100k) have higher prevalence of diabetes than women (11,740/100k) among Montgomery Cares clients from 2020 to 2022 (Figure 32). The same pattern is observed from 2017 to 2019. This is consistent to what is observed in the general population of Montgomery County (CDC, 2023). Clients 65+ (27,563/100k) have the highest prevalence of diabetes among all other age groups from 2020 to 2022 (Figure 33).

Figure 32. Diabetes by Sex and Year, Montgomery Cares, 2017-22

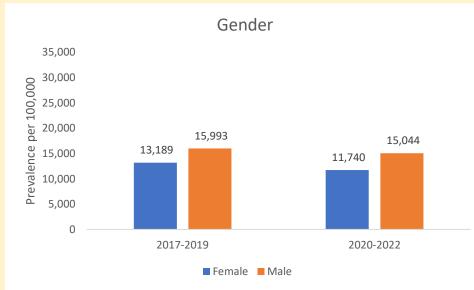
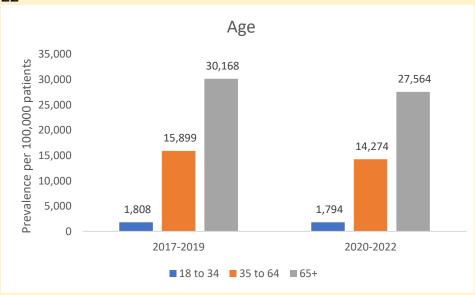
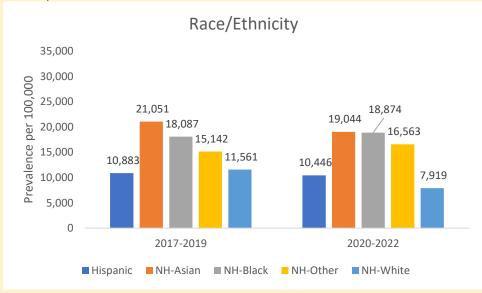


Figure 33. Diabetes by Age and Year, Montgomery Cares, 2017-22



Among population subgroups pertaining to race/ethnicity, NH-Asian clients 1,9044/100k) have the highest prevalence of diabetes, followed by NH-Black clients (18,873/100k), Hispanic clients (10,445/100k), and NH-White clients (7,919/100k) have the lowest from 2020 to 2022. A similar pattern is observed from 2017 to 2019 (Figure 34).

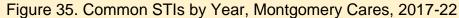
Figure 34. Diabetes by Race/ethnicity and Year, Montgomery Cares, 2017-22

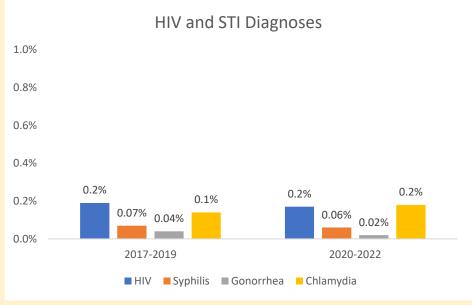


IV. Infectious Diseases

Sexually Transmitted Infections

As for sexually transmitted infections (STIs), HIV (0.2%) and chlamydia (0.2%) are the most common diagnoses among Montgomery Cares clients from 2020 to 2022 (Figure 35). A similar trend is observed from 2017 to 2019.





Syphilis

The count of clients with a syphilis diagnosis is lower from 2020 to 2022 than from 2017 to 2019. Prevalence is higher among women than men (Table 2). Age groups of 18-34 and 35-64 have higher counts of clients with a syphilis diagnosis than age group 65+ (Table 3).

Table 2. Syphilis by Sex and Year, Montgomery Cares, 2017-22

		2017-2019		202	0-2022
			Rate per		Rate per
	Sex	n	100,000	n	100,000
	Female	14	70.9	10	58.2
	Male	7	*	6	*
Total		21		16	

^{*}Rates are not displayed due to small cell counts.

Table 3. Syphilis by Age and Year, Montgomery Cares, 2017-22

	2017-	-2019	202	0-2022
		Rate per		Rate per
Age Group	n	100,000	n	100,000
18 to 34	9	*	7	*
35 to 64	9	*	9	*
65+	3	*	0	0
Total	21		16	

^{*}Rates are not displayed due to small cell counts.

The count of clients with a syphilis diagnosis is highest among Hispanic clients than other race/ethnicity groups, followed by NH-Black clients from 2020 to 2022. The same trend is observed from 2017 to 2019 (Table 4).

Table 4. Syphilis by Race/ethnicity and Year, Montgomery Cares, 2017-22

	2017-2019		20	20-2022
		Rate per		Rate per
Race/Ethnicity	n	100,000	n	100,000
Hispanic	11	68.0	10	57.7
NH-Asian	1	*	0	0
NH-Black	7	*	4	*
NH-Other	0	0	1	*
NH-White	1	*	1	*
Unknown	1	*	0	0
Total	21		16	

^{*}Rates are not displayed due to small cell counts.

Gonorrhea

The count of clients with a gonorrhea diagnosis is higher from 2020 to 2022 than from 2017 to 2019 (Table 5). Younger age groups of 18-34 and 35-64 have higher counts of clients with a gonorrhea diagnosis than clients aged 65+ (Table 6).

