



UCF Lake Nona Hospital Community Health Needs Assessment Report

May 2023

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To our community,

As a joint venture between UCF Academic Health and HCA Healthcare, UCF Lake Nona Hospital has a unique opportunity toaddress the healthcare needs of our service area. Together, we combine the experience and expertise of the nation's largest hospital corporation with the academic strength of a young, innovative medical school at one of the nation's largest universities.

The following report identifies the demographics and healthcare status of our service area and provides a strong, strategic overview of the needs of our communities. With our combined commitment to patient care, medical education, and research, we will use this report to guide us in providing services to improve community health. As this report indicates, our community faces numerous health challenges. We are excited to do our part to address these needs.

Wendy H. Brandon, FACHE Chief Executive Officer UCF Lake Nona Hospital Deborah C. German, M.D. Chief Executive Officer UCF Academic Health

# INTRODUCTION

The UCF Lake Nona Hospital was created through a joint venture partnership between HCA Healthcare's North Florida Division and UCF Academic Health, connecting one of the largest healthcare networks in the nation, HCA Healthcare with the University of Central Florida College of Medicine. The hospital has been in operation since March 2021. Although the hospital is a hybrid of for profit and non-for-profit entities, it is required to comply with the Internal Revenue Service 990 Schedule H Community Benefits Report. This is the first year that the UCF Lake Nona Hospital isfiling their Community Health Needs Assessment (CHNA), a component of Schedule H.



The CHNA is a process of assessing the physical, social, and environmental health of a service population. Primary and secondary research define the data-driven process designed to identify key health needs and available resources within the community. A prioritization of the identified needs serves as the foundation for developing a strategic action plan that the facility will focus on over the next 3 years. The goal is to improve community health outcomes by maximizing the efficiency and effectiveness of the available resources.

The Health Council of East Central Florida, Inc. (HCECF) was contracted by UCF Lake Nona Hospital to conduct the CHNA. The Health Council is a private, non-profit healthcare planning agency providing research, education, and program support to improve healthcare delivery and outcomes. The East Central Florida District VII encompasses the four counties of Brevard, Orange, Osceola and Seminole.

Created in 1982 by the Florida Legislature under Florida Statute Section 408.033, the Health Council of East Central Florida became one of eleven Local Health Councils to serve as a network of non-profit agencies that conduct regional health planning and implementation activities. Originally charged with overseeing the Certificate of Need (CON) process for local healthcare facilities, the activities undertaken by the health

councils are designed to improve access to healthcare, reduce disparities in health status, assist state and local governments in the development of sound and rational healthcare policies, and advocate on behalf of the underserved.

# **UCF Lake Nona CHNA Executive Summary**

The hospital's primary and secondary service areas encompass 11 ZIP Codes in Orange and Osceola counties. Population growth over the past 5 years in Orange County, at 10.8%, added 138,928 residents (2020). In Osceola County, growth was greater at 18.6% during the same time and added 61,790 residents. Racially, White residents accounted for over 50% of the population in both counties. Black residents represented 21% of the population in Orange County and 10.9% of the residents in Osceola County. Asian, and those of other races, or multi-racial residents, accounted for nearly 20% of the remaining population in both counties. The Hispanic population represented 32.1% of residents in Orange County and 54.7% of those in Osceola County.

The age range distribution for both counties was almost identical. Residents ages 0-19 years accounted for 25% of individuals in Orange County and 27.1% in Osceola County. Orange County was slightly younger with 31.2% of residents 25-44 years of age, compared to Osceola County at 28.9%. Those 65 years and older accounted for 11.9% of Orange County residents and 13.1% of those living in Osceola County.

Residents who attained a high school diploma accounted for 88.7% of Orange County



residents and 86.1% of Osceola County residents. The percentages of Orange County individuals with a bachelor's (23.1%) or graduate degree (12.4%) were higher when compared to residents in Osceola County at 15.9% and 7.3%, respectively.

Participation in the labor force increased in Orange and Osceola counties from 2015 to 2019. The percentage for Orange County in 2019, at 68.2%, was higher when compared to 2015 at 67.8%.

Similarly in Osceola County, participation in the labor force increased from 60.9% in 2015 to 63.7% in 2019. Conversely, the unemployment rates in both counties decreased during the same time.

The U.S. Census Bureau classifies people and families as being in poverty if their income is less than the poverty threshold. In Orange and Osceola counties, 10.7% of families were below 100% of the Federal Poverty Level (FPL) during 2016-2020. Families below 200% FPL accounted for 13.6% in Orange County and 18.7% In Osceola County. The 5-year estimate for families living at or above 400% FPL was 40.7% in Orange County and 30.2% in Osceola County.

The top ten leading causes of death (heart diseases, cancer, stroke, COVID-19, unintentional injuries, chronic lower respiratory disease, Alzheimer's disease, diabetes,

kidney diseases, and septicemia, and chronic liver disease & cirrhosis) were almost identical for both counties with minor differences in the numerical ranking.

The total birth rates for Orange and Osceola counties were similar at 11.8 and 12.0/1,000 live births, respectively. The teen birth rate (15-19 years) in Orange County, at 13.3/1,000 live births, was lower when compared to the rate in Osceola County

at 15.5/1.000 live births. The percentage of babies with low birthweight accounted for 8.7% of Orange County births and 8.1% of those in Osceola County. Rates were highest among Black babies in Orange and Osceola, at 13.4% and 12.3%, respectively. The percentage of preterm births in Orange and Osceola counties were very similar at 10.5% and 10.3%, respectively.



Infant death rates were higher in Orange County at 5.7/1,000 live births when compared to Osceola County at 4.9/1,000 live births. The highest infant deathrate was among Black infants at 10.6/1,000 live births In Orange County.

The suicide rates over the past three years (2018 to 2020) decreased in both counties. Rates among the White population were twice the rate among Black residents. Suicide rates among males were triple the rates among females.

Domestic violence rates decreased in Orange County while increasing slightly in Osceola County. The rates of children experiencing child abuse or sexual violence decrease in both counties during 2018 to 2020.

Sexually transmitted diseases include Chlamydia, Gonorrhea, and Syphilis. Bacterial STDs in Orange County increased from 1069.1/100,000 in 2019 to 1167.7/100,000 in 2021. In Osceola County, the rate of bacterial STDs decreased from 727.5/100,000 in 2019 to 693.1/100,000 in 2021. However, the 2021 rate was higher than the rate in 2020 at 623.2/100,000.

Acquired Immunodeficiency Syndrome (AIDS) diagnosis rates in Orange County decreased from 12.7/100,000 in 2019 to 9.4/100,000 in 2021. The rate among males increased during 2020 to 2021 (13.7/100,000 to 14.9/100,000) but was still lower than the rate in 2019 at 19.4/100,000. In Osceola County, rates increased in 2021 when compared to 2020 but were lower than rates in 2019. The 2021 rate for the county was 7.9/100,000. Rates among males were much higher when compared to females.

Rates of those diagnosed with Human Immunodeficiency Virus (HIV) in Orange County continually decreased among the Black population from 68.3/100,000 in 2019 to 49.8/100,000 in 2021. Among the Hispanic population, the rate in 2021 at 43.1/100,000 was higher when compared to 37.4/100,000 in 2019. Overall, the county rate also continually decreased during the past 3 years.

In Orange County, deaths from HIV/AIDS decreased for all population groups during

the past 2 years. The 2021 county rate, at 2.3/100,000, decreased from 3.2/100,000 in 2019. The biggest decline in HIV/AIDS death rate was among the Black population where the rate in 2021, at 6.0/100,000, had decreased from 11.4/100,000 the previous year. In Osceola County, the 2021 death rate, at 0.9/100,000, decreased from



1.7/100,000 in 2019. Rates in 2021 among genders were slightly above 2020 rates but still lower than 2019 rates.

The rate of chronic hepatitis B increased slightly in Orange County from 24.6/100,000 in 2019 to 26.0/100,000 in 2021. In Osceola County, the 2021 rate at 15.3/100,000 was higher than the rate in 2020 (14.9) but lower than the rate in 2019 at 15.9/100,000.

The rate of chronic hepatitis B increased slightly in Orange County from 24.6/100,000 in 2019 to 26.0/100,000 in 2021. In Osceola County, the 2021 rate at 15.3/100,000 was higher than the rate in 2020 (14.9) but lower than the rate in 2019 at 15.9/100,000.

Adults, ages 65 years and older, had higher rates of receiving a flu shot in the past year when compared to other age ranges. In Orange County, 51.9% of older adults

received a yearly flu shot while 59.5% of those in Osceola Counties had a flu shot in the past year. A comparison of the percentages by race and ethnicity showed higher rates among Orange County White adults (ages 18 years and older), at 36.7%, when compared to Black and Hispanic adults at 22.5% and 22.3%, respectively. In OsceolaCounty, the lowest immunization rate for the flu was among Black adults, at 14.6%, when compared to Hispanic adults at 16.6% and White adults at 36.7%.

