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2022 Community Health Needs Assessment

CENTRAL FLORIDA COLLABORATIVE

AdventHealth
ASPIRE HEALTH PARTNERS
ORLANDO HEALTH®
Florida HEALTH Lake County
Florida HEALTH Orange County
Florida HEALTH Osceola County
Florida HEALTH Seminole County
community health centers
ORANGE BLOSSOM FAMILY HEALTH
Osceola Community Health Services
true health
REAL CHOICES. REAL CARE.

Adventist Health System/Sunbelt, Inc.
dba AdventHealth Orlando

This CNHA applies to the following campuses
AdventHealth Altamonte Springs
AdventHealth Apopka
AdventHealth Celebration
AdventHealth East Orlando
AdventHealth Kissimmee
AdventHealth Orlando
AdventHealth Winter Garden
AdventHealth Winter Park

This CHNA was approved by the Hospital Board on: October 6, 2022.

For questions or comments please contact:
CFD.CommunityHealth@AdventHealth.com

AdventHealth Central Florida Division is represented in the Collaborative by the following:

- AdventHealth Altamonte Springs
- AdventHealth Apopka
- AdventHealth Celebration
- AdventHealth East Orlando
- AdventHealth Kissimmee
- AdventHealth Orlando
- AdventHealth Waterman
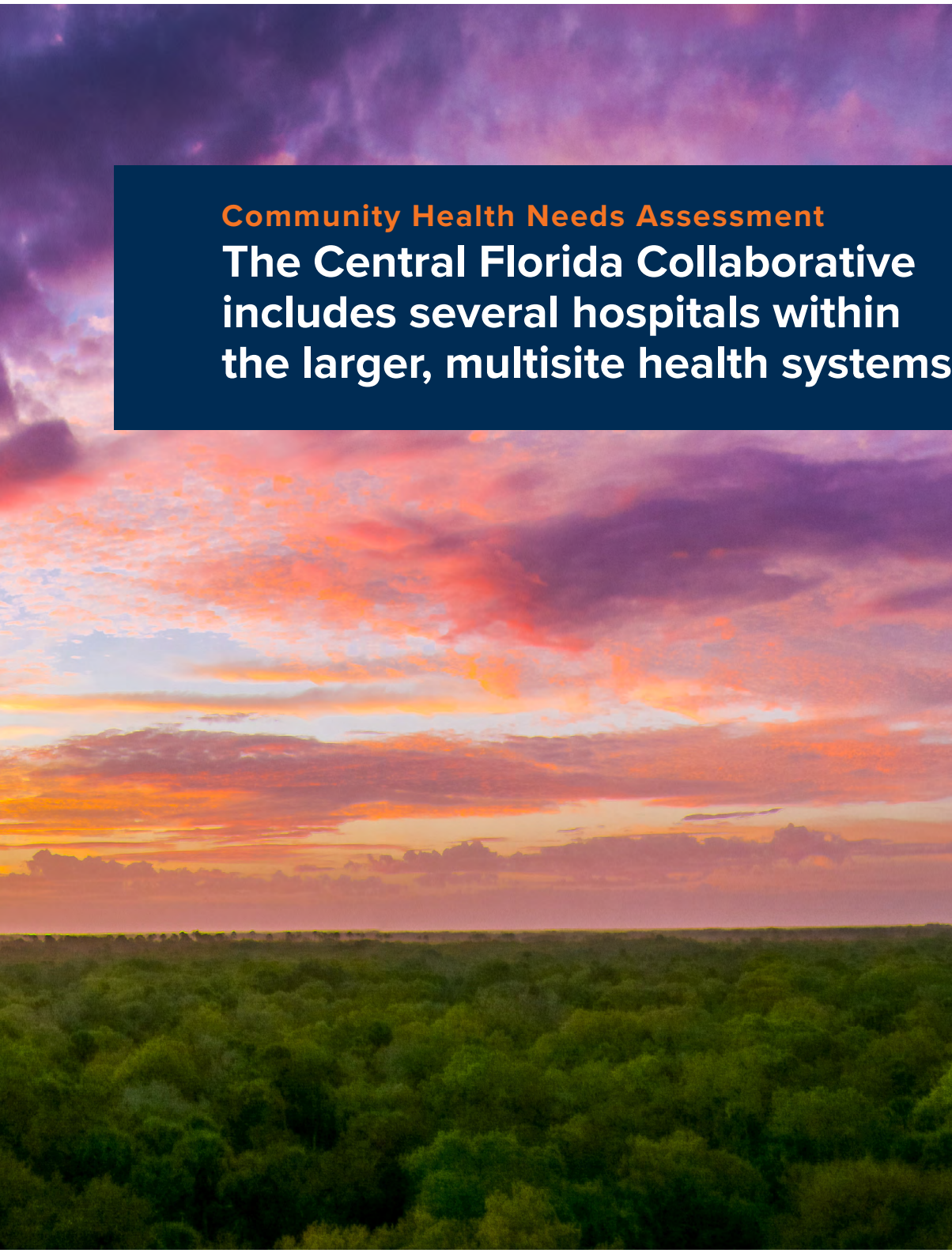- AdventHealth Winter Garden
- AdventHealth Winter Park

Aspire Health Partners with their principal locations at:

- Kassab Plaza (Inpatient)
- Princeton Plaza (Inpatient)
- Sanford (Outpatient)

Orlando Health hospitals participating in the CHNA include the following:

- Orlando Health Arnold Palmer Hospital for Children
- Orlando Health Dr. P. Phillips Hospital
- Orlando Health – Health Central Hospital
- Orlando Health Horizon West Hospital
- Orlando Health Orlando Regional Medical Center
- Orlando Health South Lake Hospital
- Orlando Health South Seminole Hospital
- Orlando Health St. Cloud Hospital
- Orlando Health Winnie Palmer Hospital for Women and Babies

A detailed list of the services area counties for each organization and a brief description of each is contained in Appendix 4.

The Central Florida Collaborative includes several hospitals within the larger, multisite health systems.

Table of Contents

Chapter 1

Introduction

Introductory Sentiments from Central Florida Collaborative Members

The Central Florida Collaborative (CFC) Community Health Needs Assessment reflects the dedication, compassion and insight of a highly diverse set of organizations. Collectively (and individually) CFC organizations focus on embracing the community, learning their stories and working diligently to meet a broad set of health and community needs.

The number and the quality of partners involved is a key measure of an effective collaborative. The CFC includes a robust number of partners outside of the traditional health care providers, e.g., hospitals and clinics. The individuals represent community populations that can speak about health challenges from personal and professional perspectives.

Throughout the process there were regular meetings and communications with partners; and the final priorities of the assessment utilized the community's input. CFC members include the following:

- AdventHealth
- Aspire Health Partners
- Community Health Centers, Inc.
- Florida Department of Health in Lake County
- Florida Department of Health in Orange County
- Florida Department of Health in Osceola County
- Florida Department of Health in Seminole County
- Orange Blossom Family Health
- Orlando Health
- Osceola Community Health Services
- True Health

Leaders from each organization have included a brief statement on the following pages.

At AdventHealth, we have a sacred mission of extending the healing ministry of Christ. Our front-line team members carry out that mission every day, providing care with uncommon compassion to patients across Central Florida.

That mission extends outside our walls, and into our community. We want to help our neighbors achieve wholeness, which requires not just physical health, but mental and spiritual health too.

We are blessed to live in Central Florida, with its leading health systems, great schools and abundant natural beauty. But like any community, we have our health challenges, and these require a collaborative effort to address.

And that is why we are proud to support and partner with other organizations that share our vision of a healthier, more whole Central Florida. We have worked with Orlando Health, Aspire Health Partners, the Florida Department of Health in Orange, Osceola, Seminole and Lake counties, and our local Federally Qualified Health Centers (FQHCs) to produce this Community Health Needs Assessment. Our partnership as the Central Florida Collaborative will help us determine how we will be most impactful in this effort.

Together, we will continue addressing Central Florida's greatest health challenges, and bring health and wholeness to our entire community.

Blessings,

Randy Haffner, Ph.D.
President & CEO
AdventHealth Central Florida Division

At Aspire Health Partners, we are committed to providing Central Florida with compassionate, comprehensive, and cost-effective integrated behavioral health care every day. During the COVID-19 pandemic this mission has been more pivotal than ever. The last two years have been unprecedented in modern health care, and we have had to shift to innovative service delivery models to provide desperately needed services. At the same time, the pandemic put a spotlight on deepening health care disparities within our community.

Aspire is passionate about its vision: Saving Lives, Transforming Communities, and Changing the World. As one of the largest not-for-profit providers of behavioral health in the Southeast, we have dedicated ourselves to providing integrated health care across Central Florida. By participating in this Community Health Needs Assessment (CHNA) we are committed to creating a meaningful impact on the health needs of our community and decreasing health disparities.

Collaboration is a core part of Aspire and we are proud to work with our partners to examine and prioritize the health needs of the people we serve. We are dedicated to filling critical gaps with programs that are of greatest need. As the demand for integrated behavioral health care services increases, Aspire is uniquely positioned to address the complex health needs of our community.

In partnership with the Central Florida Collaborative Members, we will strive to achieve better health-related outcomes for thousands of Central Florida residents. Together, we will achieve a healthier tomorrow, today.

Babette Hankey, MS
President and Chief Executive Officer
Aspire Health Partners

As we celebrate over 50 years of service to our community, Community Health Centers' (CHC) mission continues to provide quality and compassionate primary health care services to Central Florida's diverse communities and vision that all residents of Central Florida have access to timely, affordable compassionate and quality health services.

CHC is a community-minded, non-profit health care organization dedicated to serving our patients and their families locally, in the neighborhoods that they live and trust. As a health care organization, we carry out our mission and vision by collaborating intentionally with community partners to improve the lives and health of our patients.

The Central Florida Community Health Needs Assessment (CHNA) allows us to focus our strategic planning to have the most impact on health outcomes and thus healthy communities.

As we focus on the CHNA priorities, we look forward to delivering care while reflecting our values of patient centeredness, quality care, compassion, respect and integrity, and diversity, equity and inclusion.

CHC looks forward to continued collaboration in addressing Central Florida's health care needs.

Debra Andree, MD, BSN
President & Chief Executive Officer
Community Health Centers, Inc.
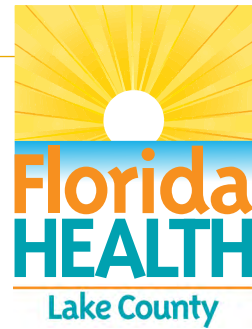
I have had the pleasure of leading the Department of Health, in Lake County for the past eight years. This is the second Community Health Needs Assessment (CHNA) that we have had the opportunity to collaborate with our neighboring counties and area hospitals.

The Community Health Needs Assessment is an important tool to align Federal, State, and Local goals and objectives to reduce duplication and increase positive outcomes towards a healthy community.

Responding to the pandemic for the past few years has only emphasized the importance and strength of collaboration between community partners. Knowledge gained from the community health assessment helped shape our response plans to allocate resources to best meet our community needs.

Thank you to all our partners who participated in the current CHNA, and we look forward to improving the health needs of our community together!
Sincerely,

Aaron Kissler, MPH
Florida Department of Health in Lake County
Administrator/Health Officer

FLORIDA
DEPARTMENT OF HEALTH
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CLERMONT HEALTH CENTER
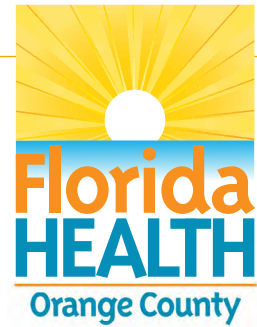
I was recently appointed as the new interim administrator of the Florida Department of Health in Orange County, a very exciting, new opportunity. I am looking forward to working together with our community in our common goal: making Orange County a better place to live, work and play.

The Florida Department of Health in Orange County is focused on improving the overall conditions for all of our residents - with special emphasis on our most vulnerable populations - by eliminating health disparities through education, prevention and access to care. By focusing on such approaches, we will not only mitigate the issues identified in the assessment but also reduce health care costs and allow individuals to live a healthier life.

I would like to thank AdventHealth, Aspire Health Partners, Orlando Health, Community Health Centers, Inc., Orange Blossom Family Health, Osceola Community Health Services, True Health, and the Health Departments of Osceola, Lake and Seminole counties for their participation in this major undertaking.

Beth Paterniti, MPA
Interim Administrator
Florida Department of Health in Orange County

The last few years have been the most challenging of my public health career as our community, state and the world responded to the threat of a global pandemic. There were unprecedented levels of partnership between public health entities, health care partners and local governments to respond to the needs of our community.

The pandemic highlighted existing disparities in our communities making the work of the Central Florida Collaborative and this Community Health Needs Assessment (CHNA) critically important to inform our efforts moving forward. The Florida Department of Health in Osceola County is grateful to our partners and residents for their active engagement in the 2022 CHNA process and we look forward to working with them to address needs that were identified.

Vianca McCluskey, MS
Health Officer/Administrator
Florida Department of Health in Osceola County
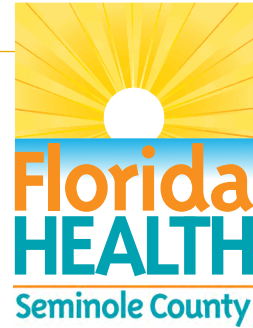
The resilience of our community was tested in many ways during the COVID-19 pandemic. This public health crisis also offered opportunities for the public, non-profit and private sectors to create and strengthen partnerships, finding innovative solutions through limited resources to keep communities safe and healthy. In addition, COVID-19 brought awareness to health disparities and widened gaps in inequity, access to care and other social determinants of health in underserved communities.

The Florida Department of Health in Seminole County is pleased to once again be part of a collaborative effort with hospitals, surrounding county health departments and other stakeholders and community partners to develop a comprehensive Community Health Needs Assessment (CHNA). The health of a community is determined by various social, economic and environmental factors. As such, routine assessment of key community health indicators is core to public health and remains a valuable method to identify significant health issues affecting a community. This CHNA is an essential tool that will empower our central Florida communities to generate a view of our previous and present health status, and engage all stakeholders in the process of charting a path to the future of public health to ensure the health and wellness of the communities we serve.

Donna J. Walsh, MPA, BSN, RN
Health Officer/Administrator
Seminole County Health Department

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Florida
HEALTH
Seminole County

ORANGE BLOSSOM FAMILY HEALTH

It is our mission to provide you and your family with the highest quality health care services in an atmosphere of dignity and respect. Our commitment is to offer an exceptional health care experience that exceeds your expectations and helps you to reach optimal wellness. We are conscious of the unique needs of each of our patients and deliver care through skilled professionals in a welcoming environment.

Ensuring access to quality, affordable health care services is at the core of the mission of Health Care Center for the Homeless, Inc., dba Orange Blossom Family Health and Orange Blossom Pediatrics. For over 29 years, we have provided compassionate care for some of our most vulnerable community members and have created a system of care designed to meet their unique health care needs.

We admire our hospital partners for the inclusiveness they practice within the CHNA process and look forward to collaborating with them to close identified gaps in care and improve the health outcomes within our Central Florida Region.

Bakari F. Burns, MPH, MBA
President & Chief Executive Officer
Orange Blossom Family Health

ORLANDO HEALTH®

For more than 100 years, Orlando Health has provided for the health needs of our local and regional communities, growing from a single hospital into an award-winning organization that attracts healthcare consumers from across the southeastern United States. As one of the region's most comprehensive private, not-for-profit healthcare organizations, we embrace our role as a leader in Florida and enjoy finding better ways to serve.

Understanding the importance of a healthy community, Orlando Health is honored to be part of the Central Florida Collaborative, working alongside AdventHealth, Aspire Health Partners, the Florida Department of Health county offices and the Federally Qualified Health Centers for Lake, Orange, Osceola and Seminole counties to identify and address our community's key health needs. It is an essential undertaking to the future of Central Florida and to the mission of Orlando Health to improve the health and quality of life of the individuals and communities we serve.

Andy Gardiner
Senior Vice President, External Affairs & Community Relations
Orlando Health

Osceola Community Health Services is committed to providing quality, accessible, and affordable health care services, while creating a culture that promotes patient-centered care and staff engagement. We believe this can be achieved through strategic partnerships and collaboration with our community, businesses, non-profits, government and staff.

The impact of the unprecedented COVID pandemic has not only increased health disparities, access to health and coordinated care, it has also induced social isolation and anxiety; mobilizing us to address the economic, emotional and long-term effects of our internal and external populations.

We value and applaud each health care professional for working tirelessly to meet the health care needs of our community and our partners for helping us to provide a healthier future for each patient we serve.

The Community Health Needs Assessment (CHNA) addresses the barriers and potential gaps, bringing stakeholders together to create awareness, discuss solutions and work collaboratively to mitigate the lingering effects of the pandemic, while creating opportunities for innovation and growth.

Belinda Johnson-Cornett, MS, RN-BC, MBA
President & Chief Executive Officer
Osceola Community Health Services

True Health was first established in 1977 to provide health care to migrant farm workers. Over the past 45 years, we have grown to eight locations within Orange and Seminole counties and are deemed a federally qualified health center (FQHC) by the Health Resources Services Administration (HRSA). True Health is also a certified patient centered medical home accredited by the Accreditation Association for Ambulatory Health Care (AAAHC). Our mission is to provide high quality, comprehensive health care at a reasonable cost to everyone.

Since the 2019 Community Health Needs Assessment (CHNA), True Health has worked diligently to address identified areas of need. Simultaneously, the global COVID-19 pandemic forced True Health to pivot into emergency response on the front lines to offer COVID testing, vaccinations, and open the only FQHC-operated monoclonal therapy treatment center in the Central Florida area. Below are some highlights of True Health's progress since the last CHNA but this list is not all inclusive.

The 2019 CHNA community survey reflected one of the highest areas of need was childhood immunizations. Due to the pandemic, childhood vaccination rates plummeted. In response, True Health conducted drive through vaccine events to encourage immunizations in the comfort of one's vehicle. Another critical area identified was difficulty accessing prenatal care. True Health added additional resources to its obstetrics department in response to this growing concern.

Moreover, True Health has expanded the dental department, expanded the mental health department to add a psychiatrist, launched optometry and optical services, and is committed to ending the HIV epidemic by offering a combination of therapy and medications to applicable patients.

True Health's vision is 'healthy communities through lifechanging care'. Our partnership with the Central Florida Collaborative serves as an opportunity to ensure we achieve our vision. True Health remains committed to residents of Central Florida and looks forward to strengthening this alliance with the Central Florida Collaborative to continually improve health outcomes.

Janelle Dunn, MHA, CMPE
Chief Executive Officer
True Health

About the Central Florida Collaborative Approach

As its name implies, collaboration is a central operating principal of the Central Florida Collaborative (CFC). In public health, the collaborative approach has been decades in the making and organizations have identified a number of activities common to successful collaboratives. Key collaborative process components include:

- Creating a vision that is broadly understood.
- Working across organizational boundaries.
- Including those most affected by health challenges in solution-creation.
- Utilizing ongoing planning and joint accountability to measure change.

The CFC has used these principles and others to implement the 2022 Community Health Needs Assessment (CHNA).

Purpose

The CHNA serves as a critical phase in the overall effort to improve community health and health equity. It is a process that provides a means of identifying and collecting community data while engaging community members in both the data collection and the implementation of prioritized efforts for improving the well-being of Central Florida.

This resulting document creates a frame of reference for community members to discuss the health status of the community. The process itself has been a collaborative effort to identify health issues, barriers, assets and to prioritize the implementation activities needed to address the identified issues.

Equity Champions

A first step in nearly every new health improvement plan is to recognize the need to reduce and eliminate health disparities and to increase diversity at the leadership and governance levels of health care and other local organizations. The second step to improving health equity is to collect and use data about race, ethnicity and language preference to develop a shared understanding of the challenges in the community. Education about cultural competency is also required. The CFC took a unique approach to working on all these steps simultaneously by creating a team of Equity Champions – ten individuals or organizations who represented multiracial or other minority communities. They assisted the CFC with the following objectives:

- Reviewing research instruments for cultural appropriateness
- Participating in stakeholder interviews
- Participating in the prioritization process and strategy development discussions
- Providing guidance regarding the most effective ways to engage unique community members (e.g., via interviews, surveys or other methods)

Recruitment included outreach to individuals in the following categories:

Racial/Ethnic
- Black/African American
- Hispanic/Latino/Spanish language speakers

Gender and Sexual Self-Identification
- LGBTQ+

Other Community Strength and Diversity
- Members of the community of people living with disabilities (including HIV/AIDS)
- Members of the community of people experiencing homelessness or housing instability
- New Americans/immigrants/migrant workers
- Members of faith-based communities
- Inmates; others in the criminal justice system
- Members of the veteran community

Goals of the Assessment and Subsequent Steps

To meet the objective of improving community health and health equity, the CHNA process has included the following goals:

- Identifying resources, strengths and barriers to improving health outcomes
- Developing a deeper understanding of community access to care challenges, including those faced by minority communities
- Enabling partners to collaborate around the opportunities for population health improvement

Ultimately, the group is working toward an ongoing process that monitors, refreshes, adds data and analyzes community health to improve the quality of life for people throughout the service area.

Dissemination of the information in this document in different forms is a critical step in communications that informs partners, stakeholders, community agencies, associations and the public about the availability of the community health assessment and what community members can do to make a difference. The CHNA results will be used on local and regional levels to inform and guide implementation plans, community health improvement plans and other strategic initiatives.

Summary of Methods Used in the CHNA

The CFC CHNA had a comprehensive methodology that included a mixed method approach consisting of the following components:

- Data analysis: In-depth review of dozens of validated data sources. Information was tabulated and parsed to identify disparities and other insights.
- Digital research: This included a review of health-related online search terms with the intent to identify new or emerging health trends.
- Primary qualitative research: This component included 30 focus group discussions and 105 key stakeholder interviews.
- Survey research: The community survey engaged over 4,000 respondents and provided insights by county on a breadth of key CHNA issues.
- Access Audit: Over 45 "mystery shopper" calls were conducted during the Access Audit to illuminate real-life customer service and access to care issues.

- Prioritization process: The CFC leadership and approximately 12 to 15 stakeholders in each county participated in a modified Delphi Process to incorporate quantitative and qualitative insight to the final needs prioritization at a county level. The process also included a series of county-level, focused meetings, as well as an "all service area" meeting.

More detailed descriptions of each of the activities above is contained in the body of this report.

Chapter 2

Research & Analysis

AdventHealth CHNA Process Snapshot

The following section is a supplemental section for the AdventHealth Central Florida Division-South Hospitals and includes the process for how the Hospitals finalized priorities.

Adventist Health System/Sunbelt, Inc. dba AdventHealth Altamonte Springs, AdventHealth Apopka, AdventHealth Celebration, AdventHealth East Orlando, AdventHealth Kissimmee, AdventHealth Orlando, AdventHealth Winter Garden and AdventHealth Winter Park.

IRS Form 990, Schedule H Compliance Listing

A definition of the community served by the hospital facility and description of how the community was determined	Page 57
A description of the process and methods used to conduct the CHNA, including identification of information gaps that limit the hospital facility's ability to assess the community's health needs	Pages 70-77
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	Pages 48-54 Pages 185-189
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	Pages 48-55 & 67-69
A description of the resources potentially available to address the significant health needs identified through the CHNA	Appendix 7 Page 541
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)	Appendix 6 Pages 55; 536
AdventHealth Board Approval	Pages 48-55: 10/6/2022
AdventHealth Prioritization Process and Selection	Pages 52-54

AdventHealth Central Florida Division South Overview

Adventist Health System/Sunbelt, Inc. dba AdventHealth Altamonte Springs, AdventHealth Apopka, AdventHealth Celebration, AdventHealth East Orlando, AdventHealth Kissimmee, AdventHealth Orlando, AdventHealth Winter Garden and AdventHealth Winter Park.
will be referred to in this document as "The Hospitals".
The Hospitals conducted a community health needs assessment from August 2021 to June 2022. The goals of the assessment were to:

- Engage public health and community stakeholders, including low income, minority and other underserved populations.
- Assess and understand the community's health issues and needs.
- Understand the health behaviors, risk factors and social determinants that impact health.
- Identify community resources and collaborate with community partners.
- Publish the Community Health Needs Assessment.
- Use assessment findings to develop and implement a 2023-2025 Community Health Plan based on the needs prioritized in the assessment process.

The Community Health Needs Assessment was completed as a collaborative process with the Central Florida Collaborative, which included Lake, Orange, Osceola and Seminole county health care providers, Federally Qualified Health Centers and the Florida Department of Health for Lake, Orange, Osceola and Seminole Counties. The full report from the Central Florida Collaborative can be found here: https://www.adventhealth.com/community-health-needs-assessments

Community Health Needs Assessment Committee

In order to ensure broad community input, the Hospitals took part in the Central Florida Collaborative, referred to as the Collaborative, to help guide the Hospital through the assessment process. The Collaborative served as the Community Health Needs Assessment Committee (CHNAC). The Collaborative included representation from the Hospital, public health experts and the broad community. This included intentional representation from low-income, minority and other underserved populations. The Collaborative worked with Crescendo Consulting Group to complete the CHNA process. The Collaborative met several times throughout 2021 - 2022. They reviewed the primary and secondary data and helped to identify the top priority needs in the community. See the Prioritization Process section for a list of Collaborative members.

Data

The Hospitals in collaboration with the Collaborative, collected both primary and secondary data. The primary data included community surveys, stakeholder interviews and community focus groups. In addition, public data was utilized from state and national data sources. Primary and secondary data were compiled and analyzed to identify the top 15 aggregate issues.

See the Process and Methods section for Primary and Secondary Data Sources.

Community Asset Inventory

The next step was to create a Community Asset Inventory. This inventory was designed to help the Collaborative understand existing community efforts to address the identified issues from aggregate primary and secondary data and to prevent duplication of efforts.

Prioritization Process

The Collaborative participated in a prioritization process that consisted of two rounds of online surveying and one facilitated discussion session per county (Lake, Orange, Osceola & Seminole) followed by one full Collaborative facilitated discussion. The Hospital leadership then finalized the top two priorities that the Hospitals would address.

The Collaborative and the Hospital also considered four factors during prioritization:

A. Alignment: Does this issue align with our mission, strategy, public-health or community goals?
B. Impact on Community: What is the scope, size and seriousness of this issue? What are the consequences to the health of the community of not addressing this issue now?
C. Resources: Are there existing, effective interventions and opportunities to partner with the community to address this issue?
D. Outcome Opportunities: Can an impact on this issue be made in a demonstrable way, and will interventions have an impact on other health and social issues in the community?

Priority Issues to be Addressed

The priority issues to be addressed are:
1. Mental Health
2. Social Determinants of Health: Workforce Development

Approval

On October 6, 2022, the AdventHealth Central Florida Division Board approved the Community Health Needs Assessment findings, priority issues and final report. A link to the 2022 Community Health Needs Assessment was posted on the Hospital's website prior to December 31, 2022.

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Next Steps

The Hospitals will work with the Collaborative and Hospital leadership to develop a measurable implementation strategy called the 2023-2025 Community Health Plan to address the priority issues. The plan will be completed and posted on the Hospital's website prior to May 15, 2023.

Prioritization Process

The Collaborative and The Hospitals through data review and discussion narrowed down the needs of the community. Community Partners in the Collaborative represented the broad range of interests and needs, from public health needs to the economic needs, for underserved, low-income and minority people in the community. The Collaborative met on a monthly basis to review and discuss the collected data and select the top community needs. The following members represent AdventHealth team members and Public Health Experts. A full list of Collaborative members can be found in the full CHNA report. AdventHealth Team Members:

- Stephanie Arguello, Director, Community Health, AdventHealth, CFD-S
- Elizabeth Aulner, Community Health Program Manager, AdventHealth, CFD-S
- Rebecca Desir, Community Health Program Manager, AdventHealth, CFD-S
- Renee Furnas, Community Relations Manager, AdventHealth
- Sarah Hawkins, Community Health Program Manager, AdventHealth, CFD-S
  Public Health Experts:
- Melaine Chin, Florida Department of Health in Lake County
- Aaron Kissler, Florida Department of Health in Lake County
- Jeremy Lanier, Florida Department of Health in Osceola County
- Vianca McCluskey, Florida Department of Health in Osceola County
- Ana McDougall, Florida Department of Health in Osceola County
- Patricia Mondragon, Florida Department of Health in Seminole County
- Ellis Perez, Florida Department of Health in Orange County
- Raul Pino, MD, MPH, Florida Department of Health in Orange County
- Chaithanya Renduchintala, Florida Department of Health in Orange County
- Ana Scuteri, Florida Department of Health in Seminole County
- Dhanya Varghese, Florida Department of Health in Orange County
- Donna Walsh, Florida Department of Health in Seminole County

Prioritization

The Collaborative participated in a prioritization process based on the Delphi method that consisted of two rounds of online surveying and three facilitated discussion sessions. The needs were then evaluated by hospital leadership using AdventHealth priority criteria, which considered four factors:

- A. Alignment: Does this issue align with public health or community goals?
- B. Impact on Community: What is the scope, size and seriousness of this issue? What are the consequences to the health of the community of not addressing this issue now?
- C. Resources: Are there existing effective interventions and opportunities to partner with the community to address this issue?
- D. Outcome Opportunities: Can an impact on this issue be made in a demonstrable way and will interventions have an impact on other health and social issues in the community?

Using these criteria, AdventHealth leadership reviewed the 15 priorities from the Collaborative and made the decision to group multiple needs together so similar or related needs could be addressed under one priority. Ultimately, two of these groups were chosen as final priorities.

The groups of needs are outlined below:

Health Care Access and Quality *(Streamline access to care & Increase system capacity)*
- Recruitment and retention of culturally diverse and informed providers who demographically reflect the community.
- Co-located case managers and behavioral health providers at community-primary care sites.
- Healthcare services in lower-income and priority communities.
- Childcare services, especially for children with special needs.
- Access to free or low-cost healthcare services for all residents.
- Information sharing among providers.
- Case managers, Community Health Workers and similarly licensed professionals to guide high-need patients.
- Access to care for seniors (e.g., transportation).

Enhance mental health outreach and treatment
- Mental health crisis services and community awareness of available resources.
- Mental health outpatient services capacity.
- Behavioral health outpatient services for children.
- Mental health inpatient bed capacity.
- Mental health and substance use disorder transition care for inmates being released from jail.
- Mental health stigma reduction.