Table 5. Gonorrhea by Sex and Year, Montgomery Cares, 2017-22

		2017	2017-2019		020-2022
			Rate per		Rate per
	Sex	n	100,000	n	100,000
	Female	5	*	1	*
	Male	9	*	4	*
Total		14		5	

^{*}Rates are not displayed due to small cell counts.

Table 6. Gonorrhea by Age and Year, Montgomery Cares, 2017-22

2017	-2019		2020-2022
	Rate per		Rate per
n	100,000	n	100,000
11	132.6	2	*
3	*	3	*
0	0	0	0
14		5	
	n 11 3 0 14	n 100,000 11 132.6 3 * 0 0 14	Rate per n 100,000 n 11 132.6 2 3 * 3 0 0 0 14 5

^{*}Rates are not displayed due to small cell counts.

The count of clients with a gonorrhea diagnosis is higher among Hispanic clients than other race/ethnicity groups, followed by NH-Black clients from 2020 to 2022. The same trend is observed from 2017 to 2019 (Table 7). This is consistent with other sexually transmitted infections.

Table 7. Gonorrhea by Race/ethnicity and Year, Montgomery Cares, 2017-22

	2017	2017-2019		2020-2022
		Rate per		Rate per
Race/Ethnicity	n	100,000	n	100,000
Hispanic	8	*	4	*
NH-Asian	0	0	0	0
NH-Black	5	*	1	*
NH-Other	1	*	0	0
NH-White	0	0	0	0
Unknown	0	0	0	0
Total	14		5	

^{*}Rates are not displayed due to small cell counts.

Chlamydia

On the contrary to other sexually transmitted infections, there are more clients with a chlamydia diagnosis from 2020 to 2022 than from 2017 to 2019. Women have higher rates than men (Table 8). Age group 18-34 has the highest rate (303.9/100k) from 2020 to 2022, followed by age group 35-64 (163.5/100k). The same trend is observed for from 2017 to 2019 (Table 9, **Error! Reference source not found.**).

Table 8. Chlamydia by Sex and Year, Montgomery Cares, 2017-22

		2017-2019		202	20-2022
		Rate per			Rate per
	Sex	n	100,000	n	100,000
	Female	31	157.1	44	256.0
	Male	12	104.6	5	*
Total		43		49	

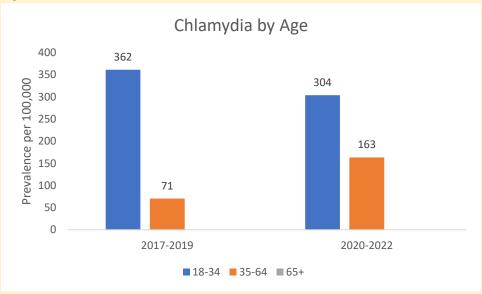
^{*}Rates are not displayed due to small cell counts.

Table 9. Chlamydia by Age and Year, Montgomery Cares, 2017-2

	2017-2019		202	20-2022
		Rate per		Rate per
Age Group	n	100,000	n	100,000
18 to 34	30	361.5	21	303.9
35 to 64	13	70.6	28	163.5
65+	0	0	0	0
Total	43		49	

^{*}Rates are not displayed due to small cell counts.

Figure 36. Chlamydia by Age Group and Year, Montgomery Cares, 2017-22



The count of clients with a chlamydia diagnosis is higher among Hispanic clients (222.5/100k) compared to other race/ethnicity groups, followed by NH-Black clients from 2020 to 2022. The same trend is observed from 2017 to 2019 (Table 10). This is consistent with other sexually transmitted infections.

Table 10. Chlamydia by Race/ethnicity and Year, Montgomery Cares, 2017-22

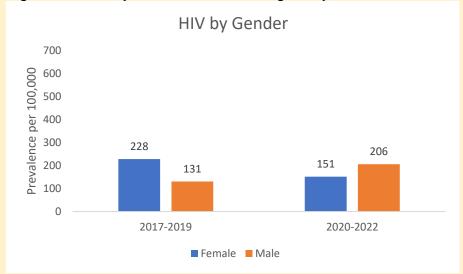
	2017-2019		202	20-2022
		Rate per		Rate per
Race/Ethnicity	n	100,000	n	100,000
Hispanic	36	222.5	42	242.4
NH-Asian	1	*	1	*
NH-Black	5	*	4	*
NH-Other	0	0	1	*
NH-White	0	0	0	0
Unknown	1	*	1	*
Total	43		49	

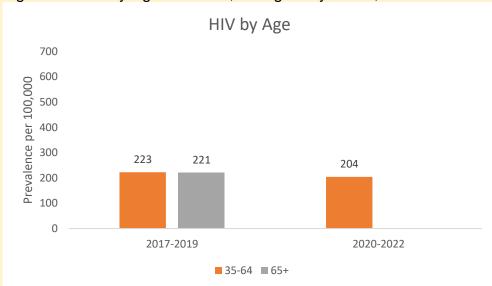
^{*}Rates are not displayed due to small cell counts.

