2022 Community Health Needs Assessment Report







Advocate Christ Medical Center

4440 W. 95th Street Oak Lawn, IL 60453



December 2022

Thank you for taking the time to learn more about Advocate Christ Medical Center's Community Health Needs Assessment (CHNA). This CHNA provides a comprehensive picture of the health status of the communities served by Advocate Christ. Through understanding the health and social needs of our communities, the hospitals will be well positioned to help people live well and improve the quality of life among individuals, children and families in the communities we serve.

Every three years the hospital works with community partners and stakeholders to complete a comprehensive CHNA. The Community Health department is responsible for pulling data from our data platform and for collecting input from the community to gain an in-depth understanding of the communities' health needs. Collaboration and partnership are a crucial component of the hospital's CHNA process therefore, the hospital is a member of the Alliance for Health Equity and the Southland Partnership Group. In addition, the hospital has a Community Health Council that provides oversight of the CHNA process and selects the hospital's priority health needs.

Based upon comprehensive community data and feedback, our Community Health Council selected two health priorities for the 2022 CHNA. The priorities selected include the following:

- Obesity
- Mental/Behavioral Health

At Advocate Christ, we are committed to helping people live well by understanding the needs of the community and implementing culturally appropriate interventions that address the root causes of poor health. Creating and sustaining community partnerships to implement evidence-based programs is critical in addressing our communities' health needs.

We welcome and encourage community feedback regarding the health needs of our community and the CHNA process. A link at the end of the CHNA report will provide you with an opportunity to leave any feedback, comments or ideas. We also encourage you to review the report and provide recommendations regarding community programs or strategies that aim to address the hospital's priority health needs. We, the leadership team at Christ Hospital, have the honor of working with community partners and leaders to improve the health and wellness of diverse communities across the hospital's service area. Thank you for participating in this effort to improve the quality of life for your neighbors, family and friends across the community.

Yours in Health,

Moody I. Chisholm

PSA President, South Chicagoland

President

Advocate Christ Medical Center

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I. Executive Summary

Advocate Christ Medical Center (Advocate Christ), a part of Advocate Aurora Health, is pleased to present its 2022 Community Health Needs Assessment (CHNA). Advocate Health Care in Illinois and Aurora Health Care in Wisconsin form one of the country's premier not-for-profit health systems. Advocate Aurora Health is nationally recognized for clinical expertise across the care continuum while leading health care transformation to drive value and reimagine the consumer experience. Within Illinois, there are 11 hospitals located across metropolitan Chicagoland and surrounding counties. Advocate Christ is one of three hospitals in the south Chicagoland region of Illinois with a mission to serve individuals, families and communities through a whole person approach.

Advocate Christ is an active member of the Alliance for Health Equity (The Alliance), a coalition of non-profit and public hospitals, health departments and community-based organizations across Chicago and Cook County. The Illinois Public Health Institute provides backbone support for The Alliance and the non-profit hospitals fund the coalition. Through this coalition, primary and secondary data was collected for indicators in Chicago and Suburban Cook County. The hospital also partnered with Metopio, a data, analytics and visualization platform, The Alliance, Cook County Department of Public Health and area community members and organizations to convene a Community Health Council (CHC) responsible for overseeing the CHNA process at Advocate Christ. Community health department staff also pulled additional local data to complete the assessment process. As federally required by the Affordable Care Act, this report provides an overview of the processes used to identify and prioritize significant health needs in the communities served by Advocate Christ. For the purposes of this CHNA, Advocate Christ and its CHC define the community as the hospital's primary service area (PSA). The PSA consists of 27 communities in suburban Cook County and Chicago, Illinois.

The PSA has a total population of 902,434 residents. There was a 4.7 percent decrease in population from the most recent CHNA. In the PSA, 42.4 percent of residents are Non-Hispanic White, while 34.3 percent is Hispanic or Latino; the remaining races are comprised of Non-Hispanic Black (22.3 percent), Asian or Pacific Islanders (2.6 percent), and two or more races (1.4 percent). While much of the population is between the ages of 40-64 years of age, women represent much of the population, outnumbering men by three percent. The median age of residents in the hospital PSA is 38.5 years.

Advocate Christ's community health staff presented extensive data to the CHC during a series of four meetings from March 2022 through June 2022. Advocate Christ's CHNA process utilized a mixed-method approach, which included the collection and review of secondary data from existing sources and primary data from both qualitative (survey) and quantitative methods (focus groups). Indicators presented included the topics listed below. In June 2022, members of the CHC gathered to participate in an exercise to help prioritize the health needs of the community using data that was presented in earlier months. During this meeting, council members selected mental health and obesity as the health needs for the 2022 CHNA.

- Access to Care
- Asthma
- Cancer
- COVID
- Demographics
- Dental Health

- Diabetes
- Heart Disease
- Hypertension/Stroke
- Mental health
- Survey and Focus Groups Results
- Violence/Homicide

II. Description of Advocate Health Care and Advocate Christ Medical Center

Advocate Aurora Health

Advocate Aurora Health (Advocate Aurora) is one of the 12th largest not-for-profit, integrated health systems in the United States and a leading employer in the Midwest with more than 75,000 employees, including more than 22,000 nurses and the region's largest employed medical staff and home health organization. A national leader in clinical innovation, health outcomes, consumer experience and value-based care, the system serves nearly 3 million patients annually in Illinois and Wisconsin across more than 500 sites of care. Advocate Aurora is engaged in hundreds of clinical trials and research studies and is nationally recognized for its expertise in cardiology, neurosciences, oncology and pediatrics. To learn more about Advocate Aurora's contributions to the community and how we help people live well, visit Serving Our Community | Advocate Health Care.

Advocate Christ Medical Center

Advocate Christ Medical Center (Advocate Christ), in Oak Lawn, Illinois, takes great pride in providing high-quality, compassionate care, offering 95 subspecialties to residents living in Chicago's Far South suburbs. Advocate Christ is a level I trauma center, providing emergency care for more than 105,000 patient visits annually. Clinical expertise and specialties include advanced cardiology, critical care, stroke care and breast cancer care. A premier teaching institution and nationally ranked center for cardiology and heart surgery, Advocate Christ is also a major referral hospital in the Midwest for several specialties, including cancer care, heart and kidney transplantation, neurosciences, orthopedics and women's health. The hospital's board-certified physicians offer advanced levels of surgical and robotic procedures in a state-of-the art, certified smoke-free, environment

III. 2022 Community Health Needs Assessment

Community Definition

For the purposes of this assessment, "community" is defined as Advocate Christ's primary service area (PSA). The PSA is comprised of 27 zip codes in Suburban Cook County and Chicago. Exhibit 1 depicts a map of the landscape of the PSA.

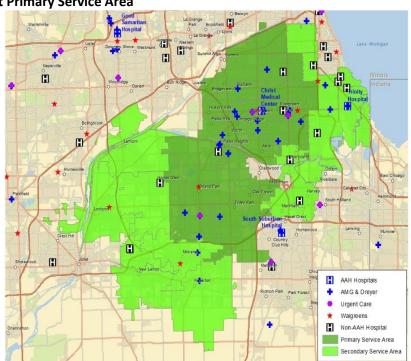


Exhibit 1: Advocate Christ Primary Service Area

Source: Advocate Aurora Business Development Analytics, 2022

1. Population

In 2020, the total population of the PSA was 902,434. There was a decrease of 45,481 residents, representing a 4.7 percent decrease from the 2017-2019 CHNA. Exhibit 2 identifies the zip codes and corresponding city or community in the primary service area.

Exhibit 2: Advocate Christ Communities and Population 2020

City/Community	Zip Code	Population	City/Community	Zip Code	Population
Chicago Ridge	60415	14,453	Tinley Park	60477	37,355
Midlothian	60445	14,692	Worth	60482	11,216
Oak Forest	60452	27,363	Tinley Park	60487	26,388
Oak Lawn	60453	58,362	Chicago/Auburn Gresham	60620	66,514
Bridgeview	60455	17,098	Chicago/Chicago Lawn	60629	114,453
Hometown	60456	4,343	Chicago/Brighton Park	60632	92,237
Hickory Hills	60457	14,420	Chicago/West Englewood	60636	34,800
Justice	60458	14,504	Chicago/Garfield Ridge	60638	59,928
Burbank	60459	29,451	Chicago/Beverly	60643	47,831
Orland Park	60462	40,539	Chicago/Ashburn	60652	40,898
Palos Heights	60463	14,048	Chicago/Mt. Greenwood	60655	27,837
Palos Park	60464	9,982	Alsip	60803	22,189
Palos Hills	60465	18,530	Evergroop Dork	60005	10.045
Oland Park	60467	26,098	Evergreen Park	60805	19,945

Source: Metopio, American Community Survey, 2022

2. Social Drivers of Health

Social Vulnerability Index.

The Social Vulnerability Index (SVI) was created to help public health officials and emergency response planners identify and map the communities that will most likely need support before, during, and after a hazardous event, such as a natural disaster, disease outbreak, or chemical spill. SVI indicates relative vulnerability by ranking places on 15 social factors, including unemployment, minority status, and disability, and combining the rankings into a single scale from the 0th percentile (lowest vulnerability) to 100th percentile (highest vulnerability).

In the Advocate Christ PSA, the zip codes with the highest social vulnerability index are located in Chicago communities: West Englewood (60636) at 85.98, Chicago Lawn (60629) at 81.49, Brighton Park (60632) at 80.10, followed by Justice (60458) at 71.08, Chicago Ridge (60415) at 69.09, and Bridgeview (60455) at 67.87 in Suburban Cook County respectively. Exhibit 3 details the zips codes in the PSA with the highest Social Vulnerability Index.

Exhibit 3: Advocate Christ PSA Social Vulnerability Index 2018

Community	Zip	Population	Social Vulnerability Index
West Englewood	60636	34,800	85.98
Chicago Lawn	60629	114,453	81.49
Brighton Park	60632	92,237	80.10
Justice	60458	14,504	71.08
Chicago Ridge	60415	14,453	69.09
Bridgeview	60455	17,098	67.87

Source: Metopio, Center for Disease Control and Prevention, 2022

Hardship Index

The Hardship Index was originally developed by Richard P. Nathan and Charles F. Adams, Jr. in 1976 to compare socioeconomic conditions between communities. It is highly correlated with other measures of economic hardship, such as labor force statistics, and with poor health outcomes. The index combines the following topics into a single composite value on a scale of 0-100:

- Crowded housing (more than one person per room)
- Poverty rate for households
- Unemployment rate
- Adults with a high school degree or equivalent
- Age dependency ratio (% of residents who are <18 or >65 years old, compared to those of working age)
- Per-capita income

Higher values indicate greater hardship and correlate higher with poor health outcomes. The index does not preserve the ratio between two places, so if one place has twice the hardship index of another, we cannot say that it experiences "twice as much hardship" as another place. Instead, compare different places using the constituent topics.

Advocate Christ PSA has a hardship index of 59.4 which is higher than the Cook County score of 50.4, Illinois score of 45.0 and U.S. score of 50.0. Exhibit 4 displays the Hardship Index comparison.

Exhibit 4: Advocate Christ PSA Hardship Index Comparison 2015-2019

Area	Hardship Index
Advocate Christ PSA	58.4
Cook County	50.4
Illinois	45.0

Source: Metopio, American Community Survey, 2022

3. Demographics

Age and Gender

Median Age by Sex

As of 2020, the Advocate Christ PSA has a median age of 38.5 years compared to the state of Illinois at 38.3 years. The median age among females and males is relatively similar in the PSA and in the state of Illinois. Males have a median age of 36.7 years in the PSA comparable to a median age of 37 years in the state of Illinois. In addition, females have a median age of 40.3 years in the PSA compared to 39.6 years in the state of Illinois. Overall, there are no notable differences in median age among males and females in the Advocate Christ PSA compared to the state of Illinois. Exhibit 5 depicts the median age for the Advocate Christ PSA and exhibit 6 depicts the median age by sex.

Exhibit 5: Advocate Christ PSA by Median Age 2016-2020

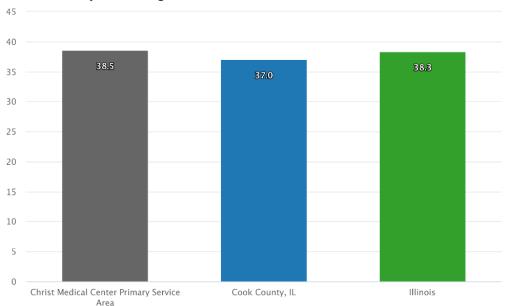
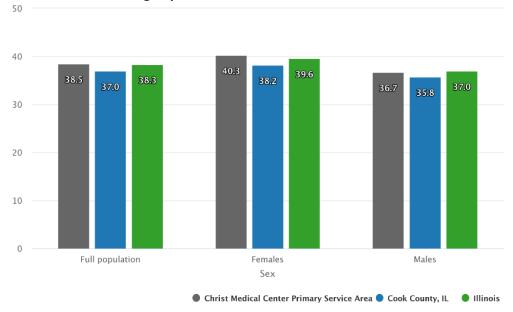


Exhibit 6: Advocate Christ PSA Median Age by Sex 2016-2020

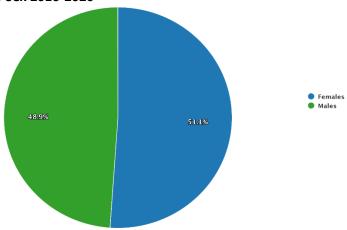


Source: Metopio, American Community Survey, 2022

Population by Sex

Males and females for Advocate Christ PSA are similar in the percent of population by gender when compared to the state of Illinois. There are 51.1 percent females in Advocate Christ PSA compared to 50.9 percent in the state of Illinois. Similarly, there are 48.9 percent males in Advocate Christ PSA compared to 49.1 percent in the state of Illinois. Overall, there are no notable differences in gender between Advocate Christ PSA and the state of Illinois among the male and female population. Exhibit 7 displays the total population by sex for Advocate Christ PSA as compared to the state of Illinois.

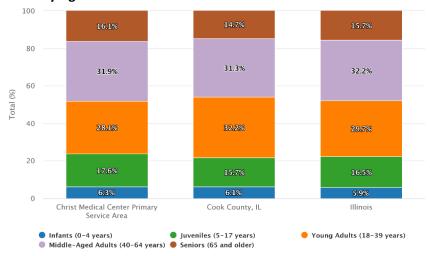
Exhibit 7: Advocate Christ PSA by Sex 2016-2020



Population by Age Group

Middle-aged adults ages 40-64 years make up most of the population (31.9 percent) for Advocate Christ PSA and in the state of Illinois (32.2 percent). There are no notable differences in age groups among the PSA compared to the state of Illinois. After middle-aged adults, the following age groups make up the population within the PSA, young adults 18-39 (29.7 percent), juveniles 5-17 (17.6 percent), seniors 65 and older (16.1 percent) and infants 0-4 (6.3 percent). The state's numbers are comparable, young adults 18-39 (29.7 percent), juveniles 5-17 (16.5 percent), seniors (15.7 percent) and infants 0-4 (5.9 percent) respectively. Exhibits 8 and 9 display the population by age group for the PSA as compared to the state of Illinois and Cook County.

Exhibit 8: Advocate Christ PSA by Age 2016-2020



Source: Metopio, American Community Survey, 2022

Exhibit 9: Advocate Christ PSA by Age Comparison 2016-2020

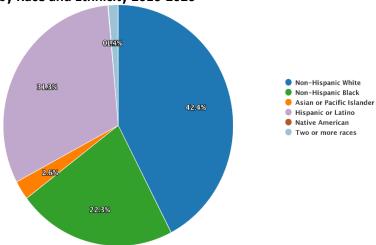
Population by Age 2016-2020	Christ PSA	Cook County	Illinois
Infants (0-4 years)	6.3%	6.1%	5.9%
Juveniles (5-7 years)	17.6%	15.7%	16.5%
Young Adults (18-39 years)	28.1%	32.2%	29.7%
Middle-Aged Adults (40-64 years)	31.9%	31.3%	32.2%
Seniors (65-Older)	16.1%	14.7%	15.7%

Race and Ethnicity

Population by Race

Advocate Christ PSA population is 42.4 percent Non-Hispanic White; 22.3 percent Non-Hispanic Black/African American; 31.3 percent Hispanic or Latino; 2.6 percent Asian or Pacific Islander; and 01.4 percent 2+ Races. The PSA has a nearly twice the population of Hispanic or Latino when compared to the state of Illinois. See exhibits 10 through 12 for population data.