Social Determinants of Health
- Affordable, quality housing.

The two groups chosen as AdventHealth priorities are:
1. Enhance Mental Health Outreach & Treatment
2. Social Determinants of Health: Workforce Development

Priorities to be Addressed:
The final two priorities were selected based on the community need, availability of existing resources and alignment with system approaches.

The final two priorities for the Hospitals include:

Priority 1: Enhance Mental Health Outreach and Treatment
Mental health outreach and treatment were identified as top needs from the CHNA. This includes mental health crisis services and community awareness of available resources, mental health outpatient services capacity, behavioral health outpatient services for children, mental health inpatient bed capacity, mental health and substance use disorder transition care for inmates being released from jail, mental health stigma reduction. There is a growing need in Orange, Osceola and Seminole County to increase the available resources addressing mental health needs. Based on the significance of need and available resources, the Hospitals will address this as a need.

Priority 2: Social Determinants of Health
According to the CDC, social determinants of health (SDOH) are the conditions in the places where people live, learn, work and play that affect a wide range of health risks and outcomes. Social determinants of health are increasingly seen as the largest contributing factor to health inequities in communities throughout the country. Based on the significance of need and available resources, the Hospitals will address Social Determinants of Health with a focus on workforce as the Hospital believes that initially focusing on community workforce development will reduce housing burden and address other priorities identified, such as increasing access to care and mental health.

Priorities Not Addressed:

Health Care Access and Quality

Health care access and quality were identified as top needs from the CHNA. This priority area included recruitment and retention of culturally diverse and informed providers who demographically reflect the community, co-located case managers and behavioral health providers at community-based, primary care sites, healthcare services in lower-income and priority communities, childcare services, especially for children with special needs, access to free or low-cost healthcare services for all residents, information sharing among providers, case managers, Community Health Workers and similarly licensed professionals to guide high-need patients and access to care for seniors (e.g., transportation). While there is a need for access to care, due to existing resources and scope, the hospital did not perceive the ability to have a measurable impact on these needs within the three years allotted for the for the Community Health Plan, therefore this need was not selected as a priority.

Next Steps

The Collaborative will work with the Hospital and other community partners to develop a measurable Community Health Plan for 2023-2025 to address the priority needs. For each priority, specific goals will be developed including measurable outcomes, intervention strategies and the resources necessary for successful implementation.

Evidence based strategies will be reviewed to determine the most impactful and effective interventions. For each goal, a review of policies that can support or deter progress will be completed with consideration of opportunities to make an impact. The plan will be reviewed quarterly with an annual assessment of progress. A presentation of progress on the plan will also be presented to the Hospital board annually.

A link to the Community Health Plan will be posted on AdventHealth.com prior to May 15, 2023.

2020 Community Health Plan Review

The Hospital evaluates the progress made on the implementation strategies from the Community Health Plan annually. The full evaluation is available upon request.

Since the last CHNA in 2019, AdventHealth has worked to address the identified priorities: mental and behavioral health, community development, care coordination and food security.

For mental and behavioral health, several initiatives were supported including a substance use disorder (SUD) Navigator in the emergency department to address the unique needs of individuals with a SUD. Funding also went towards building the Hope and Healing Center, designed to reduce overdoses and deaths in the community by implementing evidence-based prevention and treatment. AdventHealth also provided support to No Limit Unit, which trains barbers to be mental health advocates through the Barber Shop talks.
For community development and care coordination, AdventHealth worked to reduce barriers to seeking care and improve community resources. To address these priorities, AdventHealth worked with local partners to establish computer labs, support programming that addresses Adverse Childhood Events (ACEs), increase resources and programing for people experiencing homelessness. Programs were also supported that work with aging adults, including individuals with Alzheimer's and dementia, Parkinson's, Autism or other conditions related to aging or developmental delays.

AdventHealth established a primary care clinic, the Community Medicine Clinic (CMC), which sees uninsured patients identified in the emergency department. Patients with chronic diseases are stabilized at the CMC, while a social worker helps identify a permanent primary care physician.

AdventHealth worked to improve access to food and reduce food security by partnering with local partners working to address food deserts. Some of this included partnering and supporting food pantries, Meals on Wheels, mobile farmers markets and locally based farmers. In addition, AdventHealth and Orlando Health sponsored the School District of Osceola County's (SDOC) SMART Bus. The SMART Bus brings food, education, access to Wi-Fi and family support to meet the needs of the 2,500 homeless students enrolled in the SDOC.

2020 Community Health Plan Comments
We posted a link to the most recently conducted CHNA and most recently adopted implementation strategy on our Hospital website as well as AdventHealth.com prior to May 15, 2022, and have not received any written comments.

Executive Summary

The Central Florida Collaborative (CFC) worked with its assessment partner Crescendo Consulting Group (CCG) to formalize and deploy a highly inclusive Community Health Needs Assessment (CHNA). The framework was structured to be welcoming to priority communities and others.

The process methodology section of the report describes how the assessment was designed to engage the perspectives of multiple area stakeholders and result in establishing a baseline for continued community engagement, as well as a community-based list of needs.

At the conclusion of the process the CFC developed a prioritized list of community needs. An aspirational objective of the collaborative is to continue an ongoing process that monitors, refreshes, adds data and analyzes community health to improve the quality of life for people throughout the service area.

This Executive Summary serves as an introduction and an overview of the longer report. The full report and detailed data appendices are designed as a resource for CFC members to inform partners, stakeholders, community agencies, associations and the public about the availability of the CHNA. All readers are encouraged to explore the main body of the report and experience the voices and insights from community members across the service area.

Community and Service Area Definition

The service areas and data included in this CHNA encompass all of Lake, Orange, Osceola and Seminole counties. Each is identifiable individually. Every individual, participating hospital and CFC partner's service area was determined by patterns based on a review of their patient origins. Please see the map below which is identified as their collective primary service area.

Research Overview

Secondary Data References and Highlights

The extensive demographic and secondary data analysis in the full report provides the framework from which to better understand individual neighborhoods, population trends and the overall fabric of the community.

The data was collected from the United States Census Bureau 2015-2019 American Community Survey (ACS) which covers a broad range of topics about social, economic, demographic and housing characteristics of the United States population. Comparison data from 2010 was captured from the 2006-2010 United States Census 5-year ACS report. The primary advantage of using multi-year estimates is the increased statistical reliability of the data for less populated areas and small population subgroups.

The secondary data describes the four counties, and, in some cases, the tables make comparisons to the State of Florida as well as the U.S.

With over 85 pages of data tables, graphics and summaries, it is not possible to condense the findings within this executive summary. A few seminal points are highlighted below.

- The total population of the service area has grown dramatically over the last 10 years. Florida experienced a near 12% increase in population between 2010 and 2019, the second-largest increase in population after Texas.

- Overall diversity continues to increase. For example, the percent of Hispanic/Latino Osceola County residents has increased from 6.9% in 2010 to 24.1% in 2019.

- Educational attainment varies greatly by county. The percent of adults with a college degree in Seminole County is notably above the U.S. and statewide average, but substantially fewer residents of Lake County and Osceola County have similar educational attainment.

- In Seminole and Orange counties, Hispanic/Latino and Asian community members have a bachelor's degree or higher at rates at, or above, the U.S. average.

- In every service area county except Osceola, approximately 25% or more of the Black/African American community live in poverty. The issue is particularly acute in Lake County, as nearly one-third (32.3%) of Black/African American families live in poverty.

- Approximately three out of 10 homeowners across the four-county service area are housing cost burdened, meaning that ownership costs exceed 30% of the household income.

- Overall, 16.6% of Lake County's total population live with a disability, the highest figure in comparison to all service area counties and the statewide average (13.4%).

- Similar to the nation, heart disease and cancer (of all types) were the leading causes of death in the four service area counties between 2017 and 2019, followed by unintentional injuries.
- Florida has decreased both cancer and heart disease-related death rates over the last two decades.
- Rates for a majority of the leading causes of death have declined over the last 20 years. However, death rates due to Alzheimer's Disease have increased from 15.1 deaths in 1999-2001 to 19.9 deaths in 2017-2019 per 100,000 people.
- While the full data sets are not available as of this writing (Spring 2022), deaths due to the COVID-19 pandemic now rank as the third leading cause of death along with cancer and heart disease in Florida.
- The death rate caused by stroke in Seminole and Osceola counties is much higher than the state average (i.e., Seminole, 59 deaths per 100,000 adults; Osceola, 55 deaths per 100,000; Florida, 41 per 100,000).
- In 2019, over 30% of the adult population in every service area county had high blood pressure, most prevalent in Lake County (37.6%) and Osceola County (37.4%).
- Between 2002 to 2019, the percentage of adults told they ever had diabetes nearly doubled in both Seminole County (5.0% to 9.5%) and Osceola County (6.2% to 16.0%).
- In most counties, the percentage of those with diabetes among those who earn $25,000 or less is double compared to those earning $50,000 annually.
- The 2018-2020 death rate from unintentional falls in Lake County (10.3 deaths per 100,000 population) is nearly 50% higher than the state rate.
- The death rate related to motor vehicles was approximately twice as high in both Lake and Osceola counties compared to Orange and Seminole counties.
- Over the five-year reporting period (2015-2019), the percentage of the total population who do have health insurance has increased. Osceola County has historically had the lowest percentage of insured people out of the four Central Florida Collaborative counties. One in seven Osceola County adults (14.5%) and nearly one in 10 children (9.2%) are uninsured.
- Hospitalization rates attributable to diabetes increase with age, as the hospitalization rate for children in Florida, ages 12 to 18, with diabetes is more than seven times higher compared to children ages one to five.
- Compared to statewide and service area rates, Seminole County has the lowest asthma hospitalization rates for youth ages 5-11.

- Orange County has the lowest diabetes hospitalization rates among the service area and statewide rates for youth ages 1-11. Orange County also has the lowest asthma hospitalizations among the service area and statewide rates for youth ages 1-5.

- Preliminary research indicates that as a result of the COVID-19 pandemic, there is a high probability of an increased burden of mental health issues in the post-pandemic era.

- Approximately one in eight service area adults reported notable mental health challenges in 2019; this number likely increased dramatically in 2020 and 2021.

- Osceola County (111.8) and Lake County (170.6) have far fewer per capita total mental health providers than Orange County (242.8) and Seminole County (358.5). Note – data is on a rate per 100,000 population.

- Suicide rates for all ages between 2017 and 2019 ranged from 9.6 in Orange County to 19.7 deaths per 100,000 in Lake County. Firearms were the leading means of suicide in every service area county.

- Fentanyl deaths have skyrocketed in each county except Orange County – up over 300% from 2013 to 2019. Orange County had a 40% decrease.

- Similarly, overdoses from methamphetamines increased by 300% or more in Lake and Seminole counties from 2013 to 2019.

Qualitative Research Overview and Themes

The core of the assessment involved substantial onsite data gathering, local knowledge and expertise and outreach efforts for community engagement. The primary qualitative approach engaged policy leaders, key stakeholders throughout the area, non-profit organization representatives, health care consumers, the criminal justice system, diversity representatives, people experiencing homelessness and others. The qualitative techniques used included:

- Equity Champions - Diversity Group Outreach
- Stakeholder One-to-One Interviews
- Focus Group Discussions

The combination of individual interviews and focus group discussions provided an in-depth perspective of high-level topics impacting the general four-county service area. In addition, several more "Granular Qualitative Research Themes and Insights" were identified. Please refer to the full report to see some of the many comments shared.

Strengths

Many individuals who participated in the qualitative research highlighted positive aspects of living and working in the Central Florida region. The growing diversity of the population was mentioned by numerous stakeholders in all four counties. One stakeholder noted, "With diversity comes interesting things to do that we didn't use to have. It's also attracting younger, highly educated, diverse individuals; so, now there is a breadth of thought leaders."

The Central Florida region is home to numerous non-profit organizations throughout the four counties. A majority of the stakeholders agreed that many organizations are very collaborative and have developed supportive partnerships over the years with a goal to break down silos. A stakeholder in Osceola County said, "There is a willingness of various partners to come together to tackle big picture issues."

Many stakeholders commented on the positive economic impact of the local theme parks and tourism industry. There was also consensus that the weather is generally nice year-round with many opportunities for outdoor activities and recreation.

Top Challenges

Challenges and barriers were identified at three levels: (1) Policy, Advocacy and System, (2) Community and (3) Individual.

Policy, Advocacy and System Level

Many of the challenges identified through the qualitative research were issues at a state or national level and require policy and regulatory change within state and federal laws or system-wide regulations to reduce the impact felt by individual community members. Some of the most common comments relate to:

- Complex Health Care System including staffing shortages
- Financial Issues including the fact that many have no realistic access to health insurance without Medicaid expansion
- Non-profit Organization Funding and Sustainability Challenges
- Workforce development and staffing challenges

Community Level

Community-level challenges are a step below system-level challenges, but there is an overlap between system-, community- and individual-level challenges. Community-level challenges generally affect the wider population as a whole and not just select individuals within a community. Many of the community-level challenges are interrelated. The clusters of community-level challenges include:

Rapid Population Growth in Central Florida

The rapid population growth in Central Florida was identified as one of the top challenges in the qualitative research by many stakeholders. In addition, there is a lack of infrastructure to handle the growth and a lack of affordable housing.

Behavioral Health

Driven by the opioid epidemic and COVID-19 pandemic, the acuity of behavioral health in the community has increased significantly in the Central Florida region and across the country. One silver lining of the COVID-19 pandemic is that people tend to be somewhat more candid about mental health issues and are breaking through some of the stigmatization found in specific populations.

Chronic understaffing and an opioid epidemic that is not going away anytime soon exacerbate these behavioral health challenges.

Many other stakeholders also identified the importance of assisting with housing, transitions, nutrition and other basic needs to help people experiencing a mental health condition maintain some stability in the community.

Health Care Access is Not Equitable Across the Region

Stakeholders identified a variety of potential barriers and challenges people may experience when it comes to accessing health care services. Common barriers include lack of transportation or inadequate public transportation system, lack of health insurance or the ability to pay and mistrust of the health care industry. The COVID-19 pandemic has intensified the need to build trust in the health care industry in many priority populations[1] given the increasing prominent role of public health information and leaders.

[1] Priority populations include communities historically underrepresented, such as Black/African American communities, Hispanic/Latino communities, members of the LGBTQ+ community and others.

Awareness of Community Services

There is a consensus among various stakeholders across the four-county region that community-wide awareness of what services and resources are available is low. Word of mouth tends to be the best method to share information, especially in priority populations.

Individual Level

Many of the identified challenges and barriers at the system and community level trickle down, and they impact the community residents who make up the over 2.8 million people who live in the Central Florida region. Some of the key individual challenges include:

Affordable Housing Crisis

The affordable housing crisis is one of the top challenges impacting the Central Florida region and across the country. The lack of affordable housing is a root cause driver of many other needs and challenges in the community. As one stakeholder said, "Housing burden leads to a chain reaction to bad health care."

Chronic Disease

Many barriers exacerbate increasing chronic disease rates, especially in more outlying rural communities in Central Florida. One stakeholder said, "Osceola County is a large geography. If you're in a rural area, then access to healthy food and health care is limited." Transportation issues, including challenges getting to a grocery store or a health clinic, present another barrier.

Other stakeholders identified the lack of prevention and education programs, especially in the region's youth population as another contributing factor to high chronic disease rates in the community. Health literacy and culturally appropriate health information were also identified as challenges for the increasingly diverse communities of Central Florida.

The Wage Gap

The recent increases in wages are closer to the living wage needed for one adult with no children living in the Greater Orlando area. However, with inflation and the continuing rise of housing-related costs, the new wages may still not be enough for many hospitality and tourism workers to live in a safe, non-cost-burdened home.

Access to Care

Throughout the qualitative research process, many challenges and barriers to accessing health care and social services in the Central Florida region were identified. Many of the top barriers have been identified in the sections above. A list recapping the most common barriers for individuals includes:

• Transportation gaps and inefficiencies with the public transportation system
• Lack of health insurance or the financial ability to pay for services, including insurance copays
• Long wait times to see providers
• Lack of awareness of resources, services and providers in the community
• Health literacy and health information not available in multiple languages
• Mental health stigma

Qualitative Research Themes and Action Areas

There are seven high-level action areas (i.e., more granular details or insight for each theme) that are most representative of respondents' consensus across both the qualitative interviews and the focus group discussion. Simply, in the words of one 95-year-old interviewee, "… There was a time when if you needed medical care, your top concern was hoping that the doctor's medical advice and treatment was effective and that you recovered quickly and wholly."

Now, there are many additional challenges, especially around accessing care for mental health and substance-related conditions, as well as knowing even where to begin to access efficient and effective care for many conditions. The science of medicine and general community health resources — medical advice and treatments — have improved greatly over the years. However, to the interviewee's point, truly benefitting from the advice and treatments can be challenging. Across the Central Florida Collaborative region there is a growing consensus that:

• Mental health and substance use disorders (SUD) were in an urgent state before the pandemic, but they are now an even greater problem. Due to the ongoing, uncertain and wide-ranging impact of the COVID-19 pandemic, mental health and substance use disorders are expected to further proliferate.
• Access to care is a complicated issue with many facets that need to be addressed now. Capacity, awareness of services, location/availability and hours of operation, ability to pay, motivation to seek care, case management and health equity are high on the list. The changing health care landscape continues to impact all facets of access to care.

- There are some critically urgent health needs and population groups that require immediate intervention and support from a broad segment of the community.
- Working-aged people want good jobs that pay wages that allow them to afford housing, education and transportation. These social determinants of health (SDoH) help define some of the long-term structural challenges facing the service area.

Mental Health including Crisis Care Services (separate from substance use disorder services)

Substance Use Disorder Care Services

Access to Care — Capacity and Service Location

Access to Care — Health Equity

Urgent Needs Among Ultra High-Risk Communities

Social Determinants of Health Issues such as Access to Affordable, Nutritious Food and Other Basic Needs

Community Awareness of Services and Ways to Get Help (including select case management and care navigation)

Primary Quantitative Community Survey

As part of the CHNA, the CFC conducted a broad-based community survey among residents of each of the four area counties. The survey instrument was largely structured on a similar tool being fielded by the All4HealthFL Collaborative serving a four-county service area in west central Florida. The similar construction allows CFC county-level analysis while affording the ability to compare results across a broader area, if desired.

The survey results provided insight on a wide range of issues, including CHNA-related items and a host of others. The results displayed in the Community Survey section of the full CHNA report include the following sections:

- Survey Methodology
- Survey Respondent Profile
- Unmet Needs for Care
- Social Connectivity
- Bias
- Community Perceptions

- Health-related Needs for Youth
- Risky Behaviors
- Community-level Ranked Health-related Needs
- Adverse Childhood Experiences
- Others

The data tables in the body of the report are those focused primarily on the community needs-related questions. The information includes frequency tables and cross tabulations (i.e., survey responses sorted by race, ethnicity, age group or other respondent categories) for those survey questions. The results show that the survey demographics – race, ethnicity, income – closely parallel regional population demographics.

The complete data tables - consistent with the All4HealthFL Collaborative - are contained in the appendices except those tables found in the body of the CHNA.

Community Needs Prioritization Process

The needs prioritization process began by recruiting four sets of leaders (i.e., the prioritization group) – one in each county. Next, group members participated in a three-stage process to review, rank-order and share insight regarding the final set of prioritized needs.

The list of needs that group members evaluated was based on CHNA quantitative and qualitative research. Specifically, research activities in each county produced a list of approximately 50 granular, community-based, data-founded needs. Group members participated in a validated process to refine a final list of prioritized community needs.

Prioritization Process Approach The process consists of three rounds.

> **1. Round 1:** The first round asked group members to evaluate a list of needs (via an online survey) derived from primary and secondary research (included in the appendices) and asked for comments about each of the needs.
>
> **2. Round 2:** The second round also asked participants to evaluate the same or similar list of needs, and they were provided with comments gathered from colleagues during the first-round survey. The purpose was to provide additional insight to respondents when making the evaluation of each of the needs.
>
> **3. Round 3:** The third round was conducted via a series of 90-minute meetings in late March 2022 – one in each county. During those meetings, participants discussed the results of the first two rounds of the prioritization process, identified anything that may have been missed and confirmed a consolidated list of five core community needs. Note that each of the top 15 high-priority community needs was nested within the five core needs.

There was one additional, in-person, All-Collaborative meeting held with leaders from each county. The purpose was to have stakeholders from all areas affirm the prioritization process results (aggregately and for each county), add final insights and continue to strengthen bonds required to address high-priority needs.

Secondary and Primary Research The needs included in the prioritization process were derived from the extensive secondary and primary research described below

- **Secondary research**: Secondary research includes extensive amounts of data analysis of information collected from the U.S. Census Bureau; sites providing information on poverty and other Social Determinants of Health measures; FLHealthCHARTS (e.g., disease incidence, morbidity and mortality data); and many other validated data sources.
- **Primary research:** This includes a community survey with approximately 4,000 responses, results from qualitative research (i.e., approximately 100 in-depth stakeholder interviews and results from 30 focus groups).

Linkage Between Needs and Data Each of the needs in the prioritization process directly links to data observations and/or qualitative feedback. After each of the three major research tasks – data analysis, community survey and qualitative research – a list of granular needs or supporting data was created (and appended to this summary). Duplicates were removed and similar needs were combined. The resulting list of needs represents the items that were evaluated during the Prioritization Process.

Community Needs Prioritization Process –
Aggregated List of Prioritized Needs

The prioritization process was conducted on a county-level, however when aggregating the county-level results, the CFC four-county service area prioritized list of needs includes the following:

1. Affordable, quality housing.
2. Mental health crisis services and community awareness of available resources.
3. Access to free or low-cost healthcare services for all residents.
4. Mental health outpatient services capacity.
5. Information sharing among providers.
6. Case managers, Community Health Workers and similarly licensed professionals to guide high-need patients.
7. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community.
8. Mental health stigma reduction.
9. Behavioral health outpatient services for children.
10. Co-located case managers and behavioral health providers at community-based primary care sites.
11. Access to care for seniors (e.g., transportation).
12. Mental health inpatient bed capacity.
13. Healthcare services in lower-income and priority communities.
14. Mental health and substance use disorder transition care for inmates being released from jail.
15. Childcare services, especially for children with special needs.

The 15 granular issues can be categorized into four broader needs. Please see the following grouping:

Top 15 Granular Issues within the Four Top Needs

Increase system capacity

7. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community.
10. Co-located case managers and behavioral health providers at community-based primary care sites.
13. Healthcare services in lower-income and priority communities.
15. Childcare services, especially for children with special needs.

Enhance mental health (including Substance Use Disorder) outreach and treatment

2. Mental health crisis services and community awareness of available resources.
4. Mental health outpatient services capacity.
9. Behavioral health outpatient services for children.
12. Mental health inpatient bed capacity.
14. Mental health and substance use disorder transition care for inmates being released from jail.

Streamline access to care

3. Access to free or low-cost healthcare services for all residents.
5. Information sharing among providers.
6. Case managers, Community Health Workers and similarly licensed professionals to guide high-need patients.
8. Mental health stigma reduction.
11. Access to care for seniors (e.g., transportation).

Support additional affordable, quality housing

1. Affordable, quality housing.

Assessment Overview and Operational Framework

Overview

CFC worked with its assessment partner, Crescendo Consulting Group (CCG), to formalize and deploy a highly inclusive assessment framework. The approach was structured to be welcoming to priority communities and others, steeped in best practices and designed to triangulate insights. At the conclusion of the process, the CFC developed a succinct, prioritized list of community needs. To do this, the methodology included a mixed modality approach – quantitative, qualitative and technology-based techniques – to learn about the human stories and voices while weaving them with the best available data.

Methodology

Crescendo engaged community partners, used data analytics and invited others to join the discovery process to help create a positive cycle of change. The assessment activities meet the following goals:

- Identifying resources, strengths and barriers to improving health outcomes
- Developing a deeper understanding of community access to care challenges, including those faced by minority communities
- Enabling partners to collaborate around

Stage 1:
Strategic Secondary Research

Purpose:
Profile the CFC service area in aggregate by county for Health Equity data

Methods:
Secondary Research, Mapping, Digital Trends Analysis

Stage 2:
Stakeholder Input & Needs Prioritzation

Purpose:
Comprehensive, Multiracial/Diverse, Community-based Research and Needs prioritization

Methods:
Stakeholder Interviews, Surveys, Focus Group Discussions, Access Audit, Equity Champions Outreach and Engagement, Prioritization

Stage 3:
Reporting

Purpose:
Provide a Comprehensive Set of Reports Useful to Partner Organizations, Affiliates, Community Groups and the General Public

Methods:
Agregate Regional Reports, County-level Summary Reports

Briefly, the methodology components are outlined below. Detailed descriptions of these methods are found at the beginning of each respective section.

- **Strategic Secondary Research:** This type of research includes a thorough analysis of previously published materials that provide insight regarding the community profile and health-related measures. The section utilizes data tables and bulleted findings to highlight key points.

- **Health Equity Data Collection and Analysis by County:** After separate sets of health equity data were collected for each county, the CFC team developed Equity Profiles which provided detailed insight into data variations based on gender, race, ethnicity and other community characteristics.

- **Digital Trends Analysis:** The digital trends analysis helps illuminate chronic health, behavioral health and health insights. It quantifies trends in social media searches over a given time period for health-related search terms.

- **Primary Qualitative Interviews and Discussion Groups:** This primary research includes discussion groups and interviews with partner organization staff, other community service providers, community members and others. Approximately 100 in-depth stakeholder interviews and results from 30 focus groups are included.

- **Primary Community Surveys:** From December 29, 2021 to February 22, 2022, Crescendo conducted an online and paper survey with approximately 4,000 community members. The survey instrument included topic areas that emerged from the secondary data analysis, literature reviews of existing documents, initial qualitative research and other early-stage research activities. Results were analyzed and data tables/graphs were created to illuminate the results found in this report. The survey is contained in the appendices.

- **Access Audit:** Access audits, also known as mystery shopper calls, are an effective way to evaluate customer service data and consumer-level access to care issues. The Crescendo team evaluated 26 sites.

- **Needs Prioritization Process:** Based on the results of the secondary research, qualitative interviews, focus group discussions and community surveys, a list of 50 community health issues was generated. Crescendo worked with project leaders to implement a modified Delphi Method to construct a final prioritized list of needs for each area. The peer-reviewed process can be found in the appendix.

- **Reporting:** In many areas with simple, isolated service areas, report construction is straightforward. Given the unique features of the CFC, reporting had several additional layers of complexity. Reporting includes a larger, aggregated report that contains in-depth chapter analyses – one for each participating county – providing focused insight for local hospitals and other providers.

Operational Framework

Below is a graphic illustrating how the mixed-modality research methodology used stakeholder interviews, focus group discussions, a large sample community survey and an access audit to ensure community voices were combined and fed into the prioritization process.
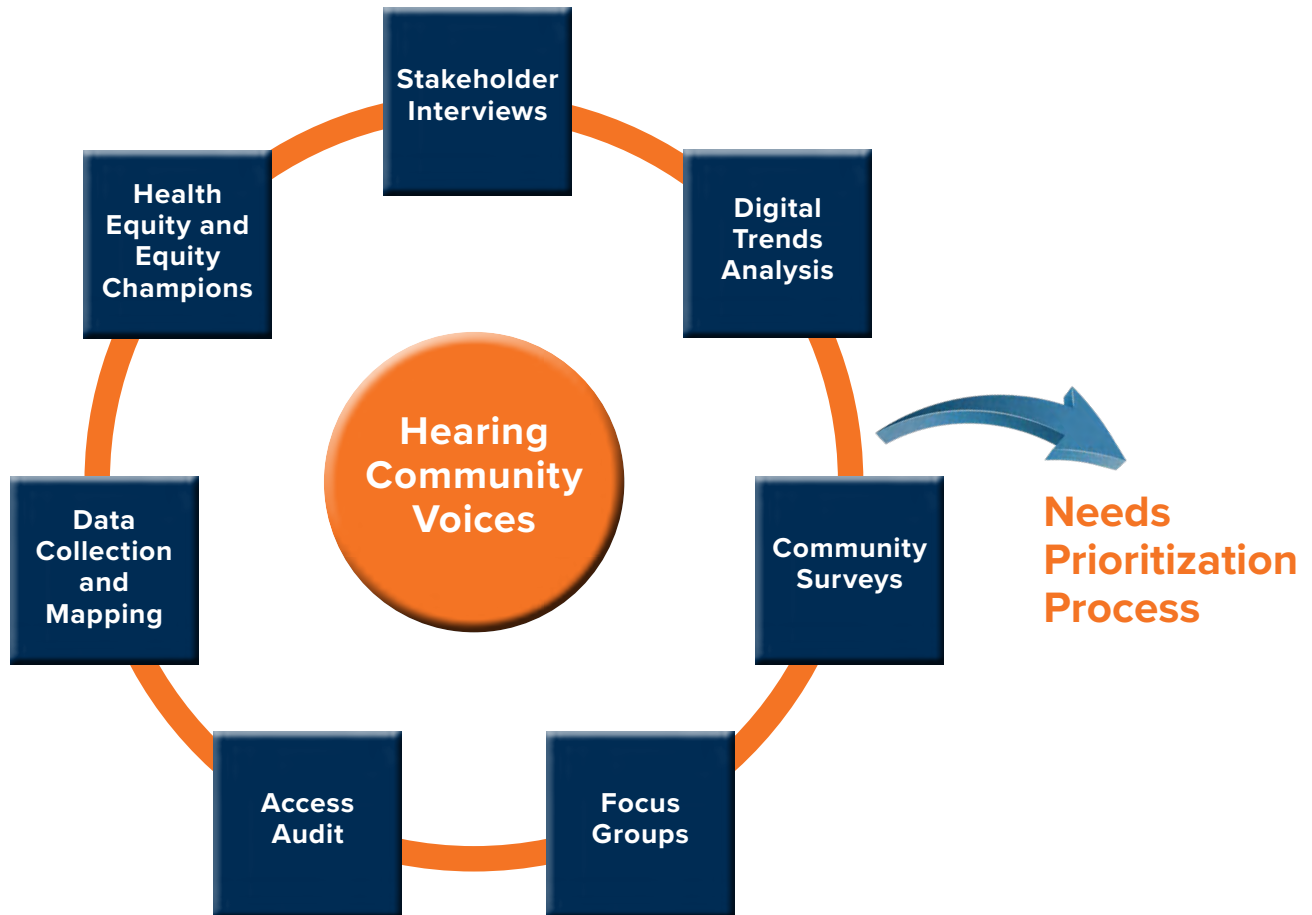
Based on the results of the mixed-modality approach, an extensive list of 50 unique needs in each county was developed. The CFC deployed a Modified Delphi Technique to prioritize the needs. Individual hospital facilities further refined their priorities, as reflected in the Facility Reports.