HIV

Men (206/100k) have higher HIV prevalence than women (151/100k) from 2020 to 2022, which is different than from 2017 to 2019 (Figure 37). Age group 35-64 (204/100k) has the highest rate (204/100k) among all age groups from 2020 to 2022. The same trend is observed for from 2017 to 2019 (Figure 38).

Figure 37. HIV by Sex and Year, Montgomery Cares, 2017-22 Figure 38. HIV by Age and Year, Montgomery Cares, 2017-22





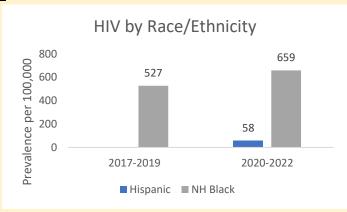
NH-Black clients have the highest rate of HIV (659.1/100k) among all race/ethnicity groups, followed by Hispanic clients (57.7/100k) from 2020 to 2022. The same trend is observed from 2017 to 2019 (Table 11, Figure 39).

Table 11. HIV by Race/ethnicity and Year, Montgomery Cares, 2017-22

Characteristic	2017-2019		20	20-2022
		Rate per		Rate per
Race/Ethnicity	n	100,000	n	100,000
Hispanic	8	*	10	57.7
NH-Asian	0	0	1	*
NH-Black	43	526.6	33	659.1
NH-Other	5	*	2	*
NH-White	2	*	2	*
Unknown	2	*	0	0
Total	60		48	

^{*}Rates are not displayed due to small cell counts.

Figure 39. HIV by Race/ethnicity and Year, Montgomery Cares, 2017-22



Tuberculosis

There are fewer prevalent Tuberculosis (TB) cases from 2020 to 2022 than from 2017 to 2019. Age group 35-64 has the most cases among all age groups, women have more cases than men. Hispanic clients and NH-Black clients have the more cases compared to other race/ethnicity groups (Table 12).

Table 12. Tuberculosis by Demographics and Year, Montgomery Cares, 2017-22

Characteristic		2017-2019	2020-2022
Age Group		n	n
	18 to 34	3	2
	35 to 64	19	7
	65+	1	1
Sex	Female	14	5
	Male	9	5
Race/Ethnicity	Hispanic	8	7
	NH-Asian	3	1
	NH-Black	9	2
	NH-Other	1	0
	NH-White	1	0
	Unknown	1	0
Total		23	10,

COVID-19

Testing

More women have at least one COVID-19 test administered (1,675/100k) than men (1,347/100k) in the Montgomery Cares program from 2020 to 2022 (Figure 40). More clients in age group 65+ have at least one COVID-19 test administered (1,640/100k) than age group 35-64 (1,611/100k) and age group 18-34 (1,346/100k) (Figure 41).

Figure 40. COVID-19 Testing by Sex, Montgomery Cares, 2020 to 2022

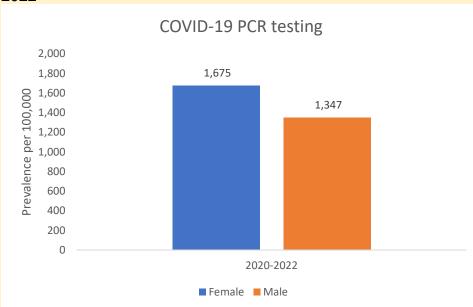
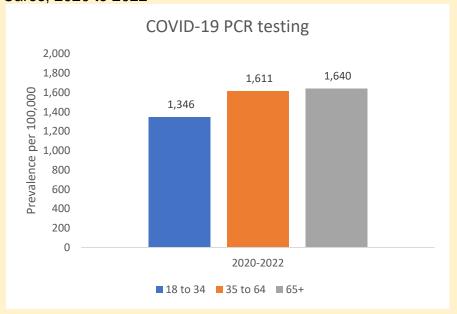
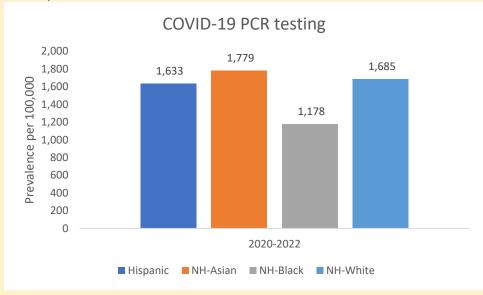


Figure 41. COVID-19 Testing by Age Group, Montgomery Cares, 2020 to 2022



Among race/ethnicity population subgroups, more NH-Asian clients have at least one COVID-19 test administered (1,779/100k) from 2020 to 2022 than NH-White clients (1,685/100k), Hispanic clients (1,633/100k), and NH-Black clients (1,178/100k) (Figure 42).

Figure 42. COVID-19 Testing by Race/ethnicity, Montgomery Cares, 2020 to 2022



Diagnosis

More men (7,774/100k) have at least one COVID-19 diagnosis than women (7,342/100k) among Montgomery Cares clients from 2020 to 2022 (Figure 43). Age group 35-64 (7,881/100k) has the highest COVID-19 infections rate, of at least one infection, followed by age group 18-34 (7,047/100k), and age group 65+ (6,663/100k) (Figure 44).