Exhibit 10: Advocate Christ PSA by Race and Ethnicity 2016-2020



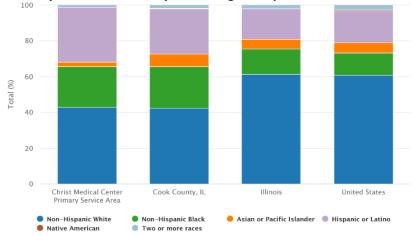
Source: Metopio, American Community Survey, 2022

Exhibit 11: Advocate Christ PSA by Race and Ethnicity Total Population Comparison 2016-2020

Population by Race/Ethnicity 2016-2020	Christ PSA	Cook County	Illinois
Non-Hispanic White	377,943	2,168,964	7,737,459
Non-Hispanic Black	198,678	1,184,373	1,766,586
Asian or Pacific Islander	22,905	383,115	705,762
Hispanic or Latino	279,088	1,308,432	2,190,696
Native American	615	4,646	13,301
Two or more races	12,280	107,075	277,509

Source: Metopio, American Community Survey, 2022

Exhibit 12: Advocate Christ PSA by Race and Ethnicity Percentage Comparison 2016-2020



Population Age 5+ by Language Spoken at Home 2016-2020

The households with Spanish as a primary language in Advocate Christ primary service area is more than double that of Illinois. The PSA has a 24.73 percent population speaking Spanish at home, followed by Cook County with 17.61 percent, and Illinois with 11.64 percent (American Community Survey, 2022). See exhibit 13.

25
20
15
10
Christ Medical Center Cook County, IL Illinois United States

Exhibit 13: Advocate Christ PSA Spanish as a Primary Language Comparison 2015-2019

Source: Metopio, American Community Survey, 2022

Household/Family

Single Parent Household

A single parent household are households that have children present and are headed by a single parent (mother or father) with no partner present (Metopio, 2022). Adults and children in single-parent households are at higher risk for adverse health effects, such as emotional and behavioral problems, compared to their peers. Children in such households are more likely to develop depression, smoke, and abuse alcohol and other substances. Consequently, these children experience increased risk of morbidity and mortality of all causes. Similarly, single parents suffer from lower perceived health and higher risk of mortality (Impact DuPage, 2022). Advocate Christ PSA had 6.75 percent of single parent households compared to 6.29 percent within the state of Illinois and 6.61 percent in Cook County. Exhibit 14 identifies the percentage of single parent households in the PSA.

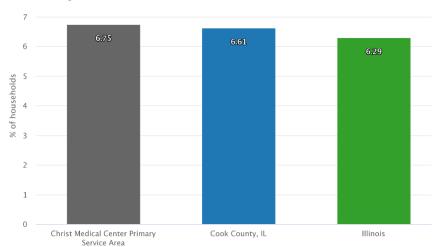
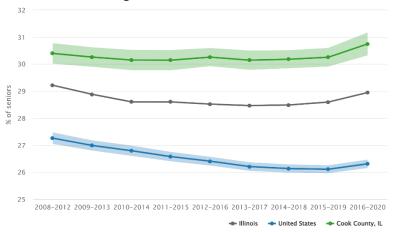


Exhibit 14: Advocate Christ PSA Single Parent Household 2016-2020

People 65+ Living Alone

Marketplace (12/19, Segarra) reports the latest data from the Census Bureau show that "the percentage of seniors in nursing homes has dropped" as "has the percentage of them who are living alone." Instead, older adults are choosing to age in place, living with each other and their children. In the Advocate Christ PSA, 30.65 percent of seniors are living alone, followed by 30.75 percent for Cook County, and 28.95 percent for Illinois, respectively. See Exhibit 15 below.

Exhibit 15: Advocate Christ PSA Seniors Living Alone 2016-2020



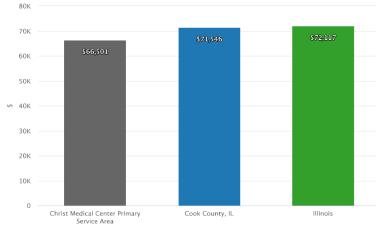
Source: Metopio, American Community Survey, 2022

4. Economics

Income

Poverty is a key determinant of health status and is associated with various barriers to access including health services, healthy food choices and other factors that contribute to poor health. Advocate Christ PSA households have a lower income level than Cook County and the state of Illinois. As of 2020, households have an income level of \$66,501 for the PSA. Comparatively, the state of Illinois has households with an income of \$72,117 and Cook County \$71,546 (American Community Survey, 2022). Exhibit 16 depicts Advocate Christ PSA household income levels within the PSA.

Exhibit 16: Advocate Christ PSA Income 2016-2020



Source: Metopio, American Community Survey, 2022

Median Household Income

There are notable income disparities when comparing income for Asians and Whites versus other races and ethnicities. Asians have a median income of \$91,264 slightly down from \$91,507 in the last CHNA cycle for the PSA and Whites have a median income of \$79,662 up from \$75,998. In contrast, Black/African Americans median income level for the PSA is

\$54,500 up from \$45,308. Native Americans have the highest median household income level for the PSA at \$106,868 among all racial/ethnic groups. Exhibit 17 depicts the median household income by race and ethnicity.

100K

75K

25K

0

Full population Non-Hispanic Non-Hispanic Non-Hispanic Islander Latino Race/Ethnicity

Christ Medical Center Primary Service Area Cook County, IL Illinois

Exhibit 17: Advocate Christ PSA Median Household Income 2016-2020

Source: Metopio, American Community Survey, 2022

People Living Below the Poverty Level

The number of families living below 150 percent of the federal poverty level (FPL) in the Advocate Christ PSA is 13.29 percent up from 11.33 percent of the population compared to 11.99 percent up from 9.80 percent in the state of Illinois. The communities with the highest poverty rates in the PSA are West Englewood (60636) 44.97, Auburn Gresham (60620) 36.72, Chicago Lawn (60629) 35.18, Brighton Park (60632) 29.37 and Justice (60458) 27.65 percent. See exhibit 18.

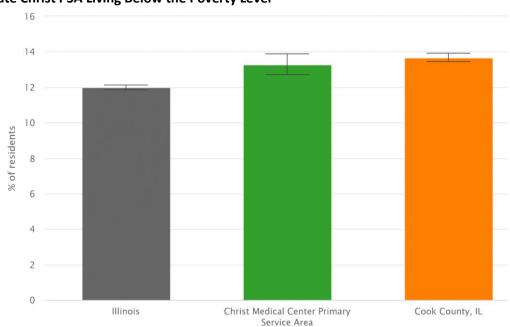


Exhibit 18: Advocate Christ PSA Living Below the Poverty Level

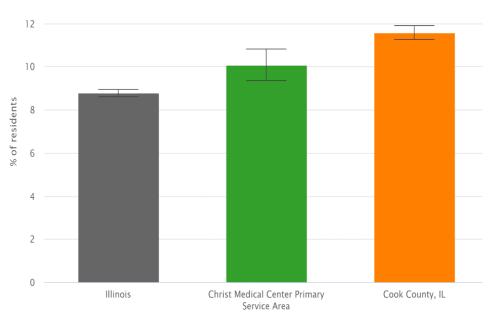
Children Living Below the Poverty Level

Family income can have a significant impact on a child's well-being including physical health, social well-being, and emotional well-being. The number of families with children living below 150 percent FPL is 20.20 percent for 0-4 years, 18.41 percent for 5-17 years, and 12.23 percent for 18-39 years (Metopio, American Community Survey, 2022).

Seniors Living Below the Poverty Level

Seniors living below 150 percent of the federal poverty level (FPL) is well below younger residents with 10.09 percent in the PSA, 11.58 percent in Cook County and 8.78 percent in Illinois. Communities in the PSA with the highest senior poverty rate include Justice (60458)19.54, West Englewood (60636) 17.80, Hometown (60456) 15.62, Auburn Gresham (60620) 13.84, and Ashburn (60652) 13.49. Exhibit 18 illustrates seniors living below the poverty level in the PSA.

Exhibit 18: Advocate Christ PSA Seniors Living Below Poverty Level 2016-2020



Source: Metopio, American Community Survey, 2022

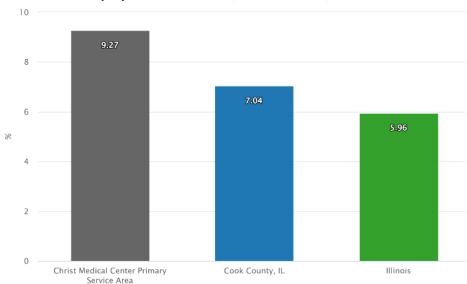
Employment

Percent of Population 16 Over Unemployed

The unemployment rate among individuals 16 years of age or older in the PSA is 9.2 percent which is higher compared to the Illinois unemployment rate at 5.96 percent. The male unemployment rate is 8.9 percent in the PSA, comparable to the female unemployment rate at 9.7 percent. The PSA's rates are significantly higher than Cook County at 6.9 for males and 7.1 for females. Illinois is the lowest with 6.1 for males and 5.8 for females, respectively.

The communities with highest unemployment rate in the PSA include West Englewood (60636) 24.5 which is nearly triple the PSA rate, Auburn Gresham (60620) 16.5, Chicago Lawn (13.3), Brighton Park (60632) 11.6 and Ashburn (60652) 10.8 (Metopio, American Community Survey 2022). See Exhibit 19.

Exhibit 19: Advocate Christ PSA Unemployment Rate 2016-2020



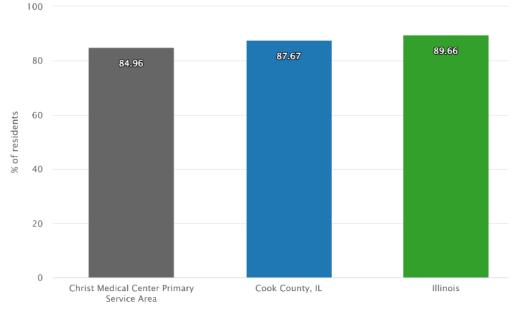
5. Education

Educational Level

Percent of Population Age 25 Over with a High School Degree

In the Advocate Christ PSA, there is 84.96 percent of the population who have attained a high school diploma, which is lower than the state of Illinois with 89.66 percent of the population with a high school diploma. The numbers are average for Non-Hispanic White, Non-Hispanic Black, and Asian or Pacific Islander but fall drastically for Hispanic or Latino (77.04 percent) in the PSA, Cook County (69.93 percent) and Illinois (69.21 percent). Exhibit 20 details the high school graduation rate in the PSA and Exhibit 21 by race and ethnicity.

Exhibit 20: Advocate Christ PSA High School Graduation Rate 2016-2020



120 100 80 % of residents 60 40 20 0 Full population Asian or Pacific Non-Hispanic Non-Hispanic Hispanic or White Black Islander Latino Race/Ethnicity

Exhibit 21: Advocate Christ PSA High School Graduation Rate by Race/Ethnicity 2016-2020

Population 25+ with a Bachelor's Degree or Higher

In Advocate Christ's PSA, there are 32.67 percent of the population who have attained a bachelor's degree or higher, which is lower than the state of Illinois with 43.66 percent and Cook County with the highest rate of 46.63 percent. The numbers are significantly lower for Non-Hispanic Black residents in the County with 31.91 percent and 30.97 percent for Illinois respectively (Source: Metopio, American Community Survey, 2022). See exhibit 22.

Cook County, IL

Christ Medical Center Primary Service Area

40
40
40
40
30
32.67
40
Christ Medical Center Primary Service Area
Cook County, IL
Illinois

Exhibit 22: Advocate Christ PSA Higher Degree Graduation Rate 2016-2020

Source: Metopio, American Community Survey, 2022

6. Health Care Resources in the Defined Community

Name of Facility	Type of Facility	<u>Location</u>
Advocate Christ Medical Center	Medical Center	Oak Lawn, IL
Advocate Trinity Hospital	Hospital	Chicago, IL
Advocate Children's Hospital	Hospital-Pediatrics	Oak Lawn, IL

Little Company of Mary Hospital	Hospital	Evergreen Park, IL
Palos Community Hospital	Hospital	Palos Heights, IL
Holy Cross Hospital	Hospital	Chicago, IL
Cook County Health Clinics	CCHS Clinics	Chicago, IL
Chicago Department of Public Health	CDPH Clinic	Chicago, IL
Christian Family Health Center	Federally Qualified	Harvey, IL

How the CHNA was Conducted

1. Purpose and Process

Every three years the State of Illinois requires not-for profit hospitals to conduct a community health needs assessment (CHNA). This CHNA is intended to identify key health needs and issues through systematic, comprehensive data collection and analysis. In March 2022, Advocate Christ convened its community health council members, comprised of hospital staff and community members to review data to make informed decisions on the health needs that will be addressed in the hospital's primary service area over the next three years. Data was presented over a period of four meetings, March 2022 through June 2022 that included topics on demographics, economics, education, employment SDOH (Social Drivers of Health) and health indicators. Partners from the Alliance for Health Equity also presented similar data based on results from focus group meetings held in the hospital PSA as part of its' CHNA. During the prioritization meeting held on June 28, 2022, council members voted to select the needs to address in the hospital PSA for the 2022 CHNA and the 2023-2025 implementation plan. The needs selected were Obesity and Mental/Behavioral Health. The Advocate Christ Governing Council approved the 2022 CHNA report at its November 14, 2022 meeting.

2. Partnership

In conducting this CHNA, Advocate Christ Medical Center partnered with several key stakeholders and community partners that include:

- Advocate Christ Medical Center Community Health Council
- Advocate Christ Medical Center Governing Council
- Alliance for Health Equity
- Metopio, a data repository platform
- Cook County Department of Public Health
- Oak Lawn Public Library
- Oak Lawn School District 123
- Superior Ambulance
- Illinois Public Health Institute

Community Health Council

The Advocate Christ Community Health Council (CHC) is responsible for overseeing the CHNA process, prioritize health needs and to oversee community health strategy for the medical center. The CHC also contributes to the development of an implementation plan to address prioritized community health needs. Chaired by a member of the Advocate Christ's Governing Council and managed by the regional director of community health, the council is comprised of a variety of representatives from the community. The CHC functions as a subset of the medical center's Governing Council and all activities and decisions made by the CHC regarding the CHNA are submitted for approval by the full Governing Council. The community heath council is comprised of community representatives and Advocate Aurora Health team members. The composition is listed above.

3. Data Collection and Analysis

Advocate Christ referenced the Cook County community assessment report to supplement other hospital and public health data pulled for the hospital CHNA, secondary data, and primary data including community surveys distributed online and focus groups. Metopio was a key source of data for the 2022 Advocate Christ CHNA. This secondary data was crucial in analyzing the hospital's PSA health needs as the data base was the only source that provided extensive data specific to the PSA. All data collected through Metopio was quantitative and included data comparisons between PSA, counties in Illinois, the state of Illinois, and United States data.

4. Data Sources

Metopio

In 2020, Advocate Aurora Health signed a contract with Metopio to provide an internet-based data resource for its eleven hospitals during the 2022 CHNA cycle. This robust platform includes health and demographic indicators, including hospitalization and emergency department (ED) visit indicators at the service area and zip code, county, and state levels. Utilizing the Illinois Hospital Association COMPdata, Metopio was able to summarize, age adjust and average the hospitalization and ED data for various periods through 2020. Metopio also provided a wealth of county, state, and zip code data comparisons, a Socio Vulnerability Index visualizing vulnerable populations within service areas and counties, that helps to maximize the ability to address the social drivers of health in the diverse communities served by Advocate Aurora Health. Advocate Christ also collected data from the Cook County Department of Public Health and the Alliance for Health Equity, the Centers for Disease Control, U.S. Census Bureau, and other nationally recognized data platforms from which to pull data.