The 2021 Immunization rates among Orange County students, at 89.6%, was slightly lower when compared to 2020 and 2019, at 90.0% and 91.1%, respectively. The same trend was observed in Osceola County where the 2021 student immunization rate, at 89.2%, was lower than the previous two years at 91.9% and 93.1%.

The prevalence of smoking among adults decreased in Orange and Osceola counties when comparing data from 2013 to 2019. This decrease occurred across genders, races, and ethnicities, except for Black adult smokers where prevalence increased. Well over 90% of middle school (MS) and high school (HS) students did not smoke at all in the past 30 days in Orange and Osceola counties.

Binge drinking is defined as consuming 5 or more drinks for men and 4 or more drinks for women during a single occasion in the past 30 days. Binge drinking among Orange

County adults, 18 years and older, decreased from 19.7% in 2013 to 18.2% in 2019. In



County, Osceola binae drinkina decreased over the past 3 years for the county as well as among men, women, and Hispanic adults. Middle and high school students were asked how many times during the past 2 weeks have you had five or more drinks in a row (defined as binge drinking for this population). In Orange County, 95.3% of students reported not binge drinking. The rates were similar among Osceola County students where 94.5% reported they had not consumed five or more drinks on any

occasions in the past 2 weeks. The percentages of students reporting having five or more drinks once or twice in the past two weeks decreased during 2018 to 2020 in both counties.

The percentage of adults in Orange County who were inactive or insufficiently active decreased slightly from 57.3% in 2013 to 56.9% in 2016. The percentage of adults who were inactive in Osceola County increased from 58.9% in 2013 to 64.6% in 2016.

The prevalence of those who have ever been told they had hypertension remained stablein Orange County while increasing 5.4% among adults in Osceola County. The percentage of adults who have been told that they have high blood cholesterol increased in Orange County while decreasing in Osceola County during 2013 to 2019. Over 65% of adults in Orange County and 75.3% of adults in Osceola County were overweight or obese. Rates steadily increased among women and Hispanic adults over the past 6 years. The range by race was greater in Osceola County, where 73.6% of White adults, 87.5% of Black adults, and 77.5% of Hispanic adults reported they wereoverweight or obese.

In 2019, the food insecurity rates in Orange and Osceola counties were almost identical at 11.2% and 11.1%, respectively. Rates in Orange County continually decreased from 2017 to 2019, while the 2019 rate in Osceola County was below the rate in 2020 (12.1%) but above the rate in 2017 at 9.8%.

Rates of adults with health insurance increased in Orange and Osceola counties over the past 6 years. In 2019, the percentages of those with health insurance in Orange and Osceola counties was 80.8% and 81.3%, respectively. Rates increased across all genders, races, and ethnicities in both counties. The greatest increase was among Black adults in Osceola County where the percentage of those with any type of health insurance increased from 57.5% in 2013 to 81.2% in 2019. In Orange County, the percentage of those who could not afford to see a doctor in the past year decreased from 23.6% in 2013 to 15.2% in 2019, while the percentage of adults in Osceola County decreased from 29.5% in 2013 to 20.3% in 2019. The greatest improvement was among Hispanic adults in both counties were decreases ranged from 17.5% in Orange County to 21.8% in Osceola County (2013 to 2019). UCF LAKE NONA HOSPITAL AND THE SURROUNDING COMMUNITY

# **DEFINE THE COMMUNITY**

The UCF Lake Nona Hospital opened on March 1, 2021, to provide full-service healthcare to Lake Nona and surrounding communities in Florida's southeast Orlando and Osceola County. The hospital was created through a joint venture partnership between HCA Healthcare's North Florida Division and UCF Academic Health, connecting one of the largest healthcare networks in the nation, HCA Healthcare with the University of Central Florida College of Medicine.

Located in the transformative Lake Nona Medical City, UCF Lake Nona Hospitalis part of the vibrant, diverse, and growing 650-acre landmark health and lifesciences park. The hospital serves as a pillar in the region's innovative wellbeing initiatives.

The primary service area encompasses a total of five ZIP codes, with three located in Orange County (32824, 32827, and 32832) and two in Osceola County (34743 and 34744). The secondary service area is comprised of six ZIP Codes in Orange County (32809, 32812, 32822, 32829, 32831, and 32837) and ZIP Code 34771 in Osceola County.



# **Population Demographics**

The population in Orange County increased an average of 2.6% each year during 2016 to 2020. The population growth for the 5-year period, at 10.8%, added 138,928 residents. The total population in Orange County was 1,426,631 residents in 2020. In Osceola County, the population increase was greater at an average of 4.4% each year during 2016 to 2020. The population growth for the 5-year period, at 18.6%, added 61,790 individuals for a total population of 388,132 residents. The population in the primary and secondary service areas accounted for 423,698 residents. Of these, 46.5% (197,091) were in the primary service area, and 53.5% (226,607) were in the secondary service area. Residentsin Orange County comprised 46.2% of those in the primary service area and 90.4% of those in the primary service area. While representingonly 9.6% of those in the secondary service area.

Females in Orange and Osceola counties accounted for slightly more than 50% of the population, while males represented the remaining 49% of residents. The male to female ratio of 1:1 has remained stable over the past 5 years.

The racial composition in Orange and Osceola counties was White accounting for 59.9% of the population in Orange County, and 66.4% of the population inOsceola County. The percentage of Black residents in Orange County, at 21%, was almost



double the percentage of Black residents in Osceola County at 10.9%. Asians accounted for 5.3% of Orange County residents while representing 2.8% of residents in Osceola County. The percentages of individuals of other races were higher in Osceola County when compared to Orange County, at 10.6% and 6.1%, respectively. Residents of two or more races, 8.9% in Osceola County, at exceeded those in Orange County

at 7.5%. The percentages of individuals by race and ZIP Codes in the two service areas revealed higher percentages for Asian, other, and individuals of two or more races. In the secondary service area, ZIP Code 32831 was themost diverse, with the Black population accounting for 38.5% of residents, and ZIP Code 34771 was the least diverse with the White population representing 80.7% of individuals.

Osceola County was more ethnically diverse as 54.7% of residents were Hispanic when compared to Orange County where 32.1% of residents were Hispanic. Those of Puerto Rician ethnicity accounted for 32.6% of Hispanic residents in Osceola County and 17.2% were other Hispanic. The percentage of Hispanic residents in Orange County ZIP Code 32824, at 61.5% was twice the percentage in Orange County. Similarly, ZIP Codes 32809, 32822, 32829, and 32837 had higher percentages of Hispanic residents when compared to thosein the county.

The age range distribution for both counties was almost identical. Residents ages 0-19 years accounted for 25% of individuals in Orange County and 27.1% in Osceola County. Orange County was slightly younger with 31.2% of residents 25-44 years of

age, compared to Osceola County at 28.9%. Those 65 years and older accounted for 11.9% of Orange County residents and 13.1% of those living in Osceola County. Individuals living in the primary service area ZIP Codes were slightly younger when compared to county percentages by age range. Those 20-44 years of age represented 33.2% to 38.8% of residents. For ZIP Codes in the secondary service



area, individuals ages 20-44 years represented 31.7% to 66.9% of residents. ZIP Code 32831 had the youngest population with only 2.9% of the population ages 65 years or older.

Residents who attained a high school diploma accounted for 88.7% of OrangeCounty residents and 86.1% of Osceola County residents. The percentages ofOrange County individuals with a bachelor's (23.1%) or graduate degree (12.4%) were higher when compared to residents in Osceola County at 15.9% and 7.3%, respectively.

Participation in the labor force increased in Orange and Osceola counties from 2015 to 2019. The percentage for Orange County in 2019, at 68.2%, was higher when compared to 2015 at 67.8%. Similarly in Osceola County, participation in the labor force increased from 60.9% in 2015 to 63.7% in 2019. Conversely, the unemployment rates in both counties decreased during the same time.

The U.S. Census Bureau classifies people and families as being in poverty if theirincome is less than the poverty threshold. In Orange and Osceola counties, 10.7% of families were below 100% of the Federal Poverty Level (FPL) during 2016-2020. Families below 200% FPL accounted for 13.6% in Orange County and 18.7% In Osceola County. The 5-year estimate for families living at or above 400% FPL was 40.7% in Orange County and 30.2% in Osceola County.