Each technique deployed in the CHNA was part of the longer-term Assessment as Action Cycle which jump-starts the continuous process of assessing community needs, addressing high-priority needs, evaluating impact, adjusting strategies and again assessing community needs.

Assessment as Action Cycle©

The CHNA provided an important opportunity for all the stakeholders in this complex landscape to work together to build a positive cycle of change. The ongoing cycle of assessment, strategy development, program development, program implementation, data collection and program evaluation are a way to continually improve community health.

The approach endeavored to engage voices that are often hard to hear – young people, gender minorities, isolated seniors, BIPOC (Black/African American, Indigenous & people of color) households, households where English is rarely spoken, single-parent households, LGBTQ+ community members and others.

Mixed Method Research Results

Strategic Secondary Research Introduction

Methodology

The secondary data collection portion of the CHNA was designed to establish a comprehensive picture of the Central Florida health care environment. By collecting and analyzing data from a great breadth of publicly available data sources, direct care providers, proprietary databases and other sources, the CFC team developed a granular picture of the Central Florida population and community health needs by county. Secondary research activities included the following:

- **Engaging a comprehensive set of validated data sources.**
  The CFC team used data from diverse sources to develop demographic and lifestyle profiles of each county (and aggregately for the region). The team also developed Equity Profiles which provide highly detailed insight to data variations based on gender, race, ethnicity and other community characteristics. Sources include, but were not limited to, the following:

  - American Community Survey
  - Community Commons
  - County Health Rankings and Roadmaps
  - FLHealthCHARTS
  - Florida Office of Data Dissemination and Transparency
  - KIDS COUNT
  - Health Equity Data Analysis, HEDA, system (University of Minnesota)
  - ESRI/ArcGIS/Business Analyst Online
  - Kaiser Family Foundation
  - Carnegie Mellon University COVID-19 Delphi Project (daily chronic disease, behavioral health and community lifestyle tracking data)
  - Google Trends
  - CPD Maps/UDS Maps
  - The Surveillance, Epidemiology and End Results (SEER) Program database
  - Law Enforcement Assisted Diversion (LEAD)
  - "Family Matters" report on multigenerational living

- o U.S. Department of Housing and Urban Development, CHAS Database
- o Other proprietary and internally developed databases

- **Analyzing data within a broad collection of approximately 100 population based, social determinants of health (SDoH), health equity, lifestyle and community health measures falling within six domains:**

  - o Core demographics
  - o Social and economic factors and health equity measures
  - o Health status
  - o Health equity
  - o Mental health status profile
  - o Risk and access measures

- **Building analyses using service use data.**
  The CFC team analyzed de-identified service use data from participating organizations and developed a series of heat maps. The maps show the dispersion of patient locations.[2]

- **Deploying SPSS software and other tools to build statistical models and analyze large data sets.**
  All data has been warehoused on encrypted, highly secured servers.

- **Creating proprietary analytical tools, when helpful, to quickly analyze data sets.**

IRS Form 990, Schedule H Compliance Listing

For not-for-profit hospitals, 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 numbers, that the IRS requires a CHNA to have to be compliant in appendix 6.

[2]Note: De-identified service use data was provided by CFC members. Heat maps were created showing concentrations of total patient populations.

Data Limitations

In general, secondary data utilizes the most current data sets available at the time.[3] The dramatic changes in 2020 due to the COVID-19 pandemic may have impacted some of the traditional projection tools, source data and data collection methods. For example, the American Community Survey (ACS), which provides detailed population and housing information revised its messaging, altered their mailout strategy and made sampling adjustments to accommodate the National Processing Center's staffing limitations.[4] Where relevant, the impacts or new data due to the COVID-19 pandemic are noted.

Additionally, in-person interviews were limited to telephone and virtual formats. Although some interviews were conducted face-to-face, the decision to conduct most interviews via telephone or virtually may have impacted some of the traditional in-person dynamics.

Population Demographics

The demographic analysis provides the framework from which to better understand individual neighborhoods, population trends and the overall fabric of the community. The following analysis highlights diverse ethnicities, median incomes and other lifestyle factors that impact the needs of the service area, as well as the development of effective strategies to meet evolving needs. To analyze these and other characteristics, the domains included in the secondary research include an examination of factors such as general demographics of the service area and the health status profile and disease burden.

The data in this section was collected from the United States Census Bureau 2015-2019 ACS which covers a broad range of topics about social, economic, demographic and housing characteristics of the United States population. Comparison data from 2010 was captured from the 2006-2010 United States Census 5-year ACS report. The 5-year estimates from the ACS are period estimates that represent data collected over some time. The primary advantage of using multiyear estimates is the increased statistical reliability of the data for less populated areas and small population subgroups.[5]

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[3]Please note that the five-year American Community Survey data was released March 17, 2022 – too late for inclusion in this analysis. Spot checks did not indicate results in wide variation with the October 2021 data.
[4]U.S. Census Bureau.
[5]American Community Survey, 2010 & 2019 5-Year Estimates.

Population

The total population of the service area has grown by a large margin over the last 10 years. Florida experienced a nearly 12% increase in population between 2010 and 2019, the second-largest increase in population after Texas.[6] Florida, including the service area, experienced a tremendous influx of new residents during the COVID-19 pandemic. These numbers are not reflected in the below data, yet anecdotally this is changing the face of the state.[7]

Exhibit 1: **Total Population Growth & Projections**
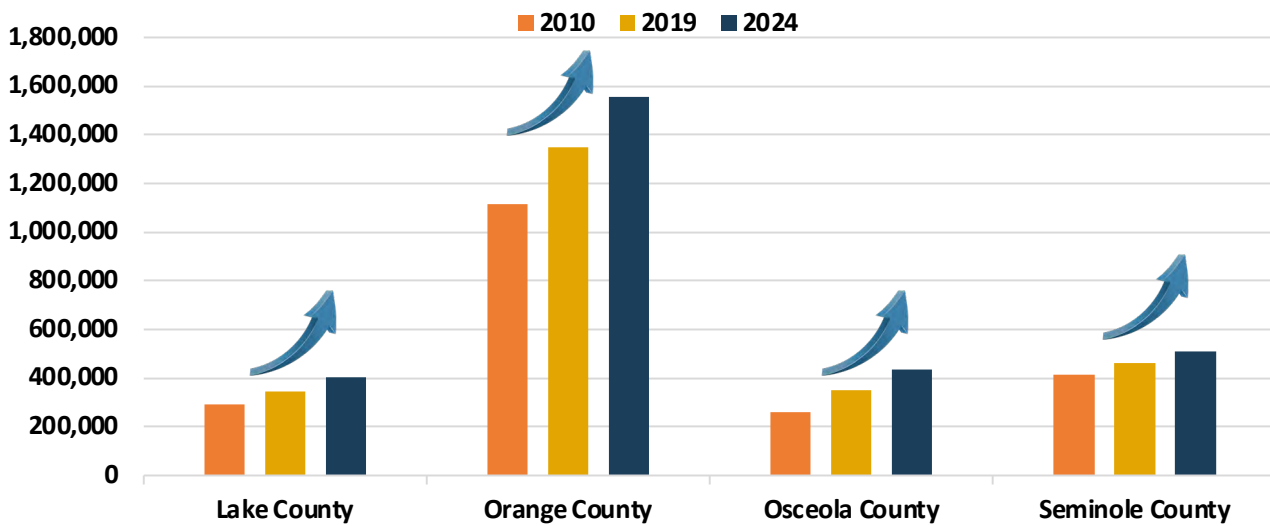
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2010	303,965,272	18,511,620	291,671	1,116,094	258,531	417,330
2019	324,697,795	20,901,636	345,867	1,349,746	351,955	461,402
2024 Projected Population	335,710,000	21,869,660	404,957	1,554,839	437,214	511,232

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019; 2024 Projection[8]
U.S. 2024 Projections[9] Florida 2024 Projection[10]

[6]United States Census. Around Four-Fifths of All United States Metro Areas Grew Between 2010 and 2020, 2021.
[7]Note the years 2010 and 2019 were selected for comparison to provide the closest decennial comparisons as possible since 2020 data was not available at the time this CHNA research was conducted. The 2024 projection year was the most helpful available from the U.S. Census Bureau.
[8]ArcGIS.
[9]Statistica, 2022.
[10]University of Florida Bureau of Economic & Business Research, 2020.

Select Demographic Changes Since the Previous CHNA

The following few tables show some of the key demographic shifts occurring in each CFC county since the prior CHNA. Total population, the percent of seniors and the percent of community members indicating that they are Hispanic/Latino reflect some foundational shifts in the area.

Compared to the previous CHNA, the population continues to rise in each CFC county, as Orange County surpassed the 1.4 million mark and the population in other CFC counties continues to rise, as well.

Note: At the time of this publishing, the 2020 US Census data was recently released. The data reflected in the table below may slightly differ from other tables showing the total population which were constructed based on the 2016-2019 5-year averages.

Exhibit 2: Population Shifts Since the Previous CHNA
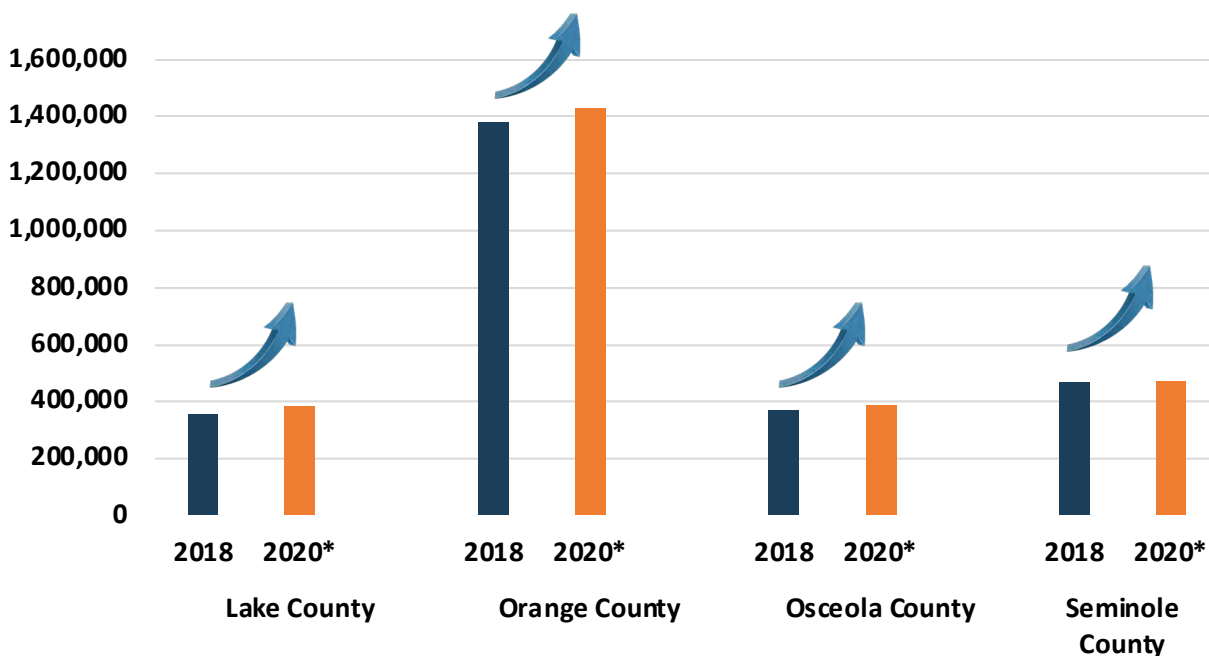
Lake County		Orange County		Osceola County		Seminole County	
2018	2020*	2018	2020*	2018	2020*	2018	2020*
356,495	383,956	1,380,645	1,429,908	367,990	388,656	467,832	470,856

Note that the asterisk (*) indicates that the most recent data (i.e., 2020) was used in the charts — different from some other data references in other portions of the CHNA which use 2019 data.

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Ethnicity and Age (Seniors) – Key Changes Since the Previous CHNA

Since the previous CHNA (2019), the percent of Hispanic/Latino residents in Seminole County has decreased, yet it continues to increase in Osceola County. However, the percentage of seniors in each county decreased.

Lake County

	Pop. % Age 65+	Pop. % Hispanic
Lake County 2018	27.6%	15.4%
Lake County 2019	26.5%	15.6%

Orange County

	Pop. % Age 65+	Pop. % Hispanic
Orange County 2018	12.2%	31.4%
Orange County 2019	11.6%	31.6%

Osceola County

	Pop. % Age 65+	Pop. % Hispanic
Osceola County 2018	13.9%	53.7%
Osceola County 2019	13.0%	54.1%

Seminole County

	Pop. % Age 65+	Pop. % Hispanic
Seminole County 2018	16.3%	25.6%
Seminole County 2019	15.2%	21.4%
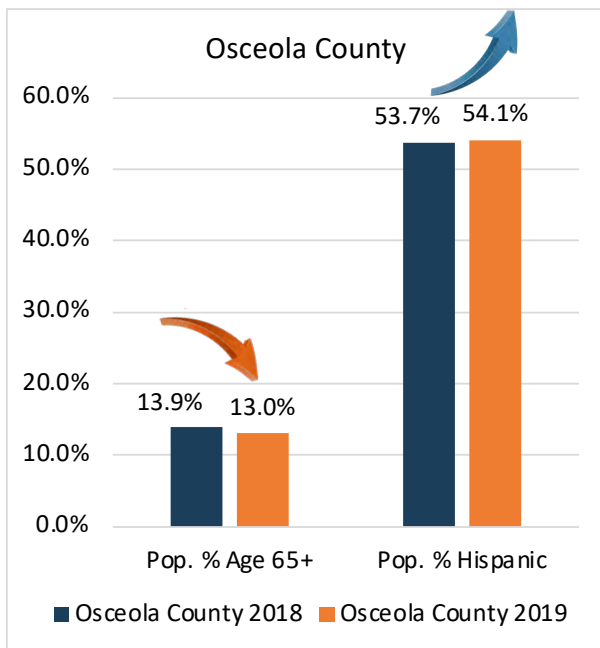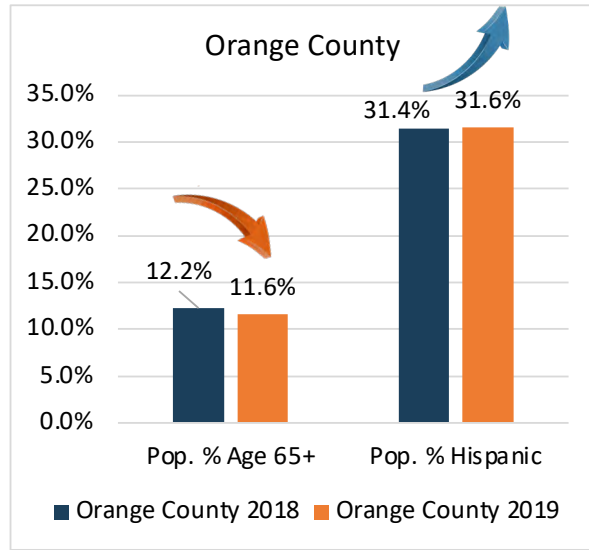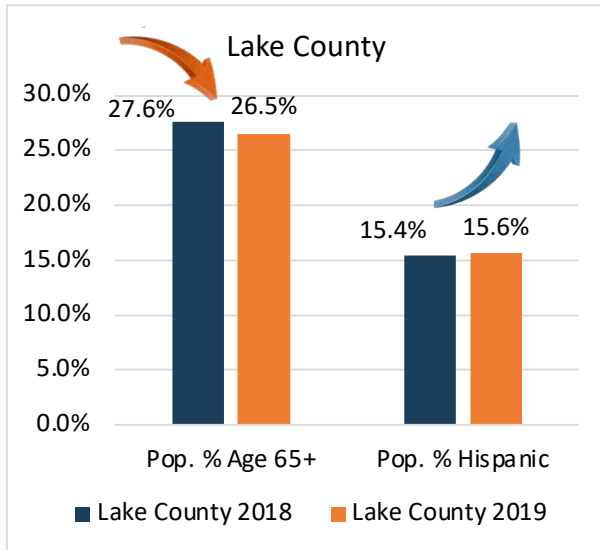
Osceola County experienced the most dramatic change in population between 2010 and 2019, increasing by over 36%. Orange County's population increased by approximately 21% while Lake County grew by nearly 19%. Seminole County experienced the smallest change in population, 10.6%. Continued, rapid growth is expected in all service area counties.

Exhibit 3: Population Percent Change

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Percent change (2019 from 2010)	6.8%	12.9%	18.6%	20.9%	36.1%	10.6%
Percent change (2024 from 2019)	NA	NA	17.1%	15.2%	24.2%	10.8%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

All areas are expected to see continued growth between 2019 and 2024; however, growth is particularly strong in Osceola County and is expected to increase by nearly 25%. Given the relatively high percentage of the population who identify as Hispanic/ Latino, there may be opportunities to further engage the community as it grows.

Exhibit 4: Service Area Population Change

■ Lake County   ■ Orange County   ■ Osceola County   ■ Seminole County

2010
- Lake County: 291,671
- Orange County: 1,116,094
- Osceola County: 258,531
- Seminole County: 417,330

2019
- Lake County: 345,867
- Orange County: 1,349,746
- Osceola County: 351,955
- Seminole County: 461,402

2024 Projected Population
- Lake County: 404,957
- Orange County: 1,554,839
- Osceola County: 437,214
- Seminole County: 511,232
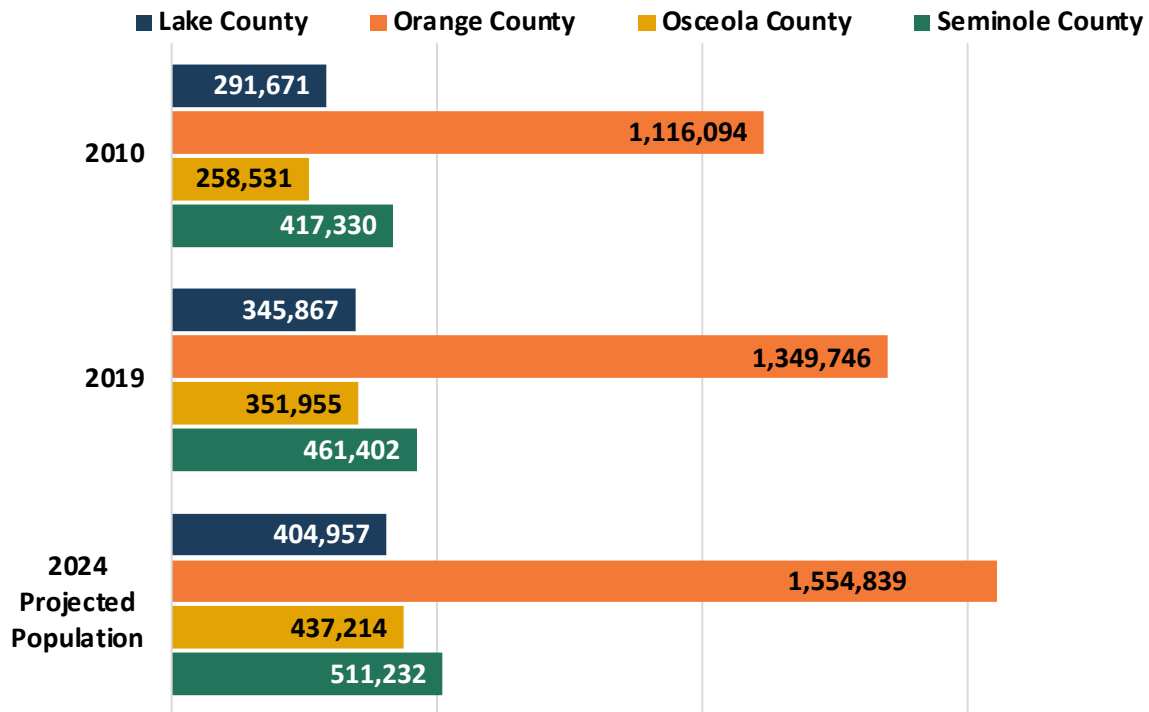
Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Comparisons show that the median age of a Florida resident remains slightly older compared to the median age of Americans; however, there are notable variations between counties.

Exhibit 5: Median Age
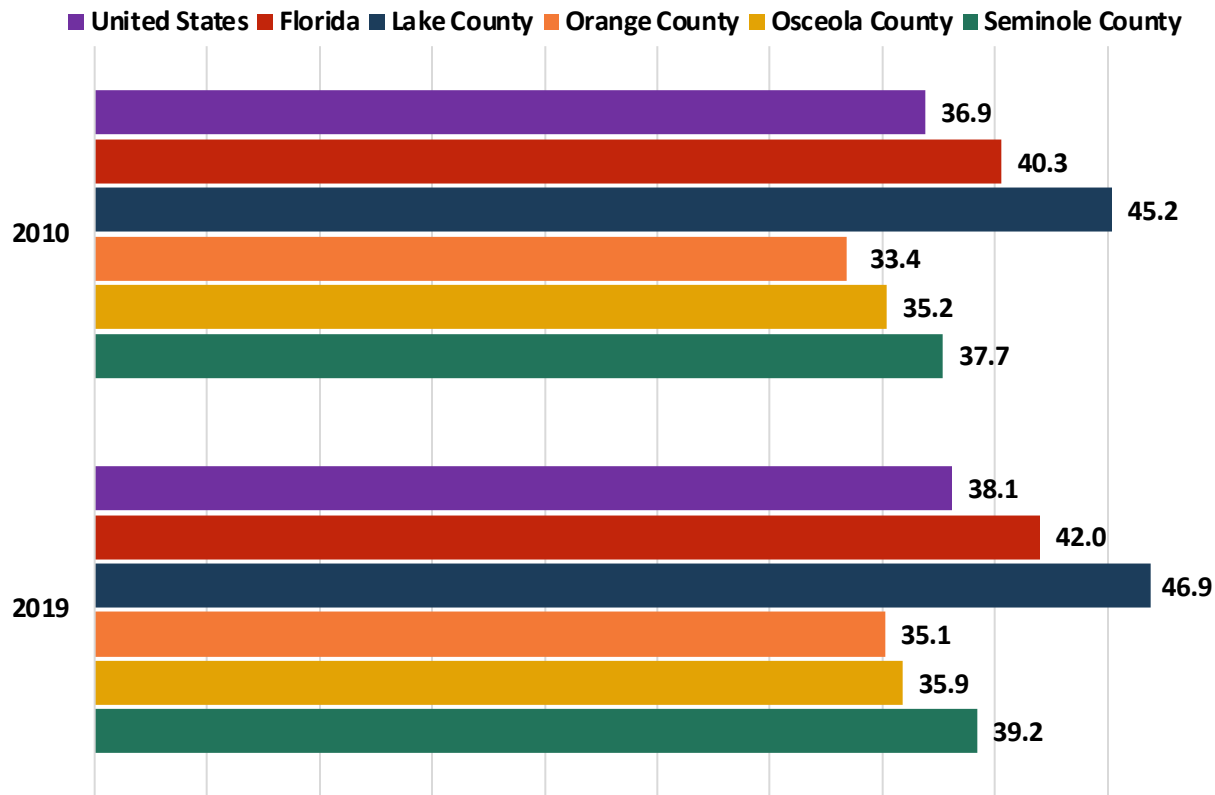
■ **United States** ■ **Florida** ■ **Lake County** ■ **Orange County** ■ **Osceola County** ■ **Seminole County**

2010
- 36.9
- 40.3
- 45.2
- 33.4
- 35.2
- 37.7

2019
- 38.1
- 42.0
- 46.9
- 35.1
- 35.9
- 39.2

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2010	36.9	40.3	45.2	33.4	35.2	37.7
2019	38.1	42.0	46.9	35.1	35.9	39.2

- Shown above, the median age is useful in summarizing whether a population is aging, but it's important to note that there is more to the age structure of the population than the snapshot that median age alone can provide.[11]

- Orange County has a relatively youthful population with a median age of 35.1 — below the statewide, national and other county medians.

- The median age in Lake County (46.9) is 30% higher than the median age for Orange County, the United States and Florida.

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

Between the five-year period ending 2010 and the five-year period ending 2019, the percent of seniors increased in each CFC county, the state of Florida and the US, generally.

Exhibit 6: **Trends of Population of People over 65+**

Legend: ■ 2006-2010 ■ 2015-2019

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2006-2010	12.7%	16.9%	23.8%	9.4%	9.4%	11.4%
2015-2019	15.6%	20.1%	26.5%	11.6%	13.0%	15.2%
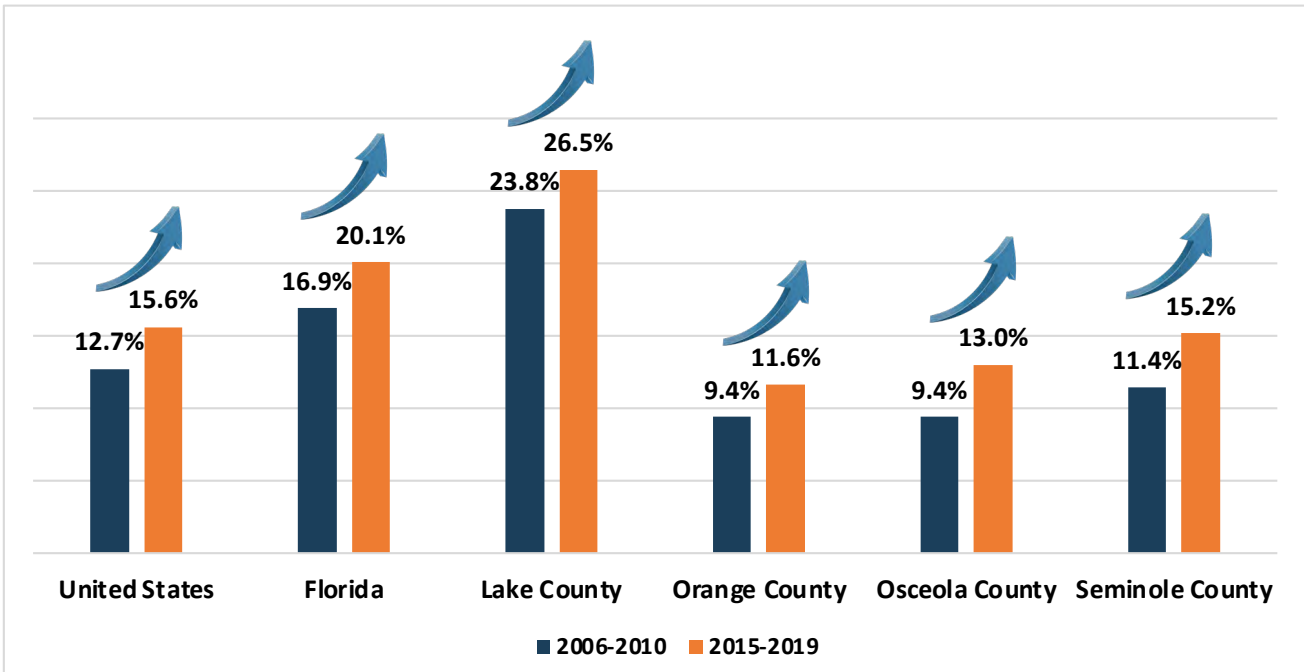
- Shown above, Lake County has a much higher percentage of seniors than other CFC counties and the state.
- Orange, Osceola and Seminole counties have a notably lower percentage of seniors than the state average.

Osceola County has the highest concentration of children under age 15 of any service area county. The county also has a higher concentration of Hispanic/Latino community members (noted elsewhere).

Exhibit 7: Gender & Age

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Male	49.2%	48.9%	48.5%	49.0%	49.3%	49.2%
Female	50.8%	51.1%	51.5%	51.0%	50.7%	50.8%
Under 5	6.1%	5.4%	4.9%	6.1%	6.4%	5.3%
5 to 9	6.2%	5.4%	5.0%	6.1%	6.6%	6.1%
10 to 14	6.4%	5.7%	6.0%	6.3%	7.3%	5.9%
15 to 19	6.5%	5.8%	5.3%	6.6%	7.1%	6.1%
20 to 24	6.8%	6.1%	4.8%	7.8%	6.8%	6.2%
25 to 34	13.9%	13.0%	10.8%	16.8%	14.4%	14.5%
35 to 44	12.6%	12.1%	10.8%	14.2%	14.5%	13.7%
45 to 54	13.0%	13.1%	12.3%	13.2%	13.3%	14.1%
55 to 59	6.7%	6.8%	6.4%	6.0%	5.6%	6.8%
60 to 64	6.2%	6.4%	7.1%	5.1%	5.3%	6.2%
65 to 74	9.1%	11.1%	14.4%	7.0%	7.9%	9.0%
75 to 84	4.6%	6.4%	9.2%	3.3%	3.8%	4.2%
85 and older	1.9%	2.6%	2.9%	1.3%	1.3%	2.1%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Orange County has the highest percentage of young adults (38.8%) between the ages of 20 and 44.
- As shown above, more than one in four (26.5%) Lake County residents is age 65 or older – nearly twice as many as other service area counties.

The percentage of the population of children under five years old has decreased slightly on national, state and county-wide levels since 2010, while the population of adults aged 65 and older has increased. Growing, and in some cases, large percentages of older adults will drive many common health needs.