Alliance for Health Equity

Advocate Christ is a member of The Alliance for Health Equity, a collaborative of 34 hospitals working with health departments and regional and community-based organizations to improve health equity, wellness, and quality of life across Chicago and Suburban Cook County.

This collaborative Community Health Needs Assessment was conducted between May 2021 and March 2022, during a time that communities across the county, country, and globe have been experiencing profound impacts from the COVID-19 pandemic. The health, economic, and social impacts of the pandemic are strongly present in what was learned from community members and healthcare and public health workers over the course of the assessment.

Click here for more information about the Alliance for Health Equity's CHNA.

Other data sources include reports from the Cook County Department of Public Health, Chicago Department of Public Health and the Illinois Department of Public Health.

Summary of CHNA Findings

1. Overall Health Status

Mortality - Leading Cause of Death (All Causes)

According to Centers for Disease Control and Prevention, in 2020, nine of the ten leading causes of death remained the same as in 2019. The top leading cause was due to heart disease followed by cancer (Exhibit 23). COVID-19 became the 3rd leading cause of death while suicide dropped from the list of 10 leading causes in 2020. Causes of death are ranked according to number of

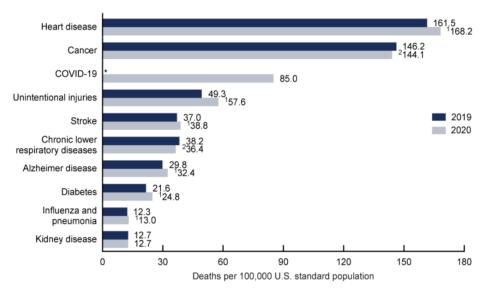
Key findings: Health Status

- The number one cause of death is heart disease.
- The highest life expectancy is 82.1 years and the lowest is 70 years.
- There is a 12-year difference in life expectancy in the PSA.

deaths (1). The 10 leading causes accounted for 74.1 percent of all deaths in the United States in 2020 (Centers for Disease Control and Prevention, Mortality, 2020).

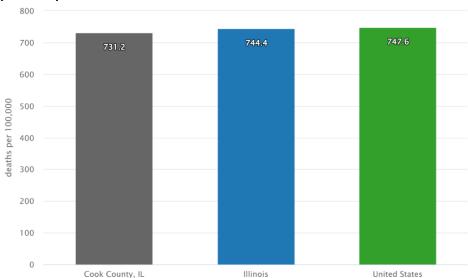
According to the Illinois Department of Public Health, heart disease, cancer, stroke, accidents, and lower respiratory disease are the top five causes of death in the state of Illinois. In Cook County, the same trends in the leading causes of death were observed from 2014 to 2016 with 65 percent of all deaths being attributed to chronic disease (Metopio, 2022). Exhibit 24 compares the mortality rate for Cook County, the state of Illinois and U.S.

Exhibit 23: Top 10 Leading Causes of Death in the US 2020



Source: CDC, National Center for Health Statistics, National Vital Statistics System, Mortality, 2022

Exhibit 24: Cook County Mortality Rate 2016-2020



Source: Metopio, National Center for Health Statistics, National Vital Statistics System, Mortality, 2022

Life Expectancy

According to the World Health Report, life expectancy is defined as the average number of years that a newborn is expected to live if current mortality rates continue to apply. Life expectancy at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all groups-children and adolescents, adults, and the elderly. Data indicate that individuals residing in more affluent communities have a longer life expectancy when

compared to individuals that reside in the lower socio-economic communities. The average life expectancy for the Advocate Christ PSA is 77.8 years which is only slightly lower that the state and Cook county at 78.7 years. The lowest life expectancy in the PSA is in: West Englewood (60636) at 70 years and the highest is Orland Park (60467) at 82.1 years (Metopio, Center for Urban Population Health, National Center of Health Statistics, U.S. Small-Area Life Expectancy Estimates Project, 2010-2015). Exhibit 25 compares life expectancy in the PSA to Illinois and the United States.

90

80

70

60

50

30

20

Illinois

United States

Christ Medical Center Primary Service Area

Exhibit 25: Advocate Christ PSA Life Expectancy Comparison 2010-2015

Source: Metopio, American Community Survey, 2022

2. Access to Care and Health Care Coverage

Why is this Important?

Sometimes people don't get recommended health care services, like cancer screenings, because they don't have a primary care provider. Other times, it's because they live too far from health care providers who offer them. Interventions to increase access to health care professionals and improve communication – in person or remotely – can help more people get the care they need.

Health Care Coverage

Persons with Private Health Insurance Only

In the PSA, 63.0 percent of residents are covered by private health insurance, such as employer-provided health insurance, direct-or purchase (ACA exchanges), or TriCare. The private health insurance rates in the PSA are lower than the U.S. (68.06), and Illinois (70.6). The zip code in the PSA with the highest percentage of residents covered by private health insurance is Mt. Greenwood (60655) at 88.4 percent and the lowest coverage being in Broadview (60455) at 56.1 percent and Hometown (60456) at 60.1 percent (Metopio, American Community Survey, 2016-20205-2019).

Persons with Public Health Insurance Only

In the PSA, 38.4 percent of residents are covered by public insurance such as Medicare, Medicaid, VA, which is higher than Illinois (33.7 percent), and higher than Cook County (34.3 percent). The zip codes in the PSA with the highest percentage of residents covered by public health insurance are West

Key findings: Health Care Coverage and Access to Care

- There is a lack of mental health providers in the PSA.
- Most residents have either private health insurance, Medicare, or Medicaid.
- The uninsured rate is only 8.81 percent in the PSA.

Englewood (60636) at 66.2 percent, Auburn Gresham (60620) at 55.0 percent and Chicago Lawn (60629) at 47.3 percent (Metopio, American Community Survey, 2016-2020).

Uninsured Rate

In the Advocate Christ PSA, 8.81 percent of residents are without health insurance. The PSA rate is higher than Illinois at (6.82 percent) but comparable to Cook County (at 8.75 percent) and the US (at 8.73 percent). The zip codes with the highest uninsured rates in the PSA are Bridgeview (60455) at 15.25 percent, Justice (60458) at 14.86 percent and Brighton Park (60632) at 14.7 percent as shown in Exhibit 26. The race and ethnicity in the PSA with the highest uninsured rates are Hispanic or Latino at 12.3 percent, followed by Asian or Pacific Islander at 6.9 percent.

35

30

25

20

15

2008-2012 2009-2013 2010-2014 2011-2015 2012-2016 2013-2017 2014-2018 2015-2019 2016-2020

Illinois
Christ Medical Center Primary Service Area
60455 (Bridgeview, IL)
60458 (Justice, IL)
Cook County, IL

Exhibit 26: Advocate Christ PSA Uninsured Rate 2016-2020

Metopio, American Community Survey, 2022

Medicare Coverage

In the PSA, there are 16.8 percent of residents covered by Medicare, which is slightly higher than Cook County (15.3 percent) but comparable to Illinois (16.6 percent). The zip codes in the PSA with the highest percentage of residents covered by Medicare are Palos Park (60464) at 29.5 percent and Palos Heights (60463) at 29.0 percent (Metopio, American Community Survey, 2016-2020).

Medicaid Coverage

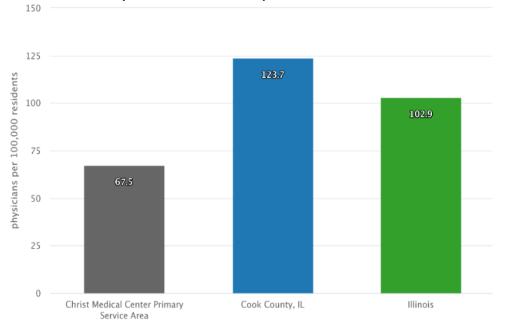
There are 23.5 percent of residents in the PSA that are covered by Medicaid. The PSA Medicaid coverage is identical to Illinois (at 23.5 percent) and Kane County (at 16.8 percent) but slightly higher than Cook County (at 21.4 percent). In the PSA, the zip codes with the highest Medicaid coverage are West Englewood (60136) at 47.9 percent, Auburn Gresham (60620) at 38.2 percent and Chicago Lawn (60629) at 36.8 percent (Metopio, American Community Survey, 2016-2020).

Access to Care

Primary Care Provider Rate

Primary Care Providers include general practice, internal medicine, obstetrics and gynecology or pediatrics. This data excludes federal physicians and physicians ages 75 and older. In Cook County, there are 123.7 primary care providers (PCP) per 100,000 residents. The county rate is nearly doubled when compared to the PSA rate of 67.5 but slightly higher than Illinois rate of 102.9 providers per 100,000 residents (Metopio, Health Resources and Services Administration, 2018). See Exhibit 27.

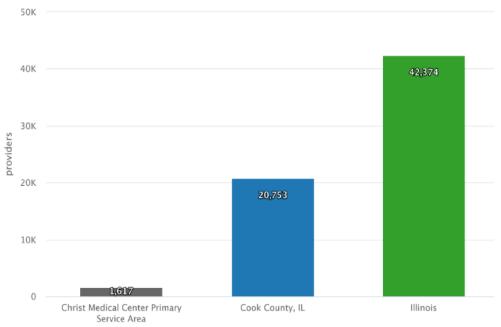
Exhibit 27: Advocate Christ PSA Primary Care Providers Per Capita 2011



Mental Health Provider Rate

Mental Health Providers includes psychiatrists, psychologists, and specialists in addiction medicine, counseling, therapy, and behavioral health and includes advanced practice nurses and nurse practitioners. In the PSA, there are 1,617 mental health providers compared to Illinois with 42,374 providers and 20,753 in Cook County. (Metopio, CMS National Provider Identifier, 2021). Exhibit 28 shows the number of mental health providers in the PSA compared to other areas.

Exhibit 28: Advocate Christ PSA Mental Health Providers 2021



3. Health Risk Behaviors

Why is this Important?

Many chronic diseases are caused by a short list of risk behaviors: tobacco use and exposure to secondhand smoke, poor nutrition, including diets low in fruits and vegetables and high in sodium and saturated fats, lack of physical activity, and excessive alcohol use.

Substance Use and Abuse

Tobacco Use

According to the World Health Organization (WHO), every year there are more than eight million people worldwide that die from tobacco use, which is about half of those identified as using tobacco (this does not include electronic cigarettes) Most of these deaths are among those who are low- and middle-income countries. With many efforts to reduce tobacco use worldwide, the WHO states that overall global tobacco use has decreased from 2000 to 2018

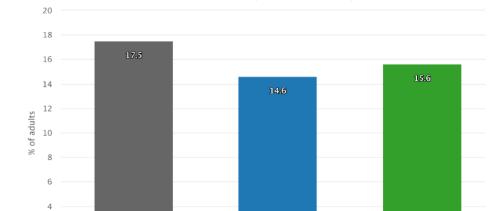
Key findings: Health Risk Behaviors

- Non-Hispanic Blacks are more likely to use the ED or be hospitalized for substance use.
- Young Adults (18-39) and Middle-Aged Adults (40-64) have the highest rates for substance use.
- Obesity rates are comparable across the PSA, Cook County, and Illinois.

by approximately 60 million people based on trends in global prevalence of tobacco use reports. While more males use tobacco products than females, there has been a steady decline in both males and females over the past few decades. These declining rates can be attributed to the many programs targeted to increase awareness of health effects that tobacco has on users. The Director of Health Promotion at WHO, Dr. Ruediger Krech, said "reductions in global tobacco use demonstrate that when governments introduce and strengthen their comprehensive evidence-based actions, they can protect the well-being of their citizens and communities" (World Health Organization, 2022, WHO Launches New Report on Global Tobacco Use Trends, December 19, 2019. Retrieved from who.int/news).

Adults who smoke

There are 17.5 percent of resident adults ages 18 and older who report having smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days. This rate is slightly higher than Illinois at 15.6 precent and Cook County at 16.0 percent. Within in the PSA, the zip codes with the highest rates of adults who smoke are those in West Englewood (60636) at 25.9 percent and Justice (60458) at 21.5 percent. (Source: Metopio, American Community Survey, 2022). Exhibit 29 shows smoking prevalence in the PSA.



Cook County, IL

Illinois

Exhibit 29: Advocate Christ PSA Cigarette Smoking Prevalence 2019

Christ Medical Center Primary

Teens Who Smoke

Healthy behavior patterns formed in adolescence play a crucial role in health throughout life. Individuals who start smoking young are more likely to have a long-term addiction to nicotine than people who start smoking later in life, putting them at greater risk for smoking related illness and death. The 2020 Suburban Chicago Illinois Youth Survey Report results should be viewed with caution, given that many students were in remote or hybrid learning environments during the COVID-19 pandemic, impacting the ability to ensure a representative sample in the survey. Information from local Drug-Free Community coalitions should be consulted for additional input and qualitative data. As shown in the 2020 Suburban Chicago Illinois Youth Survey Report, one percent of 10th and 12th graders reported to smoking cigarettes in the last 30 days, while 8th graders report zero percent. Teenagers smoking cigarettes have steadily decreased over the last ten years but vaping and e-cigarettes usage has continually increased (Center for Prevention Research and Development, Illinois Youth Survey, Suburban Chicago Report, 2020).

Vaping

According to the 2020 Suburban Chicago Illinois Youth Survey Report, 14 percent of 12th graders in high school had used e-cigarettes or vaped in the last 30 days. This is an increase from the five percent of 8th graders that reported to vaping in the last 30 days (Center for Prevention Research and Development, Illinois Youth Survey, Suburban Chicago Report, 2020).

Alcohol Use

Drinking too much alcohol can harm your health. Excessive alcohol use led to more than 140,000 deaths and 3.6 million years of potential life lost (YPLL) each year in the United States from 2015-2019, shortening the lives of those who died by an average of 26 years. Further excessive drinking was responsible for 1 in 10 deaths among working age adults aged 20-64 years. The economic cost of excessive alcohol consumption in 2010 were estimated at \$249 billion, or \$2.05 a drink (Centers for Disease Control and Prevention, 2022).

Emergency Department Rate Due to Alcohol Abuse

The ED rate due to alcohol use in the PSA is 433.6 per 100,000 residents. The zip codes in the PSA with the highest ED rates due to alcohol use are Elgin (60123) at 690.7 per 100,000 residents and Elgin (60120) at 602.7 per 100,000 residents. By race and ethnicity, rates are highest in the PSA among those who are Non-Hispanic White at 746.0 per 100,0000 residents, followed by those who are Non-Hispanic Black at 595.2 per 100,000 residents. Additionally, there are high rates among residents ages 40-64 years at 750.3. per 100,000 residents and young adults ages 18-39 years at 573.0 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). See Exhibit 30.

800 750.34 600 per 100,000 residents 573.02 400 200 171.94 0.00 Seniors (65 and Full population Infants (0-4 Juveniles (5-17 Young Adults Middle-Aged years) (18-39 years) Adults (40-64 older) years)

Age

Exhibit 30: Advocate Christ PSA Alcohol Use Emergency Department Visit Rate 2016-2020

Hospitalization Rate due to Alcohol Use

In the PSA, the hospitalization rate due to alcohol use is 191.7 per 100,000 residents. This rate is higher than Illinois at 150.0 per 100,000 residents and Cook County at 188.0 per 100,000 residents. The highest rates in the PSA are among those who are Non-Hispanic White 312.6 per 100,000 residents, middle-aged adults (40-64 years) at 378.7 per 100,000 residents, and males (296.9 per 100,000 residents) are almost three times as likely to be hospitalized for alcohol use than females at 89.7 per 100,000 residents.

The zip codes in the PSA with the highest hospitalization rates due to alcohol use are Hometown (60456) at 397.8 per 100,000 residents and Worth (60482) at 334.2 per 100,000. See Exhibit 31 for the rates by age (Metopio, IHA, COMPdata Informatics, 2016-2020).