#### Figure 1: Orange County Population Estimates (2016-2020)

Source: Florida Legislature's Office of Economic and Demographic Research (EDR)



# Figure 2: Osceola County Population Estimates (2016-2020)

Source: Florida Legislature's Office of Economic and Demographic Research (EDR)



# Figure 3: Population Estimates by Primary and Secondary ZIP Codes (2020)



## Figure 4: Orange County Population by Gender (2016-2020)

Source: U.S. Census Bureau, American Community Survey, Table DP05



# Figure 5: Osceola County Population by Gender (2016-2020)

Source: U.S. Census Bureau, American Community Survey, Table DP05

## Figure 6: Orange and Osceola Counties – Population by Race (2020)





Figure 7: Primary Service Area Population by Race - 2020



#### Figure 8: Secondary Service Area Population by Race - 2020

Source: U.S. Census Bureau, American Community Survey, Table DP05



Figure 9: Orange and Osceola Counties – Population by Ethnicity (2020)



# Figure 10: Primary Service Area Population by Ethnicity (2020)

Source: U.S. Census Bureau, American Community Survey, Table DP05



# Figure 11: Secondary Service Area Population by Ethnicity (2020)



Figure 12: Orange County Population by Age Range (2020)



Figure 13: Osceola County Population by Age Range (2020)



Figure 14: Primary Service Area Population by Age Range (2020)



Figure 15: Secondary Service Area Population by Age Range (2020)

# Figure 16: Orange and Osceola Counties – Population by Educational Attainment (2020)



Source: U.S. Census Bureau, American Community Survey, Table DP05

# Figure 17: Orange and Osceola Counties – Population Participation in the Labor Force (2015-2019)



Source: U.S Census Bureau, American Community Survey, Table DP03. Single year county level data was not available for 2020.





Source: U.S Census Bureau, American Community Survey, Table DP03. Single year county level data was not available for 2020.



# Figure 19: Orange and Osceola Counties – Ratio of Income to Poverty Level, 2016-2020 (5-Year Estimate)

# METHODOLOGY

The CHNA was completed using the components as described by the IRS 990 Schedule H form.

# **Definition of the Community**

A demographic profile of the two-county service community included 5-year trending, by county for total population, gender, participation in the labor force, and unemployment rates, 5-year estimate for race, ethnicity, age, educational attainment, and poverty status. Data indicators by race, ethnicity, and gender were included if available.

# **Assessment of Community Health Needs**

The general health assessment included 3-year trending, by county for the following indicators: good health, cancer screenings, top ten causes of death, maternal health profile, suicide, violence and abuse, sexually transmitted diseases, Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS), hepatitis, immunization, risk behaviors, risk factors, food insecurity, and access to care. Data indicators by race, ethnicity, and gender were included if available.

# Input Representing the Broad Interests of the Community

Focus group research was used to gather input from local health departments and organizations serving the interests of medically underserved, low income, and minority populations.

# **Identification and Prioritization of Health Needs**

A health indicator was defined as a health need if trended data was moving in the wrong direction or affected a specific demographic population. A multi-voting prioritization process was undertaken by staff from the UCF Lake Nona Hospital, UCF College of Medicine, and HCA Healthcare who comprised the leadership team. Atotal of four health needs were prioritized to be addressed during the current assessment period: heart diseases and stroke, behavioral health, maternal and childhealth, and unintentional injuries.

The implementation plan will define the strategies to address these needs. Monitoring of the goals and objectives will facilitate the evaluation of their effectiveness in reducing/eliminating the health behaviors and risk factors that lead to chronic health conditions, reduced mental health, poor birth outcomes, and preventable disability and death.

## Resources

A list of resources by facility type was developed to assist with partnership development and community engagement.

# **INPUT FROM THE COMMUNITY**

The leadership tam developed focus group questions to gather input from local health departments, Federally Qualified Healthcare Centers (FQHC), and free clinics that provide care to medically underserved, low income, and minority populations. A focus group was held with management staff of the Florida Departments of Health serving Orange and Osceola counties. One-on-one interviews were held with staff at the FQHC, community health centers, and free clinics.

Data was collected on issues preventing community members from accessingthe care they need. This included discussion on the role of social determinants, the most important health problems, what is needed to maintain a state of wellbeing, and the resources required to improve the system of care.

The most important health problems were identified as heart diseases and stroke, behavioral health, maternal child health, unintentional injuries, and sexually transmitted diseases. Preventing community members from accessing the care they needed was primarily due to a lack of or limited health insurance, navigation/awareness, and a shortage of services and providers to serve the community. The social determinants complicating access were related to transportation, lack of affordable housing, and food insecurity. System bias was used to describe the inequity within the currenthealth care system.



# HEALTH NEEDS OF THE COMMUNITY

# **General Health Status**

The percentages of adults, ages 18-64 years, in Orange and Osceola counties reporting their overall health as good to excellent were 79.8% and 76.4%, respectively. In bothcounties, this was a decrease from the percentages reported in 2016 at 82.7% and 78.3%.

#### **Cancer Screenings**

In Orange County, 59.4% of women 40 years and older, received a mammogram in the past year while 51.4% of women in the same age range in Osceola County had a mammogram. Hispanic women (40+ years) in Orange County had a slightly higher rate of having received a mammogram, at 59.5%, when compared to White women at 59.1%. In Osceola County, 63.3% of Hispanic women and 40.8% of White women, who were 40 years and older, received a mammogram. The sample size for Black women in both counties was <30 and statistically unreliable.

Among adults in Orange County, 61.5% of those ages 50 years and older, reported having had a sigmoidoscopy or colonoscopy. In Osceola County, 63.1% of adults in



the same age range reported having had this screening. Among (adults 50 genders, and older) vears the percentages were similar with 60.1% of men and 62.7% of women reporting to have received a sigmoidoscopy or colonoscopy. The percentages of adults 50 years and older who lived in Osceola County and reported having a colonoscopy, decreased among men from

69.9% in 2013 to 54.3% in 2016. For Osceola women, (50+years) the percentage of those receiving a colonoscopy screening increased from 65.1% in 2013 to 70.5% in 2016. For colonoscopy screenings among race and ethnic groups (50+ years), White adults in Orange County had a higher rate, at 70.0%, when compared to Black and Hispanic adults at 58.9% and 46.7%, respectively. In Osceola County, 69.2% of White adults and 54.3% of Hispanic adults (50+ years) received this cancer screening. The sample size for Black adults in Osceola County was <30 and statistically unreliable.

In Orange County, 68.8% of men, 50 +years, had a PSA test. In Osceola County, 64.5% of men 50+ years reported having had a PSA test. PSA rates among White men (50+ years) were 68.9% in Orange County and 57.8% in Osceola County. The sample size for Black and Hispanic men were <30 and statistically unreliable.

Most women, aged 21 to 65 years of age, had a Pap test in the past 3 years. Among Orange County women (21 to 65 years of age), 79.9% reported they had this test along with 77% of the women in the same age range in Osceola County. Among

race and ethnicity (21 to 65 years of age), Hispanic women in Orange County had a higher rate, at 85.4%, when compared to theirWhite and Black counterparts, at 80.9% and 64.6%, respectively. The same held true in Osceola County where 80.7% of Hispanic women and 73.8% of Whitewomen had a Pap test in the past 3 years. The sample size for Black women in Osceola County was below <30 and statistically unreliable.

## **Causes of Death**

The leading causes of death for Orange and Osceola counties were very similar. Among the top ten causes were heart diseases, cancer, stroke, COVID- 19, unintentional injury, chronic lower respiratory disease, diabetes mellitus, Alzheimer's disease, and kidney diseases. The tenth leading cause of death in Orange County was Septicemia while in Osceola County it was chronic liver disease and cirrhosis. These were also the top ten causes of death among White and Hispanic populations with minor differences in the numerical rankings. In Osceola County, perinatal period diseases ranked seventh among the Black population, while again not being in the top ten forthe county or other population groups.

The age adjusted death rates for the White population in Orange County werehigher for unintentional injury and chronic lower respiratory disease (CLRD) when compared to the rates among the Black and Hispanic populations. The death rates among the Black population were higher when compared to deathrates among the White and Hispanic populations for heart diseases, cancer, stroke, COVID-19, diabetes mellitus, kidney diseases and Septicemia. The Hispanic population had the highest death rate for Alzheimer' disease when compared to other population groups. In Osceola County, higher deaths rateswere among the White population for heart diseases, cancer, unintentional injury, CLRD, Alzheimer's disease, and liver disease. Deaths rates among the Black population were higher when compared to rates among other population groups for diabetes mellitus and kidney diseases. Among the Hispanic population, the death rates for COVID-19 and stroke were higher when compared to death rates among the White and Black populations.

## **Maternal and Child Health**

The total birth rates for Orange and Osceola counties were similar at 11.8 and 12.0/1,000 population, respectively. The highest rates were among the Hispanic population in both counties at 13.6/1,000 population in Orange County and 13.0/1,000 population in Osceola County. Among the Black population, the total birth rate in Orange County was 13.2/1,000 population and 10.1/1,000 population in Osceola County, at 12.1/1,000 population when compared to 11.2/1,000 population in Orange County.