Figure 43. COVID-19 Diagnosis by Sex, Montgomery Cares, 2020 to 2022

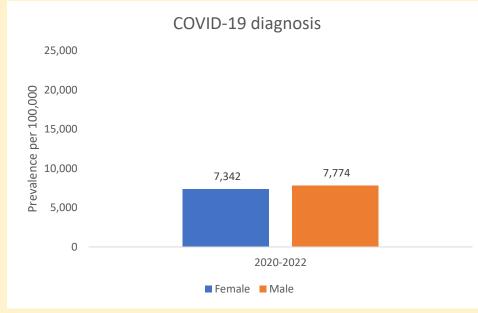
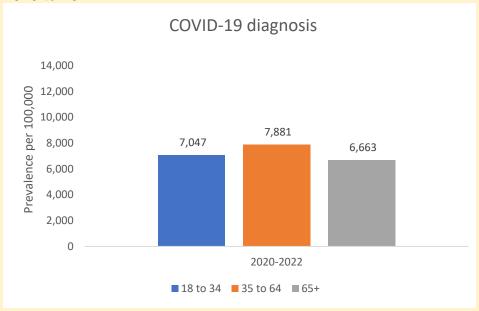
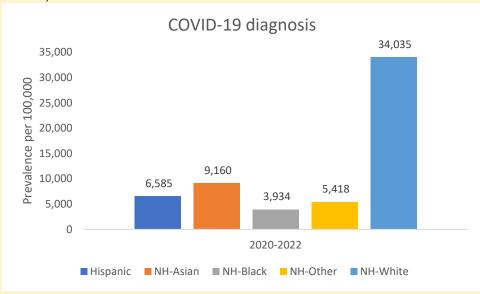


Figure 44. COVID-19 Diagnosis by Age, Montgomery Cares, 2020 to 2022



Among race/ethnicity population subgroups, NH-White clients (34,035/100k) represent the subgroup with the most clients with at least one COVID-19 diagnosis from 2020 to 2022, followed by NH-Asian clients (9,160/100k), Hispanic clients (6,585/100k), and NH-Black clients have the lowest infections rates (3,934/100k) (Figure 45).

Figure 45. COVID-19 Diagnosis by Race/ethnicity, Montgomery Cares, 2020 to 2022



Immunizations

COVID-19

More women (1,350/100k) have at least one COVID-19 vaccination administered than men (1,141/100k) among Montgomery Cares clients from 2020 to 2022 (Figure 46). The higher testing and vaccination rates for COVID-19 among women may lead to the lower infection rates observed. Age group 65+ (4,815/100k) have the highest COVID-19 vaccination rates among all age groups, followed by age group 35-64 (893/100k), and age group 18-34 (232/100k) (Figure 47).

Figure 46. COVID-19 Vaccination by Sex, Montgomery Cares, 2020 to 2022

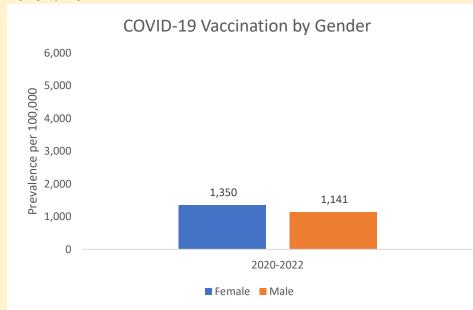
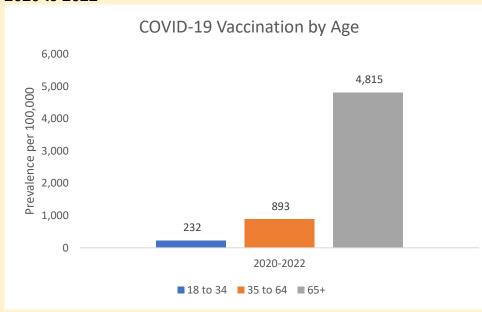
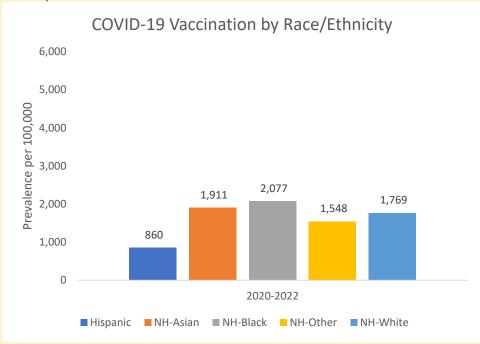


Figure 47. COVID-19 Vaccination by Age, Montgomery Cares, 2020 to 2022



Among race/ethnicity population subgroups, more NH-Black clients (2,077/100k) have at least one COVID-19 vaccine administered from 2020 to 2022 compared to NH-Asian clients (1,9110/100k), NH-White clients (1,769/100k), and Hispanic clients, who have the lowest vaccination rates (860/100k) (Figure 48).

Figure 48. COVID-19 Vaccination by Race/ethnicity, Montgomery Cares, 2020 to 2022



Influenza

In general, influenza vaccination rates among Montgomery Cares clients are lower from 2020 to 2022 than from 2017 to 2019. More women have at least one influenza vaccination than men (Figure 49). Among age groups, age group 65+ (11,895/100k) has the highest vaccination rates for influenza during 2022-22, followed by age group 35-64 (9,948/100k), and age group 18-34 (5,267/100k) (Figure 50). The same trend is observed from 2017 to 2019.