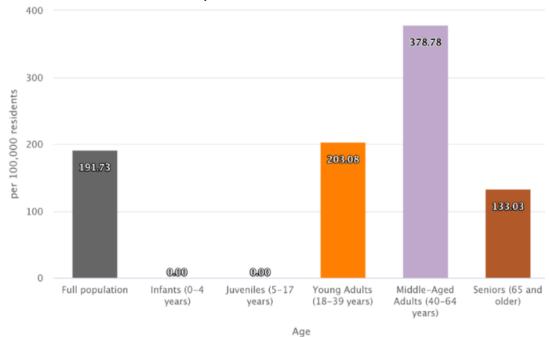


Exhibit 31: Advocate Christ PSA Alcohol Use Hospitalization Rate 2016-2020

Source: Metopio, American Community Survey, 2022

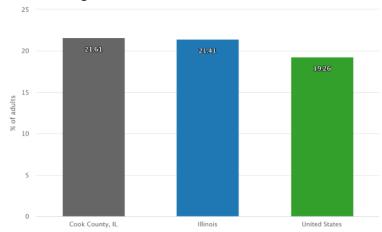
Teens Who Use Alcohol

According to the American Academy of Pediatrics, alcohol is the substance most widely used by adolescents, although the minimum legal drinking age across the United States is 21 years. Some people may initiate harmful alcohol consumption in childhood. The prevalence of problematic alcohol use continues to escalate from adolescence in young adulthood. (Retrieved from Alcohol Use by Youth | Pediatrics | American Academy of Pediatrics (aap.org), 2022)

Adults Who Drink Excessively

Binge drinking is defined as having five or more drinks (men) or four or more drinks (women) on an occasion in the past 30 days. According to Metopio, it is stated that alcohol use is likely seriously underreported, and these reported rates are at the extreme lower bound on actual binge drinking prevalence. The percentage of adults aged 18 and older who reported binge drinking in Illinois at 21.4 percent, Cook County at 21.6 percent which are both higher than the US at 19.2 percent. No data is readily available for the PSA(Metopio, PLACES, BRFSS, 2019). Exhibit 32 shows excessive drinking in Cook County compared to the state of Illinois and the U.S.

Exhibit 32: Cook County Excessive Drinking 2018



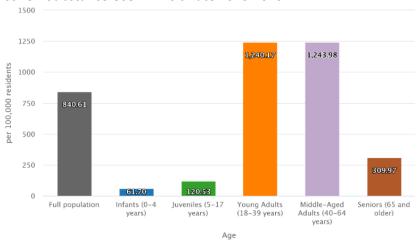
Alcohol Impaired Driving Deaths

Alcohol-Impaired Driving Deaths directly measures the relationship between alcohol and motor vehicle crash deaths. Alcohol is a substance that reduces the function of the brain, impairing thinking, reasoning, and muscle coordination, which are essential to operating a vehicle safely.[1] In 2018, approximately 10,500 Americans were killed in alcohol-related motor vehicle crashes. The annual cost of alcohol-related crashes totals more than \$44 billion. Drivers between the ages of 21 and 24 cause 27% of all alcohol-impaired deaths. The 2022 County Health Rankings indicates 24 percent (349 deaths) of driving deaths in Cook County involved alcohol which is slightly lower than the Illinois rate at 29 percent (2022 County Health Rankings, Fatality Analysis Reporting System, 2016-2020).

Emergency Department Rate Due to Substance Abuse

In Metopio, substance use includes the use of controlled substances such as alcohol, heroin, methadone, cocaine, hallucinogens, and other substances. The ED rate due to substance use in the PSA is 840.6 per 100,000 residents which is higher than the Illinois rate of 741.4 per 100,000 residents. The PSA rates are highest for ED rate due to substance use among the Non-Hispanic Black population at 1,517.4 per 100,000 residents, middle-aged adults (40-64 years) at 1,243.9 per 100,000 residents and young adults (18-39 years) at 1,240.1 per 100,000 residents. Males (1,306.4 per 100,000 residents) are almost three times as likely to visit the ED than females (494.9 per 100,000 residents). Also, the rates are highest in the PSA among those residents living in the zip codes of West Englewood (60632) at 2,858.6 per 100,000 residents and Oak Forest (60452) at 1,489.6 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 33 shows the ED rate due to substance use by age for the PSA.

Exhibit 33: Advocate Christ PSA Substance Use ED Visit Rate 2016-2020



Hospitalization Rate Due to Substance Abuse

The hospitalization rate due to substance use in the PSA is 353.9 per 100,000 residents. This is higher than the Illinois rate of 268.1 per 100,000 residents. The PSA rates are highest for hospitalization rate due to substance use among the Non-Hispanic White population at 615.3 per 100,000 residents, middle-aged adults (40-64 years) at 689.0 per 100,000 residents and males (503.1 per 100,000 residents) are extremely more likely to be hospitalized than females (176.6 per 100,000 residents). Also, the rates are highest in the PSA among those residents living in the zip codes of West Englewood (60636) at 993.8 per 100,000 residents and Worth (60482) at 565.0 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 34 shows the hospitalization rate due to substance abuse.

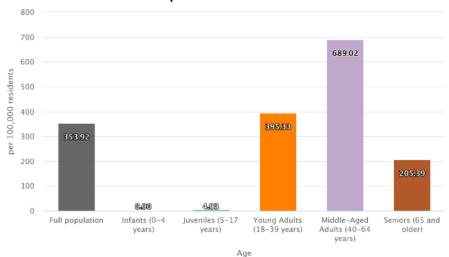
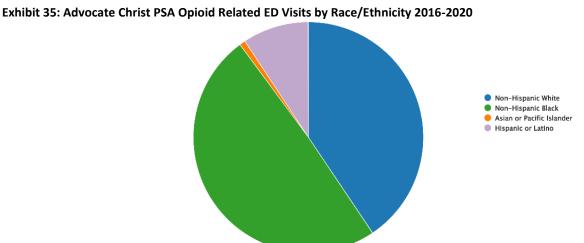


Exhibit 34: Advocate Christ PSA Substance Use Hospitalization Rate 2016-2020

Source: Metopio, American Community Survey, 2022

Age-Adjusted Emergency Department Rate for Opioid Use

The ED rate due to opioid use in the PSA is 328.5 per 100,000 residents. This is higher than the Illinois rate of 236.2 per 100,000. The PSA rates are highest for ED rate due to opioid use among the Non-Hispanic White population at 752.4 per 100,000 residents, young adults (18-39 years) at 492.4 per 100,000 residents and males are more likely to visit the ED than females. Also, the rates are highest in the PSA among those residents living in the zip codes of West Englewood (60636) at 1,463.8 per 100,000 residents and Auburn Gresham (60620) at 648.6 per 100,000 residents. See exhibit 35 (Metopio, IHA COMPdata Informatics, 2016-2020).



Hospitalization Rate due to Opioid Use

The hospitalization rate due to opioid use in the PSA is 419.4 per 100,000 residents. This is higher than the Illinois rate of 294.5 per 100,000 residents. The PSA rates are highest for hospitalization rate due to opioid use among the Non-Hispanic Black population at 775.9 per 100,000 residents, middle-aged adults (40-64) at 660.4 per 100,000 residents and males are higher than females who are hospitalized for opioid use. Also highest in the PSA, are those residents living in the zip codes of West Englewood (60636) at 1,831.5 per 100,000 residents, Hometown (60456) at 948.0 per 100,000 residents and Auburn Gresham (60620) at 927.0.0 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 36 shows hospitalization rates due to opioid use by race and ethnicity.

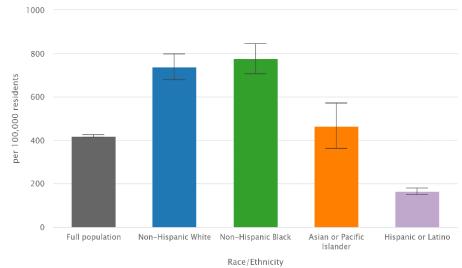


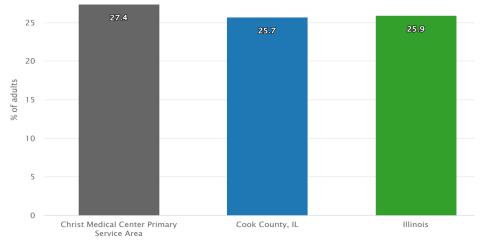
Exhibit 36: Advocate Christ PSA Opioid Related Hospitalization Rate by Race/Ethnicity 2016-2020

Source: Metopio, American Community Survey, 2022

Nutrition

According to America's Health Rankings, in Illinois, the percentage of adults who reported consuming two or more fruits and three of more vegetables daily is 6.9 precent, which is lower than the U.S. rate of 8.0 percent. This rate has been steadily declining in Illinois over time (America's Health Rankings, CDC, BRFSS, 2019). Exhibit 37 shows fruit and vegetable consumption in the PSA. There are 27.4 percent of adults who report on average consuming fruit and vegetables less than five times per day, comparable to Cook County and the state of Illinois (Metopio, Behavioral Risk Factor Surveillance System (BRFSS), 2003 - 2009.

Exhibit 37: Advocate Christ PSA Adult Fruit and Vegetable Consumption



Weight Status

The 2021 State of Obesity Report claims that the COVID-19 pandemic added new obstacles and exacerbated already existing barriers to healthy eating and physical activity in 2020 and 2021 as well as intensified already existing racial and economic inequities in the United States. The effects of underlying social, economic, and environmental conditions influence the health and well-being of Americans including emerging data which suggests eating habits shifted, physical activity declined, stress and anxiety increased, food insecurity worsened, and many Americans gained weight throughout the pandemic. Effects of the COVID-19 pandemic, both direct and indirect, fell disproportionately on certain populations, including the low-income communities and communities of color (Trust for America's Health, The Sate of Obesity: Better Policies for A Healthier America, 2021). The obesity rate in adults in the PSA is 30.8, 29.2 for Cook County, and 32.2 for Illinois respectively. Exhibit 38 shows the percent of adults who are obese in the PSA.

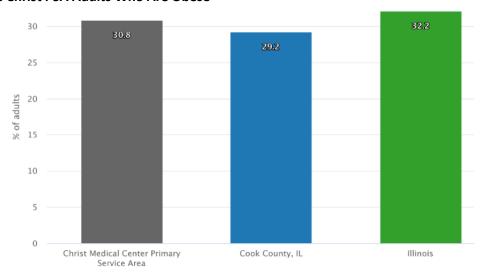


Exhibit 38: Advocate Christ PSA Adults Who Are Obese

Source: Metopio, American Community Survey, 2022

4. Disease and Chronic Conditions

Cancer

Breast Cancer

Invasive Breast Cancer Diagnosis Rate

Breast cancer is the most common cancer in American women, except for skin cancers. Currently, the average risk of a woman in the U.S. developing breast cancer sometime in her life is about 13 percent. This means there is a 1 in 8 chance she will develop breast cancer (American Cancer Society, 2022).

The diagnosis rate for invasive breast cancer for females over 15 years of age in the Advocate Christ PSA is 154.7 cases per 100,000 females, which is lower than in Cook County at 158.14 cases per 100,000 females—the rates do not consider males. The PSA case rates have increased from 136.5 cases per 100,000 females in 2000-2004 to 154.7 cases per 100,000 females in 2014-2018. In the PSA, breast cancer rates are dramatically higher in females 65 years and over (403.4 cases per 100,000 females) and females 40-64 years old (280.9 cases per 100,000 females). The breast cancer incidence rates are also

Key findings: Disease and Chronic Conditions

- Breast cancer mortality has continually declined year over year.
- Colorectal cancer mortality is strikingly higher for persons over 65.
- Lung cancer rates are higher in the PSA than in Cook County and the State.

lower than Illinois (159.2 cases per 100,000 females) but higher than the U.S. (126.8 cases per 100,000 females) when

compared to the Advocate Christ PSA (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018). Exhibit 39 shows invasive breast cancer diagnosis by age.

Full population

Middle-Aged Adults (40-64 years)

Middle-Aged Adults (40-64 years)

Seniors (65 and older)

Exhibit 39: Advocate Christ PSA Invasive Breast Cancer Diagnosis Rate by Age 2014-2018

Source: Metopio, American Community Survey, 2022

Breast Cancer Mortality Rate

Breast cancer is the leading cause of death among women in the United States (only lung cancer kills more women each year) (American Cancer Society, 2022). In Cook County, the breast cancer mortality rate is 12.6 deaths per 100,000 residents. This is higher than the U.S. at 10.8 deaths per 100,000 residents, and Illinois at 11.4 deaths per 100,000. Women 65 and older in Cook County have the highest rate at 49.2 per 100,000 as shown in Exhibit 40 (Metopio, National Vital Statistics System-Mortality, 2016-2020). Exhibit 41 shows mortality rate by age.

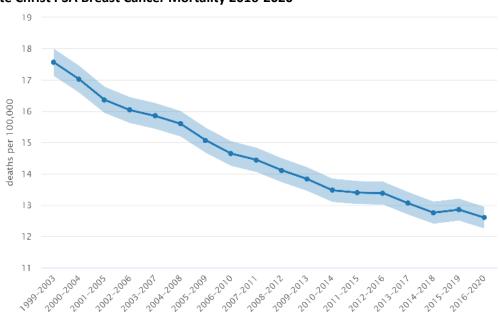


Exhibit 40: Advocate Christ PSA Breast Cancer Mortality 2016-2020

Metopio, National Vital Statistics System-Mortality, 2022

60 50 deaths per 100,000 40 30 20 10 2.0 1.8 1.3 0 Young Adults (18-39 Seniors (65 and older) Full population Middle-Aged Adults (40years) 64 years) Age Cook County, IL Illinois United States

Exhibit 41: Advocate Christ PSA Breast Cancer Mortality Rate by Age 2016-2020

Incidence rate

Mammography Use

Mammography is an x-ray imaging method used to examine the breast for the early detection of cancer and other breast diseases. It is used as both a diagnostic and screening tool. (U.S. Department of Health and Human Services, 2022). Of female adults aged 50-74 years in the Advocate Christ PSA, 78.2 percent report to having had a mammogram within the previous 2 years. This rate in the PSA for mammography screening has increased since 2014 at 73.8 percent (Metopio, PLACES, Behavioral Risk Factor Surveillance System (BRFSS), 2018).

Colorectal Cancer

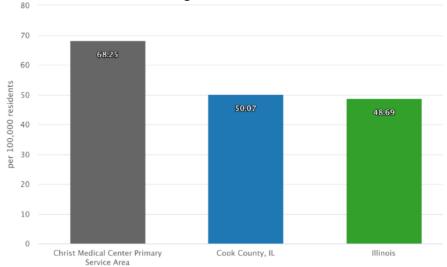
Colorectal Cancer Diagnosis Rate

According to the American Cancer Society, colorectal cancer is a cancer that starts in the colon or the rectum. These cancers can also be named colon cancer or rectal cancer, depending on where they start. Colon and rectal cancer are often grouped together because they have many features in common (American Cancer Society, 2022).

In the Advocate Christ PSA, the colorectal cancer incidence rate is 68.2 cases per 100,000 residents over 15 years of age and these rates have remained steady for the past decade. Males in the PSA have higher colorectal cancer incidence rates than females at 75.0 cases per 100,000 residents and 62.0 cases per 100,000 residents, respectively. In the PSA, seniors over the age of 65 years (200.7 cases per 100,000 residents) have the highest colorectal cancer diagnosis rate.

The PSA rate is significantly higher than the Illinois rate at 48.69 cases per 100,000 residents and the Cook County rate at 50.07 cases per 100,000 residents (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018). Exhibit 42 shows the colorectal cancer diagnosis rates in the PSA.

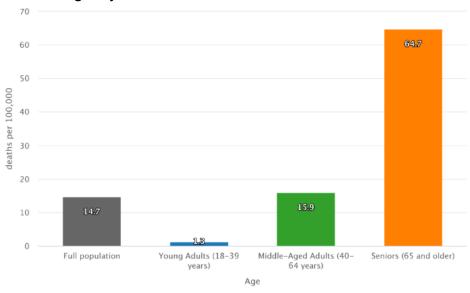
Exhibit 42: Advocate Christ PSA Colorectal Cancer Diagnosis Rate



Colorectal Cancer Mortality Rate

The Advocate Christ mortality rate due to colorectal cancer is 14.7 deaths per 100,000 residents. The rate in young adults is 1.3 deaths per 100,000 residents. The mortality rates due to colorectal cancer for middle-aged adults is 15.9 per 100,000 residents. The mortality rate for seniors was strikingly high compared to the other age groups at 64.7 per 100,000 residents (Metopio, National Vital Statistics System-Mortality, Chicago Department of Public Health, 2015-2019). See Exhibit 43.