The teen birth rate (15-19 years) in Orange County, at 13.3/1,000 live births, waslower when compared to the rate in Osceola County at 15.5/1,000 live births. Among race and ethnicities, rates were highest among Black and Hispanic teensin Orange County, at 18.9 and 18.5/1,000 live births, respectively, when compared to White teens at 12.4/1,000 live births. In Osceola County, the birth rate was highest among White and

Hispanic teens, at 17.1 and 17.6/1,000 live births respectively, when compared to Black teens at 11.1/1,000 live births.



The percentage of repeat teen births for Orange County was 13.7%. Repeat teenbirths (15-19 years) was highest among Black teens in Orange County, at 16.5%, when compared to White teens at 12.2%, and Hispanic teens at 12.8%. In OsceolaCounty the percentage of repeat teen births, at 11%, was similar to those of White teens at 11.3% and Hispanic teens at 11.1%. Among Black teens, the repeat teen birth rate was 10.1%.

The percentage of babies with low birthweight accounted for 8.7% of OrangeCounty births and 8.1% of those in Osceola County. Rates were highest amongBlack babies in Orange and Osceola, at 13.4% and 12.3%, respectively. Thelowest rates were among Whitebabies in Orange and Osceola counties at 6.8% and 7.3%, respectively. Rates for Hispanic babies in both counties were very similar to the rates among White women and lower than the county rates.

The percentage of preterm births in Orange and Osceola counties werevery similar at 10.5% and 10.3%, respectively. In both counties, the percentages of preterm births among White and Hispanic women were below the county rates. The percentage of preterm births among Black babies was slightly higher in Orange County at 14% whencompared to Osceola County at 13.4%.

The percentage of births with late or no prenatal care accounted for 6.4% of

Orange County births and 5.8% of births in Osceola County. Births to Black women with late or no prenatal care accounted for 9% in Orange County and 8.6% in Osceola County. Rates among White and Hispanic births were lower when compared to the county rates in Orange and Osceola counties.

Infant death rates were higher in Orange County at 5.7/1,000 live births when compared to Osceola County at 4.9/1,000 live births. The lowest infant deathrate in the two counties was among White infants in Orange County at 3.9/1,000 live births, while the highest infant death rate, also in Orange County, was among Black infants at 10.6/1,000 live births. Among Hispanic infants, the death rate in Orange County was 4.3/1,000 live births, which was lower thanthe rate in Osceola County at 5.6/1,000 live births.

According to the Florida Department of Health, Bureau of Vital Statistics, drowning is the leading cause of unintentional injury-related deaths for children ages 1-4 years of age. It is a preventable event. Nationally, about one in five people who die from drowning are children 14 years and younger. For every child who dies from drowning, another five receive emergency department care for nonfatal submersion injuries. More than 50% of drowning victims treated in emergency departments (EDs) require hospitalization or transfer for further care (compared with a hospitalization rate of about 6% for all unintentional injuries). These nonfatal drowning injuries can cause severe brain damage that may result in long-term disabilities such as memory problems, learningdisabilities, and permanent loss of basic functioning (e.g., permanent vegetative state).

## Suicide

The Orange County age-adjusted death rate (AADR) for suicide decreased from 10.4/100,000 population in 2018 to 8.9/100,000 population in 2020. The suicide death rates for males in Orange County, at 14.4/100,000 population, was more than triple the rates among females, at 3.9/100,000 population. In 2020, the county suicide death rate among the White population, at 10.2/100,000 population, was almost twice the rate for Black residents, at 5.3/100,000 population. The rate among Hispanics was 6.9/100,000 population.

In Osceola County, deaths from suicide decreased from 11.5/100,000 population in 2018 to 9.2/100,000 population in 2020. The suicide death rates for males in Osceola County, 14.7/100,000 population, were more than triple the rates among females, at 4.0/100,000 population. In 2020, the county suicide death rate among the White population, at 15.4/100,000 population, was more than twice the rate for Black residents at 5.8/100,000 population. Among ethnicities, the non-Hispanic 2020 AADR for suicide, at 15.9/100,000, was much higher than the rate among Hispanics at 3.6/100,000 population.

## Violence and Abuse

According to the Department of Law Enforcement Uniform Crime Report 2020, the rate of total domestic violence offenses decreased in Orange County and the state during 2018 to 2020. The county rate fell from 634.9/100,000 population to

558.2/100,000 population over those 3 years. This was still higher than the state rate of 493.2/100,000 population in 2020. The rate of total domestic violence offenses increased in Osceola County from 528.5/100,000 population to 585.7/100,000 population over the same time period.

The rate of children experiencing child abuse over those 3 years (2018 to 2020) continually decreased in Orange County. Among children ages 5-11 years, the rate of child abuse fell from 652.4/100,000 population in 2018 to 413.3/100,000 population in 2020. The rate in Osceola County decreased from 489.0/100,000 population in 2018 to 345.1/100,000 population in 2020.

The rate of children, ages 5-11 years of age, experiencing sexual violence decreased in Orange County from 49.9/100,000 population in 2019 to 45.8/100,000 population in 2020. This rate also decreased in Osceola County from 101.1/100,000 population in 2018, to 99.4/100,000 population in 2019 to 46.2/100,000 population in 2020.

#### Sexually Transmitted Diseases (STDs) and HumanImmunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS)

Sexually transmitted diseases include Chlamydia, Gonorrhea, and Syphilis. Bacterial STDs in Orange County increased from 1069.1/100,000 population in 2019 to 1167.7/100,000 population in 2021. Rates were higher among males when compared to females. Among race and ethnicity, 2021 rates were highest among the Black population at 1642.1/100,000 population when compared to the White population, at 324.4/100,000 population, and the Hispanic population at 629.6/100,000 population. In Osceola County, the rate of bacterial STDs decreased from 727.5/100,000 population in 2019 to 693.1/100,000 population in 2021. However, the 2021 rate was higher than the rate in 2020 at 623.2/100,000 population. Females in Osceola County had higher rates when compared to males. The rates among the Black population were higher when compared to the White and Hispanic populations.

Cases of Chlamydia in Orange County decreased during 2019 to 2021 but the 2021 rate at 734.6/100,000 population was higher when compared to 2020 at 643.4/100,000 population. Rates were higher among females (876.6/100,000 population) when compared to males (586.8/100,000 population) and higher than the county rate. The highest rates were among the Black population, at 882.4/100,000 population, when compared to the White population at 168.8/100,000 population and the Hispanic Population at 378.4/100,000 population. Among residents in Osceola County, the rates among the Black population consistently decreased during the 3-year period from 473.9/100,000 population to 359.7/100,000 population. Rates among females (607.9/100,000 population) were higher when compared to males (306.2/100,000 population) and the rates among the Hispanic population (234.9/100,000 population) were higher when compared to the rates among the White population at 117.5/100,000 population (2021).

The rates of Gonorrhea in Orange County increased from 128.6/100,000 population in 2019 to 167.2/100,000 population in 2021. Higher rates were among males when

compared to females. Among racial and ethnic groups, the highest rate in 2021 was among the Black population at 573.5/100,000 population, and the lowest was among the White population at 99.6/100,000 population. In Osceola County, the rate in 2021, at 459.0/100,000 population, was below the 2019 rate at 550.9/100,000 population. Rates among males were higher when compared to females. The lowest rate was among the White population, at 64.2/100,000 population in 2021, while the highest rate was among the Black population at 221.4/100,000 population.

Rates of infectious Syphilis continually increased in Orange County from 22.3/100,000 population (2019) to 28.8/100,000 population (2021) and among all population groups except for the White population. The rate among males was more than five times the rate among females. The highest rate was among the Black population at 46.0/100,000 population (2021). The rate among Hispanics in 2021 was 23.5/100,000 population. In Osceola County, the rate of infectious Syphilis increased from 7.3/100,000 population in 2019 to 12.3/100,000 in 2021. Rates increased among males, females, and the Hispanic population. Among the Black population, the rates continually decreased from 14.2/100,000 population in 2019 to 12.6/100,000 population in 2021.

Acquired Immunodeficiency Syndrome (AIDS) diagnosis rates in Orange County decreased from 12.7/100,000 population in 2019 to 9.4/100,000 population in 2021. The rate among males increased from 2020 to 2021 (13.7/100,000 population to 14.9/100,000 population) but was still lower than the rate in 2019 at 19.4/100,000. Rates among females and the Black population continually decreased during the past 3 years. Rates were highest among Hispanics at 10.9/100,000 population in 2021. In Osceola County, rates increased in 2021 when compared to 2020 but were lower than rates in 2019. The 2021 rate for the county was 7.9/100,000 population. Rates among males were much higher when compared to females. The highest rates in 2021 were among the Hispanic population at 10.6/100,000 population, and the Black population at 10.1/100,000 population.