Figure 49. Influenza Vaccination by Sex and Year, Montgomery Cares, 2020 to 2022

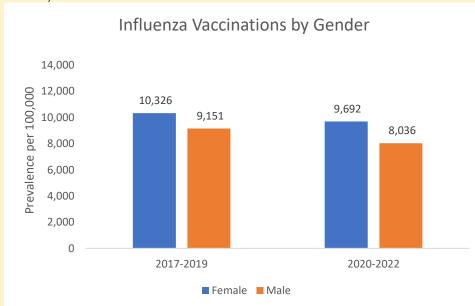
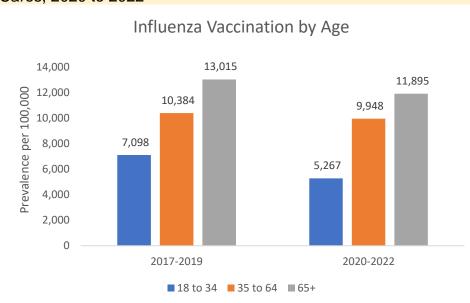
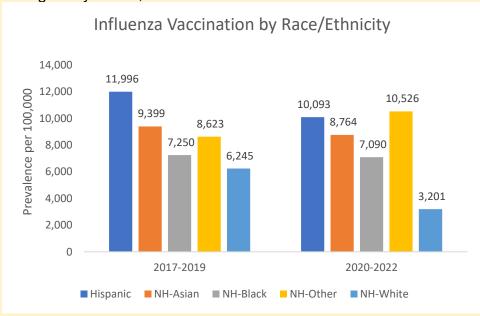


Figure 50. Influenza Vaccination by Age and Year, Montgomery Cares, 2020 to 2022



Among race/ethnicity population subgroups, Hispanic clients (10,093/100k) have the most clients with at least one influenza vaccination from 2020 to 2022, followed by NH-Asian clients (8,764/100k), NH-Black clients (7,090/100k), and NH-White clients, who have the lowest rates (3,201/100k) (Figure 51). The same trend is observed from 2017 to 2019.

Figure 51. Influenza Vaccination by Race/ethnicity and Year, Montgomery Cares, 2020 to 2022



V. Behavioral Health

Among behavioral health topics, mental health (13.8%) is the most common issue, followed by substance use disorder (2.8%), and suicide attempt/ideation (0.1%) from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 52). Among behavioral health procedures, psychological and psychiatric evaluation and therapy (4.4%) is the most common procedure, followed by alcohol and drug management, treatment, and rehabilitation (0.5%) from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 53).

Figure 52. Clients by Behavioral Health Condition Diagnosis and Year, Montgomery Cares, 2017-22

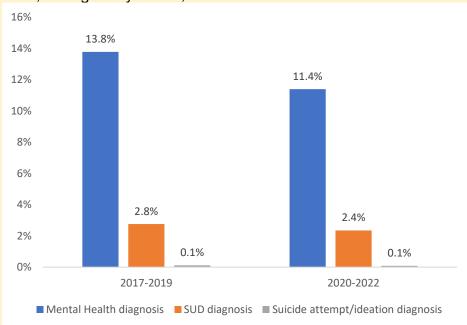
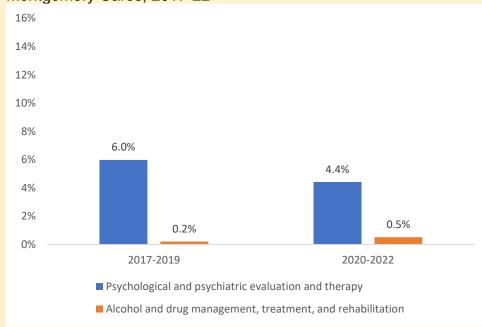


Figure 53. Clients by Behavioral Health Procedures and Year, Montgomery Cares, 2017-22



Mental Health

Women (12,246/100k) have a higher prevalence of mental health disorders than men (10,020/100k) among Montgomery Cares clients from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 54). Clients aged 35-64 (11,717/100k) have the highest prevalence of mental health disorders among all age groups, and aged 65+ (9,630/100k) have the lowest from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 55).

Figure 54. Mental Health by Sex and Year, Montgomery Cares, 2017-22

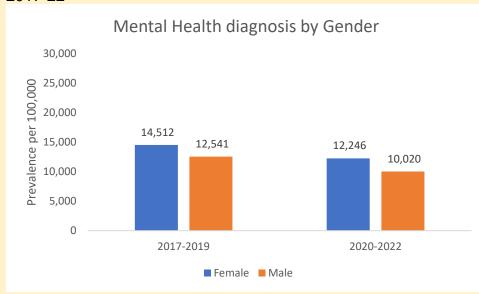
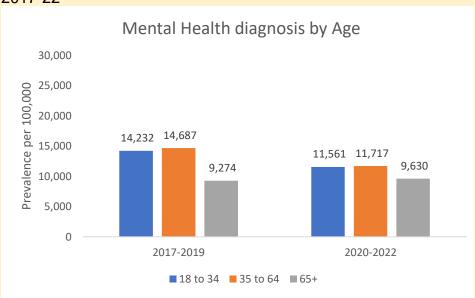
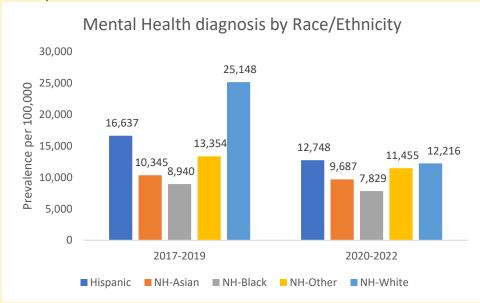