Exhibit 8: Youth & Older Adult Population

■ **United States** ■ **Florida** ■ **Lake County** ■ **Orange County** ■ **Osceola County** ■ **Seminole County**
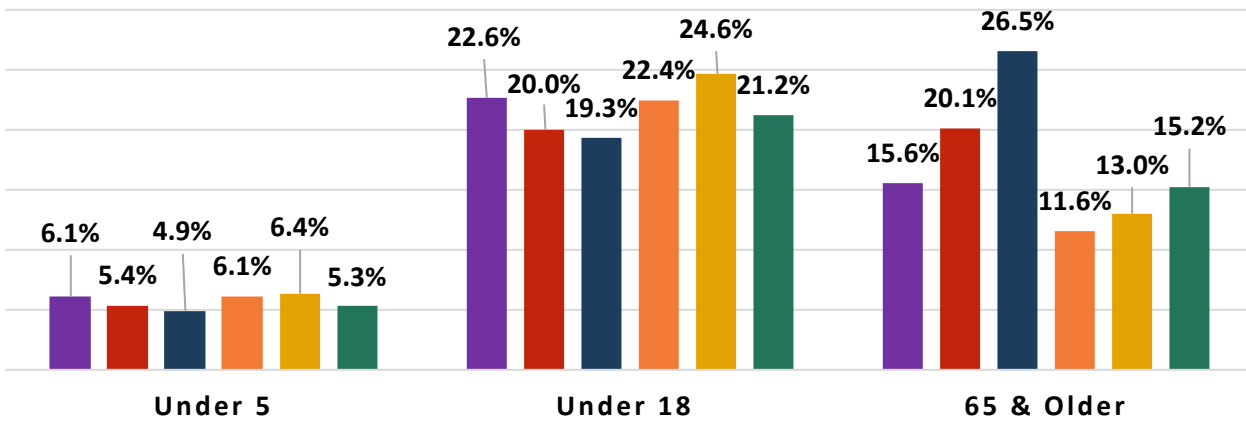
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2010						
Under 5	6.6%	5.8%	5.6%	6.7%	6.9%	5.6%
Under 18	22.3%	19.7%	18.9%	22.0%	24.1%	20.8%
65 +	12.7%	16.9%	23.8%	9.4%	10.7%	11.4%
2019						
Under 5	6.1%	5.4%	4.9%	6.1%	6.4%	5.3%
Under 18	22.6%	20.0%	19.3%	22.4%	24.6%	21.2%
65 +	15.6%	20.1%	26.5%	11.6%	13.0%	15.2%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019; (Under 18, 2010: United States Census Bureau. American Community Survey (QuickFacts, point in time survey, April 2010)

- As shown above, one in four Osceola County residents are under 18 — higher than the United States, statewide and other service area county averages. Fairly consistently, most areas shown above have about 5% of the population under age five.

- Adults aged 65 and older represent over 26% of Lake County. While all age groups have unique and ever-changing health needs, older populations are more likely to require more health care services. In 2019, the average annual cost of individual health care was approximately $7,180 for ages 45 to 54, compared to approximately $13,050 for those 65 and over.[12]

[12]Peterman-KFF Health System Tracker.

Florida is primarily comprised of residents who identify as White (75.1%), Black/African American (16.1%) and Hispanic/Latino (25.6%). The overall population identifying as Hispanic/Latino increased on national and statewide levels, as well as in all four counties since 2010. Osceola County has a large, growing Hispanic/Latino community.[13]

Exhibit 9: Race

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
White	72.5%	75.1%	82.5%	63.6%	72.8%	75.8%
Black/African American	12.7%	16.1%	10.9%	20.9%	11.5%	12.0%
American Indian & Alaska Native	0.8%	0.3%	0.4%	0.2%	0.4%	0.3%
Asian	5.5%	2.7%	2.0%	5.2%	2.7%	4.5%
Native Hawaiian & Pacific Islander	0.2%	0.1%	0.0%	0.1%	0.1%	0.1%
Other race	4.9%	3.0%	1.9%	6.4%	8.6%	4.3%
Two or more races	3.3%	2.7%	2.2%	3.6%	3.9%	3.1%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Exhibit 10: Ethnicity

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2010						
Hispanic/Latino of any race	15.7%	21.6%	11.4%	25.8%	43.5%	16.2%
Mexican	10.1%	3.2%	3.4%	3.3%	2.9%	1.8%
Puerto Rican	1.5%	4.3%	4.2%	12.5%	25%	7.1%
Cuban	0.6%	6.2%	0.6%	1.8%	2.4%	1.6%
Other Hispanic/Latino	3.6%	7.9%	3.1%	8.2%	13.1%	5.6%
Not Hispanic/Latino	84.3%	78.4%	88.6%	74.2%	56.5%	83.8%
2019						
Hispanic/Latino of any race	18.0%	25.6%	15.6%	31.6%	54.1%	21.4%
Mexican	11.2%	3.5%	3.6%	3.2%	2.7%	1.8%
Puerto Rican	1.7%	5.4%	6.2%	14.8%	32.2%	10.0%
Cuban	0.7%	7.3%	1.3%	2.9%	2.5%	2.1%
Other Hispanic/Latino	4.3%	9.4%	4.6%	10.8%	16.7%	7.5%
Not Hispanic/Latino	82.0%	74.4%	84.4%	68.4%	45.9%	78.6%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

• Orange County has a higher concentration of residents who identify as Black/African American within the service area. Orange County also has a larger Asian population, see Exhibit 9

• Lake County presents less racial diversity with most (82.5%) residents identifying as White (see Exhibit 9) and six of seven (84.4%) identifying as not Hispanic/Latino (see Exhibit 10)

[13]Note that some columns may not total 100% due to rounding.

The Hispanic/Latino population (especially in Osceola County) increased dramatically.

Exhibit 11: Hispanic/Latino Population
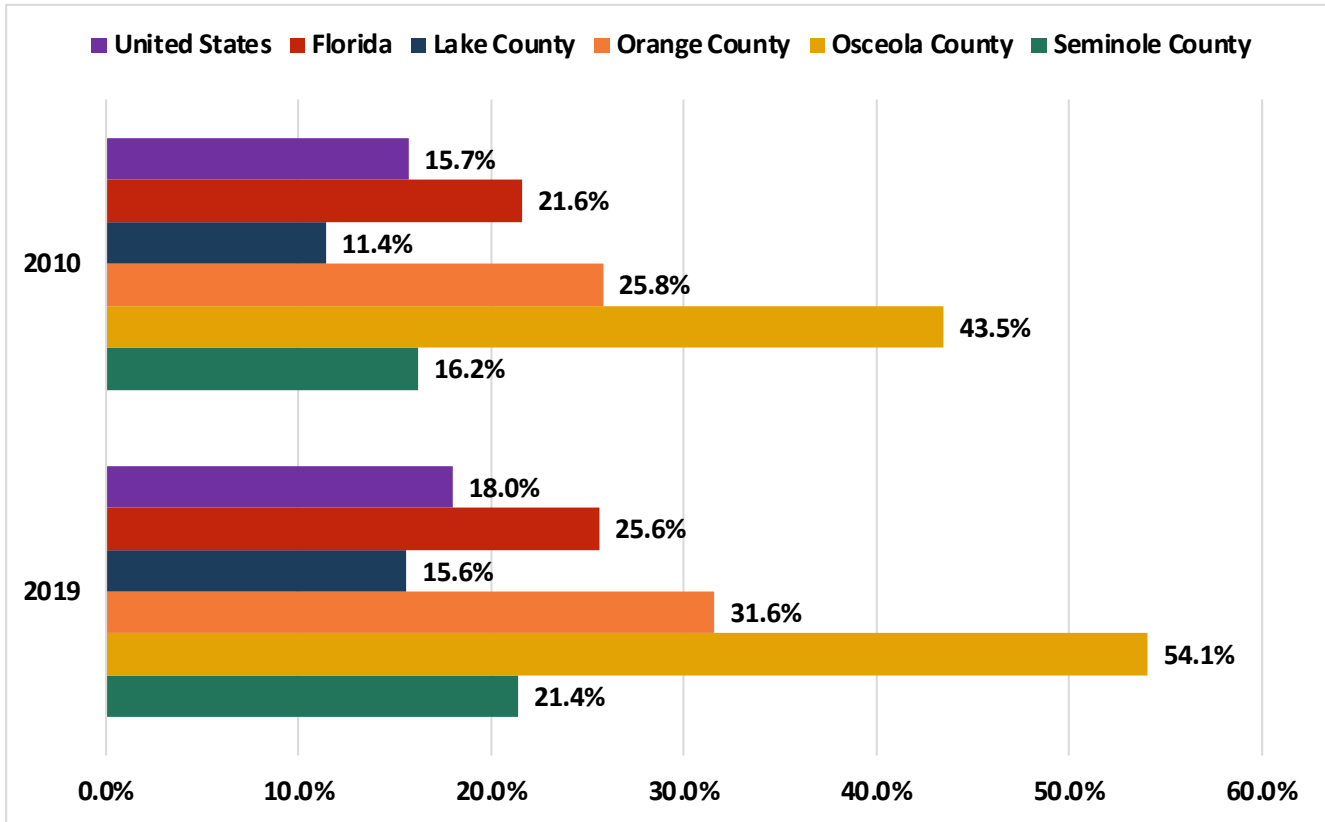
Legend: ■ United States ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

2010
- United States: 15.7%
- Florida: 21.6%
- Lake County: 11.4%
- Orange County: 25.8%
- Osceola County: 43.5%
- Seminole County: 16.2%

2019
- United States: 18.0%
- Florida: 25.6%
- Lake County: 15.6%
- Orange County: 31.6%
- Osceola County: 54.1%
- Seminole County: 21.4%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Over half (54.1%) of Osceola's total population identifies as Hispanic/Latino (see Exhibit 11) with nearly one-third of the population (32.2%) indicating that they are of Puerto Rican heritage (see Exhibit 10).
- Shown in Exhibit 11, the percentage of Hispanic/Latino Osceola County residents has increased from 43.5% in 2010 to 54.1% in 2019.

Exhibit 12: Non-Hispanic/Latino Population
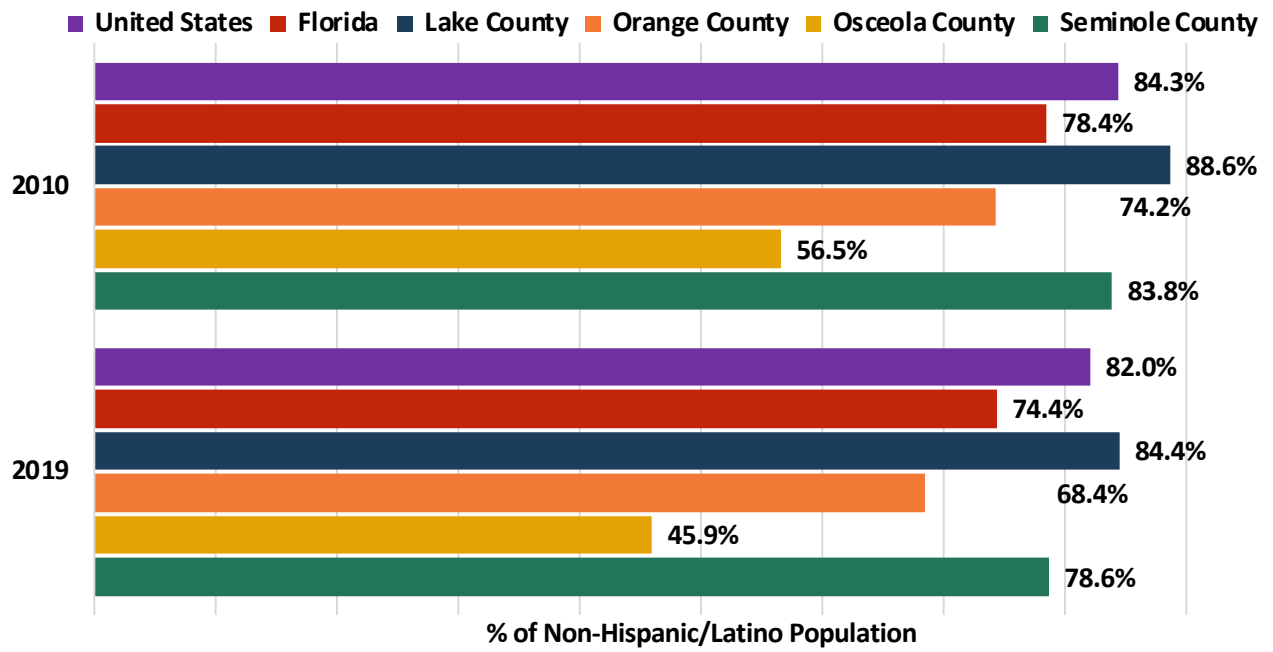
Legend: United States | Florida | Lake County | Orange County | Osceola County | Seminole County

2010
- United States: 84.3%
- Florida: 78.4%
- Lake County: 88.6%
- Orange County: 74.2%
- Osceola County: 56.5%
- Seminole County: 83.8%

2019
- United States: 82.0%
- Florida: 74.4%
- Lake County: 84.4%
- Orange County: 68.4%
- Osceola County: 45.9%
- Seminole County: 78.6%

% of Non-Hispanic/Latino Population

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

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Education

The following data provides a high-level overview of educational achievement within the service area while highlighting inequalities between educational attainment, race and ethnicity. Educational attainment varies greatly by county. The percent of adults with a Bachelor's degree in Seminole County is notably above the United States and statewide average, but substantially fewer residents of Lake County and Osceola County have similar educational attainment.

Exhibit 13: Educational Attainment
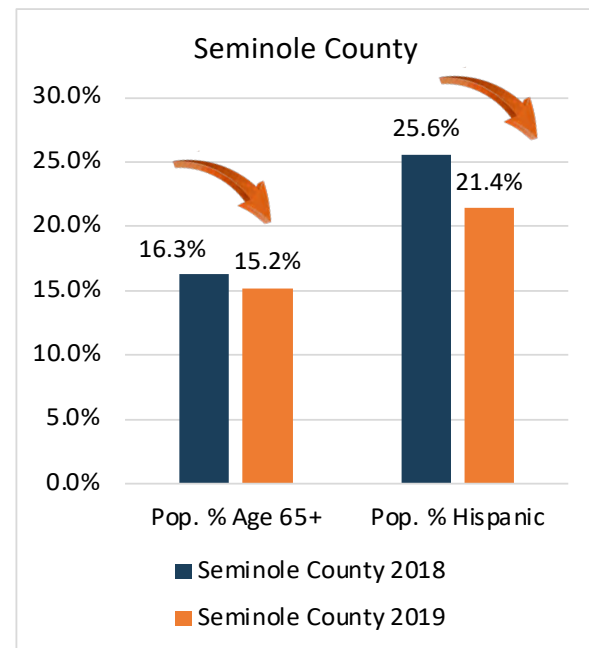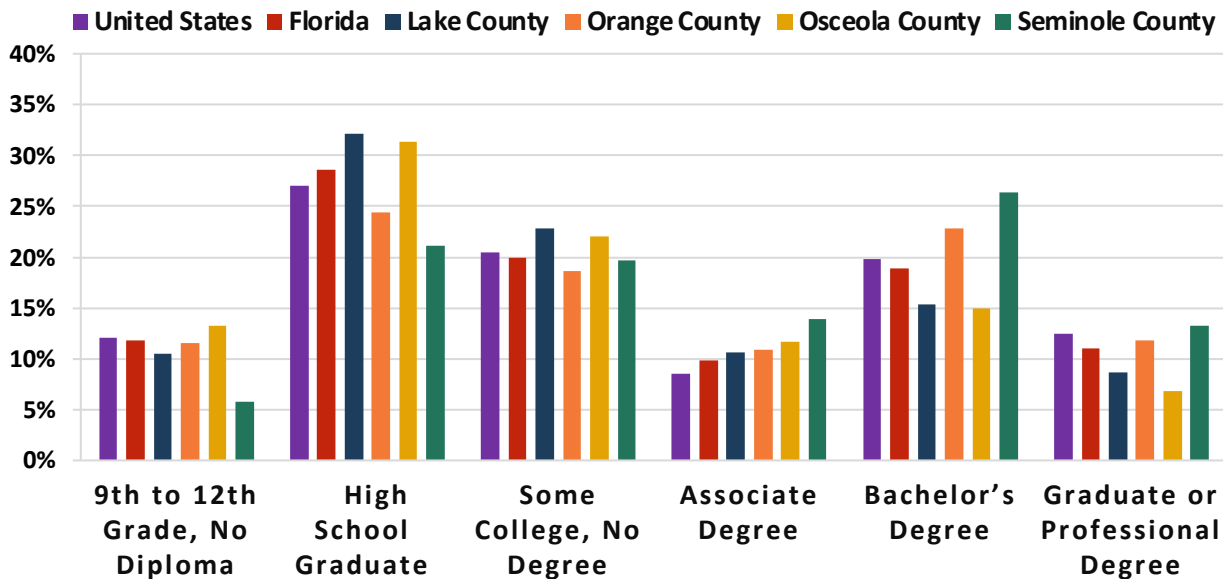

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
9th to 12th Grade, No Diploma	12.0%	11.8%	10.5%	11.5%	13.3%	5.7%
High School Graduate (Includes Equivalency)	27.0%	28.6%	32.1%	24.4%	31.3%	21.1%
Some College, No Degree	20.4%	19.9%	22.8%	18.6%	22.0%	19.7%
Associate Degree	8.5%	9.8%	10.6%	10.9%	11.6%	13.9%
Bachelor's Degree	19.8%	18.9%	15.4%	22.8%	15.0%	26.4%
Graduate or Professional Degree	12.4%	11.0%	8.6%	11.8%	6.8%	13.2%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Seminole County presents the highest percentage of those who pursue higher education overall, as two of five (39.6%) earned a bachelor's degree, graduate or professional degree. Fewer than one in four Lake County (24.0%) and Osceola County (21.8%) residents have a bachelor's or graduate degree, see Exhibit 13.[14]

[14]Note that column totals may not equal 100% due to rounding.

In Florida, a higher percentage of residents who identify as Hispanic/Latino earn a bachelor's degree compared to the United States average. Similarly, in Seminole County, educational achievement among racial and ethnic minorities is notably higher than the United States, the State of Florida or other service area county averages.

Exhibit 14: Population with a Bachelor's Degree or Higher by Race & Ethnicity
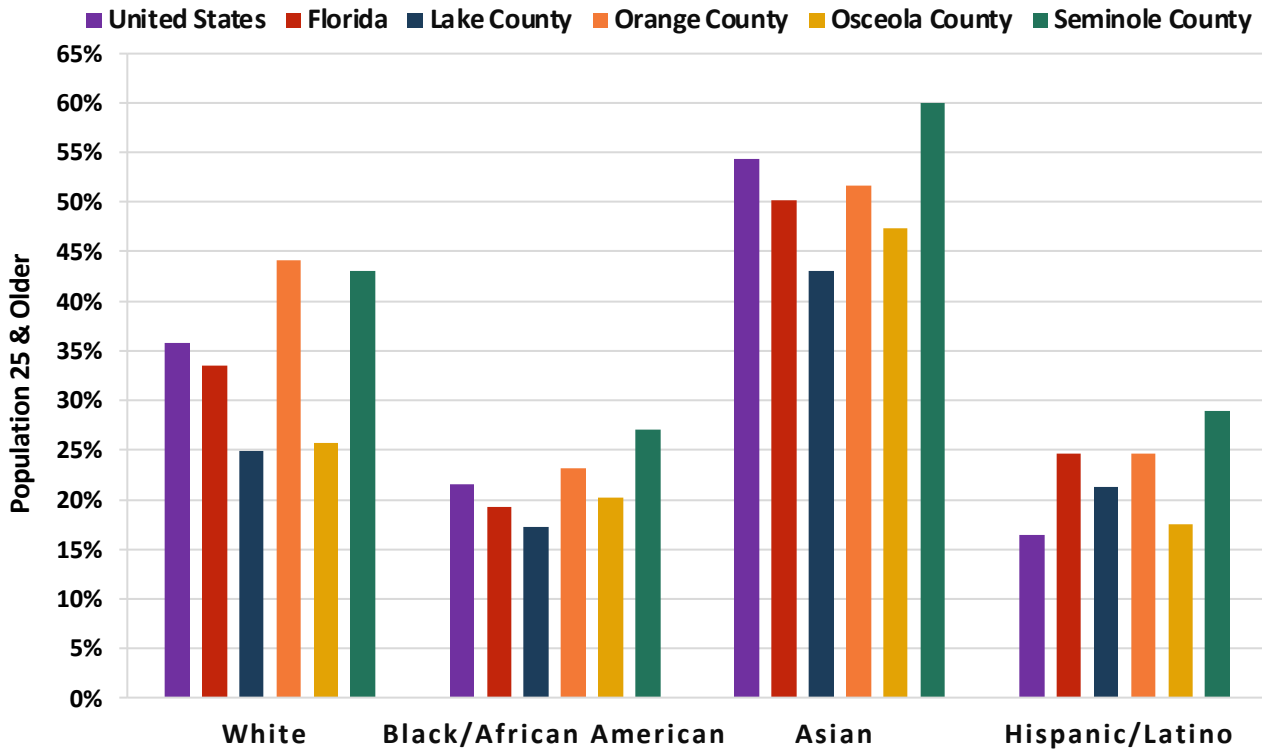
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
White	35.8%	33.5%	24.9%	44.1%	25.7%	43.1%
Black/African American	21.6%	19.3%	17.3%	23.1%	20.2%	27.0%
Asian	54.3%	50.1%	43.0%	51.6%	47.4%	60.0%
Hispanic/Latino	16.4%	24.6%	21.3%	24.6%	17.5%	29.0%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Hispanic/Latino community members in each of the four CFC counties have bachelor's degrees or higher rates above the United States average.

- In Orange County and Seminole County, a relatively high percentage of Asian residents earn a bachelor's degree or higher (51.6%, 60.0%, respectively).

- Approximately one in five Black/African American residents across the service area have earned a bachelor's degree or higher – similar to the rate for Hispanic/Latino community members.

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The percentage of Hispanic/Latino residents and Black/African American residents with no high school diploma is approximately twice as high as those who identify as White. The service area echoes this trend with the greatest disparities being seen in Orange and Seminole counties.

Exhibit 15: Population with No High School Diploma by Race & Ethnicity
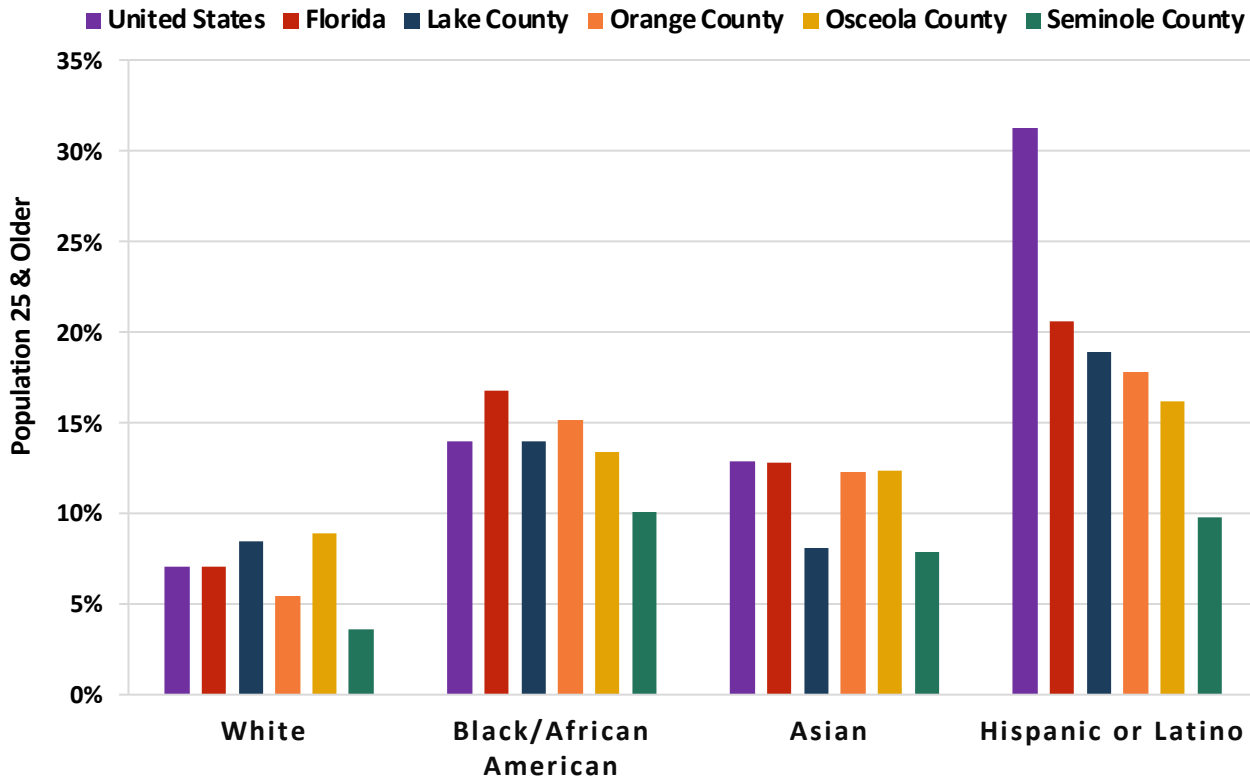
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
White, Not Hispanic/Latino	7.1%	7.1%	8.5%	5.5%	8.9%	3.6%
Black/African American	14.0%	16.8%	14.0%	15.2%	13.4%	10.1%
Asian	12.9%	12.8%	8.1%	12.3%	12.4%	7.9%
Hispanic/Latino	31.3%	20.6%	18.9%	17.8%	16.2%	9.8%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

• Shown in Exhibit 15, three of seven adults in Lake County (42.6%) and Osceola County (44.6%) achieve a high school degree (or equivalent certification) or less. The lack of higher levels of educational attainment is particularly acute among racial and/or ethnic communities.

Poverty & Social Determinants of Health

The term "population living in poverty" refers to the population living 100% below the Federal Poverty Level (FPL). Overall, the total population in Florida living 100% below the FPL is slightly higher compared to the United States. Comparing racial and ethnic factors within the county level to poverty rates highlights disparities within Central Florida's population.

Exhibit 16: **Population Living in Poverty**
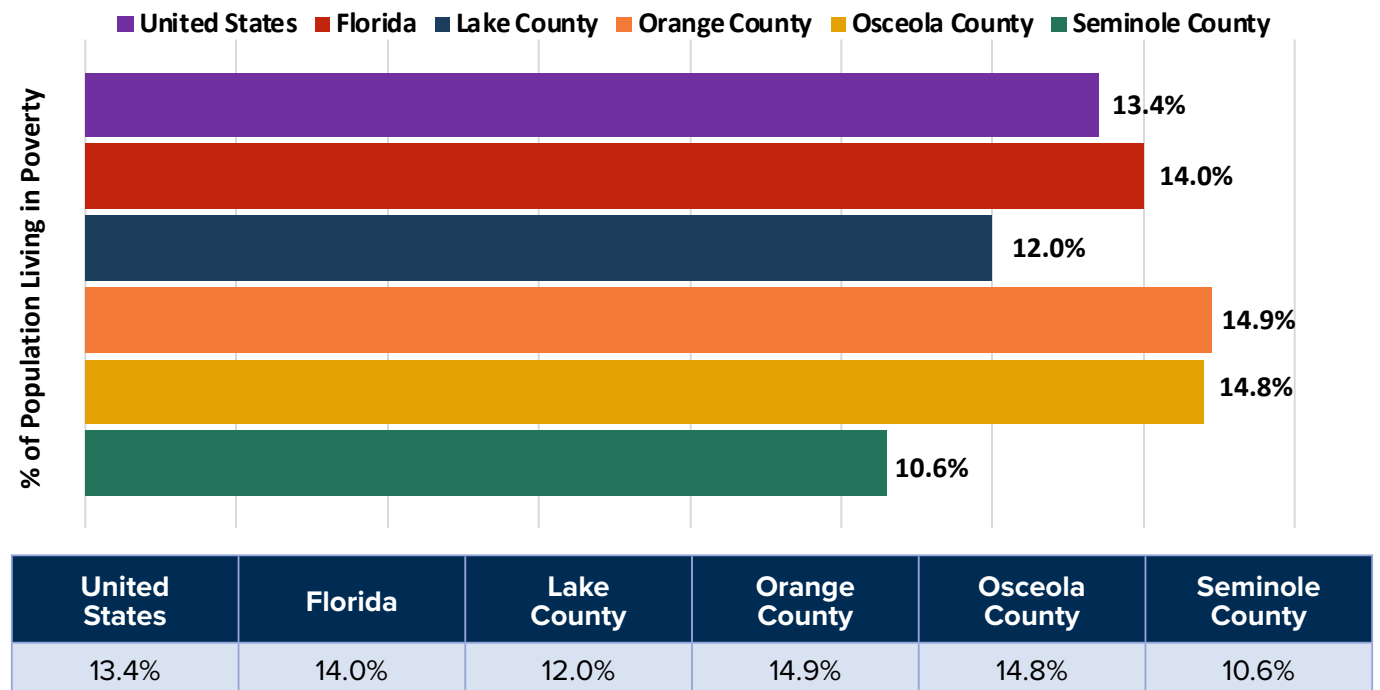
■ **United States** ■ **Florida** ■ **Lake County** ■ **Orange County** ■ **Osceola County** ■ **Seminole County**

% of Population Living in Poverty

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
	13.4%	14.0%	12.0%	14.9%	14.8%	10.6%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Exhibit 17: Population Living in Poverty by Race

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
White (Total Population)	72.5%	75.1%	82.5%	63.6%	72.8%	75.8%
White (Living in Poverty)	12.5%	13.7%	11.4%	13.3%	15.6%	8.7%
Black/African American (Total Population)	12.7%	16.1%	10.9%	20.9%	11.5%	12.0%
Black/African American (Living in Poverty)	27.1%	28.6%	32.3%	24.3%	15.7%	28.6%
Asian (Total Population)	5.5%	2.7%	2.0%	5.2%	2.7%	4.5%
Asian (Living in Poverty)	12.5%	13.2%	15.5%	11.2%	10.8%	4.5%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- In every service area county besides Osceola, approximately 25% or more of the Black/African American community live in poverty. The issue is particularly acute in Lake County, as nearly one-third (32.3%) of Black/African American families live in poverty.[15]

- Approximately 16% of the population in Florida identifies as Black/African American. Of this population, over a quarter (28.6%) are considered to be living in poverty.

- In Lake and Seminole counties, well over 25% of Black/African American residents are living in poverty while consisting of just 10% to 12% of the overall population.

[15]Note that columnar totals do not equal 100% since not all races are included (due to sample size considerations).

Exhibit 18: **Trends of People Living in Poverty (1-year estimates)**

The percent of people living in poverty declined notably between the five-year period ending 2010 and the five-period ending 2019.