Rates of those diagnosed with Human Immunodeficiency Virus (HIV) in Orange County continually decreased among the Black population from 68.3/100,000 population in 2019 to 49.8/100,000 population in 2021. Among the Hispanic population the rate in 2021 at 43.1/100,000 population was higher when compared to 37.4/100,000 in 2019. Overall, the county rate also continually decreased during the 3-year period. Rates were higher among males when compared to females. In Osceola County, the 2021 rate, at 29.4/100,000 population was higher when compared to 2019 at 22.8/100,000 population. Rates increased over the 3-year period among genders, and among the Black and Hispanic populations. Among the White population, rates of HIV decreased.

In Orange County, deaths from HIV/AIDS decreased for all population groups during the past 2 years. The 2021 county rate, at 2.3/100,000 population, decreased from 3.2/100,000 population in 2019. The biggest decline in HIV/AIDS death rate was among the Black population where the rate in 2021, at 6.0/100,000 population, had decreased from 11.4/100,000 the previous year. In Osceola County, the 2021 death rate, at 0.9/100,000 population decreased from 1.7/100,000 population in 2019.

Rates in 2021 among genders were slightly above 2020 rates but still lower than 2019 rates. The same trend was noted among racial and ethnic groups. The 2021 rates ranged from 0.9/100,000 population among the White population to 1.4/100,000 population among the Black population. In 2020, the rate among the Hispanic population was 0.0/100,000 population. It rose slightly in 2021 to 1.3/100,000 population.

The most current data available for the percentages of adults (18-64 years) who have had an HIV test in the past year was from 2016. The percentages decreased at the county level and among the Black population while increasing among males, females, White, and Hispanic populations. In Orange County, the percentage in 2016 was



19.4%, down slightly from 19.8% in 2013. The percentage of males tested in the past year, at 16.6% was lower than the county rate and the rate among females at 22.4%. Although the percentages of testing among the Black population decreased from 37.2% in 2013 to 27.3% in 2016, this population still had the highest percentage of adult testing when compared to the White population at 15.1% and the Hispanic population at 21.0%. In Osceola

County, the percentages of adults testing for HIV in the past year were below the rates in Orange County for all population groups. It should be noted that the sample size for Black respondents in Osceola County for this indicator was <30 and statistically unreliable.

For adults (ages 18 – 64 years) who have been tested for HIV in their lifetimes, the percentages were much higher. In Orange County, the percentage of testing among the Black population in 2019, at 68.7% was higher when compared to the county, genders, White, and Hispanic populations. The lowest percentages of adults testing for HIV in their lifetimes were among the White population in Orange and Osceola counties at 45.4% and 41.7%, respectively. The highest testing rate in Osceola County, at 64%, was among Hispanic adults in 2019.

## Hepatitis

The rate of chronic hepatitis B increased slightly in Orange County from 24.6/100,000 population in 2019 to 26.0/100,000 population in 2020. In Osceola County, the 2021 rate at 15.3/100,000 population was higher than the rate in 2020 (14.9) but lower than the rate in 2019 at 15.9/100,000 population.

Chronic hepatitis C rates decreased in Orange and Osceola counties from 2019 to 2021. The rate in 2021 for Orange County, at 69.8/100,000 population, was higher when compared to Osceola County at 47.7/100,000 population.

# Immunization

Adults, ages 65 years and older, had higher rates of receiving a flu shot in the past year when compared to other age ranges. In Orange County, 51.9% of older adults received a yearly flu shot while 59.5% of those in Osceola Counties hada flu shot in the past year. Rates were much lower among those ages 18-44 years, at 19.5% in Orange County and 14.7% in Osceola County. The percentagesof middle-aged adults, 45-64 years of age who were immunized against the flu, ranged from 31.7% in Orange County to 27.5% in Osceola County. A comparison of the percentages by race and ethnicity showed higher rates among Orange County White adults (ages 18 years and older), at 36.7%, when compared to Black and Hispanic adults at 22.5% and 22.3%, respectively. In Osceola County, the lowest immunization rate for the flu was among Black adults, at 14.6%, whencompared to Hispanic adults at 16.6% and White adults at 36.7%.

The 2021 Immunization rates among Orange County students (grades K-7<sup>th</sup>), at 89.6%, wasslightly lower when compared to 2020 and 2019, at 90.0% and 91.1%, respectively. The same trend was observed in Osceola County where the 2021student immunization rate, at 89.2%, was lower than the previous two years at 91.9% and 93.1%. The 2021 rates for both counties were below the state rate at 93.3%.

# **Risk Behaviors**

The prevalence of smoking among adults (ages 18-64 years) decreased in Orange and Osceola counties when comparing data from 2013 to 2019. This decrease also occurred across genders, races, and ethnicities, except for Black adult smokers where prevalence increased. The percentage of adult smokers in Orange County in 2019 was 11.7% which was a decrease from the rate in 2013 at 16%. Likewise in Osceola County, the rate decreased from 18.2% in 2013 to 12.8% in 2019. The biggest decrease was among White adults in Orange County where smoking decreased from 20% in 2013 to 9.2% in 2019. The increase in smoking over the past 6 years among Black adults was greater in Osceola County, at 9.1%, when compared to the increase in Orange County at 3.6%

Well over 90% of middle school (MS) and high school (HS) students did not smoke at all in the past 30 days in Orange and Osceola counties. The rate among students in Orange County, at 97.6% in 2020, was a slight decrease from 98.2% in 2016. In Osceola County, 98.3% of students reported not smoking at all in the past 30 days (2020).

Binge drinking is defined as consuming 5 or more drinks for men and 4 or moredrinks for women during a single occasion in the past 30 days. Binge drinking among Orange County adults, 18 years and older, decreased from 19.7% in 2013 to 18.2% in 2019. Among men, binge drinking decreased during the past 6 years, and among women, drinking decreased from 14.5% in 2016 to 13% in 2019. However, the 2019 rate was higher when compared to 2013 at 12.3%. By race and ethnicity, drinking decreased during the past 3 years among White adults, stayed the same among Black adults, and increased among Hispanic adults. The 2019 rate for Orange County was slightly higher than the state rate at 18%. In Osceola County, binge drinking

decreased over the past 3 years for the county as well as among men, women, and Hispanic adults. Among White adults, therate increased from 15.5% in 2016 to 16.3% in 2019. The county rate, at 10.7%, was below the state rate of 18%.

Middle and high school students were asked how many times during the past 2weeks have you had five or more drinks in a row. In Orange County, 95.3% of students reported none. This was a slight increase from 94.4% in 2016. The rates were similar among Osceola County students as 94.5% reported they had not consumed five or more drinks on any occasions in the past 2 weeks. The percentages of students reporting having five or more drinks once or twice in the past two weeks decreased during 2018 to 2020 in both counties.

The percentage of adults (ages 18-64 years) in Orange County who were inactive or insufficiently active decreased slightly from 57.3% in 2013 to 56.9% in 2016. The state ratewas 56.7%. Rates decreased among men while increasing among women. In 2019, the percentage of men who were inactive, at 51.8%, was lower when compared to women at 61.8%. Rates among White adults decreased slightly and were steady among Hispanic adults. Among Black adults, inactivity decreased from 61.1% in 2013 to 46.5% in 2016. The percentage of adults who were inactive in Osceola County increased from 58.9% in 2013 to 64.6% in 2016. Inactivity increased among Osceola County men, along with White and Hispanic adults during the same time. Among Black adults, 79% reported theywere inactive in 2013. The sample size for this group was <30 and statisticallyunreliable in 2019.

# **Risk Factors**

The prevalence of those adults ages 18-64 years who have ever been told they had hypertension remained stable in Orange County while increasing 5.4% among adults in Osceola County. In Orange County, 30.1% of adults reported they had hypertension (2019). Rates decreased slightly among men while increasing slightly among women. By race and ethnicity, a small increased was noted among White adults, rates among Black adults increased from 26.5% in 2013 to 33.7% in 2019 and decreased among Hispanic adults from 30.2% in 2013 to 27.7% in 2019. In Osceola County, the increase in hypertension was greater among women at 9% over the past six years when compared to men where the increase was less than 2%. Rates among White adults increased from 33.4% in 2013 to 41.5% in 2019. Among Black adults, the percentage of those with hypertension increased from 15.8% in 2013 to 45.3% in 2019. Among Hispanic adults, hypertension decreased 2.5% over the past 6 years.