Figure 55. Mental Health by Age and Year, Montgomery Cares, 2017-22



Among population subgroups pertaining to race/ethnicity, Hispanic clients (12,748/100k) and NH-White clients (12,216/100k) have the highest prevalence of mental health disorders, while NH-Black clients (7,829/100k) have the lowest from 2020 to 2022. While the pattern is similar for from 2017 to 2019, NH-White clients have the highest prevalence (25,148/100k) and are almost twice of what they are from 2020 to 2022 (12,216/100k) from 2017 to 2019 (Figure 56).

Figure 56. Mental Health by Race/ethnicity and Year, Montgomery Cares, 2017-22



Substance Use Disorder (SUD)

Men (4,332/100k) have much higher prevalence than women (1,123/100k) of substance use disorder among Montgomery Cares clients from 2020 to 2022 (Figure 57). The same pattern is observed from 2017 to 2019. Clients aged 35-64 (2,592/100k) have the highest prevalence of substance use disorder among all age groups, and aged 65+ (1,119/100k) have the lowest from 2020 to 2022. The same pattern is observed from 2017 to 2019 (Figure 58).

Figure 57. Substance Use Disorder by Sex and Year, Montgomery Cares, 2017-22

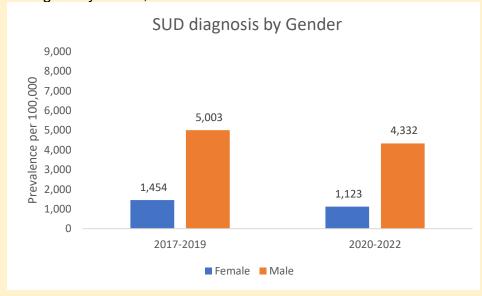
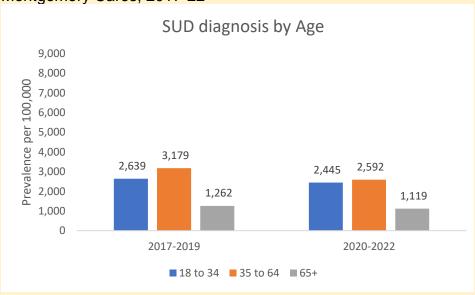
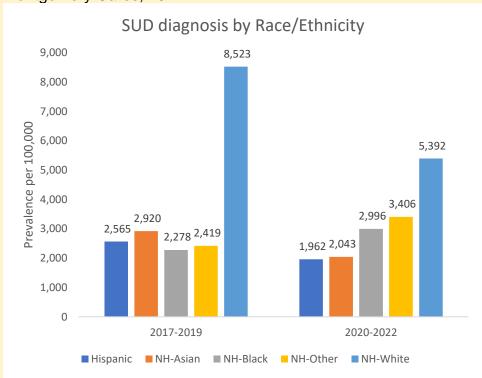


Figure 58. Substance Use Disorder by Age and Year, Montgomery Cares, 2017-22



Among population subgroups pertaining to race/ethnicity, NH-White clients (5,392/100k) have the highest prevalence of substance use disorder, while Hispanic clients (1,962/100k) have the lowest from 2020 to 2022 (Figure 59). While the pattern is similar for from 2017 to 2019, NH-White clients have the highest prevalence (8,523/100k) and are much higher than what they are from 2020 to 2022 (5,392/100k) from 2017 to 2019.

Figure 59. Substance Use Disorder by Race/ethnicity and Year, Montgomery Cares, 2017-22



Suicide Attempt/Ideation

In general, there are less clients diagnosed with attempted suicide or ideation from 2020 to 2022 than from 2017 to 2019. Clients in the age group 35-64 have the highest numbers for both periods, followed by age group 18-34. The comparison of gender shows inconsistent results. Men have higher numbers than women from 2020 to 2022 while women have higher numbers from 2017 to 2019. Hispanic clients have the highest numbers among other race/ethnicity groups for both periods, followed by NH-Asian clients and NH-Black clients (Table 13).