Population Living in Poverty (1-Year Estimates)

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2010	15.3%	16.5%	13.2%	16.3%	15.9%	10.6%
2019	12.3%	12.7%	11.2%	12.6%	14.5%	9.3%
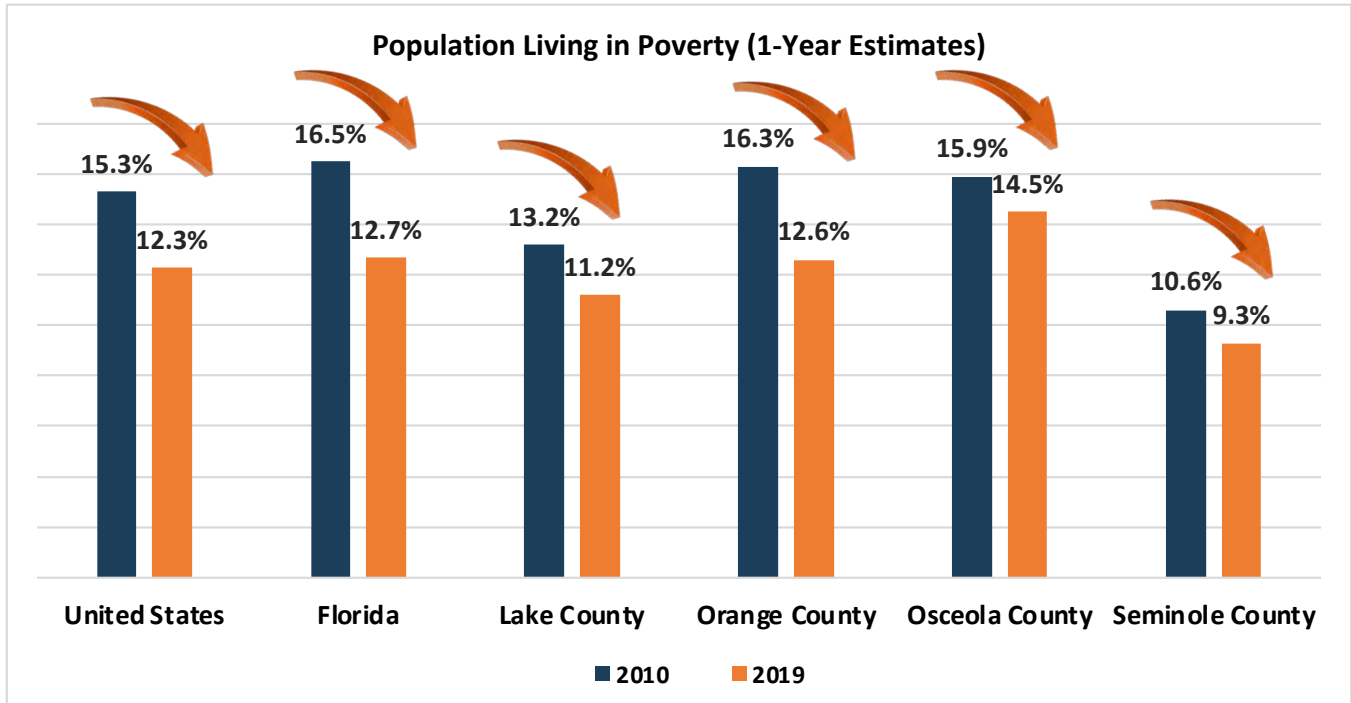
Housing

Indicators related to household composition and housing-related finances are important factors to review, as housing is an important social determinant of health that highlights the link between where people live and their health. People with low incomes and minority communities tend to reside in places with more health risks and face housing cost burdens that encourage housing instability, which can jeopardize the ability to meet their basic needs.[16]

Exhibit 19: **Total Housing Units**

United States	Florida	Lake County	Orange County	Osceola County	Seminole County
137,428,986	9,448,159	157,039	535,981	149,427	190,156

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Exhibit 20: **Homeownership by Race & Ethnicity in Florida[17]**
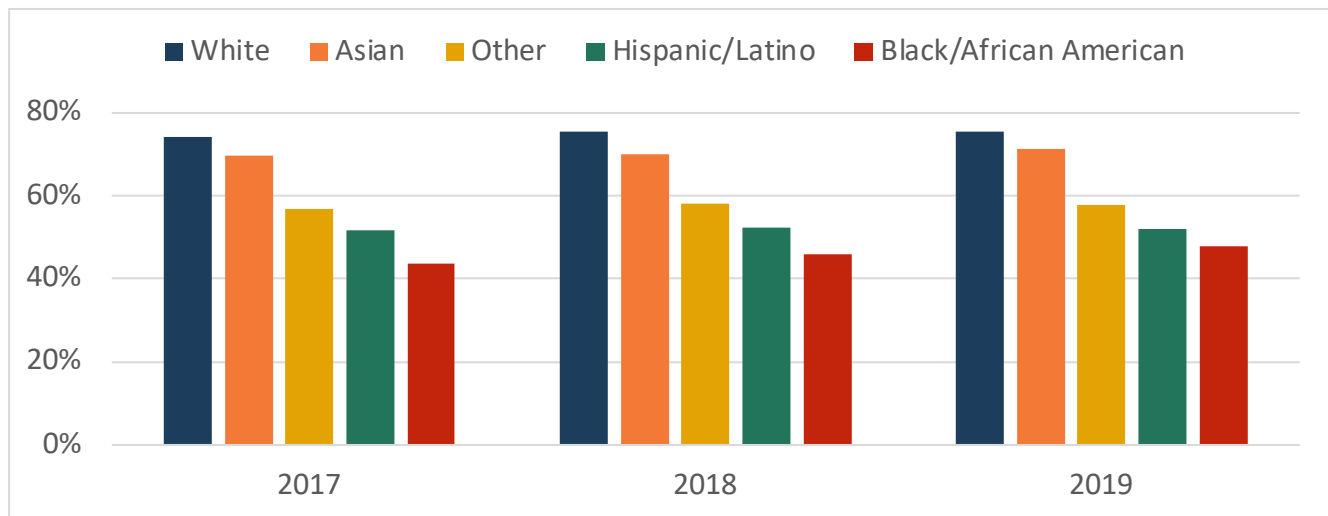
	White	Black/African American	Asian	Other	Hispanic/Latino
2017	74.2%	43.6%	69.7%	56.7%	51.5%
2018	75.4%	46.0%	70.1%	58.1%	52.2%
2019	75.5%	47.7%	71.3%	57.8%	52.0%

Source: Shimberg Center for Housing Studies Tabulations of United States Census Bureau American Community Survey, 2021

• Black/African American homeownership increased approximately 5% from 2017 to 2019 (43.6% to 47.7%, respectively). White and Asian residents are much more likely to own homes compared to those identifying as Black/African American or Hispanic/Latino – paralleling median household income rates, see Exhibit 20.

[16]Centers for Disease Control & Prevention, Social Determinants of Health.
[17]Shimberg Center for Housing Studies.

Many homes within the service area are considered to be cost burdened which means that ownership costs exceed 30% of household income. The burden is more extreme for renters.

Exhibit 21: Monthly Owner Costs as a Percent of Household Income

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Less than 20.0%	45.9%	40.7%	42.1%	42.8%	35.4%	45.8%
20.0 to 24.9%	15.7%	15.3%	17.0%	15.6%	15.8%	16.1%
25.0 to 29.9%	10.5%	10.7%	10.3%	10.8%	11.5%	10.5%
30.0 to 34.9%	6.9%	7.5%	6.4%	7.4%	9.0%	6.4%
35.0% +	20.9%	25.8%	24.1%	23.4%	28.4%	21.2%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Approximately three of every 10 homeowners across the four-county service area are housing cost burdened.
- The housing cost burden is most severe in Osceola County where nearly 40% of homeowners (37.4%) pay 30% or more of income for housing.
- The rates of monthly owner costs as a percent of household income are higher in Osceola County than Florida, except in the "Less than 20%" category.

Housing Insecure Population

The Point in Time (PIT) Count is a one-day snapshot of the persons experiencing homelessness on a given night and should not be interpreted as a measure of the number of people who experience homelessness over a year. Persons experiencing homelessness are divided into unsheltered and sheltered population categories and include not only people living on the streets, but also those residing in emergency shelters, safe havens and transitional housing units. All those experiencing homelessness who are sheltered on the night of the count are not included in the PIT figures shown below.

Within the service areas, 1,767 people were considered homeless in 2021. Although this figure is much less compared to 2019 (2,264), the 2021 Point in Time Count number is not comparable to the previous years' counts due to the explanation in the note below. The majority of the area's people experiencing homelessness are in Orange County.

*Note: The 2021 Point in Time Count numbers are not comparable to the previous years' counts. Typically, Continuums of Care (CoCs) conduct a PIT Count of both sheltered and unsheltered households. This year, due to COVID-19 related safety concerns, only six of the 27 CoCs conducted such a count; 10 CoCs did not conduct an unsheltered count; and others conducted a modified form of the unsheltered count. All CoCs conducted a sheltered PIT count. For those that did not conduct an unsheltered count, the CoCs reported zero unsheltered persons, resulting in an undercount of homelessness.

Exhibit 22: Point in Time Count
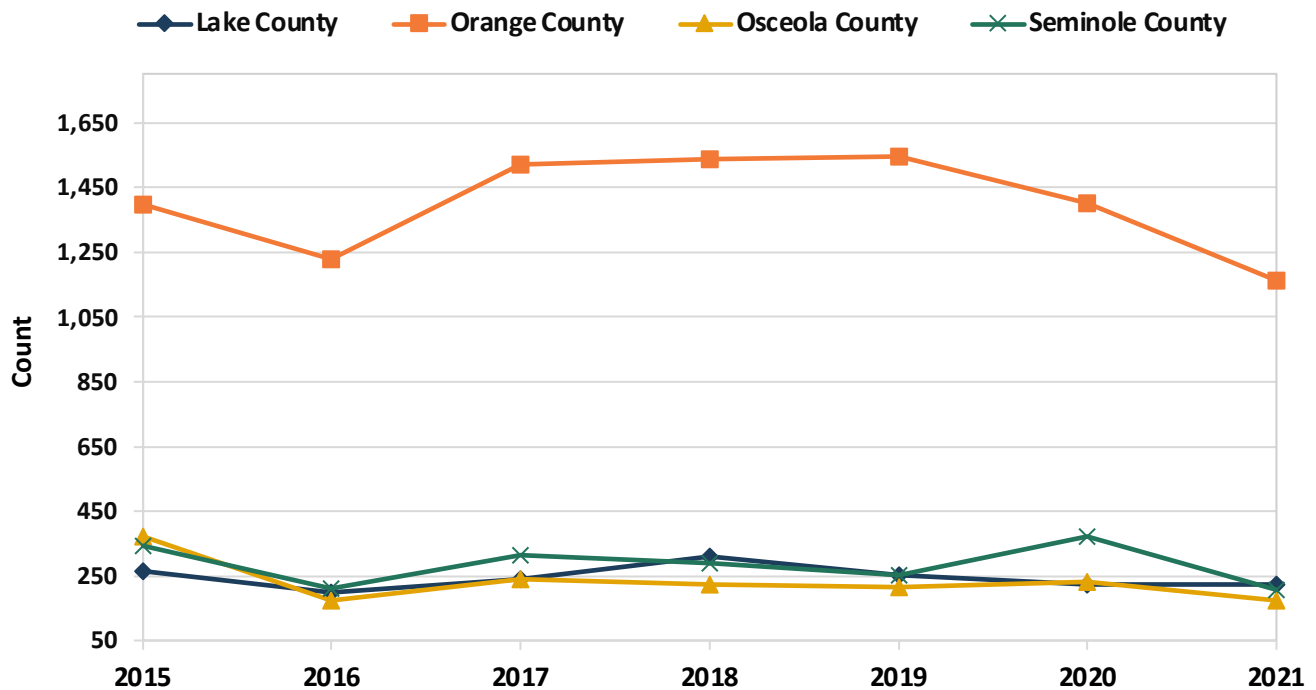
	Florida	Lake County	Orange County	Osceola County	Seminole County
2015	35,964	265	1,396	372	344
2016	33,502	198	1,228	175	210
2017	32,109	242	1,522	239	313
2018	29,717	312	1,539	226	288
2019	28,590	254	1,544	214	252
2020	27,679	ND[18]	1,401	234	372
2021*	21,141	223	1,162	173	209

Source: Florida's Council on Homelessness 2021 Annual Report[19]

- As shown above, the majority of people experiencing homelessness in the CFC area are located in Orange County.

[18]ND indicates no available data
[19]Florida Department of Children & Families. Annual Council on Homelessness 2021 Report.

Employment & Income

Economic stability is a known social determinant of health as people living in poverty are less likely to have access to health care, healthy food, stable housing and opportunities for physical activity. These disparities mean people living in poverty are more likely to die from preventable diseases.[20] Research suggests that low-income status is associated with adverse health consequences, including shorter life expectancy, higher infant mortality rates and other poor health outcomes.[21] Poverty is a notable issue in each service area county, as well as statewide. In Florida, the median household income is nearly $10,000 less compared to the average household in the United States. Within service area counties, the median household income ranges from $52,279 in Osceola County to $66,768 in Seminole County. Only Seminole County income exceeds the United States average.

■ **United States** ■ **Florida** ■ **Lake County** ■ **Orange County** ■ **Osceola County** ■ **Seminole County**

Median Household Income

- $62,843
- $55,660
- $54,513
- $58,254
- $52,279
- $66,768
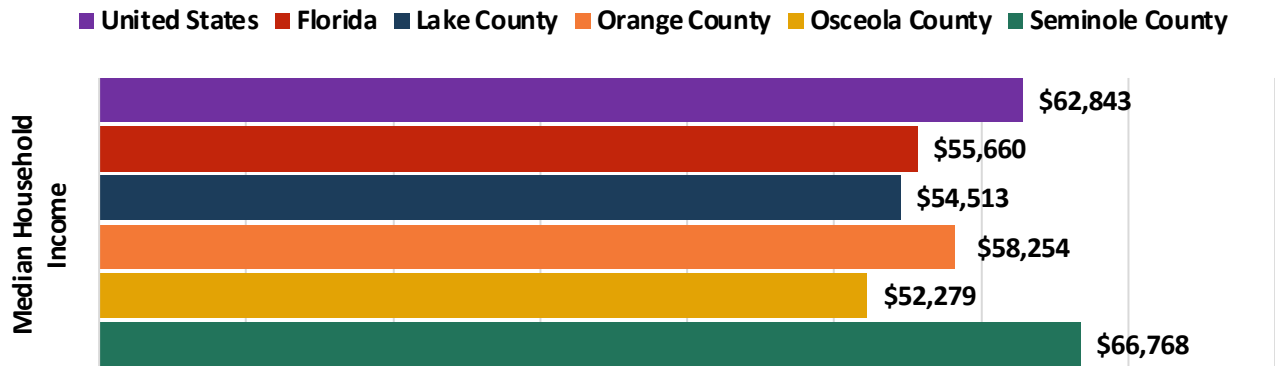
Exhibit 23: **Median Household Income by Income Group**

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Less than $10,000	6.0%	6.5%	4.7%	6.2%	6.2%	5.6%
$10,000 to $14,999	4.3%	4.3%	4.4%	3.8%	3.8%	2.7%
$15,000 to $24,999	8.9%	9.9%	10.2%	9.2%	10.3%	7.9%
$25,000 to $34,999	8.9%	10.3%	12.0%	9.9%	11.1%	8.5%
$35,000 to $49,999	12.3%	13.9%	14.8%	13.8%	16.7%	12.3%
$50,000 to $74,999	17.2%	18.3%	19.5%	18.8%	20.3%	18.1%
$75,000 to $99,999	12.7%	12.4%	13.8%	12.4%	13.1%	14.2%
$100,000 to $149,999	15.1%	13.1%	12.8%	13.7%	12.3%	15.4%
$150,000 to $199,999	6.8%	5.3%	4.4%	5.7%	3.6%	7.4%
$200,000 +	7.7%	6.0%	3.3%	6.6%	2.7%	7.9%
Median Household Income	$62,843	$55,660	$54,513	$58,254	$52,279	$66,768

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

[20]Social Determinants of Health, Economic Stability.
[21]American Academy of Family Physicians, Poverty & Health, The Family Medicine Perspective.

- The 2021 Federal Poverty Level (FPL) of annual household income for a typical family of four was approximately $26,500. Approximately 20% of households in Lake, Orange and Osceola counties earn less than $25,000 per year (see Exhibit 23), meaning nearly a quarter of the population in each county may face more financial hardships than other households. Even in Seminole County, one of six (16.2%) families earns less than $25,000 per year; nearly two of five (37.0%) earn less than $50,000.

- More households in Seminole County earn an annual household income of $150,000 or higher – 15.3%, compared to 6.3% to 12.3% in other service area counties (which is more similar to the state average).[22]

Exhibit 24: **Trends in Median Household Income**

The median household income increased in each CFC county and the state from the five-year period ending 2010 and the five-year period ending 2019.

Median Household Income

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2006-2010	$51,914	$47,661	$46,477	$50,138	$46,328	$58,971
2015-2019	$62,843	$55,660	$54,513	$58,254	$52,279	$66,768
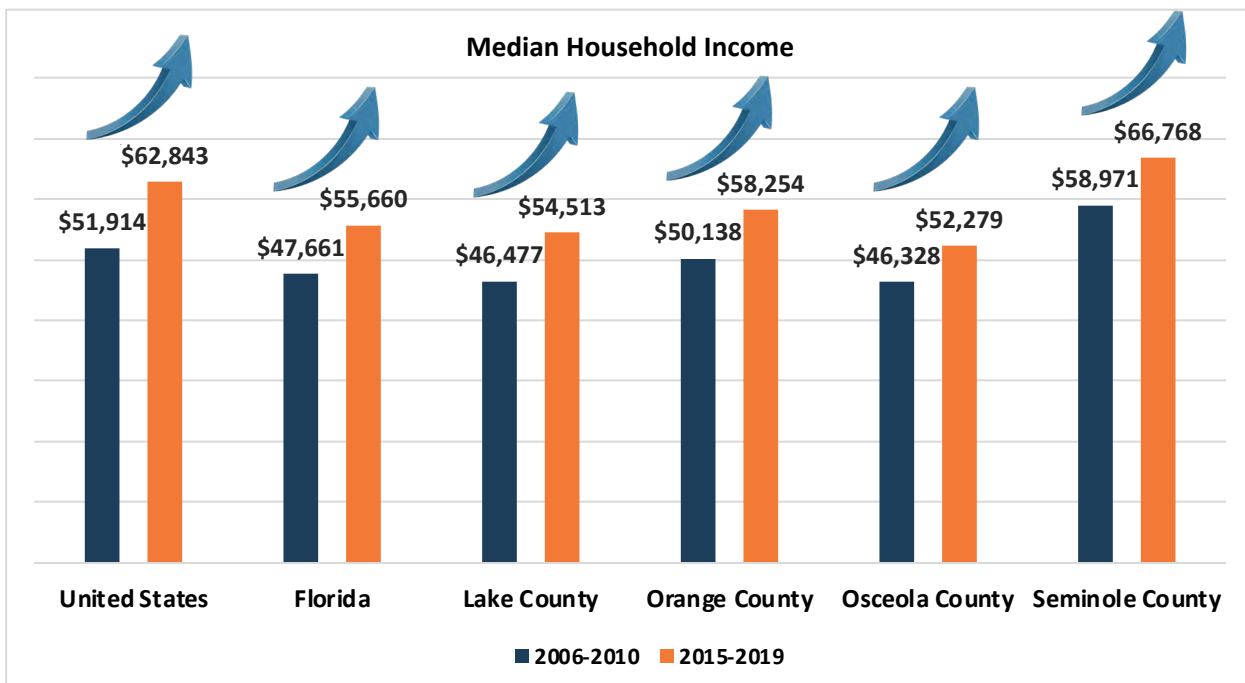
U.S. Census Bureau, American Community Survey, 2015-2019 5-year averages.

[22]Note that columnar percentages in Exhibit 23 may not equal 100.0% due to rounding.

100

The table below indicates the trends in unemployment rates between January 2020 to July 2021. Family economics is a factor highly correlated to community health. The COVID-19 pandemic impacted America's labor force in consequential ways. Nationally, the number of unemployed United States citizens skyrocketed from 6.2 million in February 2020 to 20.5 million in May 2020. The United States unemployment rate shot up from less than 4% in February 2020, among the lowest on record in the post-World War II era, to 13% in May of the same year.[23]

However, even though unemployment rates have returned to near pre-pandemic levels, labor shortages remain. After a surge in unemployment in the months following the start of the COVID-19 pandemic, unemployment rates in the service area have stabilized slightly higher than statewide averages and below national averages for the first half of 2021. A comprehensive timeline of unemployment rates from January 2017 to July 2021 is located within the Appendices.

Exhibit 25: **Trend of Unemployment Rates**

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
2020						
January	3.5%	3.3%	3.7%	3.3%	3.8%	3.4%
February	3.5%	3.3%	3.3%	3.0%	3.3%	3.0%
March	4.4%	4.9%	5.4%	5.0%	5.6%	4.9%
April	14.8%	14.0%	15.3%	18.3%	22.5%	13.6%
May	13.3%	14.2%	19.8%	23.4%	30.6%	14.5%
June	11.1%	11.6%	15.7%	19.4%	25.2%	11.6%
July	10.2%	11.5%	12.8%	16.5%	20.3%	10.8%
August	8.4%	7.9%	8.7%	11.3%	14.2%	7.3%
September	7.8%	7.2%	7.3%	9.2%	11.5%	6.1%
October	6.9%	5.8%	5.8%	7.2%	8.8%	4.9%
November	6.7%	5.4%	5.0%	6.0%	7.4%	4.3%
December	6.7%	5.1%	4.1%	4.6%	5.6%	3.4%
2021						
January	6.3%	4.8%	5.3%	6.9%	8.4%	4.7%
February	6.2%	4.7%	4.9%	5.3%	6.1%	4.4%
March	6.0%	4.7%	5.3%	5.5%	6.4%	4.6%
April	6.1%	4.8%	5.3%	5.7%	6.7%	4.7%
May	5.8%	4.9%	5.1%	5.5%	6.6%	4.5%
June	5.9%	5.0%	5.9%	6.1%	7.2%	5.1%
July	5.4%	5.1%	5.2%	5.3%	6.3%	4.5%

Source: United States Bureau of Labor Statistics, Unemployment Rate, retrieved from FRED, Federal Reserve Bank of St. Louis

[23]Pew Research Center. Unemployment Rose Higher in Three Months of COVID-19 Than It Did in Two Years of The Great Recession, 2020.

- Shown in Exhibit 25 above, though unemployment rates are low, the overall workforce size has contracted. Even in segments where employment levels are higher, the workforce reliability is somewhat unstable due to the need for higher levels of employees requiring time off work to respond to health issues for themselves or their families.

Exhibit 26: Number of People in the Workforce
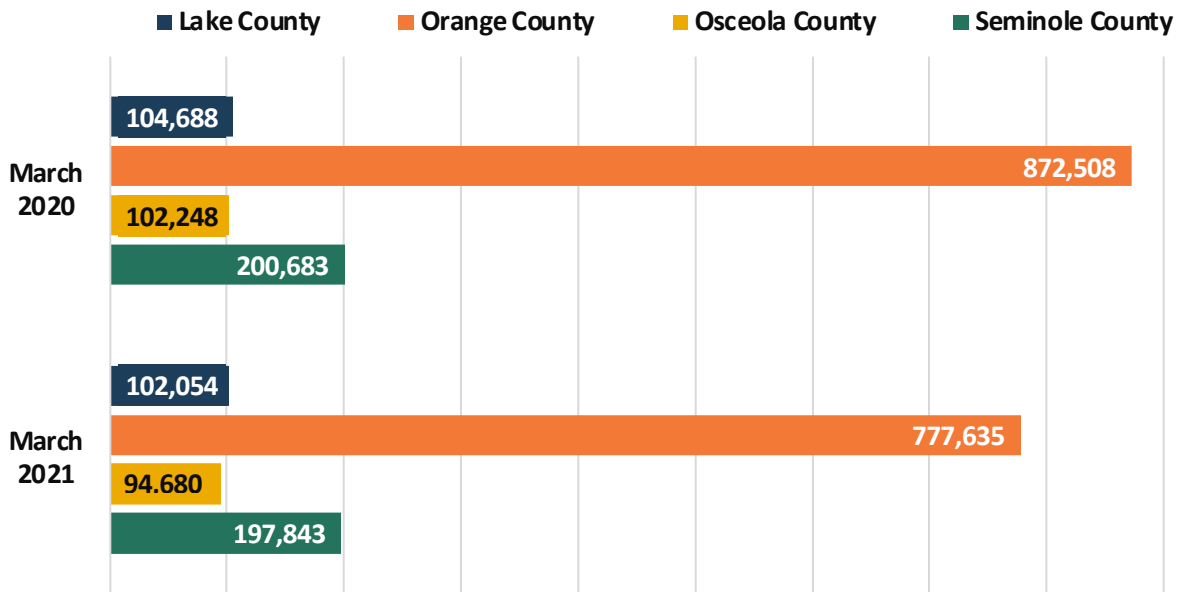
■ Lake County   ■ Orange County   ■ Osceola County   ■ Seminole County

March 2020
- Lake County: 104,688
- Orange County: 872,508
- Osceola County: 102,248
- Seminole County: 200,683

March 2021
- Lake County: 102,054
- Orange County: 777,635
- Osceola County: 94.680
- Seminole County: 197,843

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
March 2020	147,065,206	8,979,549	104,688	872,508	102,248	200,683
March 2021	140,606,898	8,691,899	102,054	777,635	94,680	197,843
Percent Change	- 4.1%	- 3.1%	- 2.2%	- 10.9%	- 7.4%	- 1.4%

Source: United States Bureau of Labor Statistics. Quarterly Census of Employment & Wages, State & County Map

- Workforce data for the first quarter of 2021 indicates an overall decrease in the workforce across all areas of interest. Collectively, the service area experienced a workforce decrease of approximately 110,000 people.

Population Living with a Disability

Research indicates that in comparison to those living without a disability, people with disabilities have less access to health care, experience more depression and anxiety, engage more often in risky health behaviors such as smoking and are less physically active.[24]

The total population in Florida living with a type of disability is slightly higher compared to the national average. The population aged 65 and older naturally experience the highest percentage of those living with a disability, indicating that this population within communities may require more resources to achieve an equal quality of life compared to those without a disability. The data below indicates the percentage of those within each demographic who are living with a disability.

Exhibit 27: Population Living with a Disability Summary
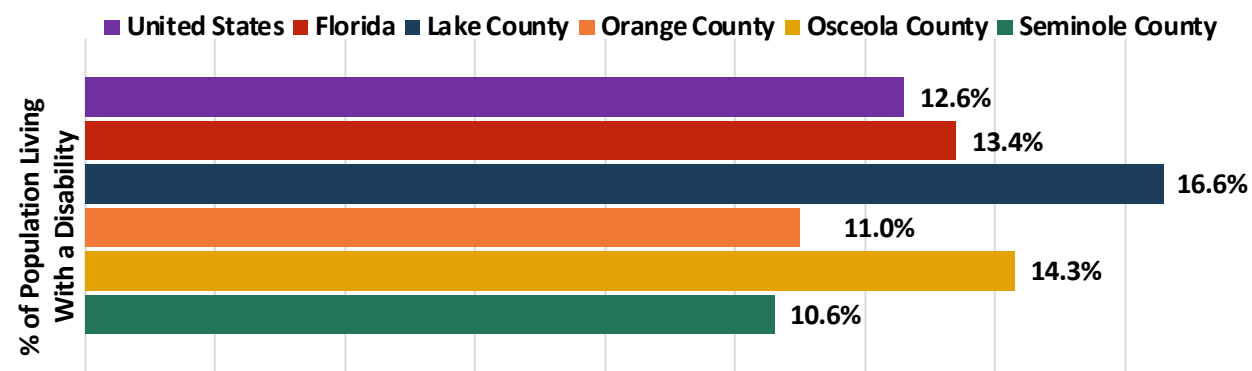
2019	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Percent Living with a Disability	12.6%	13.4%	16.6%	11.0%	14.3%	10.6%
Living with a Disability, by Gender						
Male	12.5%	13.5%	17.1%	10.8%	14.4%	10.1%
Female	12.7%	13.4%	16.2%	11.3%	14.2%	11.1%
Living with a Disability, by Race & Ethnicity						
White	13.1%	14.2%	17.4%	11.4%	14.8%	11.0%
Black/African American	14.0%	11.9%	13.3%	10.4%	12.9%	10.5%
Asian	7.1%	7.7%	7.7%	7.5%	14.0%	5.4%
White, Not Hispanic/Latino	13.9%	15.9%	18.7%	11.6%	16.2%	11.4%
Hispanic/Latino of Any Race	9.0%	10.0%	10.6%	11.2%	13.5%	9.5%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- Overall, 16.6% of Lake County's total population live with a type of disability, the highest figure in comparison to service area counties and statewide.

- The Asian community tends to have the lowest percentage of people living with a disability in the four service area counties.

[24]Centers for Disease Control and Prevention. Health Equity for People with Disabilities, 2021.

Exhibit 28: Trends in People Living with a Disability

The percentage of people living with a disability rose slightly in most areas – statewide, approximately one percent.