The percentage of adults (ages 18-64 years) who have been told that they have high blood cholesterol increased in Orange County while decreasing in Osceola County during 2013 to 2019. The increases in Orange County were among men, women, White, and Hispanic adults. There was a small decrease among Black adults where the rate declined from 23.6% in 2013 to 22.3% in 2019. The largest increase was among Hispanic adults in Orange County where the rate grew from 19.5% in 2013 to 30% in 2019. Among Osceola County adults, rates of high cholesterol decreased among men and those of Hispanic ethnicity while increasing among women, White, and Black adults.

Over 65% of adults (ages 18-64 years) in Orange County and 75.3% of adults in Osceola Countywere overweight or obese. Rates steadily increased among women, and Hispanic adults over the 6-year period. In 2019, the percentages of those overweight or obese in Orange County ranged from 63.7% among White adults to 72.3% among Hispanic adults. The range by race was greater in Osceola County, where 73.6% of White adults, 87.5% of Black adults, and 77.5% of Hispanic adults reported they were overweight or obese.

# Food Insecurity

In 2019, the food insecurity rates in Orange and Osceola counties were almost identical at 11.2% and 11.1%, respectively. Rates in Orange County continually decreased from 2017 to 2019, while the 2019 rate in Osceola County was below the rate in 2020 (12.1%) but above the rate in 2017 at 9.8%.

# Access to Care

Rates of adults (ages 18-64 years) with health insurance increased in Orange and Osceola counties over a 6-year period (2013 to 2019). In 2019, the percentages of those with health insurancein Orange and Osceola counties was 80.8% and 81.3%, respectively. Rates increased across all genders, races, and ethnicities in both counties. The greatest increase was among Black adults in Osceola County where the percentage of those with any type of health insurance increased from 57.5% in 2013 to 81.2% in 2019.

The increasing percentages of adults with any type of health insurance may correlate with the decrease in percentages of adults who could not see a doctor in the past 12 months due to cost. In Orange County, the percentage of those who could not afford to see a doctor in the past year decreased from 23.6% in 2013 to 15.2% in 2019, while the percentage of adults in Osceola County decreased from 29.5% in 2013 to 20.3% in 2019. The greatest improvement wasamong Hispanic adults in both counties were decreases ranged from 17.5% inOrange County to 21.8% in Osceola County (2013 to 2019).

# **General Health Status**

Figure 20: Orange County Adults Who Said Their Overall Health was "Good to Excellent" (2013 to 2019)



Source: Behavioral Risk Factor Surveillance System





Source: Behavioral Risk Factor Surveillance System

# **Cancer Screenings**

Figure 22: Orange County Women 40 Years of Age and Older Who Have Received aMammogram in the Past Year (2016)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population was <30 and statistically unreliable.

# Figure 23: Osceola County Women 40 Years of Age and Older Who Have Received a Mammogram in the Past Year (2016)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population was <30 and statistically unreliable.

# Figure 24: Orange County Adults 50 Years of Age and Older Who Have Ever Had a Sigmoidoscopy or Colonoscopy (2013 and 2016)



Source: Behavioral Risk Factor Surveillance System

# Figure 25: Osceola County Adults 50 Years of Age and Older Who Have Ever Had a Sigmoidoscopy or Colonoscopy (2013 and 2016)



Source: Behavioral Risk Factor Surveillance System

# Figure 26: Orange County Men Ages 50 Years and Older Who Have Ever Had a PSA Test (2016)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population was <30 and statistically unreliable.
## Figure 27: Osceola County Men Ages 50 Years and Older Who Have Ever Had a PSATest (2016)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black and Hispanic populations were <30 and statistically unreliable.

## Figure 28: Orange County Women Aged 21 to 65 Years Who Had a Pap Test in the Past3 Years (2013 and 2016)



Source: Behavioral Risk Factor Surveillance System

## Figure 29: Osceola County Women Aged 21 to 65 Years Who Had a Pap Test in the Past3 Years (2013 and 2016)



### **Causes of Death**

Top Ten Causes of Death	Orange	White	Black	Hispanic
Heart Diseases	148.4	144.6	176.5	105.0
Cancer	134.3	134.4	148.6	104.9
Stroke	59.1	57.0	70.8	50.0
COVID-19	55.0	48.2	82.2	74.0
Unintentional Injury	53.8	59.8	41.7	41.0
CLRD	29.5	32.4	23.3	17.0
Alzheimer's Disease	24.1	25.4	21.2	29.4
<b>Diabetes Mellitus</b>	22.9	19.1	37.1	19.1
Kidney Diseases	11.8	9.2	22.3	9.4
Septicemia	11.0	11.0	12.3	8.5
Homicide	8.0	4.4	20.1	4.6

Figure 30: Top Ten Causes of Death for Orange County by Race (2020)

Source: Florida Department of Health, Bureau of Vital Statistics. The darker color highlights rates that are higher than the county and other population groups.

Top Ten Causes of Death	Osceola	White	Black	Hispanic
Heart Diseases	159.3	165.1	135.8	134.0
Cancer	148.8	154.6	112.6	109.0
COVID-19	69.9	75.2	47.3	103.7
Stroke	64.8	68.0	57.9	69.5
Unintentional Injury	51.6	56.8	29.3	43.3
CLRD	32.7	37.2	11.7	20.4
Diabetes Mellitus	23.3	21.4	36.4	25.7
Alzheimer's Disease	21.1	21.6	18.0	21.5
Kidney Diseases	13.7	13.6	15.8	14.6
Chronic Liver Disease &	11.8	13.7	5.1	11.0
Perinatal Period	3.8	2.4	12.4	3.7

Figure 31: Top Ten Causes of Death for Osceola County by Race (2020)

Source: Florida Department of Health, Bureau of Vital Statistic The darker color highlights rates that are higher than the county and other population groups.

## **Maternal and Child Health**





Source: Florida Department of Health, Bureau of Vital Statistics. Total births rate per 1,000 live births.



Figure 33: Osceola County Total Birth Rate by Race and Ethnicity (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics. Total births rate per 1,000 live births.





Source: Florida Department of Health, Bureau of Vital Statistics. Total births rate per 1,000 live births.





Source: Florida Department of Health, Bureau of Vital Statistics. Total births rate per 1,000 live births.

# Figure 36: Orange County Repeat Teen Birth Rate 15-19 Years by Race and Ethnicity(2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births to females 15-19 years.

## Figure 37: Osceola County Repeat Teen Birth Rate 15-19 Years by Race and Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births to females 15-19 years.

#### Figure 38: Orange County Low Birthweight by Race and Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.



Figure 39: Osceola County Low Birthweight by Race and Ethnicity (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.





Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.





Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.



Figure 42: Orange County Late or No Prenatal Care by Race and Ethnicity (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.

### Figure 43: Osceola County Late or No Prenatal Care by Race and Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics. Percentage of live births.

Figure 44: Orange County Infant Death Rate by Race and Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics. Rate per 1,000 live births.



Figure 45: Osceola County Infant Death Rate by Race and Ethnicity (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics. Rate per 1,000 live births.

#### Suicide

Figure 46: Orange County Age-Adjusted Suicide Death Rates (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics, Rate per 100,000

#### Figure 47: Orange County Age-Adjusted Suicide Death Rates by Gender (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics, Rate per 100,000



Figure 48: Orange County Age-Adjusted Suicide Death Rates by Race (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics, Rate per 100,000

### Figure 49: Orange County Age-Adjusted Suicide Death Rates by Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics, Rate per 100,000

### Figure 50: Osceola County Age-Adjusted Suicide Death Rates (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics, Per 100,000



Figure 51: Osceola County Age-Adjusted Suicide Death Rates by Gender (2018-2020)

Source: Florida Department of Health, Bureau of Vital Statistics, Per 100,000





Source: Florida Department of Health, Bureau of Vital Statistics, Per 100,000

### Figure 53: Osceola County Age-Adjusted Suicide Death Rates by Ethnicity (2018-2020)



Source: Florida Department of Health, Bureau of Vital Statistics, Per 100,000

### **Domestic Violence**

Figure 54: Orange County Total Domestic Violence Offenses (2018-2020)



Source: Florida Department of Law Enforcement, Crime in Florida, Uniform Crime Report 2020, Rate per 100,000

#### Figure 55: Osceola County Total Domestic Violence Offenses (2018-2020)



Source: Florida Department of Law Enforcement, Crime in Florida, Florida Uniform Crime Report, 2020

## Figure 56: Orange County Rate of Children Experiencing Child Abuse, Ages 5-11 Years(2018-2020)



Source: Department of Children and Families, Florida Safe Families Network Data Mart, Rate per 100,000

## Figure 57: Osceola County Rate of Children Experiencing Child Abuse, Ages 5-11 Years(2018-2020)



Source: Florida Department of Children and Families, Florida Safe Families Network Data Mart, per 100,000

## Figure 58: Orange County Rate of Children Experiencing Sexual Violence, Ages 5-11 Years (2018-2020)



Source: Department of Children and Families, Florida Safe Families Network Data Mart, Rate per 100,000

#### Figure 59: Osceola County Rate of Children Experiencing Sexual Violence, Ages 5-11 Years (2018-2020)



Source: Florida Department of Children and Families, Florida Safe Families Network Data Mart, per 100,000

### **Sexually Transmitted Diseases**

Figure 60: Bacterial Sexually Transmitted Diseases (STDs) - Orange County (2019-2021)



Source: Florida Department of Health, Bureau of Communicable Diseases. Rate per 100,000 population.