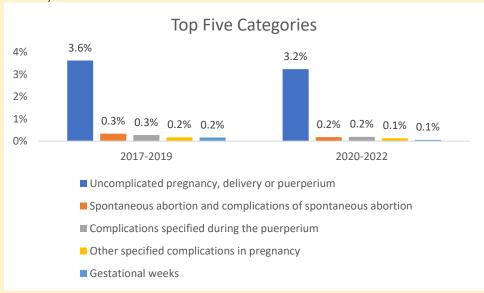
Table 13. Suicide Attempt/Ideation by Demographics and Year, Montgomery Cares, 2017-22

Characteristic		2017-2019	2020-2022
Age Group		n	n
	18 to 34	13	8
	35 to 64	21	11
	65+	2	4
Sex	Female	23	7
	Male	13	16
Race/Ethnicity	Hispanic	30	11
	NH-Asian	1	8
	NH-Black	1	3
	NH-Other	0	1
	NH-White	3	0
	Unknown	1	0
Total		36	23

VI. Maternal Health

The top 5 maternal conditions originating in the perinatal period or pregnancy, childbirth, and the puerperium for 2020 to 2022 are uncomplicated pregnancy, delivery or puerperium (3.2%), spontaneous abortion and complications of spontaneous abortion (0.2%), complications specified during the puerperium (0.2%), Other specified complications in pregnancy (0.1%), and gestational weeks (0.1%). The same patterns are observed from 2017 to 2019 (Figure 60).

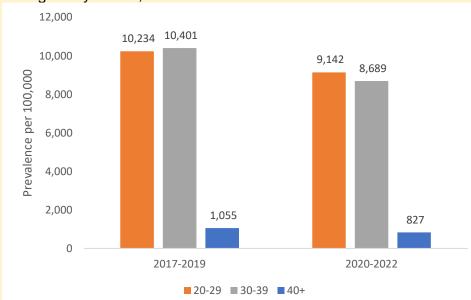
Figure 60. Top 5 Maternal Health Diagnoses by Year, Montgomery Cares, 2017-22



Clients aged 20-29 (9,142/100k) have the highest prevalence of maternal health diagnoses among all age groups, and aged 40+ (827/100k) have the lowest from 2020 to 2022; however, the age group 30-39 (10,401/100k) have the highest prevalence of maternal health diagnoses from 2017 to 2019 (Figure 61).

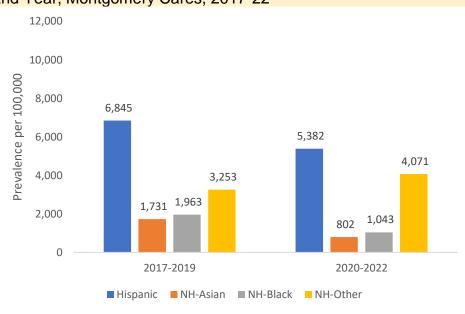
Among population subgroups pertaining to race/ethnicity, Hispanic clients (5,382/100k) have the highest prevalence of maternal health diagnoses, while NH-Asian clients (802/100k) have the lowest from 2020 to 2022. While the pattern is similar for from 2017 to 2019, overall prevalence of maternal health complication decreases from 2017 to 2019 to 2020 to 2022 consistently across all race/ethnicity groups (Figure 62).

Figure 61. Top 5 Maternal Health Diagnoses by Age and Year, Montgomery Cares, 2017-22



**Under 20 are not shown too small cell counts

Figure 62. Top 5 Maternal Health Diagnoses by Race/ethnicity and Year, Montgomery Cares, 2017-22



^{**}NH white not shown due to small cell counts

CONCLUSION

Overall, there is an increasing trend of Hispanic clients served by Montgomery Cares program from 2017 to 2019 (51.8%) to 2020 to 2022 (62.2%), Spanish (59.0%) is the most spoken language and El Salvador (25.3%) is most frequent country from which clients originated between 2020 to 2022. Heart disease (28.2%) is the most common chronic condition and female breast cancer (0.2%) is the top cancer site. Other than COVID-19, common infectious disease are HIV (0.2%), chlamydia (0.2%), and syphilis (0.06%). Mental health disorder (13.8%) is the most common behavioral health condition. Among all the major health topics evaluated, variations on disease burden exist among population subgroups by sex, age, and race/ethnicity.

Montgomery County ranks at the top for most health outcomes and health factors among jurisdictions in Maryland. The great disparities of health outcomes and factors across population subgroups and communities are of concern. Especially on uninsured population, it is well known to have poorer health outcomes than the insured population. Montgomery County has a very diverse population with close to 32% foreign born residents, a certain proportion of such population is undocumented and lacks health insurance. It is critical to continue to monitor the health status and health care access of this special population to address their needs for population health improvement.

REFERENCES

Adler Jaffe, S., Myers, O., Meisner, A. L. W., Wiggins, C. L., Hill, D. A., & McDougall, J. A. (2020). Relationship between Insurance Type at Diagnosis and Hepatocellular Carcinoma Survival. *Cancer epidemiology, biomarkers & prevention: a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*, 29(2), 300–307. https://doi.org/10.1158/1055-9965.EPI-19-0902

Akinyemiju, T., Jha, M., Moore, J. X., & Pisu, M. (2016). Disparities in the prevalence of comorbidities among US adults by state Medicaid expansion status. *Preventive medicine*, *88*, 196–202. https://doi.org/10.1016/j.ypmed.2016.04.009

American Medical Association. (2022). CPT® Category I and Proprietary Laboratory Analyses (PLA) Codes for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]).