Exhibit 43: Advocate Christ PSA Age-Adjusted Death Rate 2016-2020



Source: Metopio, American Community Survey, 2022

Cervical Cancer

Cervical Cancer Diagnosis Rate

The annual cervical cancer diagnosis rate in the Advocate Christ PSA is 10.75 cases per 100,000 female residents. In Cook County, there are 8.91 cases of cervical cancer per 100,000 females. The diagnosis rate in Illinois (8.14 cases per 100,000

females) is lower than the Advocate Christ PSA. (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018).

Pap Test Use

The American College of Obstetricians and Gynecologists recommends that all women aged 21 through 29 have a Pap test every three years. For women aged 30-65, it is recommended that they have a Pap test and a Human Papillomavirus (HPV) test every five years.

The percentage of resident female adults aged 21-65 years who report having had a Papanicolaou (Pap) smear within the previous 3 years is 82.23 percent for the Advocate Christ PSA. The PSA is slightly lower than Cook County rate (82.70 percent) and the Illinois rate (83.55 percent) (Metopio, PLACES, Behavioral Risk Factor Surveillance System (BRFSS), 2018).

Lung Cancer

Lung Cancer Diagnosis Rate

The annual lung and bronchus cancer diagnosis rates for ages 15 and over are down in the Advocate Christ PSA from 106.45 cases per 100,000 residents in 2004-2008 to 99.54 cases per 100,000 residents in 2014-2018. When compared to Illinois (74.39 cases per 100,000 residents) the Advocate Christ PSA has a significantly higher rate, with the lowest rate being in Cook County (68.70 per 100,000 residents.) (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018). Exhibit 44 shows lung cancer diagnosis rates in the PSA.

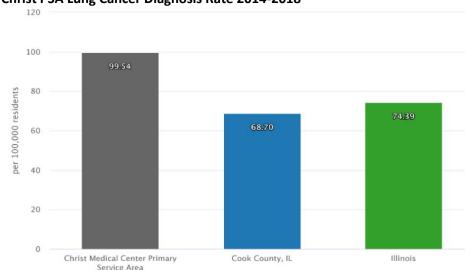


Exhibit 44: Advocate Christ PSA Lung Cancer Diagnosis Rate 2014-2018

Source: Metopio, American Community Survey, 2022

Lung, Trachea, and Bronchus Cancer Mortality Rate

In the Advocate Christ PSA, the mortality rate due to lung, trachea and bronchus cancer is 33.0 deaths per 100,000 residents for the full population. Seniors over the age of 65 years have significantly higher rates (186.8 deaths per 100,000 with the lowest rate falling to 28.1 per 100,000 residents for middle-aged adults 40-64. The Illinois rate is 37.4 deaths per 100,000 residents (Metopio, National Vital Statistics System-Mortality, Chicago Department of Public Health, 2016-2020).

Oral Cancer Diagnosis Rate

The diagnosis rates for oral cavity and pharynx cancer for adults 15 years and over in the Advocate Christ PSA is 17.15 cases per 100,000 residents, which is slightly higher than the Illinois rate of 14.43 cases per 100,000 residents. The PSA rate is up, from 16.6 cases per 100,000 residents in 2010-2014. Males in the PSA have double the diagnosis rate of oral

cavity and pharynx (24.6 cases per 100,000 residents) of females at 10.7 cases per 100,000 residents (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018).

Prostate Cancer Diagnosis Rate

The prostate cancer diagnosis rate is has dropped in the Advocate Christ PSA to 145.84 cases per 100,000 males in 2014-2018 from 163.0 per 100,000 males in 2004-2008. In the PSA, male seniors over the age of 65 years (624.8 cases per 100,000 residents) have the highest diagnosis rates. The prostate cancer diagnosis rate in Illinois is 129.85 cases per 100,000 males and in Cook County 137.70 cases per 100,000 males (Metopio, Illinois Department of Public Health, Illinois State Cancer Registry, 2014-2018). Exhibit 45 shows prostate cancer diagnosis rates in the PSA.

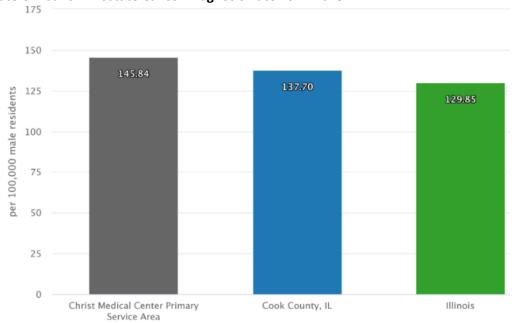


Exhibit 45: Advocate Christ PSA Prostate Cancer Diagnosis Rate 2014-2018

Source: Metopio, American Community Survey, 2022

Cardiovascular Disease

The CDC states that heart disease is the number one leading cause of death for men, women, and people of most racial and ethnic groups in the United States. One person dies every 34 seconds in the U.S. from cardiovascular disease and about 697,000 people (in the U.S.) died from heart disease in 2020 which is about 1 in every five deaths. The cost of heart disease in the US is a about \$229 billion annually from 2017- 2018 and includes the cost of healthcare services, medicines, and lost productivity due to death (Centers for Disease Control and Prevention, July 15, 2022. Retrieved from cdc.gov). Heart disease (first) and stroke (third) are the leading causes of death in Illinois. Deaths due to heart disease and stroke combined represented almost 29 percent of all deaths in the state in 2017. The Illinois Department of Public Health has partnered with many agencies/organizations to raise awareness of heart disease and stroke to help our communities understand their risk factors, change environmental policies and impact lives in Illinois (IDPH, Heart Disease and Stroke, 2022. Retrieved from dph.illinois.gov).

High Blood Pressure Prevalence

In the PSA, 31.7 percent of adults ages 18 and older reported having been told by a doctor, nurse, or health professional that they have high blood pressure. This is slightly higher than Cook County rate of 29.2 percent and the Illinois rate of 29.2 percent. In the PSA, the zip code with the highest rate for high blood pressure is Auburn Gresham (60620) at 46.3 percent (Metopio, PLACES, BRFSS, 2019).

Hypertension Hospitalization Rate by Age

In the PSA, the hospitalization rate due to hypertension is highest among seniors 65 and older at 145.7 per 100,000 residents. The next highest rate is among middle-aged adults 40-64 at 80.4 per 100,000 residents followed by young adults 18-39 at 36.6 per 100,000 residents. The latter was the only group that had a rate lower than the full population at 68.7 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). See Exhibit 46.

150
125
100
75
50
68.78
25
Full population
Young Adults (18-39 Middle-Aged Adults (40- Seniors (65 and older) Age

Exhibit 46: Advocate Christ PSA Hypertension Hospitalization Rate by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Coronary Heart Disease

In the Advocate Christ PSA, 5.5 percent of resident adults ages 18 and older reported ever being told by a doctor, nurse, or other health professional that they have angina or coronary heart disease. This is slightly higher than the Illinois rate of 5.2 percent and the Cook County rate of 5.0 percent. In the PSA, the zip code with the highest rate for coronary heart disease is Auburn Gresham (60620) at 7.7 percent (Metopio, PLACES, BRFSS, 2019). Exhibit 47 shows coronary heart disease rates in the PSA.

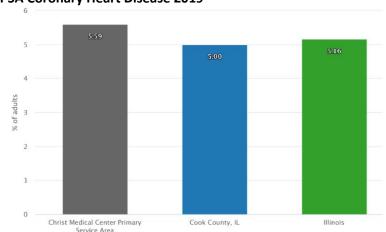


Exhibit 47: Advocate Christ PSA Coronary Heart Disease 2019

Source: Metopio, American Community Survey, 2022

Hospitalization Rate Due to Stroke

The hospitalization rate due to stroke in the PSA is 266.4 per 100,000 residents (adults ages 18 and older). This is higher than Illinois rate of 224.2 per 100,000 residents, and the Cook County rate of 257.8 per 100,000 residents. The PSA rates are highest for hospitalization due to stroke for the Non-Hispanic Black population at 375.3 per 100,000 residents and Non-Hispanic White population at 261.4 per 100,000 residents, as well as those residents living in the zip codes of West

Englewood (60636) at 446.3 per 100,000 residents and Auburn Gresham (60620) at 421.2 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2017-2021).

Mortality Rate Due to Stroke

In Cook County, there are 41.2 deaths per 100,000 residents due to stroke. This is higher compared to the Illinois rate of 39.1 deaths per 100,000 residents. Additionally, stroke mortality rate is highest among the Non-Hispanic Black population (63.9 deaths per 100,000 residents) and Non-Hispanic White population in (34.5 deaths per 100,000 residents). Males also have the highest rates in Cook County and seniors (ages 65 and older) (Metopio, National Vital Statistics System-Mortality, 2016-2020).

High Cholesterol Prevalence

In the PSA, 29.6 percent of adults ages 18 and older reported having been told by a doctor, nurse, or health professional that they have high cholesterol. This is slightly higher than the Illinois rate of 28.0 percent and the Cook County rate of 27.2 percent. (Metopio, PLACES, Behavioral Risk Factor Surveillance System, 2019). See Exhibit 48 and 49.

25 29.61 27.20 28.01

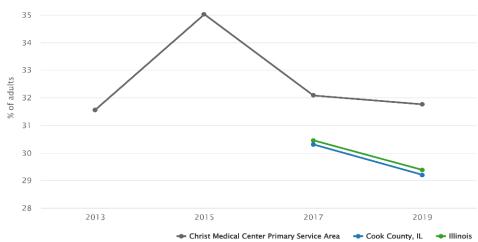
27.20 28.01

Christ Medical Center Primary Cook County, IL Illinois

Exhibit 48: Advocate Christ PSA High Cholesterol Prevalence

Source: Metopio, American Community Survey, 2022





Diabetes

Diabetes is a long-lasing health condition that affects how your body turns food into energy. In turn, with diabetes, your body does not produce enough insulin to break down the food. Over time, diabetes can lead to serious health conditions such as heart disease, vision loss and kidney disease. The Centers for Disease Control and Prevention state that diabetes is the seventh leading cause of death in the United States and is the number one cause of kidney failure, lower-limb amputations, and adult blindness. In the last 20 years, the number of adults diagnosed with diabetes has more than doubled. While there is no cure for diabetes, losing weight, eating healthy foods, and exercising can help lead to a healthy lifestyle managing diabetes (Centers for Disease Control and Prevention, July 7, 2022. Retrieved from cdc.gov).

Diagnosed Diabetes

In the PSA, 11.1 percent of resident adults ages 18 and older reported ever being told by a doctor, nurse of health professional that they have diabetes (other than during pregnancy). This is slightly higher than the Illinois rate of 10.1 percent and the Cook County rate of 10.6 percent. In the PSA, the zip code with the highest rate for diagnosed with diabetes is West Englewood (60636) at 19.1 percent and Auburn Gresham (60620) at 18.2 percent (Metopio, Diabetes Atlas, PLACES, 2019).

Emergency Department Rates Due to Diabetes

In the PSA, the ER rate due to diabetes is 253.0 per 100,000 residents. This is higher than the Illinois rate of 239.7 per 100,000 residents and the Cook County rate of 282.6 per 100,000 residents. All areas are trending up. In the PSA, the zip codes with the highest rates for ED visits due to diabetes are Oak Forest (60654) at 629.4 per 100,000 residents and Englewood (60636) at 577.5 per 100,000 residents.

The highest rates in the PSA are among those who are Non-Hispanic Black at 699.6 per 100,000 residents, females are slightly higher than males and seniors (ages 65 and older) (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 50 displays ED visit rates by age.

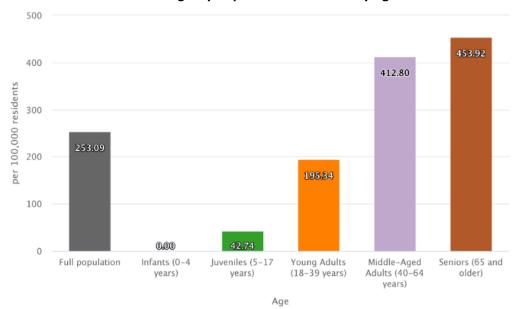


Exhibit 50: Advocate Christ PSA Diabetes Emergency Department Visit Rate by Age

Source: Metopio, American Community Survey, 2022

Uncontrolled Diabetes Emergency Department Visit Rate by Race and Ethnicity 2016-2020

In the PSA, the ED rate due to uncontrolled diabetes is 179.4 per 100,000 residents. This is lower than the Illinois rate of 187.1 per 100,000 residents and the Cook County rate of 184.1 per 100,000 residents respectively. The zip codes in the PSA with the highest rates for ED due to uncontrolled diabetes are West Englewood (60636) at 565.7 per 100,000

residents and Auburn Gresham (60620) at 316.9 per 100,000 residents. The ED rates are also highest among those residents who are Non-Hispanic Black at 416.7 per 100,000 residents (as shown in Exhibit 51) as well as seniors (ages 65 and older) at 248.4 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020).

600 500 per 100,000 residents 400 300 200 100 0 Full population Non-Hispanic White Non-Hispanic Black Asian or Pacific Hispanic or Latino Islander Race/Ethnicity Illinois Christ Medical Center Primary Service Area Cook County, II.

Exhibit 51: Advocate Christ PSA Uncontrolled Diabetes Emergency Department Visit Rate by Race and Ethnicity 2016-2020

Source: Metopio, American Community Survey, 2022

Hospitalization Rate due to Uncontrolled Diabetes

The hospitalization rate due to uncontrolled diabetes in the PSA is 71.4 per 100,000 residents. This is higher than the Illinois rate of 46.7 per 100,000 residents and the Cook County rate of 60.41 per 100,000 residents. The zip codes in the PSA with the highest hospitalization rates due to uncontrolled diabetes are West Englewood (60636) at 194.6 per 100,000 residents and Auburn Gresham (60620) at 132.9 per 100,000 residents. Also, the highest are among the Non-Hispanic Black population at 141.8 per 100,000 residents, males at 78.1 per 100,000 residents and seniors (ages 65 and older) at 154.3 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020).

Emergency Department Rate Due to Short-Term Complications of Diabetes

In the PSA, the ED rate due to short-term complications of diabetes is 6.7 per 100,000 residents. This is lower than the Illinois rate at 9.97 per 100,000 residents but higher than the Cook County rate at 5.4 per 100,000 residents. The zip codes with the highest ED rate due to short-term complications of diabetes are West Englewood (60636) at 15.7 per 100,000 residents and Worth (60482) at 14.4 per 100,000 residents. Also, the rates are highest among the Non-Hispanic Black population at 4.89 per 100,000 residents, males at 9.3 per 100,000 residents, and young adults (ages 18-39 years) at 9.1 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020).

Hospitalization Rate Due to Short-Term Complications of Diabetes

The hospitalization rate due to short-term complications of diabetes in the PSA is 67.1 per 100,000 residents. This is higher than the Illinois rate of 62.7 per 100,000 residents and higher than the Cook County rate at 64.0 per 100,000 residents. The zip codes in the PSA with the highest hospitalization rate due to short-term complications of diabetes are West Englewood (60636) at 235.58 per 100,000 residents and Auburn Gresham (60620) at 155.1 per 100,000 residents. Also, the highest rates in the PSA among the Non-Hispanic Black population at 163.9 per 100,000 residents, males at 78.3 per 100,000 residents and young adults (18-39 years) at 84.2 per 100,000 residents. (Metopio, IHA COMPdata Informatics, 2016-2020).