Figure 61: Bacterial Sexually Transmitted Diseases (STDs) – Osceola County (2019-2021)

# Figure 62: Acquired Immunodeficiency Syndrome (AIDS) Diagnosis – Orange County(2019-2021)



Source: Florida Department of Health, HIV/AIDS Section. Rate per 100,000 population.



# Figure 63: Acquired Immunodeficiency Syndrome (AIDS) Diagnosis – Osceola County(2019-2021)

Source: Florida Department of Health, HIV/AIDS Section. Rate per 100,000 population.



Figure 64: Human Immunodeficiency Virus (HIV) Diagnosis – Orange County (2019-2021)

Source: Florida Department of Health, HIV/AIDS Section. Rate per 100,000 population.





Source: Florida Department of Health, HIV/AIDS Section. Rate per 100,000 population.



Figure 66: Chlamydia Diagnosis – Orange County (2019-2021)



Figure 67: Chlamydia Diagnosis - Osceola County (2019-2021)







Figure 69: Gonorrhea Diagnosis – Osceola County (2019-2021)



Figure 70: Infectious Syphilis Diagnosis – Orange County (2019-2021)



Figure 71: Infectious Syphilis Diagnosis – Osceola County (2019-2021)











Figure 74: Orange County Adults Who Have Had a Human Immunodeficiency Virus (HIV) test in the Past 12 Months (2013 and 2016)

Source: Behavioral Risk Factor Surveillance System



# Figure 75: Osceola County Adults Who Have Had a Human Immunodeficiency Virus (HIV) test in the Past 12 Months (2013 and 2016)





Source: Behavioral Risk Factor Surveillance System





### Hepatitis



#### Figure 78: Orange County Chronic Hepatitis B Rates (2019-2021)

Source: Florida Department of Health, Bureau of Epidemiology. Rates per 100,000 population.





Source: Florida Department of Health, Bureau of Epidemiology. Rates per 100,000 population.

### Figure 80: Orange County Chronic Hepatitis C Rates (2019-2021)



Source: Florida Department of Health, Bureau of Epidemiology. Rates per 100,000 population.



### Figure 81: Osceola County Chronic Hepatitis C Rates (2019-2021)

Source: Florida Department of Health, Bureau of Epidemiology. Rates per 100,000 population.

### Immunization

Figure 82: Orange County Adults Who Have Received a Flu Shot in the Past Year (2016and 2019)



### Figure 83: Osceola County Adults Who Have Received a Flu Shot in the Past Year (2016and 2019)





Figure 84: Percentage of Orange County Students Immunized (2019-2021)

Source: Florida Department of Health, Bureau of Immunization.



Figure 85: Percentage of Osceola County Students Immunized (2019-2021)

Source: Florida Department of Health, Bureau of Immunization.

### **Risk Behaviors**





# Figure 87: Percentage of Osceola County Adults Who are Current Smokers (2013to 2019)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population in 2016 was <30 and statistically unreliable.

## Figure 88: Orange County – How frequently have you smoked cigarettes in the past 30 days (MS&HS 2016 to 2020)



Source: Florida Youth Substance Abuse Survey

## Figure 89: Osceola County – How frequently have you smoked cigarettes in the past 30 days (MS&HS 2016 to 2020)



Source: Florida Youth Substance Abuse Survey







Figure 91: Percentage of Osceola County Adults Who Engage in Heavy of Binge Drinking (2013 to 2019)

Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population in 2016 was <30 and statistically unreliable.

## Figure 92: Orange County – Think back over the past 2 weeks...how many times have you had five or more drinks in a row (MS&HS 2016 to 2020)



Source: Florida Youth Substance Abuse Survey

## Figure 93: Osceola County – Think back over the past 2 weeks...how many times have you had five or more drinks in a row (MS&HS 2016 to 2020)



Source: Florida Youth Substance Abuse Survey





## Figure 95: Percentage of Osceola County Adults Who are Inactive orInsufficiently Active (2013 and 2016)



Source: Behavioral Risk Factor Surveillance System. Sample size for the Black population in 2016 was <30 and statistically unreliable.

### **Risk Factors**

Figure 96: Percentage of Orange County Adults Who Have Ever Been Told They Had Hypertension (2013 and 2019)





Figure 97: Percentage of Osceola County Adults Who Have Ever Been Told TheyHad Hypertension (2013 and 2019)

Source: Behavioral Risk Factor Surveillance System

## Figure 98: Percentage of Orange County Adults Who Have Ever Been Told That They Have High Blood Cholesterol (2013 and 2019)







Source: Behavioral Risk Factor Surveillance System









Source: Behavioral Risk Factor Surveillance System

## Figure 102: Percentage of Orange County Residents Experiencing Food Insecurity (2017-2019)



Source: Feeding America Map the Meal Gap





Source: Feeding America Map the Meal Gap

### Access To Care



Figure 104: Percentage of Orange County Adults with Any Type of Health Insurance (2013 to 2019)

Source: Behavioral Risk Factor Surveillance System







# Figure 106: Percentage of Orange County Adults Who Could Not See a Doctor in the Past Year Due to Cost (2013 to 2019)

Source: Behavioral Risk Factor Surveillance System





## **Prioritization of Health Needs**

A list of 28 health needs were identified through a comprehensive needs assessment and focus group research. A health issue was defined as a need if rates were increasing over time or disproportionately affected a specific demographic population. The needs identified were as follows:

- Heart Diseases
- Cancer
- COVID-19
- Stroke
- Unintentional Injury
- Chronic Lower Respiratory Disease
- Diabetes Mellitus
- Kidney Diseases
- Smoking
- Binge Drinking
- Inactivity or insufficient activity
- Hypertension
- High Blood Cholesterol
- Overweight/Obese Status
- Teen Births
- Repeat Teen Births
- Low Birth Weight
- Preterm Births
- Late or No Prenatal Care
- Obese Moms
- Infant Deaths
- Food Insecurity
- Sexually Transmitted diseases HIV/AIDS, Chlamydia, Gonorrhea, Syphilis
- HIV Testing
- Hepatitis B

To select the health needs that would be addressed during the current assessment cycle, staff from UCF Academic Health, and UCF Lake Nona Hospital (the leadership team) held a meeting to discuss prioritizing the identified health needs. A multi-voting technique was used to prioritize health needs. The initial voting was completed after the health needs were identified but before the focus groups were conducted. This resulted in the prioritization of the following health needs:

- Heart Diseases and Stroke
- Weight Status
- Hypertension
- High Cholesterol
- Diabetes
- Behavioral Health



- Maternal Child Health
- HIV/AIDS/Sexually Transmitted Disease
- Heathy Eating
- Sedentary Lifestyle

Focus group research was conducted to obtain input from local public health departments, FQHC's, and free clinics that serve medically underserved, low income, and minority populations. Participants ranked heart diseases, behavioral health issues, and maternal child health as the top three health issues in the two-county community. Two other top issues noted were unintentional injuries and sexually transmitted diseases.

Preventing community members from getting the care they needed centered around no or limited health insurance, health system navigation, limited transportation, food insecurity, poverty, lack of health literacy/education, and chronic disease management.

A second prioritization meeting was held after the focus group results were presented. The final prioritized list of health needs are as follows:

### **Primary Health Needs**

- Heart diseases and Stroke
- Behavioral Health
- Maternal Child Health
- Unintentional Injuries

### **Implementation Strategy**

Using an upstream approach to transform the quality of life at the individual level and improve health outcomes on a community level, the implementation strategies will be focused on education, screening, and addressing health needs. Developing education and screening programs will increase health literacy on the importance of health behaviors and risk factors (healthy eating, sedentary lifestyle, monitoring high blood pressure and cholesterol, proper breast and formula feeding, etc.) that lead to downstream chronic health conditions, reduced mental health, poor birth outcomes, disability, and death. Addressing health behaviors and risks through partnership development and community engagement will lead to interventions that result in reduced risks, improved outcomes, and increased healthequity. Periodic monitoring of the implementation strategies will be used to demonstrate provided community benefit while measuring the effectiveness of the plan's SMART (Specific, Measurable, Achievable, Relevant Time-bound) goals.