Amini, A., Jones, B. L., Yeh, N., Guntupalli, S. R., Kavanagh, B. D., Karam, S. D., & Fisher, C. M. (2016). Disparities in disease presentation in the four screenable cancers according to health insurance status. *Public health*, *138*, 50–56. https://doi.org/10.1016/j.puhe.2016.03.014

Armed Forces Health Surveillance Division. (2023, May 31). Surveillance Case Definitions. Retrieved from https://www.health.mil/Military-Health-Topics/Health-Readiness/AFHSD/Epidemiology-and-Analysis/Surveillance-Case-Definitions

Centers for Disease Control and Prevention. (2023, June 21). *United States Diabetes Surveillance System*. Retrieved from Surveillance: https://gis.cdc.gov/grasp/diabetes/diabetesatlas-surveillance.html

Fang, J., Zhao, G., Wang, G., Ayala, C., & Loustalot, F. (2016). Insurance Status Among Adults With Hypertension-The Impact of Underinsurance. *Journal of the American Heart Association*, *5*(12), e004313. https://doi.org/10.1161/JAHA.116.004313

HCUP Clinical Classifications Software (CCS) for Services and Procedures, v2022.1. (2023, March 2). *Healthcare Cost and Utilization Project (HCUP)*. Retrieved from Agency for Healthcare Research and Quality: www.hcup-us.ahrq.gov/toolssoftware/ccs_svcsproc/ccssvcproc.jsp

HCUP Clinical Classifications Software Refined (CCSR) for ICD-10_CM diagnoses, v2023.1. (2023, March 2). *Healthcare Cost and Utilization Project (HCUP)*. Retrieved from Agency for Healthcare Research and Quality: www.hcup-us.ahrq.gov/toolssoftware/ccsr/dxccsr.jsp

Li, S., Bruen, B. K., Lantz, P. M., & Mendez, D. (2015). Impact of Health Insurance Expansions on Nonelderly Adults With Hypertension. *Preventing chronic disease*, *12*, E105. https://doi.org/10.5888/pcd12.150111

Markt, S. C., Lago-Hernandez, C. A., Miller, R. E., Mahal, B. A., Bernard, B., Albiges, L., Frazier, L. A., Beard, C. J., Wright, A. A., & Sweeney, C. J. (2016). Insurance status and disparities in disease presentation, treatment, and outcomes for men with germ cell tumors. *Cancer*, 122(20), 3127–3135. https://doi.org/10.1002/cncr.30159

Maryland Department of Health. (2020). *Maryland Vital Statistics Annual Report*. Retrieved from Vital Statistics Administration: https://health.maryland.gov/vsa/Pages/reports.aspx

Mazurenko, O., Balio, C. P., Agarwal, R., Carroll, A. E., & Menachemi, N. (2018). The Effects Of Medicaid Expansion Under The ACA: A Systematic Review. *Health affairs (Project Hope)*, *37*(6), 944–950. https://doi.org/10.1377/hlthaff.2017.1491

National Center for Health Statistics. Percentage of being uninsured for at least part of the past year for adults aged 18-64, United States, 2019—2021. National Health Interview Survey. Generated interactively: Jun 14, 2023, from https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html

Tolbert, J., Orgera, K., & Damico, A. (2020, November 12). *Key facts about the uninsured population*. KFF. https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/

Olfson, M., Mauro, C., Wall, M. M., Choi, C. J., Barry, C. L., & Mojtabai, R. (2022). Healthcare coverage and service access for low-income adults with substance use disorders. *Journal of substance abuse treatment*, *137*, 108710. https://doi.org/10.1016/j.jsat.2021.108710

United States Census Bureau. (2021). Retrieved from data.census.gov

APPENDIX: Codes for Health Conditions

	ICD-10	CPT/HCPCS
Chronic Disease		
All cancer sites	C00-C97	
Lung and bronchus cancer	C33-C34	71271
Lung and broneilus cancer	000 004	76641, 76642, 77046, 77047, 77048, 77049,
		77053, 77054, 77063, 77065, 77066, 77067,
Female breast cancer	C50	C8903, C8905, C8906, C8908
Colon and Rectum cancer	C18-C21	45378
Prostate cancer	C61	G0102, G0103
Cerebrovascular disease	160-169	, i
Chronic lower respiratory disease	J40-J47	
Diabetes	E10-E13	
Heart Disease	100-151	
Behavioral Health		
Mental Health	AHRQ HCUP CCSR	AHRQ HCUP CCS
Substance Misuse	AHRQ HCUP CCSR	AHRQ HCUP CCS
Suicide attempt/ideation	AHRQ HCUP CCSR	AHRQ HCUP CCS
Infectious Disease		
COVID-19	U07, U08, U09, U10	
HIV	Z21, B20	
Immunizations	Z23, U11.9	
STIs	SYPHILIS - A50, A51, A52, A53	
	GONORRHEA - 098, A54	
TD	CHLAMYDIA - A55, A56	
TB	A15, A16, A17, A18, A19, Z11, R76, Z20, Z86, Z18, T37	
Maternal Health Out divine a crimination in the ALIBO HOLIB COOR		
Conditions originating in the	AHRQ HCUP CCSR	AHRQ HCUP CCS
perinatal period or Pregnancy,		
childbirth, and the puerperium		