Hospitalization Rate Due to Long-Term Complications of Diabetes

The hospitalization rate due to long-term complications of diabetes in the PSA is 155.3 per 100,000 residents. This is higher than the Illinois rate at 101.6 per 100,000 residents and the Cook County rate at 127.2 per 100,000 residents. The zip codes in the PSA with the highest ER rates are West Englewood (60636) at 318.1 per 100,000 residents, Auburn Gresham (60620) at 245.0 per 100,000 residents and Hometown (60456) at 242.8 per 100,000 residents. Also, the rates are highest in the PSA among the Non-Hispanic Black population at 254.7 per 100,000 residents, males at 200.2 per 100,000 residents and seniors (ages 65 and older) at 326.0 per 100,000 residents as shown below in Exhibit 52. (Metopio, IHA COMPdata Informatics, 2016-2020).

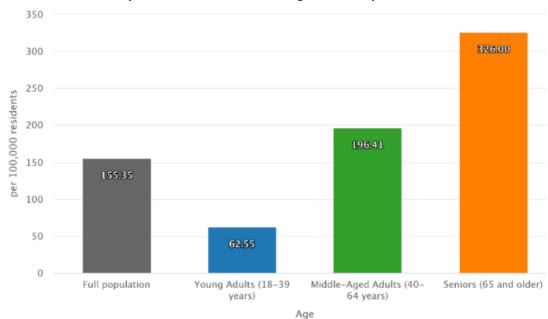


Exhibit 52: Advocate Christ PSA Hospitalization Rate Due to Long-Term Complications of Diabetes

Source: Metopio, American Community Survey, 2022

Mental Health

According to The State of Mental Health in America 2022, the state of Illinois is ranked 12th in the country for adult and youth measures relating to mental health, indicating lower prevalence of mental illness and higher rates of access to care. It was also reported that nearly 50 million (19.9 percent) of American adults experienced a mental illness in 2019. Over 60 percent of youth with major depression do not receive any health treatment, even in states with the greatest access, nearly one in three are going without treatment. More than half of adults with a mental illness do not receive treatment, totaling over 27 million U.S. adults. (The State of Mental Health in America 2022, Mental Health America, 2022).

Poor Mental Health

In the PSA, 14.64 percent of resident adults ages 18 and older report 14 or more days during the past 30 days during which their mental health was not good. This is higher than the Illinois rate of 13.4 percent and the Cook County rate of 12.9 percent. The zip codes in the PSA with highest rates of poor mental health are West Englewood (60636) at 19.5 percent, Justice (60458) at 17.2 percent, and Chicago Ridge (60415) at 16.6 percent, with all zip codes increasing over time as shown in Exhibit 53 (Metopio, PLACES, 2014-2019).

25 20 % of adults 15 10 2014 2019 2015 2017 2018 - Christ Medical Center Primary Service Area - 60415 (Chicago Ridge, IL) - 60445 (Midlothian, IL) 60452 (Oak Forest, IL) 60455 (Bridgeview, IL) 60453 (Oak Lawn, IL) - 60456 (Hometown, IL) 60457 (Hickory Hills, IL) - 60458 (Justice, IL) 60459 (Burbank, IL) 60462 (Orland Park, IL) 60463 (Palos Heights, IL) - 60464 (Palos Park, IL) - 60465 (Palos Hills, IL) 60467 (Orland Park, IL) - 60477 (Tinley Park, IL) - 60487 (Tinley Park, IL) 60482 (Worth, IL) 60620 (Chicago, IL) 60629 (Chicago, IL) - 60632 (Chicago, IL) 60636 (Chicago, IL) 60638 (Chicago, IL) 60643 (Chicago, IL) - 60652 (Chicago, IL) - 60655 (Chicago, IL)

Exhibit 53: Advocate Christ PSA by Zip Code Poor Self-Reported Mental Health Trend Over Time 2014-2019

Emergency Department Rates Due to Mental Health

In the PSA, the ED rate due to mental health is 846.3 per 100,000 residents. This is lower than the Illinois rate of 988.6 per 100,000 residents and the Cook County rate of 917.1 per 100,000 residents. The zip codes in the PSA with the highest ED rate due to mental health are West Englewood (60636) at 2,345.0 per 100,000 residents and Hometown (60456) at 1,283.5 per 100,000 residents.

60805 (Evergreen Park, IL)

60803 (Alsip. IL)

Also, the rates were highest among the Non-Hispanic Black population at 1,651.8 per 100,000 residents, young adults (ages 18-39 years) at 1,285.0 per 100,000 residents and juveniles (ages 5-17 years) at 822.1 per 100,000 residents and males (912.4 per 100,000 residents) higher than females (782.1 per 100,000 residents) (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 54 shows the breakdown of emergency department rates due to mental health by age.

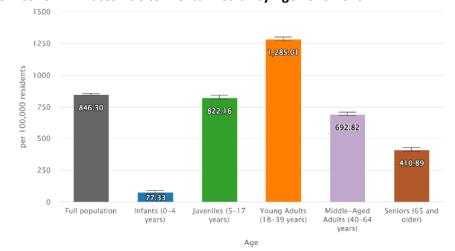


Exhibit 54: Advocate Christ PSA ED Rates Due to Mental Health by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Hospitalization Rates due to Mental Health

The hospitalization rate due to mental health in the PSA is 582.0 per 100,000 residents, which is higher than the Illinois rate of 543.6 per 100,000 residents, but much lower than the Cook County rate of 639.9 per 100,000 residents. The zip

codes in the PSA with the highest hospitalization rate due to mental health are West Englewood (60636) at 1,860.6 per 100,000 residents and Chicago Ridge (60415) at 1,139.1 per 100,000 residents. Also, the rates are highest in the PSA among the Non-Hispanic Black population at 1,188.2 per 100,000 residents, young adults (ages 18-39 years) at 760.6 per 100,000 residents and middle-aged adults (ages 40-64 years) at 624.2 per 100,000 residents as shown in Exhibit 55 (Metopio, IHA COMPdata Informatics, 2016-2020).

800 760.63 600 624.29 100,000 residents 465.34 400 ത്ത 0 Full population Infants (0-4 Middle-Aged Seniors (65 and Juveniles (5-17 Young Adults (18-39 years) Adults (40-64 years) years) Age

Exhibit 55: Advocate Christ PSA Hospitalization Rates due to Mental Health by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Emergency Department Rate due to Suicide and Self-Injury

In the PSA, the ED rate due to suicide and self-injury is 46.3 per 100,000 residents. This is significantly lower than the Illinois rate of 75.87 per 100,000 residents, but comparable to the Cook County rate of 50.0 per 100,000 residents. The zip codes in the PSA with the highest ED rate due to suicide and self-injury are Hometown (60456) at 100.8 per 100,000 residents and Chicago Ridge (60415 at 79.3 per 100,000 residents. Also, the highest rates in the PSA are among the Non-Hispanic White population at 87.56 per 100,000 residents, and juveniles (ages 5-17 years) at 98.5 per 100,000 residents and young adults (ages 18-39 years) at 79.1 per 100,000 residents as shown in Exhibit 56 (Metopio, IHA COMPdata Informatics, 2016-2020).

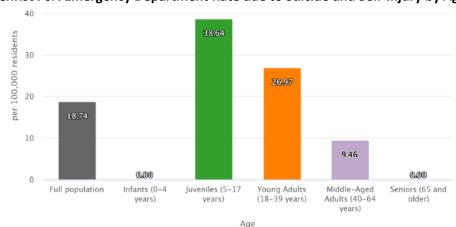


Exhibit 56: Advocate Christ PSA Emergency Department Rate due to Suicide and Self-Injury by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Hospitalization Rate due to Suicide and Self-Injury

The hospitalization rate due to suicide and self-injury in the PSA is 48.4 per 100,000 residents, which is lower than the Illinois rate of 51.7 per 100,000 residents but slightly higher than the Cook County rate of 43.7 per 100,000 residents.

The zip codes in the PSA with the highest hospitalization rate due to suicide and self-injury are Hometown (60456) at 128.0 per 100,000 residents and Worth (60482) at 101.0 per 100,000 residents. Also, the rates highest in the PSA are among the Non-Hispanic White population at 93.4 per 100,000 residents, young adults (ages 18-39 years) at 98.9 per 100,000 residents and middle-aged adults (40-64 years) at 39.4 per 100,000 residents as shown in Exhibit 57 (Metopio, IHA COMPdata Informatics, 2016-2020).

100 98.92 100,000 residents 75 50 48.49 39.45 25 29.01 0.00 Full population Infants (0-4 Juveniles (5-17 Young Adults Middle-Aged Seniors (65 and (18-39 years) Adults (40-64 years) vears) older) vears) Age

Exhibit 57: Advocate Christ PSA by Age Hospitalization Rate due to Suicide and Self-Injury 2016-2020

Source: Metopio, American Community Survey, 2022

Suicide Mortality

Suicide deaths within Cook County has been steady from 2016-2019 (2020 data is still ongoing). However, there are disparities in gender and race. Suicides rates are about three times higher in males than females, and the rate is double in whites compared to blacks. Suicide mortality in Illinois is 10.9 deaths per 100,000 residents and Cook County is 8.5 deaths per 100,000 residents. In Cook County, those that are Non-Hispanic White have the highest suicide mortality at 11.3 deaths per 100,000 residents, males at 17.5 deaths per 100,000 residents, middle-aged adults (ages 40-64 years) at 12.2 deaths per 100,000 residents and young adults (ages 18-39 years) at 10.1 deaths per 100,000 residents as shown in Exhibit 58 (Metopio, National Vital Statistics System-Mortality, 2016-2020). Exhibit 59 shows mortality in Cook County by race and ethnicity.

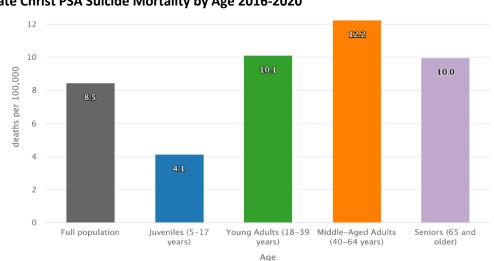


Exhibit 58: Advocate Christ PSA Suicide Mortality by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Exhibit 59: Cook County Mortality by Suicide by Race/Ethnicity 2016-2020

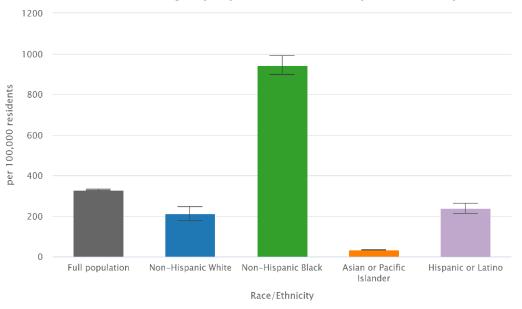
Source:											
Cook County Office o	f the Medical E	xaminer,	Case Arch	ive. http	s://datacatalog	.cookcountyil.gov/f	Public-Safety/M	edical-			
Examiner-Case-Archiv	ve/cjeq-bs86/da	ata									
Number of Suicide Race/Ethn ✓						Crude Rate			es, per 100,000		
Year	Asian	Black	Hispanic	White	Grand Total	Year	Asian	Black	Hispanic	White	Total
⊞ 2016	17	7 65	54	298	434	201	6 3.8	5.2	4.1	9.7	8.4
⊞ 2017	18	84	59	318	479	201	7 4.0	6.7	4.5	10.3	9.2
⊞ 2018	22	2 77	55	325	479	201	8 4.9	6.1	4.2	10.6	9.2
⊞ 2019	28	3 56	78	313	475	201	9 6.3	4.5	5.9	10.2	9.2
⊕ 2020	1	56	34	135	236						
Grand Total	9(338	280	1389	2103						

Respiratory Disease

Emergency Department Rate due to Asthma

In the PSA, the ED rate due to asthma is 328.6 per 100,000 residents. This is higher than the Illinois rate of 292.7 per 100,000 residents but lower than the Cook County rate of 369.3 per 100,000 residents. The zip codes with the highest ED rate due to asthma are West Englewood (60636) at 1675.4 per 100,000 residents and Auburn Gresham (60620) at 865.4 per 100,000 residents. The highest rates among residents are Non-Hispanic Black at 942.9 per 100,000 residents and infants (0-4 years) at 522.6 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). See Exhibit 60.

Exhibit 60: Advocate Christ PSA Asthma Emergency Department Visit Rate by Race/Ethnicity 2016-2020



Source: Metopio, American Community Survey, 2022

Hospitalization Rate due to Asthma

The hospitalization rate due to asthma in the PSA is 75.0 per 100,000 residents, which is higher than the Illinois rate of 50.8 per 100,000 residents and higher than the Cook County rate of 70.4 per 100,000 residents. The zip codes in the PSA with the highest hospitalization rates due to asthma are West Englewood (60636) at 285.4 per 100,000 residents and Auburn Gresham (60620) at 188.3 per 100,000 residents. The rates are also highest in the PSA among Non-Hispanic Black residents at 202.5 per 100,000 residents, infants (ages 0-4 years) at 178.2 per 100,000 residents, and females at 88.1 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 61 shows hospitalization rate due to asthma by race and ethnicity.

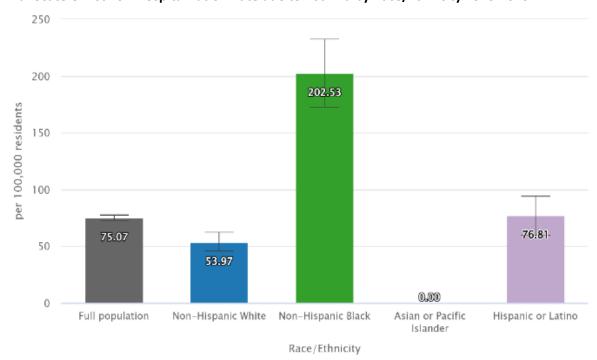


Exhibit 61: Advocate Christ PSA Hospitalization Rate due to Asthma by Race/Ethnicity 2016-2020

Bacterial Pneumonia

Pneumonia is an infection of the lungs that can cause mild to severe illness in people of all ages. It is most serious for infants and young children, people older than 65 years and people with health problems or weakened immune systems. In the hospital PSA, the community-acquired pneumonia hospitalization rate is 149.0 per 100,000 residents, which is more than the Cook County rate of 125.1 per 100,000 residents but less than the state rate of 149.7 per 100,000 residents.

Chronic Obstructive Pulmonary Disease

Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease that causes obstructed airflow from the lungs. COPD comprises three primary diseases that cause respiratory dysfunction—asthma, emphysema, and chronic bronchitis. People with COPD are at increased risk of developing heart disease, lung cancer and a variety of other conditions. Although COPD is a progressive disease that gets worse over time, COPD is treatable. With proper management, most people with COPD can achieve good symptom control and quality of life, as well as reduced risk of other associated conditions.

In the hospital's PSA, the emergency department visit rate for COPD is 500.7 per 100,000 residents. This rate is lower than the Cook County rate of 562.4 per 100,000 residents and the Illinois rate of 611.8 per 100,000 residents. (Metopio, IHA, COMPdata, 2020). In the PSA, females have higher rates (512.2 emergency department visits per 100,000 residents) than males (487.8 emergency department visits per 100,000 residents). Non-Hispanic Blacks have significantly higher emergency department visits that all other ethnicities combined. Exhibit 62 illustrates the COPD emergency department rates by race and ethnicity.

1500
1250
1,204.96
1,204.96

500.73
414.25
177.45

Exhibit 62: Advocate Christ PSA Emergency Department Visits 2016-2020

Full population

Hospitalization Rate Due to COPD

The hospitalization rate due to COPD is 587.7 hospitalizations per 100,000 residents in the hospital PSA, which is lower that the county rate (511.7 hospitalizations per 100,000 residents) and slightly higher than the state rate (483.3 hospitalizations per 100,000 residents). (Metopio, IHA COMPdata, 2016-2020). Non-Hispanic Blacks have substantially higher rates than all other ethnicities. Exhibit 63 illustrates the COPD hospitalization rates for the PSA and by race/ethnicity.