Population Living with a Disability (1-Year Estimates)

Location	2010	2019
United States	11.9%	12.7%
Florida	12.8%	13.7%
Lake County	15.4%	17.0%
Orange County	9.4%	11.4%
Osceola County	14.7%	13.2%
Seminole County	9.5%	11.7%

■ 2010   ■ 2019
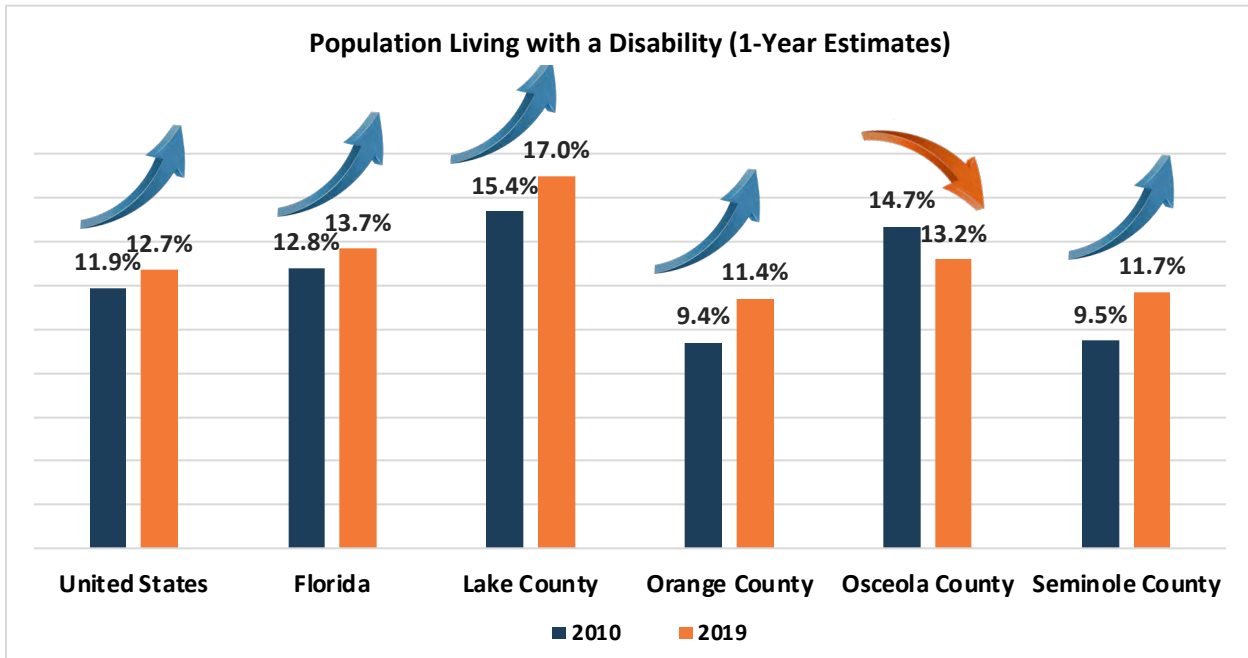
- The percent of people living with a disability in Lake County is higher than the state average – correlated with the higher percentage of the population over age 65.

- The percent of people living with a disability in Orange and Seminole counties increased by about 20% (or two percentage points).

Disability status increases rapidly with age. All county-level data reflects the occurrence while most (not all) counties have similar percentages of their populations within each age group.

Exhibit 29: Population Living with a Disability by Age Group
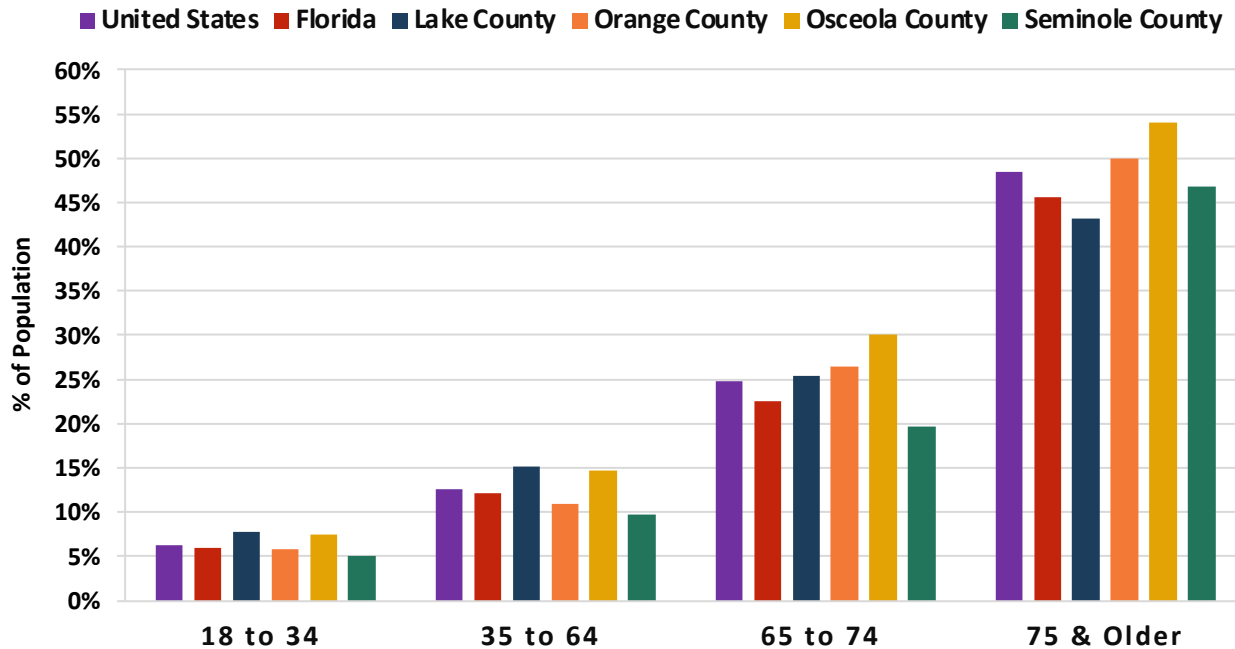
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Under 5	0.7%	0.7%	0.2%	0.9%	0.7%	1.3%
5 to 17	5.5%	5.8%	5.7%	6.5%	9.3%	5.2%
18 to 34	6.3%	6.0%	7.8%	5.8%	7.5%	5.1%
35 to 64	12.6%	12.2%	15.2%	11.0%	14.7%	9.7%
65 to 74	24.8%	22.6%	25.4%	26.4%	30.0%	19.6%
75 +	48.4%	45.6%	43.2%	50.0%	54.0%	46.8%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

• Shown in Exhibit 29, Seminole County tends to have slightly lower percentages of residents (in most age groups) living with a disability.

• Approximately 15% of residents between the ages of 35 and 64 in Lake County live with a disability. The average age of the labor force in America is approximately 42 years old, indicating that those between the ages of 35 to 64 living with a disability may be more heavily impacted by work-related issues compared to other age groups.[25]

[25]United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019.

While it is evident that people with a disability encounter a range of barriers when they attempt to access health care including communication, financial and physical barriers – each disability type presents unique challenges. In Florida, the most common type of disability is ambulatory difficulty (7.6%), followed by independent living difficulty (6.0%). Ambulatory difficulty is defined by the U.S Census as having serious difficulty walking or climbing stairs; independent living difficulty indicates that a physical, mental or emotional problem increases difficulty doing errands alone, such as visiting a doctor's office or shopping.[26]

Exhibit 30: Population Living with a Disability by Disability Type in Florida
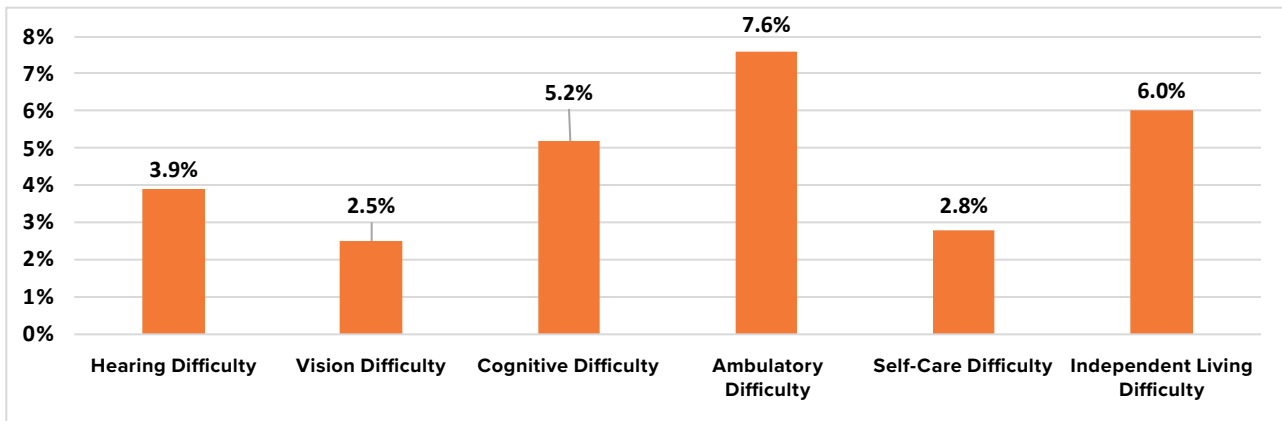
Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Population Living with a Disability	12.6%	13.4%	16.6%	11.0%	14.3%	10.6%
Hearing Difficulty	3.6%	3.9%	5.2%	2.6%	3.2%	2.9%
Vision Difficulty	2.3%	2.5%	3.0%	2.3%	3.2%	2.0%
Cognitive Difficulty	5.1%	5.2%	5.8%	4.8%	6.6%	4.3%
Ambulatory Difficulty	6.9%	7.6%	9.5%	5.6%	7.7%	5.8%
Self-Care Difficulty	2.6%	2.8%	3.1%	2.2%	2.9%	2.3%
Independent Living Difficulty	5.8%	6.0%	6.9%	4.9%	7.0%	4.9%

- In total, approximately 13% of the service area population are living with a disability. Within the service area, the most common difficulty by this definition is in line with the state figures – ambulatory and independent living difficulties.

- As shown above, among those living with the disabilities noted above, those who experience ambulatory and independent living difficulties face high costs of home modifications and other services. It is estimated that a household containing an adult

[26]United States Census. Disability Glossary.

living with a disability (that limits their ability to gain employment) requires approximately 28% more income (or an additional $17,690 a year) to obtain the same standard of living as a similar household without a member with a disability.[27]

The number of people living with a disability, especially those in high health care service use age groups, present notable health care challenges. The following tables provide a granular overview of people living with a disability by age group.

Florida residents present with fewer disabilities in each category than national averages. Osceola County has the highest percentage of people between 65 to 74 years living with a disability of any kind, compared to the United States, Florida and the other three counties.

Exhibit 31: Ages 65 to 74 Living with a Disability by Type

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Population 65 to 74	24.8%	22.6%	25.4%	26.4%	30.0%	19.6%
Hearing Difficulty	9.0%	7.8%	9.5%	8.3%	9.5%	6.8%
Vision Difficulty	4.2%	3.8%	4.3%	4.8%	6.3%	3.4%
Cognitive Difficulty	5.2%	4.8%	5.2%	6.0%	6.7%	3.7%
Ambulatory Difficulty	15.1%	13.5%	15.1%	16.4%	19.5%	11.8%
Self-Care Difficulty	4.2%	3.5%	3.1%	4.0%	5.4%	2.8%
Independent Living Difficulty	7.4%	6.2%	6.5%	8.1%	9.8%	5.1%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Exhibit 32: Ages 75 & Older Living with a Disability by Type

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Population 75 +	48.4%	45.6%	43.2%	50.0%	54.0%	46.8%
Hearing Difficulty	22.0%	20.3%	21.4%	19.4%	21.8%	21.7%
Vision Difficulty	9.3%	9.0%	9.4%	11.4%	11.9%	10.4%
Cognitive Difficulty	13.4%	12.9%	10.2%	15.6%	16.7%	11.4%
Ambulatory Difficulty	31.7%	29.8%	26.3%	34.0%	39.3%	31.7%
Self-Care Difficulty	13.1%	11.9%	7.9%	13.1%	13.7%	13.1%
Independent Living Difficulty	24.0%	21.5%	18.4%	27.1%	29.0%	23.0%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

[27]National Disability Institute; The Extra Costs of Living with a Disability in the United States Resetting the Policy Table, 2020.

Mortality & Morbidity

Mortality rates measure the frequency of occurrence of death in a defined population during a specified interval.[28] Mortality data answers critical questions to help health care organizations and providers understand how many people are dying and – importantly – why. Heart disease and cancer (of all types) were the leading causes of death between 2017 and 2019, followed by unintentional injuries both statewide and within the service area.

Exhibit 33: Leading Causes of Death
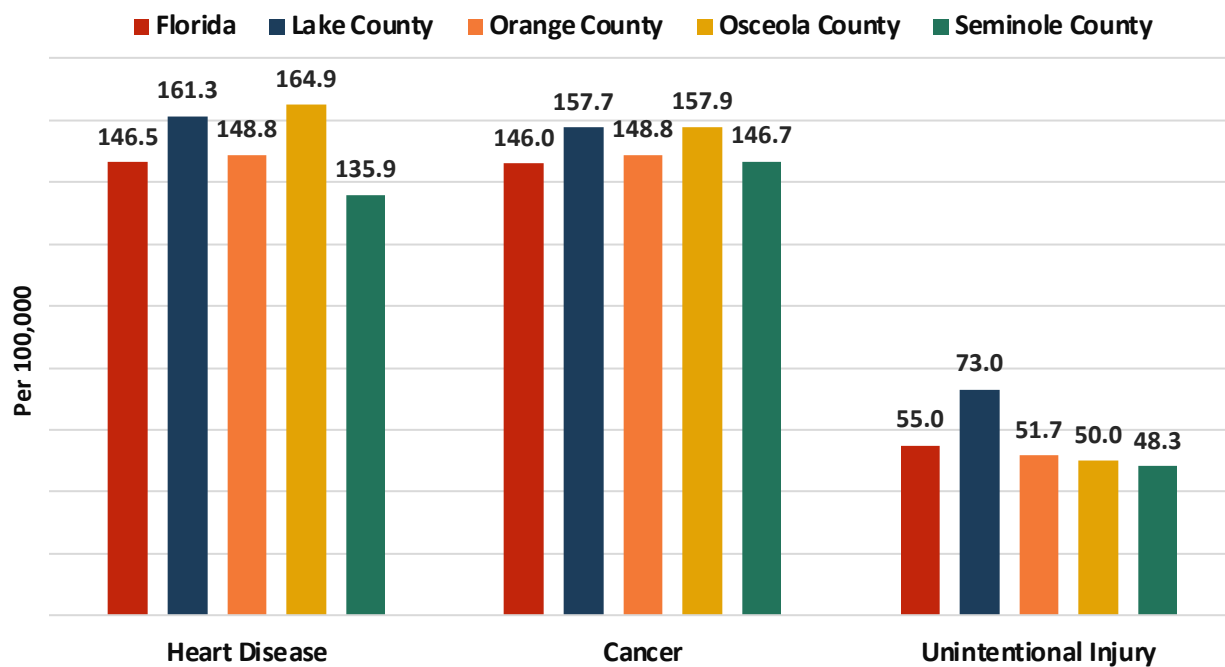
Age-Adjusted Mortality Rate, per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Heart Disease	146.5	161.3	148.8	164.9	135.9
Cancer	146.0	157.7	148.8	157.9	146.7
Unintentional Injury	55.0	73.0	51.7	50.0	48.3
Stroke	40.7	33.3	45.3	51.6	55.3
Chronic Lower Respiratory Disease	38.1	43.5	31.7	32.5	35.3
Diabetes	20.3	25.7	21.3	21.9	19.8
Alzheimer's Disease	19.9	18.0	21.2	22.6	19.5
Suicide	14.6	21.6	10.3	12.6	11.7

Source: Florida Department of Health. Bureau of Vital Statistics, 2017-2019

[28]Deputy Director for Public Health Science & Surveillance. Center for Surveillance, Epidemiology & Laboratory Services, Division of Scientific Education & Professional Development.

Select Morbidity Changes Since the Previous CHNA

Lake County death rates (per 100,000 population) increased for heart disease and (slightly) for some other most common causes of death. However, cancer death rates declined.

Exhibit 34: Leading Causes of Death – Lake County
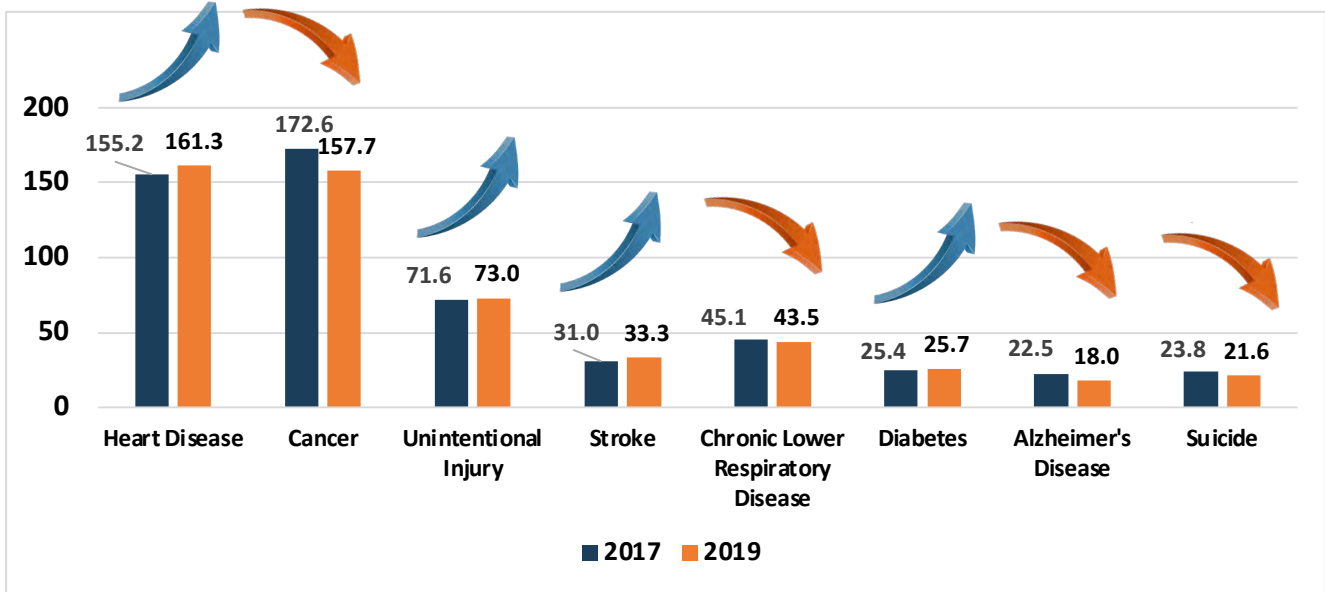
Source: FLHealthCharts; Florida Department of Health, Division of Public Health Statistics and Performance Management, FLHealthCharts database.

In Orange County, nearly all of the most common causes of death decreased from 2017 to 2019 (with the exception of unintentional injuries).

Exhibit 35: Leading Causes of Death – Orange County
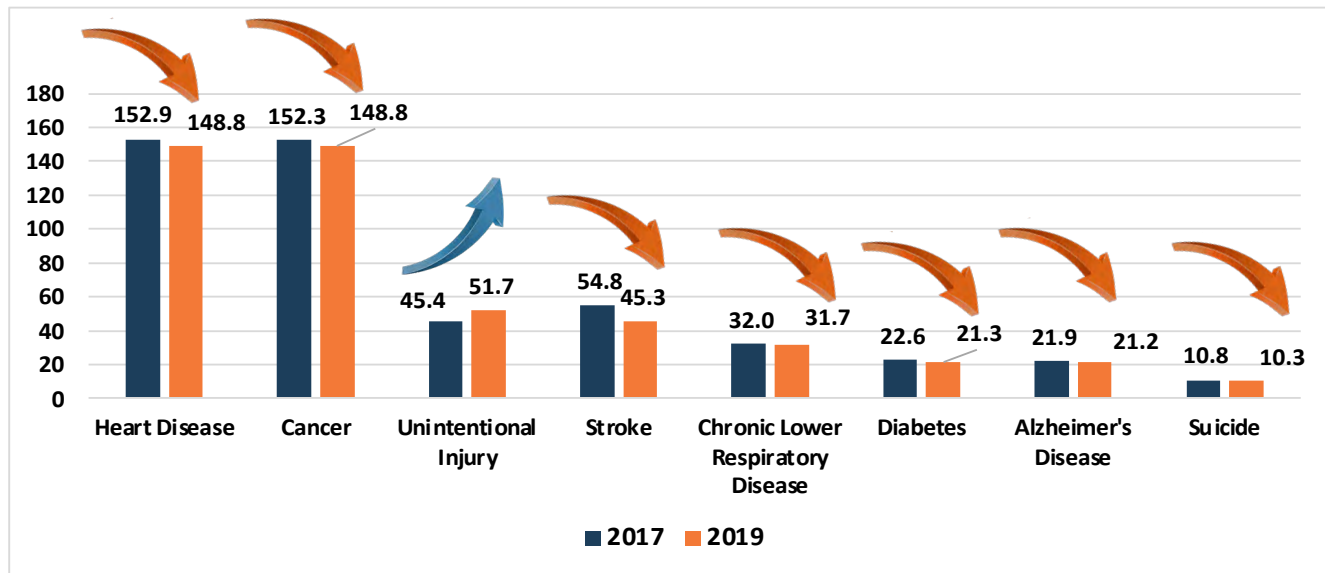
Source: FLHealthCharts; Florida Department of Health, Division of Public Health Statistics and Performance Management, FLHealthCharts database.

Death rates in Osceola County (on a deaths per 100,000 population basis) decreased for heart disease, yet they increased very slightly or were flat for all other most common causes of death.

Exhibit 36: Leading Causes of Death – Osceola County
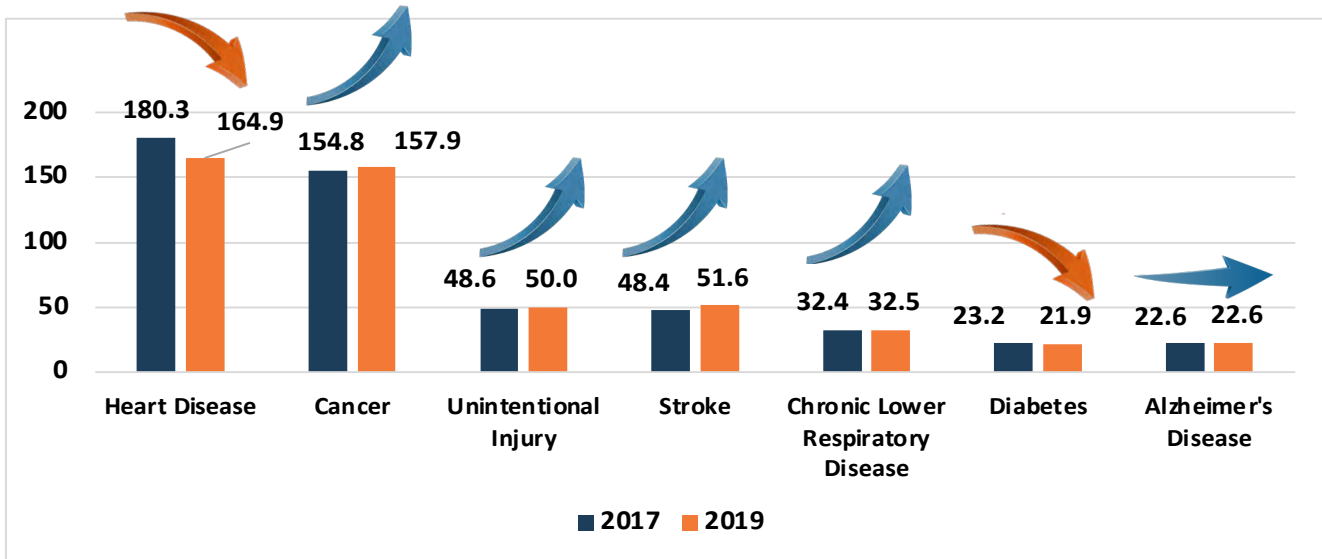
Source: FLHealthCharts; Florida Department of Health, Division of Public Health Statistics and Performance Management, FLHealthCharts database.

The two most common causes of death in Seminole County (plus Chronic Obstructive Pulmonary Disorder, COPD) declined from 2017 to 2019. The rate of deaths from unintentional injuries and stroke increased while others stayed largely unchanged.

Exhibit 37: Leading Causes of Death – Seminole County
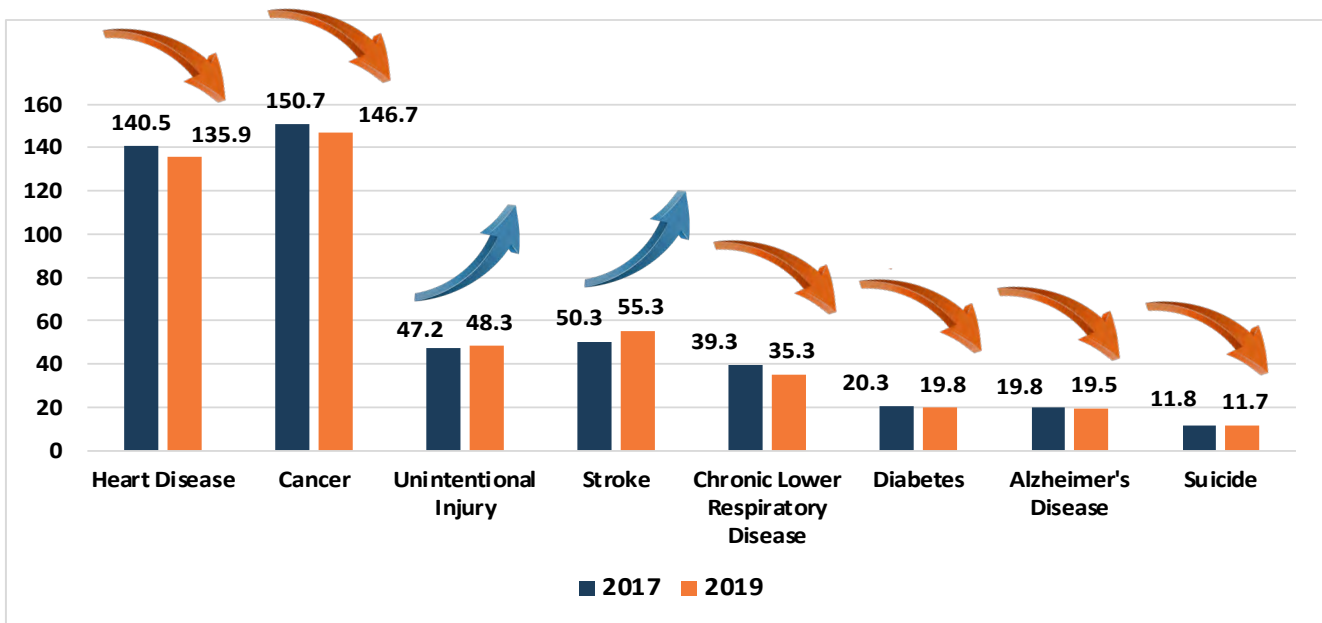
Source: FLHealthCharts; Florida Department of Health, Division of Public Health Statistics and Performance Management, FLHealthCharts database.

Key Risk Factors and Mortality / Morbidity

Risk factors for heart disease include family history and lifestyle behaviors. While family history is not in the control of the individual, controllable risk factors include high blood pressure or cholesterol and obesity. Behaviors such as tobacco and alcohol use as well as an unhealthy diet can increase the chance of developing some type of heart disease.[29]

Exhibit 38: Heart Disease & Cancer-Related Deaths

Legend: ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

Cancer
- Florida: 146.0
- Lake County: 157.7
- Orange County: 148.8
- Osceola County: 157.9
- Seminole County: 146.7

Heart Disease
- Florida: 146.5
- Lake County: 161.3
- Orange County: 148.8
- Osceola County: 164.9
- Seminole County: 135.9

Per 100,000
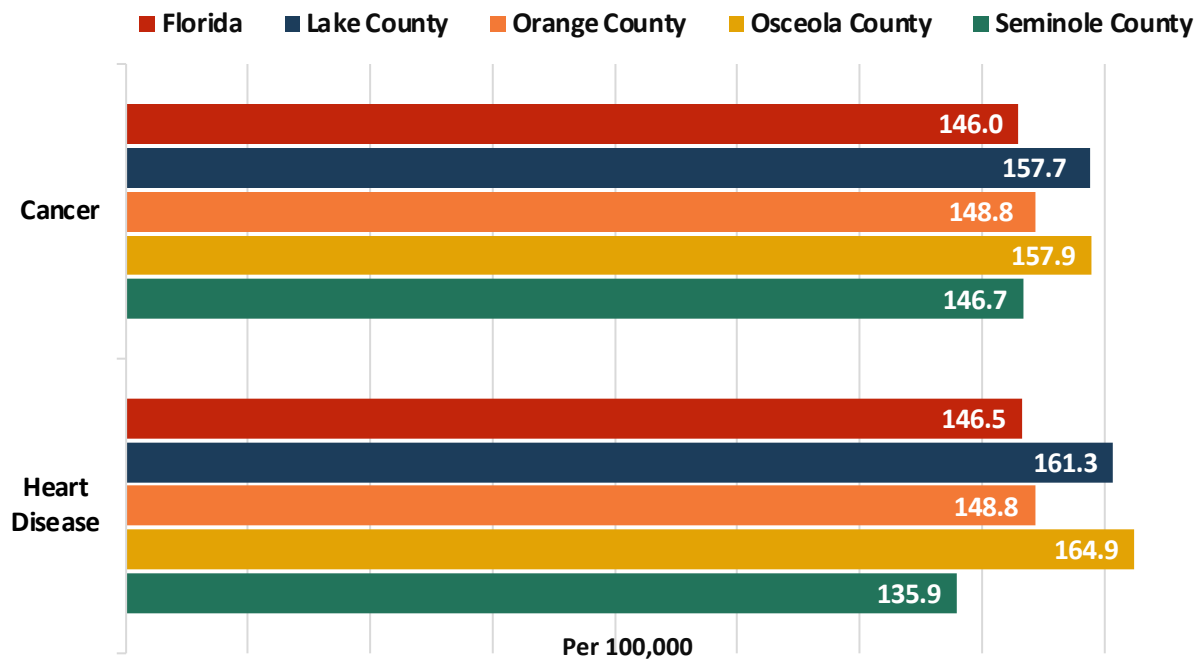
Source: Florida Department of Health. Bureau of Vital Statistics, 2017-2019

- The service area counties all present higher death rates related to cancer compared to Florida.
- Heart disease-related death rates in Lake, Orange and Osceola counties are higher compared to Florida.

[29]Florida Department of Health. Risk factors of Heart Disease.

Florida has decreased both cancer and heart disease-related deaths over the last two decades. While a majority of the leading causes of death have declined over the last 20 years, death rates related to Alzheimer's Disease have increased from 15.1 deaths to 19.9 deaths per 100,000 people. Deaths from unintentional injuries also increased notably (44.7%).