Evaluate how effectively we identify and reduce/eliminate health risks

## **POTENTIAL AVAILABLE RESOURCES**

Hospitals			
AdventHealth Celebration	400 Celebration Place Celebration, Florida 34747	407-303-4000	
AdventHealth East Orlando	7727 Lake Underhill Road Orlando, Florida 32822	407-303-8110	
AdventHealth Heart of Florida Regional Medical Center	40100 US Highway 27 Davenport, Florida 33837	863-422-4971	
AdventHealth Kissimmee	2450 North Orange Blossom Trail Kissimmee, Florida 34744	407-846-4343	
AdventHealth Orlando	601 East Rollins Street Orlando, Florida 32803	407-303-5600	
AdventHealth Winter Park	200 North Lakemont Avenue Winter Park, Florida 32792	407-646-7000	
HCA Florida Osceola Hospital	700 W Oak Street Kissimmee, Florida 34741	407-846-2266	
Orlando Health Arnold Palmer Hospital for Children	92 W Miller Street Orlando, Florida 32806	407-649-9111	
Orlando Health Champions Gate Hospital	Future		
Orlando Health Dr. Phillips Hospital	9400 Turkey Lake Road Orlando, Florida 32810	407-351-8500	
Orlando Health Medical Center	52 W Underwood Street Orlando, Florida 32806	321-841-5111	
Orlando Health St. Cloud Hospital	2906 17 <sup>th</sup> Street St. Cloud, Florida 34769	407-892-2135	
Nemours Children's Hospital	6535 Nemours Parkway Orlando, Florida 32827	407-567-4000	
UCF Lake Nona Hospital	6700 Lake Nona Blvd. Orlando, Florida 32827	689-216-8000	
Free Standing Emergency Room			
AdventHealth Four Corners	17430 Bali Blvd. Winter Garden, Florida 34787	863-422-5582	
AdventHealth Lake Nona	10080 Lake Nona Blvd. Orlando, Florida 32827	321-340-4100	
AdventHealth Partin Settlement	2500 E Irlo Bronson Memorial Hwy. Kissimmee, Florida 34744	407-861-3500	
AdventHealth Waterford Lakes	13691 E Colonial Drive Orlando, Florida 32826	407-281-3600	
AdventHealth Winter Garden	2000 Fowler Grove Blvd. Winter Garden, Florida 34787	407-614-0500	

	2361 N Semoran Blvd.	407 677 2400		
HCA Baldwin Park	Orlando, Florida 32807	407-677-2400		
HCA Champions Gate	8460 Champions Gate Blvd.	407-606-0500		
	Championsgate, Florida 33896	407-000-0300		
HCA Florida Hunters Creek	12100 S John Young Parkway	407-903-7033		
	Urlando, Florida 32/3/			
HCA Florida Millenia	Orlando, Florida 32839	407-393-9800		
Orlando Health Horizon	17000 Porter Road			
West	Winter Garden, Florida 34787	407-407-0000		
Orlando Health Pandal Park	10122 Dowden Road	321-842-2280		
	Orlando, Florida 32832	521-042-2200		
Orlando Health Osceola	1001 E Osceola Parkway	321-842-5052		
	KISSIMMee, Florida 34744			
Health Departments				
Florida DOH Orange County-	832 W Central Blvd.	407 959 1420		
Main Office	Orlando, Florida 32805	407-050-1450		
Florida DOH Orange County-	6101 Lake Ellenor Drive	407-858-1400		
South Side Health Center	Orlando, Florida 32809			
Central Health Center	Orlando Florida 32805	407-723-5004		
Florida DOH Orange County-	807 W Church Street			
Vital Statistics	Orlando, Florida 32805	407-858-1460		
Florida DOH Orange County-	12050 E Colonial Drive	407-858-1404		
Eastside Health Center	Orlando, Florida 32826	407-030-1494		
Florida DOH Orange County-	5449 S Semoran Blvd.	407-858-1479		
Florida DOH Orango County	5151 Paloigh Street			
Lila Mitchell Health Center	Orlando, Florida 32811	407-858-1487		
Florida DOH Orange County-	13275 W Colonial Drive	407 050 1404		
Winter Garden Health Center	Winter Garden, Florida 34787	407-858-1494		
Florida DOD- Osceola	1875 Fortune Road	407-343-2000		
County	Kissimmee, Florida 34744			
Florida DOD- Osceola	1050 Grape Avenue	407-343-3085		
WIC at St. Cloud	St. Cloud, Florida	407-343-2005		
Federally Qualified Health Centers				
Central Florida Family Health	5730 Lake Underhill Road	407-956-4320		
Center	Orlando, Florida 32807			
	5449 5 Semoran Biva. Orlando, Elorida 22822	407-207-7756		
Center	7912 Forest City Road			
Community Health Centers	Orlando, Florida 32810	407-905-8827		
	13275 W colonial Drive	407 660 1007		
Community Health Centers	Orlando, Florida 34787	407-000-1007		

Central Florida Family Health	11881-a E Colonial Drive	407 267 0064
Center	Alafaya, Florida 32826	407-367-0064
Healthcare Center for the	4426 Old Winter Garden Road	205 202 0004
Homeless	Orlando, Florida 32811	303-392-8084
Osceola Community Health	1050 Grape Avenue	407 042 9600
Services	St. Cloud, Florida 34769	407-945-0000
Osceola Community Health	1501-1507 Bill Beck Blvd.	407-043-8600
Services	Kissimmee, Florida 34744	407-945-0000
Osceola Community Health	109 N Doverplum Avenue	407 042 9600
Services	Poinciana, Florida 34758	407-945-0000
Osceola Community Health	1703 Business Center Lane	407-943-8600
Services	Kissimmee, Florida 34758	
Osceola Community Health	2600 Simpson Road	407-943-8600
Services	Kissimmee, Florida 34743	
Osceola Community Health	201 Hilda Street, Suite 25	407-943-8600
Services	Kissimmee, Florida 34741	
Osceola Community Health	4303 Cameron Preserves Circle	407-943-8600
Services	Kissimmee, Florida 34746	
Osceola Community Health	8600 W Irlo Bronson Memorial	407-943-8600
Services	Hwy.	
	Kissimmee, Florida 34747	
Osceola Community Health	200 Park Place Blvd.	407-943-8600
Services	Kissimmee, Florida 34741	
True Health	6101 Lake Ellenor Drive	407-056-4660
il de llealth	Orlando, Florida 32809	407-930-4000
True Health	4930 E Lake Mary Blvd.	107-302-8615
il de llealth	Sanford, Florida 32771	407-322-0043
Winter Garden Family Health	1210 E Plant Street	407 977 4240
Center	Winter Garden, Florida 34787	407-077-4340
Winter Garden Children's	205 Dillard Street	407 656 0600
Center	Winter Garden, Florida 34787	407-030-0009
	Free Clinics	
	1417 E Colonial Street	
Grace Medical Home	Orlando, Florida 32803	407-936-2785
	700 Generation Point	
Osceola Council on Aging	Kissimmee, Florida 34744	407-846-8532
Shepherd's Hope – Orange	101 S Westmoreland Drive	407-876-6699
County Medical Clinic	Orlando, Florida 32805	ext. 248
Shepherd's Hope – Dr.		404 076 6600
Diebel, Jr. Memorial Health		404-8/0-6699
Center	Uriando, Fiorida 32817	ext. 247
Shepherd's Hope – West	455 9 <sup>th</sup> Street	407-879-6699
Orange Health Center	Winter Garden, Florida 34787	ext. 250
St. Thomas Aquinas Free	510 Brown Chapel Road	407 502 1256
Medical Clinic	St. Cloud, Florida 34769	407-593-1250

## UCF Lake Nona Hospital CHNA IRS Form 990, Schedule H Compliance Listing

A CHNA serves to meet certain requirements of the Internal Revenue Service (IRS), pursuant to provisions of the Patient Protection & Affordable Care Act of 2010. Please find the table that lists the sections, along with corresponding page chapters, that the IRS requires a CHNA to have to be compliant.

IRS Requirement	See Report Chapters
A definition of the community served by the hospital facility and a description of how the community was determined	Chapter 3: UCF Lake Nona Hospital and the Surrounding Community
A description of the process and methods used to conduct the CHNA	Chapter 4: Methodology
A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves	Chapter 5: Community Input
A prioritized description of the significant health needs of the community identified through the CHNA, along with a description of the process and criteria used in identifying certain health needs as significant and prioritizing those significant health needs	Chapter 6: Health Needs of the Community
A description of the resources potentially available to address the significant health needs identified through the CHNA	Chapter 7: Potential Available Resources
An evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA(s).	Chapter 2: Introduction and Executive Summary
UCFAH Board Approval	Chapter 2: Introduction and Executive Summary; 05/24/2023
Central FL Health Services, LLC Board Approval	Chapter 2: Introduction and Executive Summary; 05/31/2023