Non-Hispanic White Non-Hispanic Black

Race/Ethnicity

Asian or Pacific

Islander

Hispanic or Latino

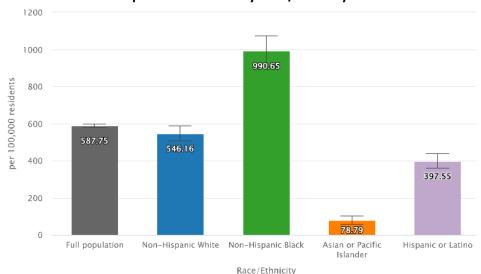


Exhibit 63: Advocate Christ PSA COPD Hospitalization Rates by Race/Ethnicity 2016-2020

Source: Metopio, American Community Survey, 2022

Adults with Current Asthma

In the Advocate Christ PSA, 9.51 percent of residents answered "yes" to both of the following questions: "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" and the question "Do you still have

asthma?" This percentage is higher than Cook County (8.6 percent) and Illinois (8.7 percent) of residents with asthma. (Metopio, PLACES, Behavioral Risk Factor Surveillance System, 2019). See Exhibit 64.

9.51

8 8.60

8.73

Christ Medical Center Primary Service Area

Exhibit 64: Advocate Christ PSA Adults with Current Asthma 2019

Source: Metopio, American Community Survey, 2022

Other Chronic Diseases or Conditions

Alzheimer's Disease Mortality

The age-adjusted death rate due to Alzheimer's disease in Illinois is 25.9 deaths per 100,000 residents which is higher than Cook County at 21.8 deaths per 100,000 residents. The rates in the county have slowly increased over time. Additionally, the death rate due to Alzheimer's disease is highest among females in the county which is similar to the Illinois and U.S. rates (Metopio, National Vital Statistics System-Mortality, Chicago Department of Public Health, 2016-2020). See Exhibit 65.

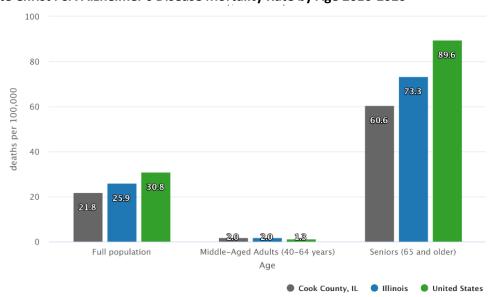


Exhibit 65: Advocate Christ PSA Alzheimer's Disease Mortality Rate by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Impact of COVID-19

Why is this Important?

The Covid-19 pandemic brought profound changes to the way people work, communicate, learn, play, eat, socialize, and receive health care. COVID-19 raced across the American landscape bringing illness, suffering, economic struggle, and death to people across all racial, ethnic, and socioeconomic groups. COVID-19 shined an even brighter light on the health inequities experienced by low-income communities and communities of color. Notably, communities of color were disproportionately affected by the disease, its many difficult side effects, and higher death rates. Covid-19 continues to be a priority and as a health care system, we are proactively working with public health professionals and clinical experts to educate and improve health outcomes in our communities.

COVID-19 Risk Factor

The COVID-19 risk factor score is a score representing predicted risk of fatalities from COVID-19, built using data on chronic disease prevalence, hospitalization, and mortality as well as demographic characteristics. A higher score indicates a greater predicted risk. The COVID-19 risk factor score for the hospital PSA is 0.8, significantly higher than the county score of 0.08 and the state score of 0.0026. (Metopio, UIC School of Public Health, 2020)

COVID-19 death rate

The COVID-19 death rate for Cook County is 285.7 per 100,000 residents, lower when compared to the state rate of 295.3 per 100,000 residents. Please note that his number represents the confirmed deaths from SARSCoV-2 virus that causes COVID-19 per 100,000 residents. This only includes cases where the underlying or contributing cause of death was the virus, meaning that the patient had to have a confirmed test result for the virus. The true number of deaths from the virus is higher by an unknown amount. Case counts are extremely biased by where testing and resources are available. (Metopio, National Vital Statistics System-Mortality, 2020)

Low-Income Jobs Lost to COVID-19

The percentage of low-income jobs lost to COVID-19 in Cook County is 13.5 percent. Low-income jobs are categorized as a salary ≤\$40,000. Modeled estimates based on Bureau of Labor Statistics unemployment reports and LEHD data on the distribution of low-income jobs. Does not include independent contractors, those working in the gig economy, or jobs with pay cuts. (Metopio, Urban Institute, US Bureau of Labor Statics, 2020.

Oral Health Emergency Department Rate Due to Dental Problem

According to the Mayo Clinic, oral health can contribute to various diseases and conditions including: endocarditis, cardiovascular disease and pneumonia. Diabetes, HIV/AIDS, and other conditions may also affect one's oral health. Daily oral hygiene, regular dental checkups and cleanings are strongly recommended to avoid further health complications. The annual emergency department visit rate for dental problems in the hospital PSA is 239.5 per 100,000 residents. Young adults ages 18-39 have the highest rates for emergency department visits due to dental problems in the PSA is 367.4 per 100,000 residents. This rate is lower than Cook County rate of 265.6 per 100,000 residents and the Illinois rate of 458.9 per 100,000 residents (Metopio, IHA COMPdata Informatics, 2020).

Emergency Department Rates due to Urinary Tract Infection

Urinary tract infections (UTIs) are common infection that occur when bacteria enter the urethra and infect the urinary tract. The infections can affect several parts of the urinary tract, but the most common type is a bladder infection. UTIs are more common in females than males. The emergency department visit rate for UTIs in the hospital PSA is 583.8 per 100,000 residents – lower than the Cook County rate of 607.3 per 100,000 residents and the Illinois rate of 784.4 per 100,000 residents. Seniors aged 65 and older represent the most emergency department visits for UTIs in the at PSA 675.6 per 100,000 residents (Metopio, IHA COMPdata, 2021). See Exhibit 66.

Hospitalization Rates due to Urinary Tract Infection

The annual hospitalization rate for urinary tract infections in the hospital PSA is 161.9 per 100,000 residents, higher than the Cook County rate of 150.2 per 100,000 residents and the Illinois rate of 143.6 per 100,000 residents. Seniors ages 65 and older represented the highest rate for urinary tract infections in the hospital PSA with a rate of 570.9 per 100,000 residents – higher than the Cook County rate of 551.6 and the Illinois rate of 547.1 per 100,000 residents as shown in Exhibit 67. (Metopio, IHA COMPdata, 2020).

700 675.63 600 per 100,000 residents 500 400 387.38 300 200 100 0 Full population Young Adults (18-39 Middle-Aged Adults (40-Seniors (65 and older) 64 years) years) Age

Exhibit 66: Advocate Christ PSA Emergency Department Rates for Urinary Tract Infection by Age 2016-2020

Source: Metopio, American Community Survey, 2022

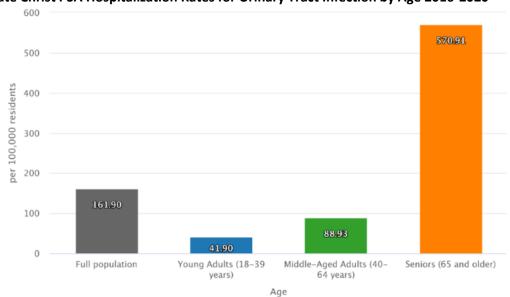


Exhibit 67: Advocate Christ PSA Hospitalization Rates for Urinary Tract Infection by Age 2016-2020

Source: Metopio, American Community Survey, 2022

Kidney Disease Mortality Rate

According to the CDC, kidneys that function properly are critical for maintaining good health, however, more than one in seven American adults are estimated to have chronic kidney disease. The kidneys filter the blood every 30 minutes. They remove wastes, toxins, and excess fluid. They also help control blood pressure, stimulate production of red blood cells, keep bones healthy, and regulate blood chemicals that are essential to life. (CDC, 2022). In Cook County, the death rate

due to kidney disease is 17.0 deaths per 100,000 residents – higher than the Illinois rate of 16.7 deaths per 100,000 residents and the U.S. rate of 12.9 deaths per 100,000 residents.

Mortality rates for males surpass the female rates in the county (21.6 vs. 13.8 deaths per 100,000 residents); the state rate (20.7 vs. 14.0 deaths per 100,000 residents); and the U.S. (15.6 vs. 10.9 deaths per 100,000 residents). Seniors, age 65 and older were more likely to die from kidney disease. (Metopio, National Vital Statistics System-Mortality; Chicago Department of Public Health, 2022).

Sexually Transmitted Infections

Since 2013, new cases of sexually transmitted infections that include chlamydia, gonorrhea, syphilis, and HIV/AIDS have been on the rise across Cook County, Illinois, and the U.S. More than half of these cases are from chlamydia alone. In Cook County, the sexually transmitted infection rate is 745.3 cases per 100,000 residents. This rate is lower than the Illinois rate of 837.5 per 100,000 residents and the U.S. rate, which is significantly higher at 1,205.8 per 100,000 residents (Metopio, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018).

Chlamydia

According to the CDC, Chlamydia is a common sexually transmitted disease that can cause infection among both men and women. It can cause permanent damage a woman's reproductive system. The prevalence of chlamydia in Cook County has consistently increased since 2013. The rate of chlamydia in Cook County is higher (830.3 per 100,000 residents) than the Illinois rate at604.0 per 100,000 residents and the U.S. rate at 539.9 per 100,000 residents (Metopio, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, via http://healthindicators.gov, 2018).

Gonorrhea

Gonorrhea is a sexually transmitted infection that is especially common among teenagers and young adults. The rate of reported gonorrhea cases per 100,000 residents in Cook County is 309.0. The county rate is significantly higher than the Illinois rate of 179.1 per 100,000 residents and the U.S. rate of 198.6 per 100,000 residents. (Metopio, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018).

Syphilis

People who are sexually active can get syphilis, a curable sexually transmitted disease (STD). Syphilis is a sexually transmitted infection (STI) that can cause serious health problems without treatment. Infection develops in stages (primary, secondary, latent, and tertiary). Each stage can have different signs and symptoms. In Cook County, the syphilis case rate is 44.0 per 100,00 residents. Similarly, the case rate is 22.4; however, the U.S. case rate for syphilis is nearly double at 22.6 cases per 100,000 residents. (Metopio, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018).

5. Environment

Why is This Important?

Many people face challenges and dangers they can't control – like unsafe neighborhoods, discrimination, or trouble affording the things they need. This can have a negative impact on health and safety throughout life.

Housing

Homeownership

Homeownership has many benefits for individuals and communities alike. Homeownership can represent stability, financial success, and the opportunity to contribute to the community. Homeowners are more likely to be involved in civic affairs, both of which benefit the individual and the community. In addition, homeownership provides tax benefits.

In the hospital PSA, 70.3 percent of housing units are occupied by homeowners. Much higher than the Cook County rate of 57.2 percent, the Illinois rate of 66.2 and the U.S. rate of 64.64. (Metopio, American Community Survey, 2020)

Renters Spending 30 Percent or More of Household Income on Rent

Spending a high percentage of household income on rent can create financial hardship, especially for lower-income renters. With a limited income, paying a high rent may not leave enough money for other expenses, such as food, transportation and medical. Moreover, high rent reduces the proportion of income a household can allocate to savings each month. In the Advocate Christ PSA, 29.6 percent of renters spend 30 percent or more of their household income on rent, while in Cook County, 42.7 percent of renters spend 30 percent or more of their income on rent ((Metopio, American Community Survey, 2020).

Transportation

Households Without a Vehicle

The percent of households in the PSA with no vehicles available is 11.3 percent. The urban areas in the PSA have the highest rates of households without a vehicle versus the suburban areas. Exhibit 68 displays the rates in the PSA.

40 35.56 30 of households 28.59 20 10 3 days the gray to est. Proof of the party as o thirto dilitis Day of Little Land Land Book State States Hills of On I Hilliam bank BUAST WHITELL PARK 604 15 Chicago, Fidue DUNUK DELONATUREST. South State 232 Tation of the state of the 23 data Hitorica dan. unde studiel state first or of day the thinky Trees, 4 9 Marker Troop 59 Burlough Tried of Marth. GOOD Chicago. ary Surest Fillings 160833 CHICAGO. of Children of the Children AND STREET OF THE BOOK Coloss Chicago 60805 Every deer Park. 10

Exhibit 68: Advocate Christ PSA Households Without a Vehicle 2016-2020

Source: Metopio, American Community Survey, 2022

Mean Travel Time to Work

Generally, people living in a household without a car make fewer than half the number of journeys compared to those with a car. People who commute must double their commute time, factoring in the time it takes to get to and from work. The mean time travel to work in the hospital PSA is 35.1 minutes (Metopio, American Community Survey, 2019). See Exhibit 69.

40

35

35.1

30

25

10

Christ Medical Center Primary

Cook County, IL

Illinois

Exhibit 69: Advocate Christ PSA Mean Travel Time to Work 2016-2020

Particulate Matter

The CDC defines_particle pollution – also called particulate matter (PM) as particles (tiny pieces) of solids or liquids that are in the air. These particles may include dust, soot, smoke or drops of liquid. Some particles are big enough (or appear dark enough) to see — for example, smoke. Others are so small that they cannot be seen in the air. The PM concentration for Cook County is 9.3 micrograms per cubic meter, Illinois 8.7 micrograms per cubic meter and the U.S. 7.0 micrograms per cubic meter. Common sources of PM 2.5 emissions include power plants and industrial facilities. Secondary PM 2.5 can form from gases, such as oxides of nitrogen (NOx) or sulfur dioxide (SO2), reacting in the atmosphere. Health effects associated with exposure to PM 2.5 include elevated risk of premature mortality from cardiovascular diseases or lung cancer, and increased health problems such as asthma attacks. PM 2.5, or particulate matter smaller than 2.5 microns in diameter, is one of the most dangerous pollutants because the particles can penetrate deep into the alveoli of the lungs (Metopio, Environmental Protection Agency (EPA), 2020).

Food Security and Access to Healthy Foods

Food Insecurity Rate

Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food, as represented in the USDA food-security reports. In the Advocate Christ PSA, the percentage of residents experiencing food insecurity is 12.3 percent. The food insecurity rate for Cook County is 10.9 percent; the Illinois rate is 8.3 percent as shown in Exhibit 70. This 2020 data is a projection based on 11.5 percent national unemployment and 16.5 percent national poverty rate. Communities with the greatest rates of food insecurity include West Englewood (60636), 18.7 percent; Justice (60458), 16.8 percent; Chicago Ridge (60415) 16.2 percent; Auburn Gresham (60620) 16.1 percent; Bridgeview (60455),15.6 percent; and Worth (60482) at 12.5 percent. (Metopio, Map the Meal Gap 2020). See Exhibit 71.

Food insecurity among children ages 0-17 years is greater than the overall county, state, and national rates. The food insecurity for children in Cook County is 18.3 percent of residents. In Illinois and the U.S., the percentage of children affected by food insecurity is 11.3 percent and 16.7 percent respectively.

16

14

15.0

15.1

10

10

Christ Medical Center Primary
Service Area

Cook County, IL

Illinois

Exhibit 70: Advocate Christ PSA Food Insecurity Rate and Comparison 2020

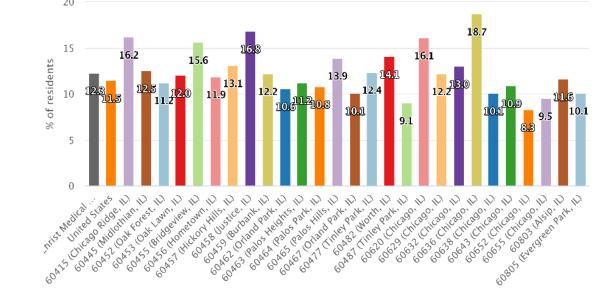


Exhibit 71: Advocate Christ PSA Food Insecurity Rate 2020

Source: Metopio, American Community Survey, 2022

Social Environment and Community Safety

Unintentional Fall Emergency Department Visit Rate

Unintentional falls are described as falls from vehicles, recreational accidents, trips and falls, and other unintentional falls. In the Advocate Christ PSA, the unintentional fall emergency department visit rate is 1,553.0 per 100,000 residents, lower than the Cook County rate of 1,799.4 falls per 100,000 residents and lower than the Illinois rate of 1,998.5 per 100,000 residents. The unintentional fall rate for emergency department visits were highest among Non-Hispanic Black

residents at 2,130.0 per 100,000 residents in the PSA. (Metopio, IHA COMPdata Informatics, 2016-2020). Exhibit 72 shows the percentage of falls by race and ethnicity.