Exhibit 39: **Leading Causes of Death in Florida, Two-Year Comparison**
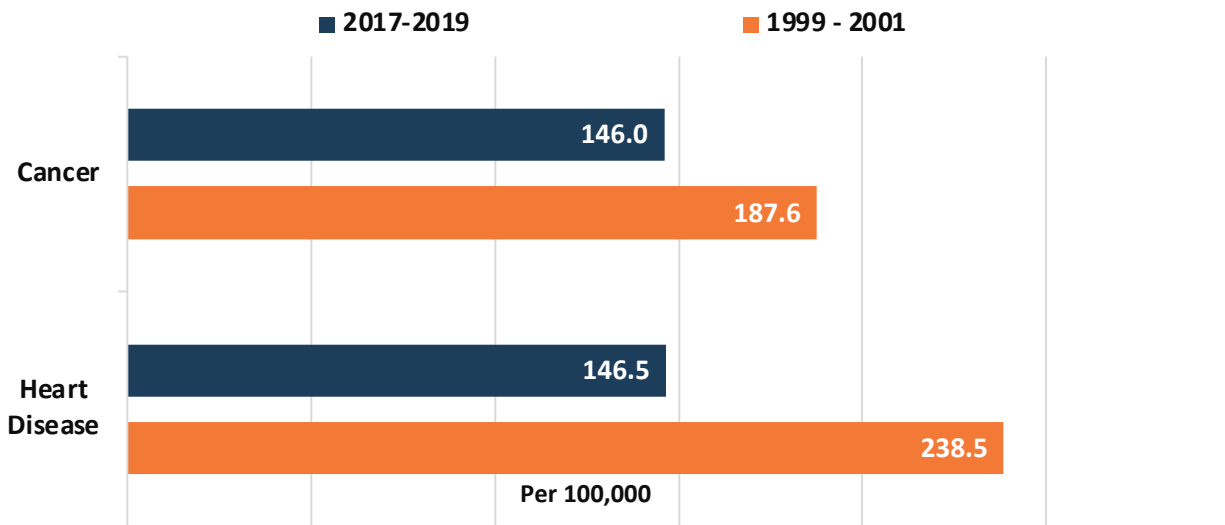
Age-Adjusted Mortality Rate, Florida, per 100,000	1999-2001	2017-2019	Percent Change
Heart Disease	238.5	146.5	-38.6%
Cancer	187.6	146.0	-22.2%
Unintentional Injury	38.0	55.0	44.7%
Stroke	48.9	40.7	-16.8%
Chronic Lower Respiratory Disease	41.3	38.1	-7.7%
Diabetes	21.7	20.3	-6.5%
Alzheimer's Disease	15.1	19.9	31.8%
Suicide	12.8	14.6	14.1%

Source: Florida Department of Health. Bureau of Vital Statistics, 2017-2019

Cancer

Prevalence & Incidence[30]

Florida has the second-highest cancer burden in the nation. Since 2014, cancer has been the second leading cause of death in Florida, after heart disease.[31] Cancer prevalence refers to the proportion of the population with pre-existing cases of any type of cancer, except melanoma, as well as new cases at or during a specified time period. For a more in-depth analysis, additional tables on age groups, income levels, gender and race/ethnicities can be found in the Appendices.

Most service area counties (i.e., all except Lake County), have cancer prevalence rates better than the Florida average. Between 2013 and 2016, the statewide percentage of adults with cancer decreased 0.1% and increased by just half a percent between 2016 and 2019.

Exhibit 40: Trend of Adults Who Have Ever Been Told They Had Cancer
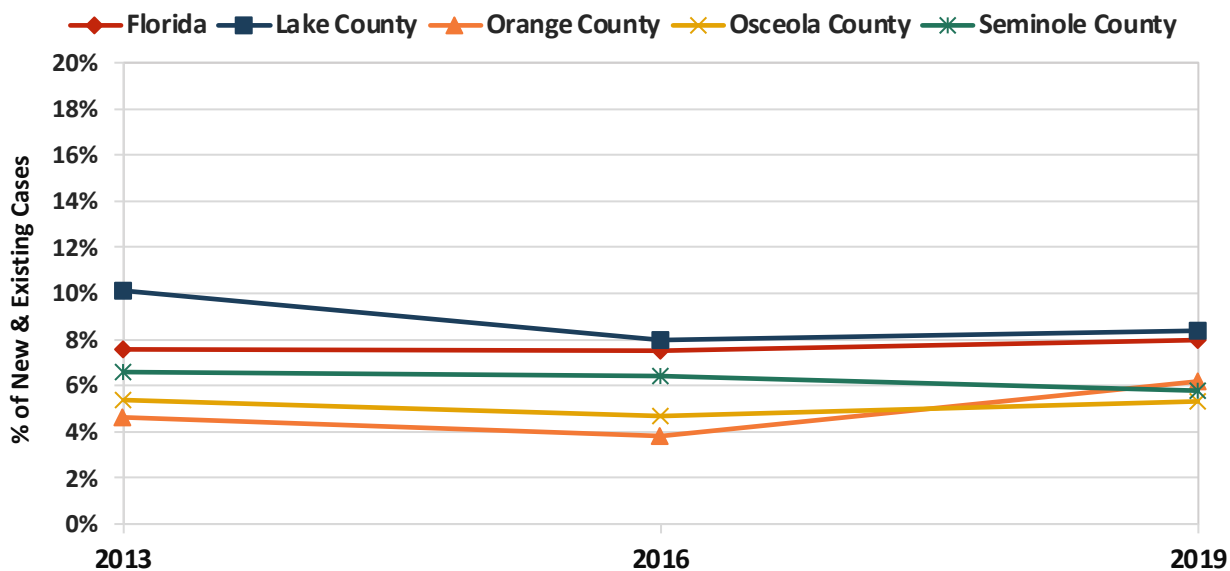
	Florida	Lake County	Orange County	Osceola County	Seminole County
2013	7.6%	10.1%	4.6%	5.4%	6.6%
2016	7.5%	8.0%	3.8%	4.7%	6.4%
2019	8.0%	8.4%	6.2%	5.3%	5.8%

Source: Florida Behavioral Risk Factor Surveillance System[32]

[30]Note: "Prevalence" means new previously diagnosed cases. "Incidence" means new cases only during a defined time period. For additional reference, please see, https://www.flhealthcharts.gov/ChartsReports/rdPage.aspx?rdReport=NonVitalInd.DataViewer&cid=460
[31]Florida Department of Health, Cancer.
[32]Please note: The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health

- In Lake County, the prevalence rate of cancer in 2019 was slightly higher than comparable counties, indicating that there were more existing and new cases of cancer throughout that year. Yet the rate improved notably since 2013, and the gap between county and state rates has almost been eliminated.

- Shown in Exhibit 40, between 2013 and 2019, the prevalence of cancer in Orange County increased while comparable counties experienced a decrease (4.6%, 6.2%, respectively).

conditions, and use of preventive services. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world. The Florida Behavioral Risk Factor Surveillance System (BRFSS) is a state-based telephone surveillance system designed to collect data on individual risk behaviors and preventive health practices related to the leading causes of morbidity and mortality in the United States. **Responses are self-reported**. There have been numerous studies that have examined issues related to the reliability and validity of the BRFSS and the system's ability to provide both valid national estimates, within state estimates and comparisons across states. Read the literature here: https://www.cdc.gov/brfss/publications/data_qvr.htm

The incidence of cancer of all types, except for melanoma, refers to the occurrence of new cases only in a population over a specified time period. The overall incidence of cancer in Florida increased between 2015 and 2018 from 420.3 to 454.3 cases per 100,000 residents – returning to a level similar to, but slightly higher than, the 2008 rate (i.e., 448.7 new cases per 100,000 population).

Exhibit 41: Incidence of Cancer Trend
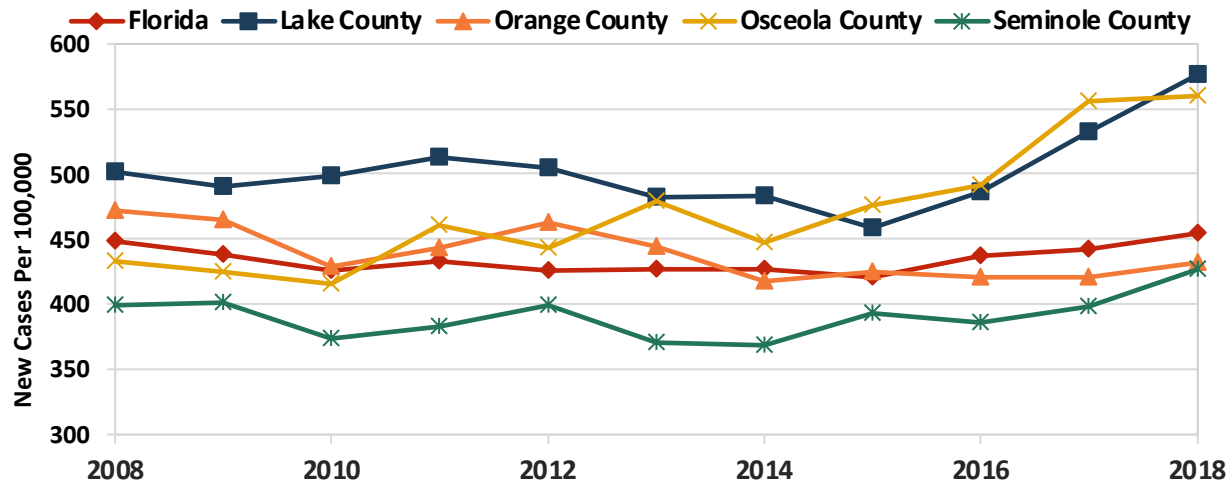
	Florida	Lake County	Orange County	Osceola County	Seminole County
2008	448.7	501.8	472.0	432.8	399.4
2009	438.1	490.5	464.7	425.3	401.4
2010	426.0	498.4	428.6	415.1	373.7
2011	433.1	513.1	443.5	460.6	382.5
2012	426.2	504.9	462.6	443.1	399.3
2013	427.2	482.5	444.6	479.4	371.1
2014	427.2	483.0	417.7	447.2	369.0
2015	420.3	458.3	424.5	475.6	393.3
2016	436.6	486.1	420.6	491.2	385.5
2017	441.9	532.1	420.3	555.8	398.3
2018	454.3	575.8	432.1	559.6	427.2

Source: Florida Behavioral Risk Factor Surveillance System

- The incidence (i.e., new cases per year) of cancer in each of the service area counties except Orange County has increased since 2013. The biggest overall increase over the ten years occurred in Osceola County – rising by approximately 126.8 cases per 100,000 residents.

- Orange County reduced the incidence of cancer between 2008 and 2018 by approximately 40 cases per 100,000 residents, see Exhibit 41.

Breast cancer is a major health issue. Even though incidence rates in the service area (except for Osceola County) are near the statewide average, a nominal number of people with breast cancer is significant. Osceola County rates are of particular concern and approximately 18% higher than the Florida average.

In 2018, the overall incidence of breast cancer was the highest within Florida and the service area, compared to comparable types of cancer, followed by lung cancer. Additional charts indicating the ten-year trend (2008-2018) of each type of cancer, plus additional types, are located in the Appendices of this report.

Exhibit 42: Incidence of Cancer by Type per 100,000
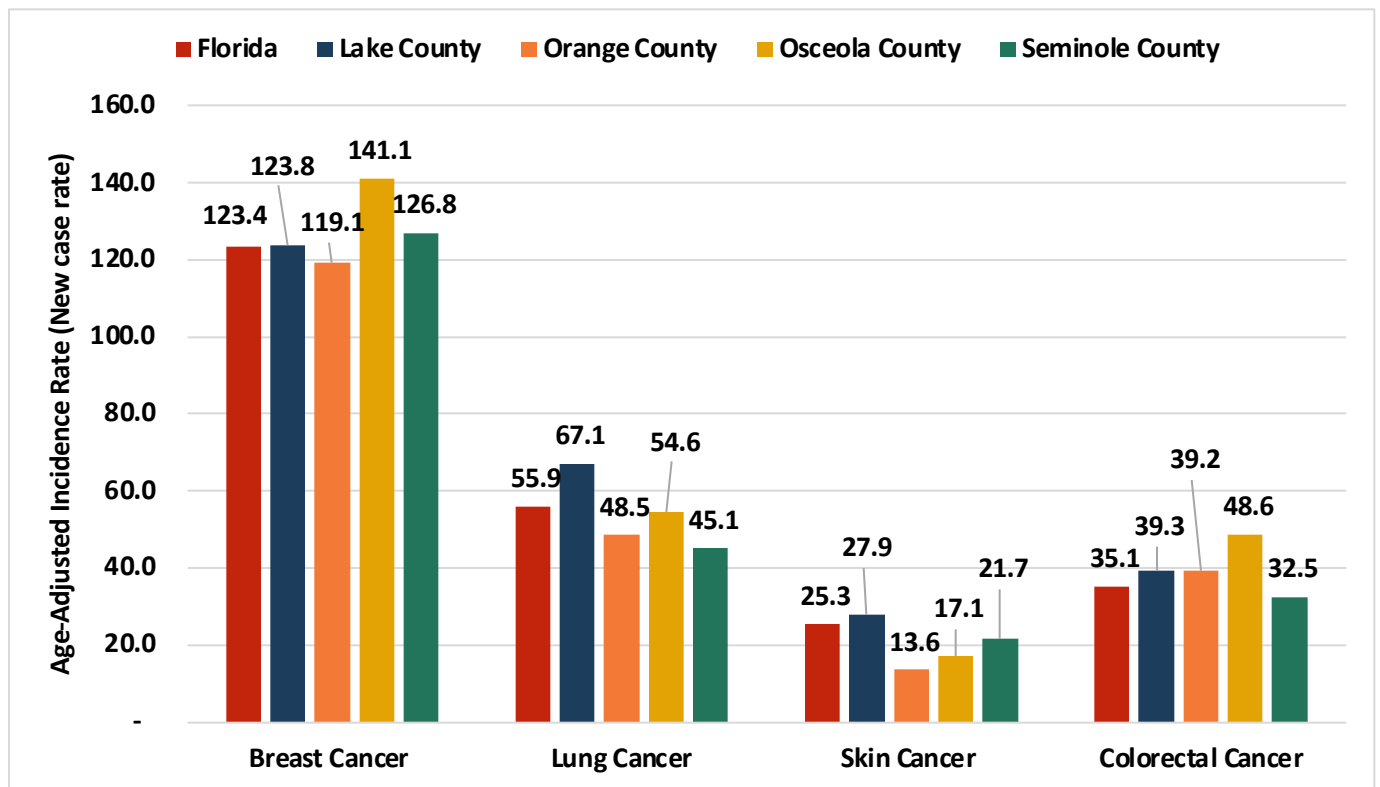
Age-Adjusted Incidence Rate	Florida	Lake County	Orange County	Osceola County	Seminole County
Breast Cancer	123.4	123.8	119.1	141.1	126.8
Lung Cancer	55.9	67.1	48.5	54.6	45.1
Skin Cancer	25.3	27.9	13.6	17.1	21.7
Colorectal Cancer	35.1	39.3	39.2	48.6	32.5

Source: The University of Miami Medical School, Florida Cancer Data System, 2018

• The incidence rate of breast cancer in Osceola County is highest within the service area at 141.1 diagnoses per 100,000 residents, notably higher compared to Florida.

Heart Disease

Heart disease accounts for approximately two out of 10 deaths in Florida. Data from this section was sourced from the Florida Behavioral Risk Factor Surveillance System. Respondents were asked if they had ever been told they had angina or coronary heart disease. Angina is defined as a type of chest pain caused by reduced blood flow to the heart and is a symptom of coronary artery disease.[34]

In Florida, those who identify as non-Hispanic/Latino White are much more likely to experience heart disease compared to those who identify as Hispanic/Latino (5.9%, 1.8%, respectively). For a more in-depth analysis, additional tables on age groups, income levels, gender and race/ethnicities can be found in the Appendices of this report.[35]

Exhibit 43: Adults with Coronary Heart Disease Summary[35]

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Adults with Heart Disease	4.7%	5.5%	3.0%	6.4%	2.9%
Gender[36]					
Men	5.8%	6.0%	4.2%	5.2%	3.6%
Women	3.6%	5.0%	1.8%	7.5%	2.2%
Age					
18 – 44	0.4%	0.1%	0.3%	4.2%	0.3%
45 – 64	4.4%	7.0%	4.1%	7.0%	2.7%
65 +	11.0%	9.8%	9.9%	10.6%	9.1%
Annual Income					
< $25,000	6.2%	7.6%	5.6%	8.2%	5.6%
$25,000 - $49,999	4.5%	4.2%	1.4%	2.9%	1.2%
$50,000 +	3.5%	3.7%	2.0%	4.2%	2.5%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- The percentage of adults that have been told they have heart disease is double in Osceola County compared to Orange and Seminole counties.

- Osceola County also presents a much higher percentage of women experiencing heart disease compared to women in comparable counties - and men. For each service area county, the percentage of those who earn $25,000 or less annually are twice as likely to experience heart disease compared to those earning $50,000 or more annually.

[33]Florida Department of Health, Heart Disease.
[34]Mayo Clinic. Diseases & Conditions, Angina.
[35]Adults who have ever been told they had angina or coronary heart disease.
[36]Gender categories provided in this report are those available in the publicly available data, and do not reflect the population identifying as non-binary or other.

From 2013 to 2019, heart disease rates drifted lower except in Osceola County. Service area heart disease rates deviate slightly from the state percentage.

Exhibit 44: Trend of Adults Who Have Ever Been Told They Had Heart Disease
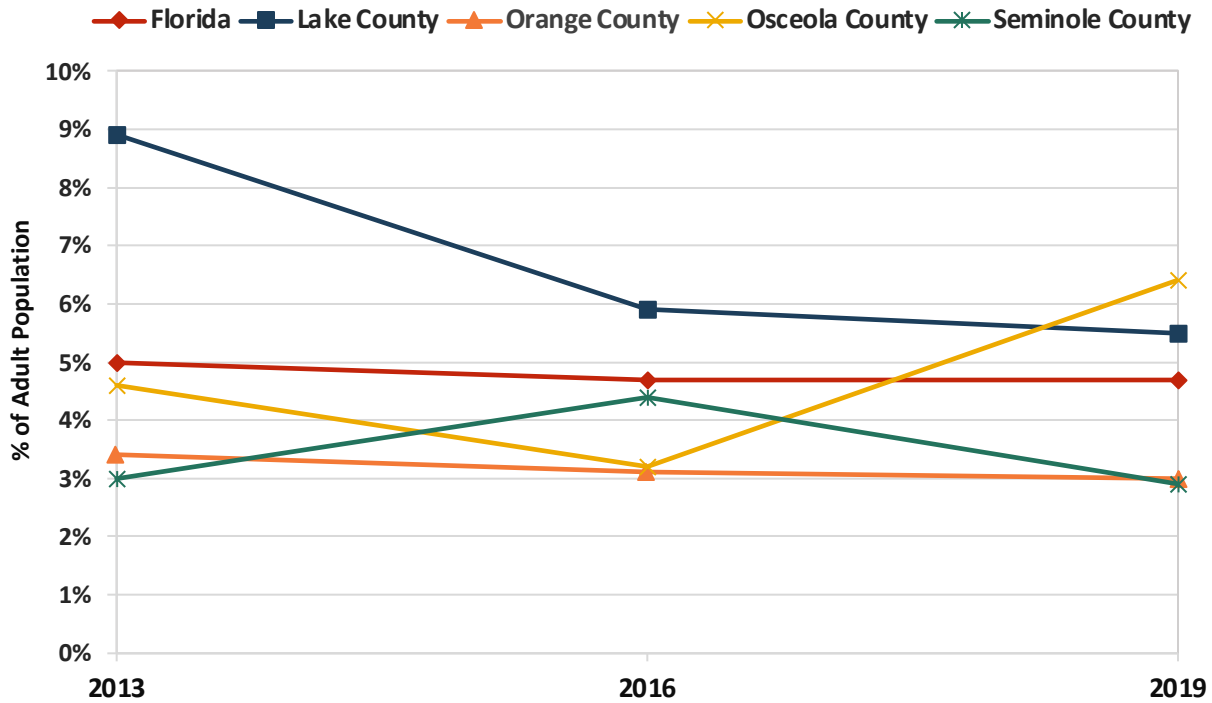
	Florida	Lake County	Orange County	Osceola County	Seminole County
2013	5.0%	8.9%	3.4%	4.6%	3.0%
2016	4.7%	5.9%	3.1%	3.2%	4.4%
2019	4.7%	5.5%	3.0%	6.4%	2.9%

Source: Florida Behavioral Risk Factor Surveillance System

- In 2019, the percentage of adults in Osceola and Lake counties with heart disease was higher compared to Florida. However, Osceola County percentages are trending negatively (i.e., a higher rate than in 2013 and 2016), and Lake County rates are notably improved.

- Osceola County presented the highest percentage of adults who have ever been told they have heart disease in 2019 (6.4%). While the remaining service area counties have decreased since 2013, Osceola County saw a nearly 2% increase.

- Between 2016 and 2019, percentages remained steady in Lake and Orange counties, but they doubled in Osceola County and decreased by nearly half in Seminole County.

Coronary heart disease is a major risk among non-Hispanic/Latino Black/African American residents in Osceola County – four to five times higher than other service area counties.

Exhibit 45: Adults with Coronary Heart Disease by Race & Ethnicity
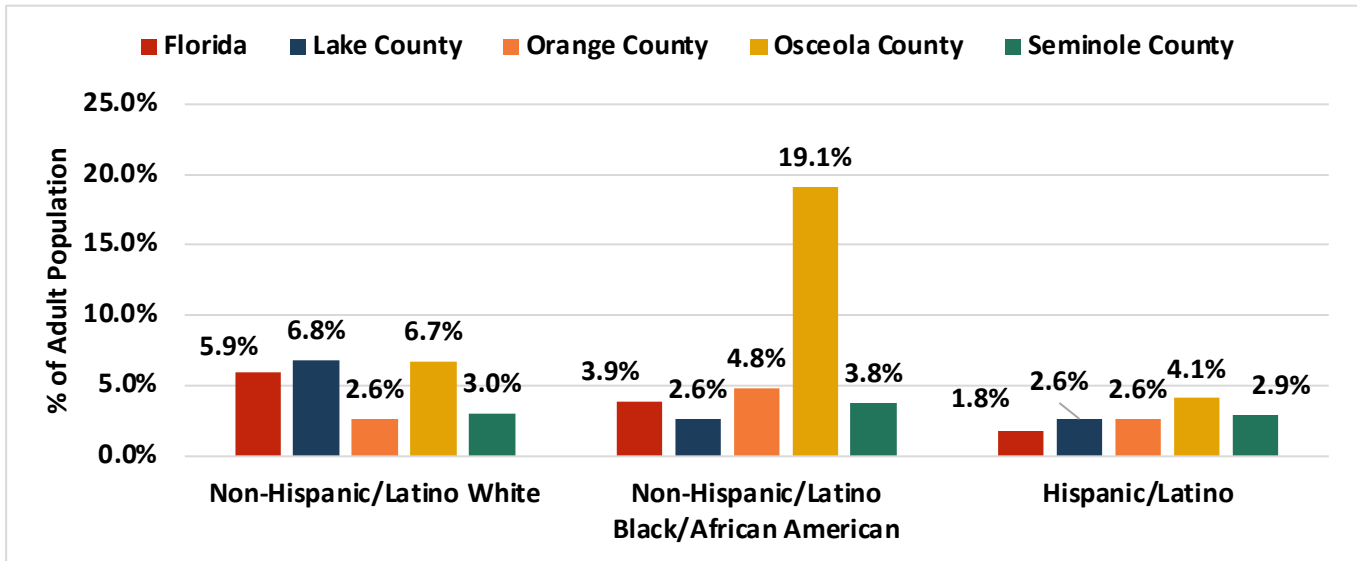
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Non-Hispanic/Latino White	5.9%	6.8%	2.6%	6.7%	3.0%
Non-Hispanic/Latino Black/African American	3.9%	2.6%	4.8%	19.1%	3.8%
Hispanic/Latino	1.8%	2.6%	2.6%	4.1%	2.9%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Exhibit 46: Preventable Hospitalizations Under 65 from Congestive Heart Failure
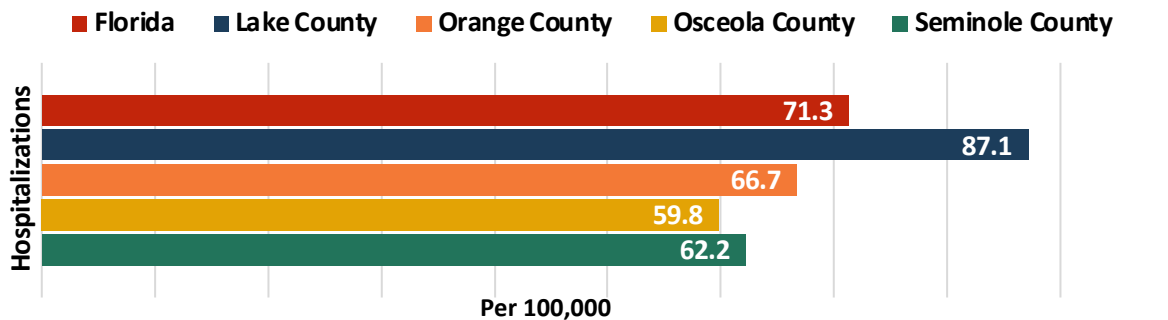
Florida	Lake County	Orange County	Osceola County	Seminole County
71.3	87.1	66.7	59.8	62.2

Source: Florida Agency for Health Care Administration, 2018-2020

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Other Chronic Diseases

Chronic diseases are defined broadly as conditions that last one year or more and require ongoing medical attention or limit activities of daily living or both. Chronic diseases such as heart disease, cancer and diabetes are the leading causes of death and disability in the United States. They are also leading drivers of the nation's $3.8 trillion in annual health care costs.[37] Research has shown that the onset of a chronic disease reduces wages by nearly 20%. Chronic illness may restrict employment and increase medical expenses and costly caregiving responsibilities, which all contribute to widening the income and wealth gaps.[38] The bar graph below displays death rates caused by all other chronic diseases, excluding the top three leading causes of death discussed previously.

Exhibit 47: Chronic Disease Deaths per 100,000
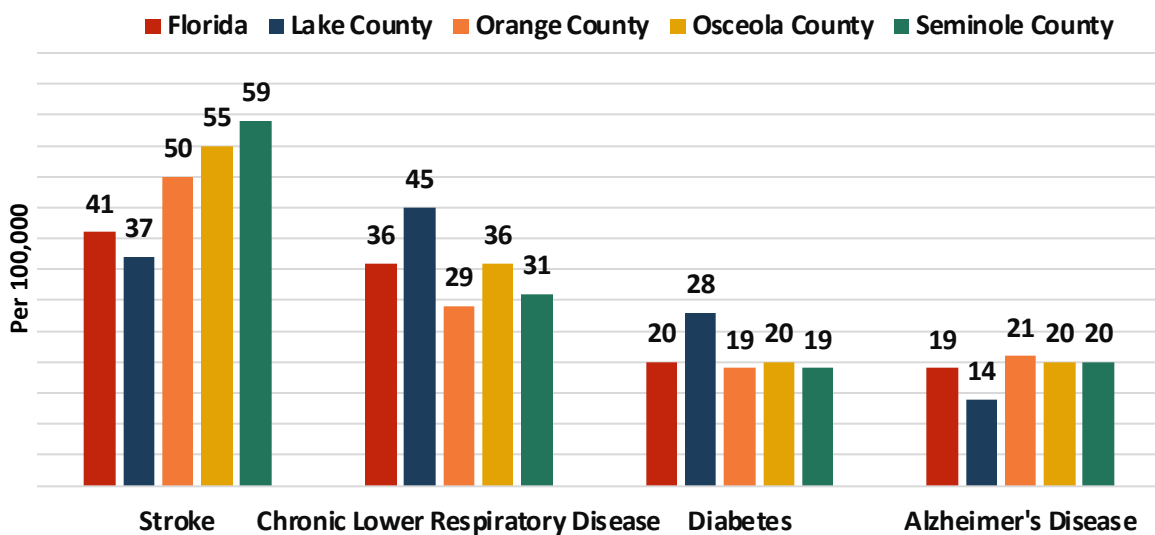
2017-2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Heart Disease	144	161	145	155	127
Cancer	143	153	144	169	140
Unintentional Injuries	56	83	44	51	51
Stroke	41	37	50	55	59
Chronic Lower Respiratory Disease	36	45	29	36	31
Diabetes	20	28	19	20	19
Alzheimer's Disease	19	14	21	20	20

Source: Florida Department of Health. Bureau of Vital Statistics, 2017-2019

[37]National Center for Chronic Disease Prevention and Health Promotion. About Chronic Disease, 2021.
[38]Health Affairs. The United States Can Reduce Socioeconomic Disparities by Focusing on Chronic Diseases, 2017.

- The rate of deaths caused by stroke in Orange, Osceola and Seminole counties is much higher than the state average. Seminole County also presents the highest three-year cumulative death rate related to strokes within the service area, 59 deaths per 100,000 residents.

- While Orange County has heart disease, cancer, diabetes and Alzheimer's death rates similar to the Florida average, the chronic lower respiratory disease death rates are notably lower than the Florida average.

- Death rates in Osceola County for heart disease and cancer are the highest or second highest among any of the service area counties.

- Chronic lower respiratory disease-related deaths are more common in Lake County than the other three counties.