20.5%

Non-Hispanic White
Non-Hispanic Black
Asian or Pacific Islander
Hispanic or Latino

Exhibit 72: Advocate Christ PSA Unintentional Fall Emergency Department Visit Rate by Race 2016-2020

Source: Metopio, American Community Survey, 2022

Hospitalization Rate Due to Unintentional Falls

In the hospital PSA, the annual hospital admissions for unintentional falls per 100,000 residents is 523.8 per 100,000 residents. This rate is lower than the Cook County rate of 547.5 hospitalizations per 100,000 residents and higher than the Illinois rate of 496.8 hospitalizations per 100,000 residents. The unintentional fall rate for hospitalizations were highest among Non-Hispanic White residents at 706.2 per 100,000 residents in the PSA (Metopio, IHA COMPdata Informatics, 2016-2020).

Fall Mortality

The fall mortality rate in Cook County is 6.1 deaths per 100,000 residents, lower than the state rate of 7.8 deaths per 100,000. Seniors, age 65 and older had the highest mortality rate in both Cook County (22.1 deaths per 100,000 residents) and Illinois (28.0 deaths per 100,000 residents (Metopio, National Vital Statistics System-Mortality (NVSS-M, 2016-2020).

Deaths due to Motor Vehicle Crashes

The National Highway Traffic Safety Administration (NHTSA) projects that an estimated 42,915 people died in motor vehicle traffic crashes in 2021, a 10.5 percent increase from the 38,824 fatalities in 2020. The projection is the highest number of fatalities since 2005 and the largest annual percentage increase in the Fatality Analysis Reporting System's history. In Cook County, the motor vehicle traffic mortality rate is 6.7 deaths per 100,000 residents. The rates are even greater for Illinois (8.9 deaths per 100,000 residents) and the U.S. rate (11.5 deaths per 100,000 residents) (Metopio, National Vital Statistics System-Mortality (NVSS-M, 2016-2020).

Violent Crime Rate

Crimes related to violence (yearly rate) include homicide, criminal sexual assault, robbery, aggravated assault, and aggravated battery. The violent crime rate in Cook County is 634.4 crimes per 100,000 residents. This rate is higher than the Illinois rate of 425.1 crimes per 100,000 residents and the U.S rate of 391.0 crimes per 100,000 residents (Metopio, FBI Crime Data Explorer, 2016-2020).

Homicide/Gun Violence

Homicide crimes (yearly rate) are defined as first- or second-degree murder: the killing of one human being by another. The homicide rate in Cook County is 14.0 crimes per 100,000 residents. This rate is nearly double the Illinois rate of 7.8

crimes per 100,000 residents and nearly triple the U.S. rate of 5.5 crimes per 100,000 residents (Metopio, FBI Crime Data Explorer, 2016-2020).

Social Engagement

The Social Engagement Index is a composite score measuring elements of civic engagement and social isolation, especially those that are affected by the built environment. It incorporates information about neighborhood resiliency (five-year change in rent prices, how often residents move, and housing vacancy) and barriers to social engagement (disconnected youth, proportion of seniors living alone, residents with cognitive and ambulatory disabilities, limited English proficiency, and residents reporting poor mental health). Higher values indicate more social engagement. The social engagement score for the hospital's PSA is 90.9. This score is comparable to the Cook County rate of 90.2 and the Illinois rate of 91.5 (Metopio, 2011-2015).

IV. Prioritization of Health-Related Issues

Priority Setting Process

Advocate Christ's community health department reviewed additional data from primary and secondary sources. The data highlighted the prevalent health issues within the medical center's PSA. After review of medical center data, the Alliance data and other data sources, the most significant health issues were summarized and presented to the medical center's CHC for prioritization. Data presented to the CHC targeted the following significant health conditions for Advocate Christ's PSA: heart disease, cancer, diabetes, mental health, substance abuse and asthma.

A structured prioritization process provided a framework to analyze health problems as well as explore solutions that will have the greatest impact on the health of the community. To determine the health priorities, a summary of the data sets was presented to the CHC during the June 2022 meeting.

The process enabled CHC members to prioritize health needs by narrowing options and systematically comparing choices through the selection and application of criteria. The process was selected because it provided a strong solution to guide implementation of interventions effectively and successfully. The options were presented in a Zoom poll for selection. Data presented included:

- Access to Care
- Cancer
- Cardiovascular Disease
- Demographics
- Dental Health
- Diabetes
- Hardship Index
- Maternal, Fetal & Infant Care
- Mental Health
- Obesity
- Respiratory Health
- Sexually Transmitted Infections
- Social Drivers of Health
- Substance Abuse
- Unintentional Falls

Health Need Selected

Behavioral Health

Behavioral health was again selected as the first health priority for the CHNA and includes both mental health and substance use. The CHC determined the strong connection between mental health and substance use based on the data presented at the meetings. While the rates of both substance use and mental health continue to increase over time in the PSA, counties and state, the data suggests that more work needs be done to address the ever-growing need of additional services, access to programs and support services in our communities.

Obesity

The CHC selected obesity as its second priority to address as part of the hospital's CHNA based on data reviewed for the PSA and county. Obesity prevalence continues to increase and even more so among racial and ethnic minorities. Individuals with obesity are at higher risks for chronic health conditions such as diabetes, heart disease, cancer and COVID. Community health staff will investigate opportunities to develop strategies to address obesity in the hospital PSA.

Health Need Not Selected

Cardiovascular Disease

Cardiovascular disease was not selected due to the improving rates of emergency room visits and hospitalization rates in the PSA. Advocate Christ continues to focus on a robust program for cardiac services including the Advocate Christ Cardiovascular Institute. The council selected to continue focusing on obesity as a health priority, which has a direct correlation to heart disease.

Diabetes

Hospitalization and emergency department (ED) visits are indicative of poorly controlled chronic diseases and a lack of access to routine preventive care. Poorly controlled diabetes can lead to severe or life-threatening complications, such as heart and blood vessel disease, nerve damage, kidney damage, eye damage and blindness, foot damage and lower extremity amputation, hearing impairment, skin conditions and Alzheimer's disease.

ED visits for diabetes are heavily concentrated in the West and South Sides of Chicago and the southern region of Suburban Cook County. The areas with high rates of ED visits largely overlap with communities with high rates of poverty, unemployment, and cost-burdened households. As a result, the medical center's CHC decided that diabetes initiatives in this service area are still needed and continue to be a burden for residents (Alliance for Health Equity, 2019). Diabetes was a priority for the previous CHNA cycle and continues to be addressed with successful programming including the Diabetes Prevention Program.

Violence Prevention

To a large extent, the conditions of the environments in which we live, work, play, grow, and age determine our quality of life and health outcomes. These conditions are called Social Drivers of Health, and they explain why some people face a more difficult challenge in achieving and maintaining good health.

Violence has profound direct and indirect impacts on health in communities and can have broader socioeconomic effects that further impact the health of communities. Violence in communities has been associated with reduced investment in community resources such as parks, recreational facilities and programs that promote healthy activity (Prevention Institute, 2011). Food resources such as supermarkets are more reluctant to enter communities of color with higher rates of violence further reducing access to healthy foods (Odoms-Young et al., 2009; Zenk et al., 2005). Gun violence can significantly decrease the growth of new retail and service businesses, decrease the number of new jobs available and slow home value appreciation (Irvin-Erickson et al., 2017). In addition, high rates of gun violence are associated with lower home values, credit scores and home ownership rates (Irvin-Erickson et al., 2017).

The CHC identified violence prevention as a significant determinant of health in the PSA but determined that significant work is being done in the PSA particularly with the Advocate Christ Trauma Recovery Center and with Southland Rise, an ongoing collaboration that addresses trauma and violence in partnership with the University of Chicago Medical Center.

Respiratory

Asthma and respiratory health were not selected as a priority health need to address as the hospital already provides many services and programs to address asthma, COPD and other respiratory health issues. Advocate Christ offers comprehensive, multi-disciplinary services for lung and respiratory care, including the treatment of asthma. The lung and respiratory care center provide inpatient and outpatient respiratory care services to help patients achieve a better quality of life. With board certified pulmonologists who collaborate with related specialists, airway diseases are treated from prevention and diagnostics to advanced treatment and support services.

Sexually Transmitted Diseases (STI's)

Although sexually transmitted infections are a considerable health issue in the PSA, the local health department is taking the lead on identification and prevention efforts through their respective communicable disease departments. Advocate Christ community health staff assist with sharing prevention messages and practices with primary care providers in the PSA.

Unintentional Falls

The CHC thought that unintentional falls is more of an issue with education on the importance of safety, rather than a health priority of focus. There are already organizations in the community who offer education to senior populations.

V. Approval of Community Health Needs Assessment

The Advocate Christ Governing Council met on November 14, 2022, to review the findings of the CHNA and the recommended implementation strategy. The governing council voted to approve the CHNA Report.

VI. Vehicle for Community Feedback

Community Feedback

Advocate Christ Medical Center welcomes all feedback regarding the 2022 Community Health Needs Assessment. Any member of the community wishing to comment on this report, can click on the link below to complete a CHNA feedback form. Questions will be addressed and will also be considered during the next CHNA cycle.

Feedback Link: Advocate Aurora Health CHNA Feedback

If you experience any issues with the link to our feedback form or have any other questions, please email Elvis Munoz at Elvis.munoz@aah.org

This report can be viewed online at Advocate Health Care's Community Health Needs Assessment Report webpage via the following link: Hospital CHNA Reports Implementation Plans Progress Reports | Advocate Health Care

A paper copy of this report may also be requested by contacting the hospital's Community Health Department.

SCAN ME



VII. Evaluation of Impact from Previous CHNA

Violence Prevention

Advocate Christ participated in the Chicago Heal Initiative which brings together hospitals from leading health systems to address violence in targeted Chicago Neighborhoods. The Advocate Trauma Recovery Center provided trauma recovery services to 1120 victims of trauma. The Advocate Trauma Recovery Center assisted 314 victims of violence with referrals to community support and case management services.

Advocate Christ partnered with University of Chicago Medicine to continue implementation of the Southland RISE initiative developed to address violence in southside Chicago neighborhoods.

The Southland RISE partnership provided 150,000 dollars in grant funding to community-based organizations to address youth violence, COVID-19 strategies and social drivers of health (SDOH) identified during the COVID-19 pandemic.

Mental Health

Advocate Christ partnered with the Sertoma Centre, Inc., to provide virtual programming for mental health education. Nine seminars were offered with topics in self-care, understanding anxiety and managing conflict, and attended by 100 participants. The Advocate Christ community health team also partnered with the Alliance for Health Equity to collaborate on addressing access to mental health services and programs.

Advocate Children's planned to implement a program to embed a Licensed Clinical Professional Counselor (LCPC) in partnering Chicago Public Schools to provide behavioral health services and education to students, faculty, and parents. For the 2020-2021 school year, the program was put on pause due to COVID-19. The LCPC was redeployed to assist in the pediatric outpatient clinic in Oak Lawn and the adolescent medicine clinic in Evergreen Park. Discussions have resumed with Chicago Public Schools to provide services in the Auburn-Gresham neighborhood of Chicago beginning in the 2021-22 school year.

Access to Care

Advocate Children's continues to partner with Ronald McDonald House Charities of Chicagoland and Northwest Indiana to provide access to free school physicals and immunizations for at-risk children through the Ronald McDonald Care Mobile (Care Mobile). Advocate Children's provides immunizations, routine checkups, and screenings to the most vulnerable students in the Advocate Children's-Oak Lawn PSA. The Care Mobile is staffed by an Advocate Children's team that includes a nurse practitioner, medical assistant, health educator and driver.

The Ronald McDonald Care Mobile saw limited operations during 2021 due to school cancellations and hybrid and online learning models, which limited student and school access necessitated by the COVID-19 pandemic. In 2021, the Care Mobile was redeployed for community-based COVID-19 vaccinations across the Southland PSA.

Maternal Health/Infant Mortality

Due to COVID-19, implementation of this program was placed on an extended pause and will be reactivated once it is safe for small group gatherings.

For more information or to view the complete 2021 CHIP report for Advocate Christ, please click here.

VIII. Appendices

Appendix 1: 2022 Community Health Needs Assessment Data Sources

Advocate Aurora Health Business Development Analytics, 2022

The Alliance for Health Equity, Community Health Needs Assessment, 2022 Community Health Needs Assessment Survey Report, 2020 2022 CHNA Report - Alliance for Health Equity (allhealthequity.org)

Cook County Department of Public Health

Illinois Department of Public Health

National Association for Mental Illness (NAMI)

Metopio. Accessed via a contract with Advocate Aurora Health. Website is unavailable to the public. The following data sources were accessed through the portal:

American Community Survey, 2015-2019, 2016-2020

Behavioral Risk Factor Surveillance System, 2019

Centers for Disease Control and Prevention, 2018

Centers for Disease Control and Prevention WONDER, 2015-2019, 2016-2020

Centers for Medicare and Medicaid Services, National Provider Identifier, 2021

Chicago Department of Public Health, 2016-2020

Diabetes Atlas, 2019

Feeding America, 2020

FBI Crime Data Explorer, 2016-2020

Health Resources and Services Administration, 2018

Illinois Department of Public Health, 2014-2018, 2021

IHA COMPdata Informatics, 2016-2020

Illinois State Cancer Registry, 2014-2018

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018

National Vital Statistics System-Mortality, 2016-2020

PLACES, 2015-2019

UIC School of Public Health, 2020, 2021

United Way ALICE Data, 2018

USDA, 2019

Appendix 2: Citations

Alzheimer's Association, 2022:

alzheimers-facts-and-figures.pdf

American Cancer Society:

American Cancer Society, 2022

Centers for Control Disease and Prevention Healthy Aging:

Alzheimer's Disease and Healthy Aging | CDC

Centers for Control Disease and Prevention Alcohol Use and Your Health:

Youth and Tobacco Use | Smoking and Tobacco Use | CDC

Centers for Control Disease and Prevention Asthma:

Asthma | CDC

Centers for Control Disease and Prevention Depression in Older Adults:

Depression is Not a Normal Part of Growing Older | Alzheimer's Disease and Healthy

Centers for Control Disease and Prevention Cardiovascular Disease

Lead Poisoning Prevention | Lead | CDC

Centers for Disease Control and Prevention Nutrition:

Poor Nutrition | CDC

Centers for Control Disease and Prevention Youth and Tobacco Use

Youth and Tobacco Use | Smoking and Tobacco Use | CDC

Centers for Control Disease and Prevention Particle Pollution:

Particle Pollution-Particulate Matters

Cleveland Clinic Cerebrovascular Disease:

Cerebrovascular Disease: Types, Causes & Symptoms (clevelandclinic.org)

Centers for Control Disease and Prevention Prenatal Care:

Pregnancy | CDC

Mayo Clinic Chronic Obstructive Pulmonary Disease:

COPD - Symptoms and causes - Mayo Clinic

Impact DuPage:

Single Parent Household Indicators Definition

Healthline Overview of an Aneurysm:

Aneurysm: What Is It, Causes, Symptoms, and More (healthline.com)

High Blood Pressure:

What Is Vascular Dementia: Symptoms, Causes, and Treatment (healthline.com)

Subarachnoid Hemorrhage: Symptoms, Causes & Risk Factors

Office of Disease Prevention and Health Promotion:

Food Insecurity - Healthy People 2030 | health.gov

Mayo Clinic Oral Health:

Oral health: A window to your overall health - Mayo Clinic

National Alliance on Mental Illness:

Mental Health Conditions | NAMI: National Alliance on Mental Illness

National Highway Traffic Safety:

National Highway Traffic Safety Administration

Pew Research – Older Adults Living Alone in the U.S:

Pewresearch.org