Morbidity refers to having a disease, or a symptom of disease, or to the amount of disease within a population. Morbidity also refers to medical problems caused by a treatment.[39]

Exhibit 48: Population Diagnosed with a Chronic Disease
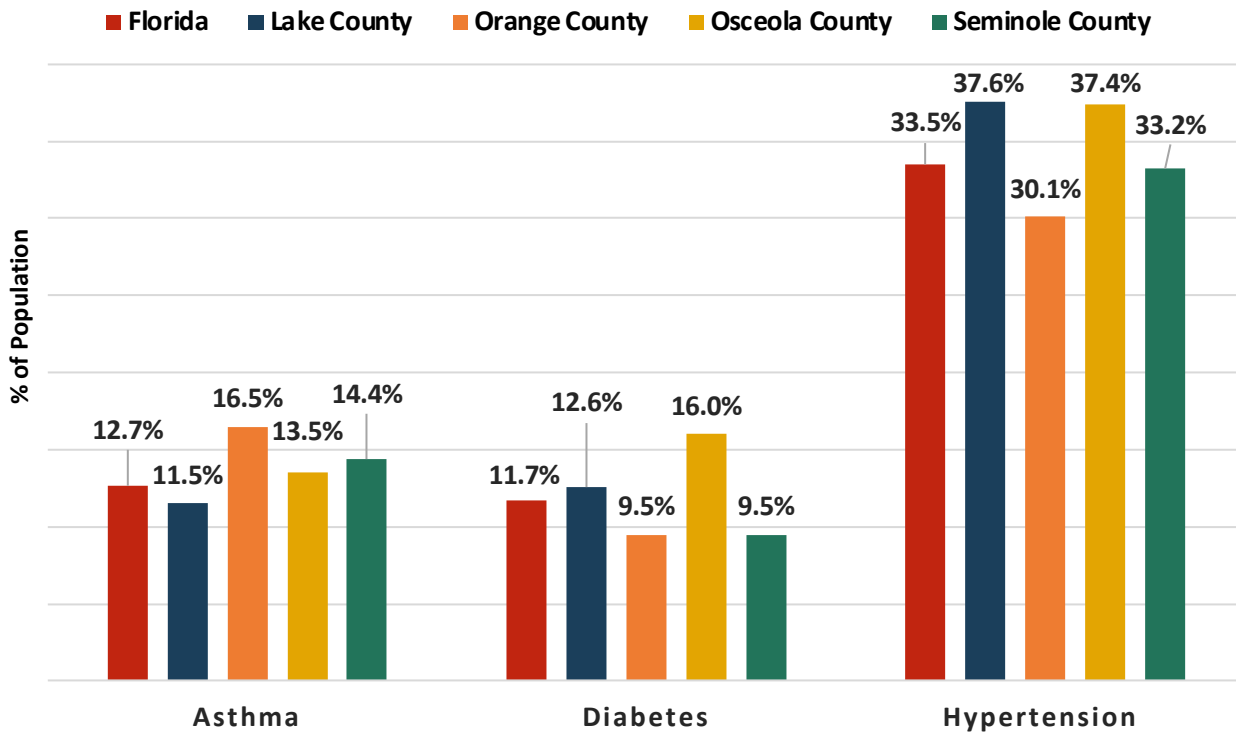
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Asthma	12.7%	11.5%	16.5%	13.5%	14.4%
Diabetes	11.7%	12.6%	9.5%	16.0%	9.5%
Hypertension	33.5%	37.6%	30.1%	37.4%	33.2%

Source: Florida Behavioral Risk Factor Surveillance System, 2019[40]

- In 2019, over 30% of the adult population in every service area county had hypertension high blood pressure), most prevalent in Lake County and Osceola County (37.6%, 37.4%, respectively).

- As shown above, while Orange and Seminole counties present the lowest percentage of adults diagnosed with diabetes, the prevalence of asthma remains higher than comparable counties and the statewide percentage.

[39]National Cancer Institute, Morbidity.
[40]Behavioral Risk Factor Surveillance System (BRFSS) Survey.

Asthma

People with asthma are often triggered by colds, cigarette smoke and exercise.[41] In Florida, asthma is most common in female residents between the ages of 18 to 44 earning an annual household income of $25,000 or less. Adults who identify as non-Hispanic/Latino Black/African American are slightly more likely to have been told they had asthma than non-Hispanic/Latino White and Hispanic/Latino populations.

Exhibit 49: Adults with Asthma Summary

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Adults with Asthma	12.7%	11.5%	16.5%	13.5%	14.4%
Age					
18 - 44	14.2%	12.4%	19.1%	17.9%	16.7%
45 - 64	12.9%	12.0%	13.4%	10.6%	13.1%
65 +	10.5%	10.5%	15.4%	8.1%	11.3%
Annual Income					
< $25,000	17.8%	13.4%	24.7%	14.5%	20.2%
$25,000 - $49,999	12.3%	13.2%	17.3%	9.2%	20.0%
$50,000 +	11.0%	12.3%	11.9%	14.3%	11.9%
Gender					
Men	10.1%	8.8%	11.7%	11.4%	11.1%
Women	15.2%	14.0%	21.1%	15.4%	17.3%
Race & Ethnicity					
Non-Hispanic/Latino White	12.3%	12.4%	12.7%	10.4%	13.0%
Non-Hispanic/Latino Black/African American	14.2%	10.2%	12.7%	25.4%	15.9%
Hispanic/Latino	13.8%	11.4%	26.4%	13.7%	19.4%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- Orange County presents the highest percentage of adults that have ever been told they had asthma (16.5%) as well as an exceptionally high percentage of residents between the ages of 18 and 44 with asthma.[42]

- Households within the service area earning an average income of $25,000 or less per year are more likely to have an individual diagnosed with asthma in their household.

- In Orange County, 9.4% more women have been told they have asthma compared to men (21.1% and 11.7%, respectively).

[41]Florida Department of Health, Asthma.
[42]For a more in-depth analysis, additional tables on age groups, income levels, gender and race/ethnicities can be found in the Appendices.

Long-term asthma trends have risen in Orange and Seminole counties but stayed the same or declined slightly in the other service area counties. Overall, all service area counties experienced a decrease in adult asthma between 2013 and 2016. However, between 2016 and 2019, all service areas experienced a sharp increase. This is most obvious in Orange and Seminole counties.

Exhibit 50: Trend of Adults Who Have Ever Been Told They Had Asthma
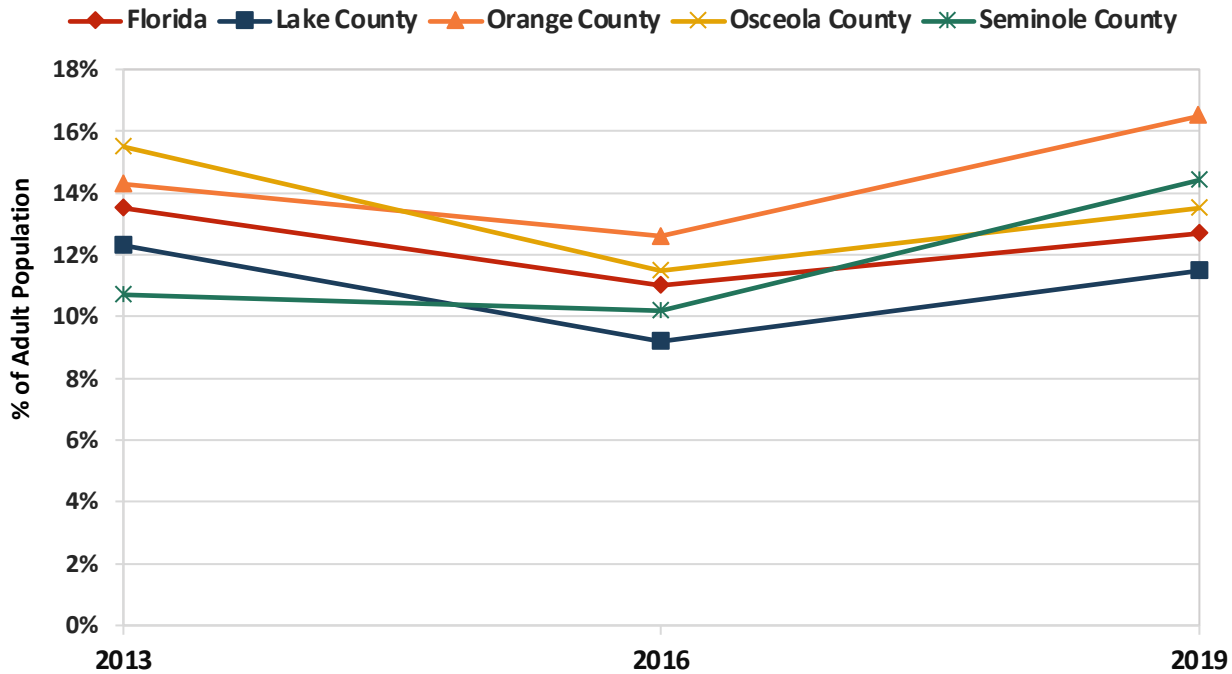
	Florida	Lake County	Orange County	Osceola County	Seminole County
2013	13.5%	12.3%	14.3%	15.5%	10.7%
2016	11.0%	9.2%	12.6%	11.5%	10.2%
2019	12.7%	11.5%	16.5%	13.5%	14.4%

Source: Florida Behavioral Risk Factor Surveillance System

- Between 2013 to 2019, the greatest increase in adults with asthma occurred in Seminole County, growing from 10.7% in 2013 to 14.4% in 2019.

Diabetes

Diabetes is a life-long disease that affects the way your body handles glucose, a kind of sugar, in the blood. The body changes most food into glucose, which the body uses for energy.[43] This section indicates population characteristics of adults that have ever been told they have diabetes.

In Florida, diabetes is most common in male residents 65 and older. Those earning an annual household income of $25,000 or less in Florida are also more likely to experience diabetes compared to other income brackets. The percentage of those who earn $50,000 or more a year who have ever been told they have diabetes is half compared to those who earn $25,000 or less per year. For a more in-depth analysis, additional tables on age groups, income levels, gender and race/ethnicities can be found in the Appendices of this report.

Exhibit 51: Adults with Diabetes Summary

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Adults with Diabetes	11.7%	12.6%	9.5%	16.0%	9.5%
Gender					
Men	12.7%	13.7%	9.8%	16.1%	10.3%
Women	10.7%	11.6%	9.2%	15.8%	8.8%
Age					
18 - 44	2.3%	4.1%	2.7%	5.1%	1.1%
45 - 64	14.1%	13.6%	11.9%	18.9%	8.1%
65 +	23.5%	20.5%	28.1%	40.6%	31.0%
Annual Income					
< $25,000	16.1%	19.9%	13.8%	23.0%	15.9%
$25,000 - $49,999	12.7%	14.9%	6.8%	14.9%	7.7%
$50,000 +	7.9%	10.0%	5.5%	7.4%	6.5%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- Osceola County presents the highest percentage of adults that have been told they have diabetes.

- In most counties, the percentage of those with diabetes earning $25,000 or less is double compared to those earning $50,000, annually.

- For adults between the ages of 18 and 44, diabetes is most common in Osceola County (5.1%) and least common in Seminole County (1.1%).

[43]Florida Department of Health, Diabetes.

The percent of adults having been told they have diabetes varies slightly by ethnicity within each county, yet there is no overall 2019 trend that puts a particular ethnicity at greater risk. However, Osceola County diabetes rates (all ethnicities) tend to be higher than other service area counties.

Exhibit 52: Trend of Adults Ever Told They Have Diabetes by Race & Ethnicity

Legend: ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

Y-axis: % of Adult Population

Non-Hispanic White:
- Florida: 11.5%
- Lake County: 13.7%
- Orange County: 8.8%
- Osceola County: 14.4%
- Seminole County: 10.6%

Non-Hispanic Black:
- Florida: 16.0%
- Lake County: 8.2%
- Orange County: 7.4%
- Osceola County: 13.9%
- Seminole County: 12.4%

Hispanic:
- Florida: 10.6%
- Lake County: 8.7%
- Orange County: 12.1%
- Osceola County: 18.3%
- Seminole County: 4.7%

2019

	Florida			Lake County			Orange County		
	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
2002	8.0%	10.6%	7.1%	10.1%	18.5%	3.4%	6.5%	17.1%	2.8%
2007	9.0%	12.4%	6.6%	13.2%	18.5%	9.7%	8.0%	13.4%	6.0%
2010	10.1%	13.1%	9.6%	12.5%	18.5%	18.0%	7.8%	21.5%	6.9%
2013	11.4%	12.3%	10.8%	16.2%	18.5%	18.0%	10.6%	6.4%	15.0%
2016	11.5%	14.5%	10.9%	11.1%	18.5%	14.5%	8.8%	10.9%	10.6%
2019	11.5%	16.0%	10.6%	13.7%	8.2%	8.7%	8.8%	7.4%	12.1%

	Florida			Osceola County			Seminole County		
	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
2002	8.0%	10.6%	7.1%	7.6%	ND	2.3%	6.2%	3.6%	ND
2007	9.0%	12.4%	6.6%	8.4%	22.8%	8.2%	6.7%	12.5%	10.4%
2010	10.1%	13.1%	9.6%	7.8%	30.1%	11.6%	11.8%	ND	19.5%
2013	11.4%	12.3%	10.8%	10.7%	8.5%	18.4%	10.7%	10.4%	4.1%
2016	11.5%	14.5%	10.9%	17.0%	3.6%	14.7%	10.7%	9.4%	18.6%
2019	11.5%	16.0%	10.6%	14.4%	13.9%	18.3%	10.6%	12.4%	4.7%

Source: Florida Behavioral Risk Factor Surveillance System[45]

[44]Note: The data point for 2019 Non-Hispanic/Latino Black/African American residents of Lake County is correctly reported from the Florida Charts website, however, the magnitude of the change from 2016 is suspicious. There are a few other notable time period fluctuations, so analysis will be most useful when broader trends and comparisons are made for this chart. It is likely that the variations stem from sample size deviations potentially related to pandemic related issues.
[45]Adults who are overweight.

The percentage of adults who have ever been told they have diabetes steadily increased in Florida from 2002 to 2016; it decreased by 0.1% from 2016 to 2019. While service county percentages varied throughout the data collection period, by 2019, all percentages had increased.

Exhibit 53: **Trend of Adults Who Have Ever Been Told They Had Diabetes**
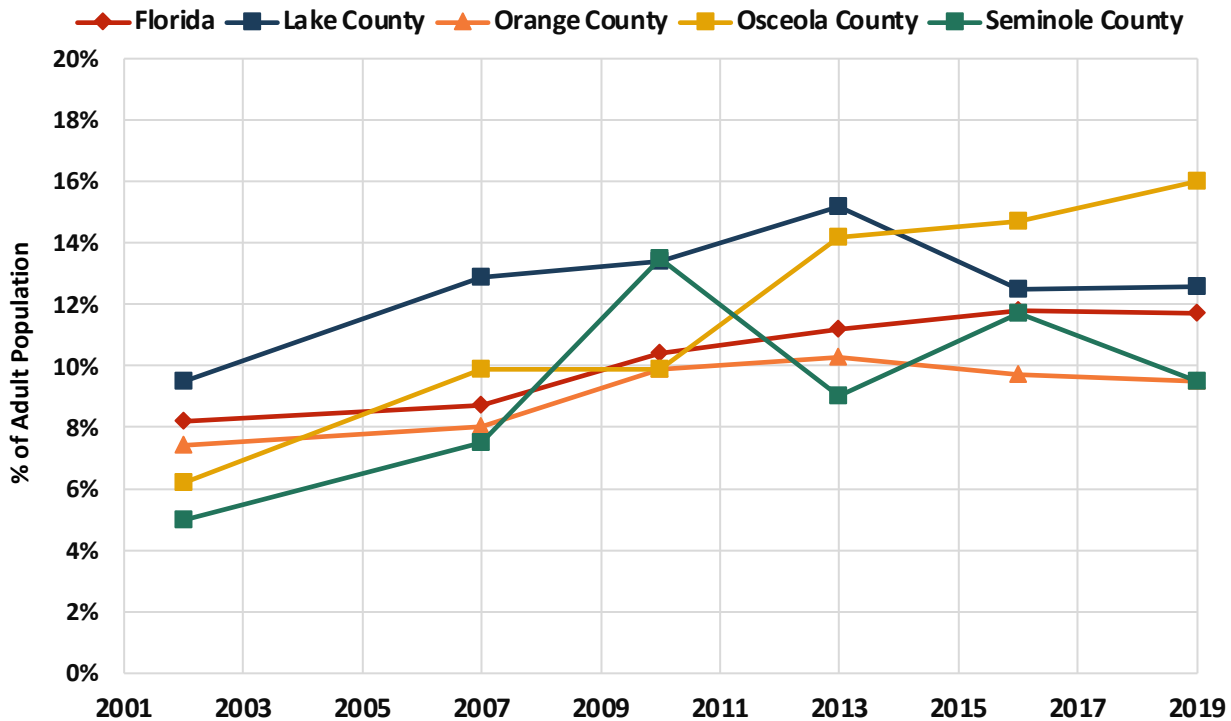
	Florida	Lake County	Orange County	Osceola County	Seminole County
2002	8.2%	9.5%	7.4%	6.2%	5.0%
2007	8.7%	12.9%	8.0%	9.9%	7.5%
2010	10.4%	13.4%	9.9%	9.9%	13.5%
2013	11.2%	15.2%	10.3%	14.2%	9.0%
2016	11.8%	12.5%	9.7%	14.7%	11.7%
2019	11.7%	12.6%	9.5%	16.0%	9.5%

Source: Florida Behavioral Risk Factor Surveillance System

- Shown above, between 2002 to 2019, the percentage of adults told they ever had diabetes nearly doubled in Seminole County (5.0%, 9.5%) while Osceola County experienced an even higher increase (6.2%, 16.0%).

- Between 2007 and 2010, the adult population with diabetes in Seminole County grew by 6% and was the only county during this period to experience an increase of this size.

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Osceola County presents the highest percentage of obese or overweight adults within the service area. This figure is also higher compared to Florida.

Exhibit 54: Adults Who Are Overweight or Obese

Legend: ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

% of Overweight or Obese Adults

- Florida: 64.6%
- Lake County: 64.4%
- Orange County: 65.9%
- Osceola County: 75.3%
- Seminole County: 60.3%
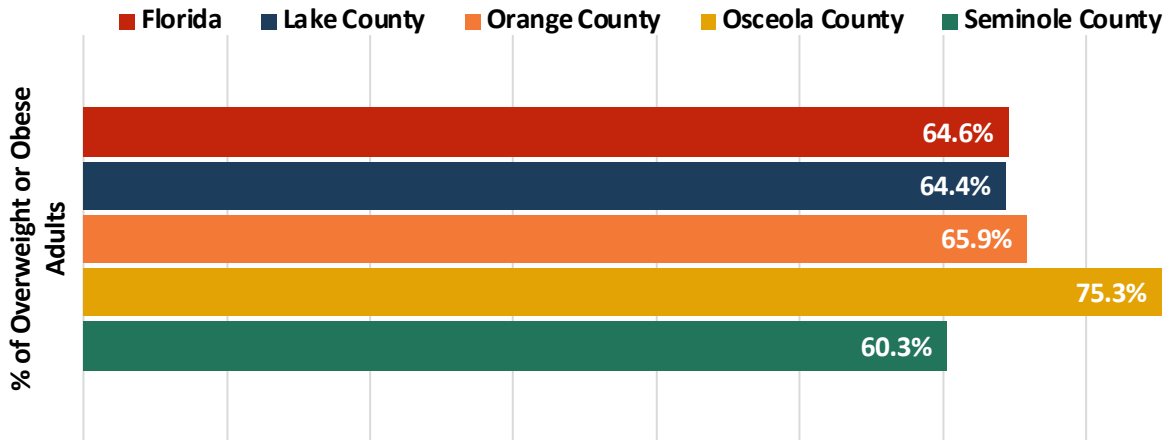
Florida	Lake County	Orange County	Osceola County	Seminole County
64.6%	64.4%	65.9%	75.3%	60.3%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

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Hypertension

Hypertension, also called high blood pressure, is a serious, widespread health challenge that occurs when blood pressure is higher than normal. Hypertension is a serious, widespread health challenge. People with hypertension have an increased risk of heart disease and stroke. Only about one in four adults with hypertension have their condition under control.[46] Blood pressure changes throughout the day based on activities. Having blood pressure measures consistently above normal may result in a diagnosis of high blood pressure or hypertension.[47]

This section indicates population characteristics of adults that have ever been told they have hypertension. Note: 2016 data for this indicator was unavailable. For a more in-depth analysis, additional tables on age groups, income levels, gender, as well as race and ethnicities can be found in Appendices of this report.

Exhibit 55: Adults with Hypertension Summary

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Adults with Hypertension	33.5%	37.6%	30.1%	37.4%	33.2%
Gender					
Men	36.2%	38.3%	29.2%	38.7%	38.1%
Women	31.0%	37.0%	31.0%	36.3%	28.7%
Age					
18 - 44	12.4%	16.2%	16.7%	17.8%	14.1%
45 - 64	39.3%	39.3%	38.1%	45.9%	40.1%
65 +	58.7%	58.1%	57.0%	71.8%	64.4%
Annual Income					
< $25,000	37.9%	40.9%	34.2%	46.1%	45.1%
$25,000 - $49,999	33.1%	38.3%	29.4%	35.2%	29.7%
$50,000 +	30.3%	32.5%	27.0%	26.7%	30.8%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- More than half of adults in Lake and Orange counties over age 65 have high blood pressure (58.1%, 57.0%, respectively), while the rates in Osceola and Seminole counties are higher (71.8%, 64.4%, respectively).

[46]Center for Chronic Disease Prevention & Health Promotion, Division for Heart Disease & Stroke.
[47]National Center for Chronic Disease Prevention & Health Promotion, Division for Heart Disease & Stroke Prevention.

Unlike some other chronic health conditions, high blood pressure rates have been fairly stable over the past 10 years.

Exhibit 56: Trend of Adults Who Have Ever Been Told They Have Hypertension
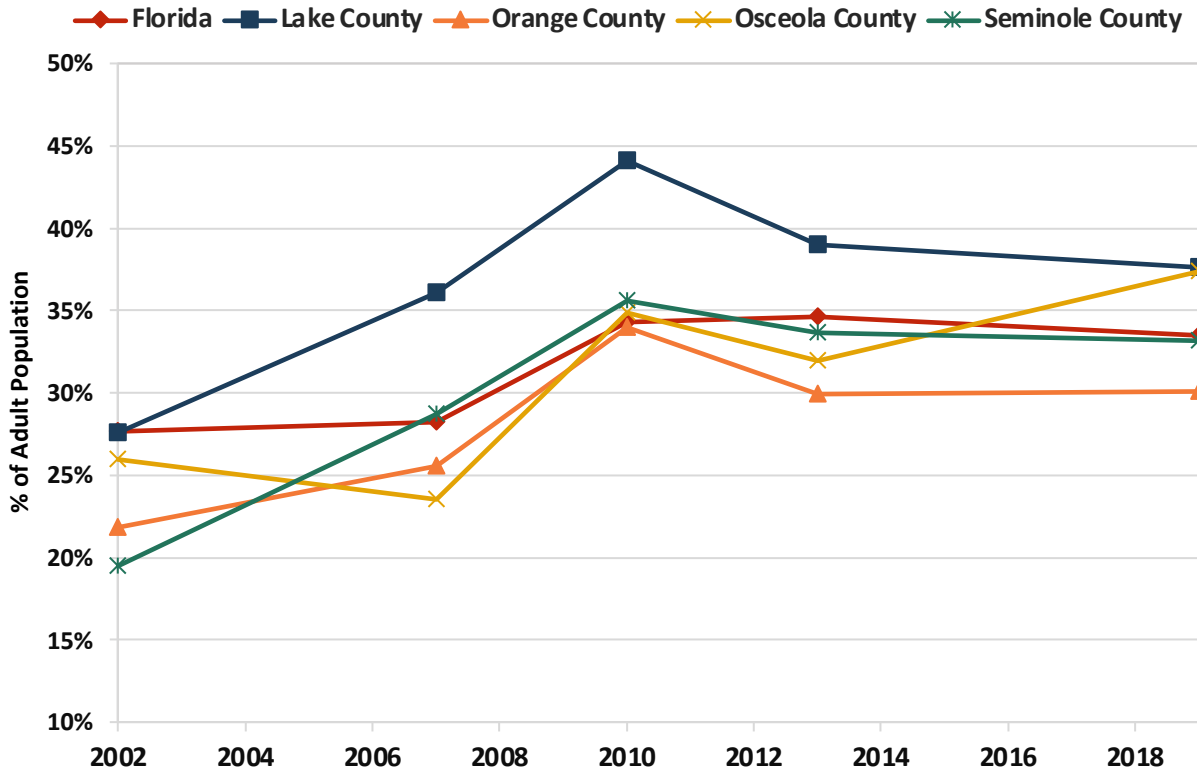
	Florida	Lake County	Orange County	Osceola County	Seminole County
2002	27.7%	27.6%	21.8%	26.0%	19.5%
2007	28.2%	36.1%	25.6%	23.5%	28.7%
2010	34.3%	44.1%	34.0%	34.9%	35.6%
2013	34.6%	39.0%	29.9%	32.0%	33.7%
2019	33.5%	37.6%	30.1%	37.4%	33.2%

Source: Florida Behavioral Risk Factor Surveillance System

- As shown in Exhibit 56, hypertension has risen within all service area counties over the 2002-2019 time period. The largest increase occurred in Seminole County by approximately 13.7% followed by Osceola County by approximately 11.4%.

- Hypertension rates in Lake and Osceola counties are the highest in comparison to statewide rates and the rest of the service area.

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Exhibit 57: **Adults with Hypertension by Race & Ethnicity**
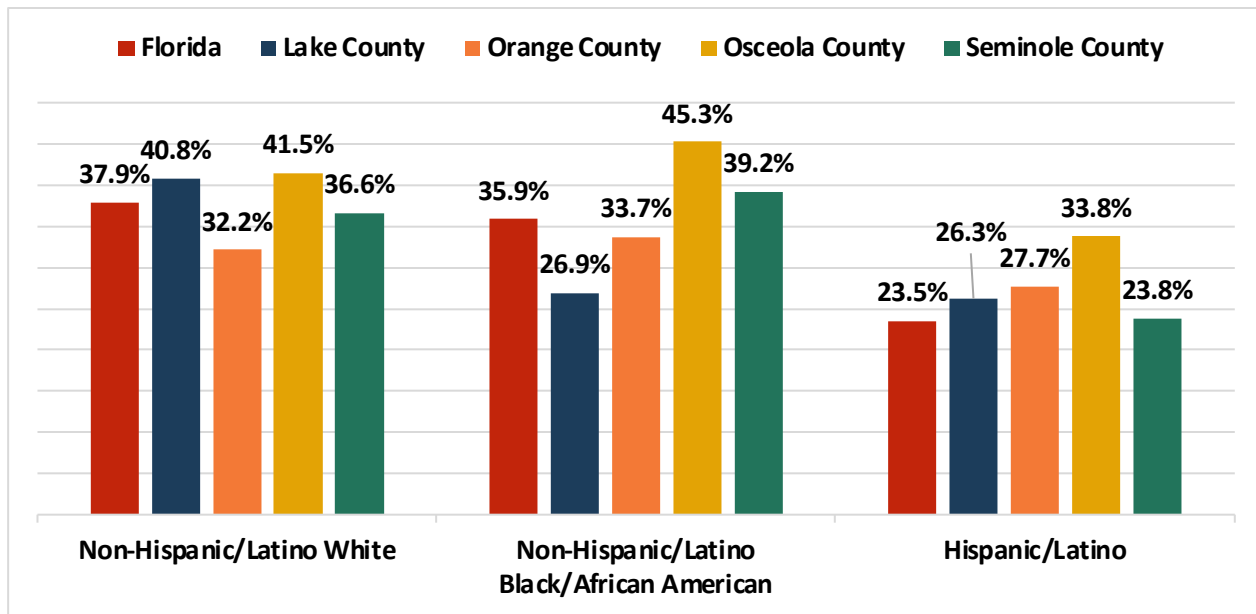
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Non-Hispanic/Latino White	37.9%	40.8%	32.2%	41.5%	36.6%
Non-Hispanic/Latino Black/African American	35.9%	26.9%	33.7%	45.3%	39.2%
Hispanic/Latino	23.5%	26.3%	27.7%	33.8%	23.8%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- High blood pressure is particularly prominent among adults in Osceola County residents with nearly half of those identifying as non-Hispanic/Latino Black/African American (45.3%) and more than two-fifths of those identifying as non-Hispanic/Latino White (41.5%) having been diagnosed with hypertension.

Hypertension and stroke are often highly correlated. However, that is not necessarily the case in the four-county service area. In 2019, Lake and Osceola counties had the highest percentage of adults who have ever been told they had a stroke – higher than the statewide percentage. See Exhibit 58.

Exhibit 58: **Adults Who Have Ever Been Told They Had a Stroke**

Legend: ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

% of Adults

	Florida	Lake County	Orange County	Osceola County	Seminole County
	3.6%	4.1%	3.0%	4.4%	2.3%

Bar chart values:
- Florida: 3.6%
- Lake County: 4.1%
- Orange County: 3.0%
- Osceola County: 4.4%
- Seminole County: 2.3%
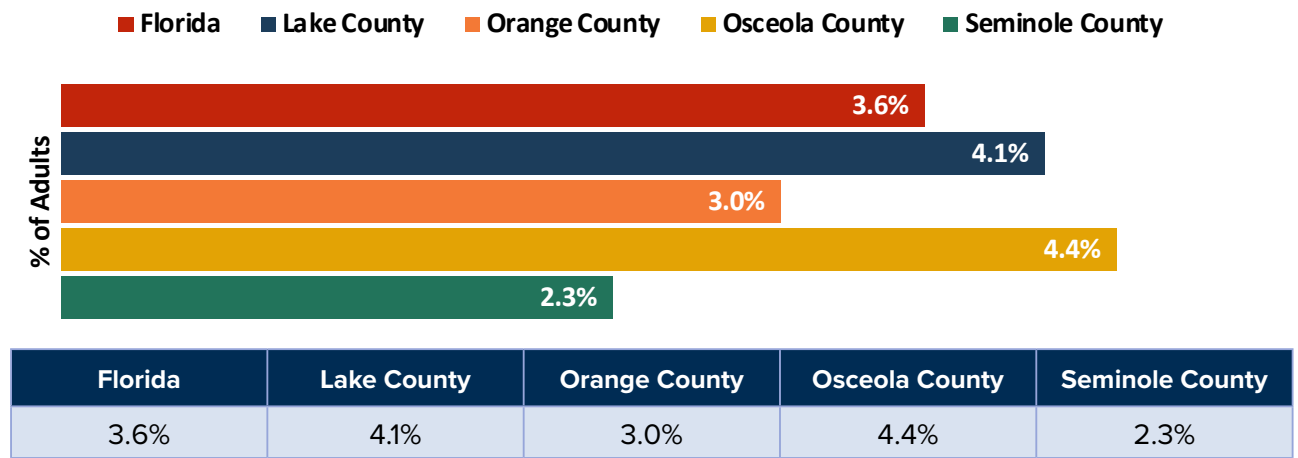
Source: Florida Behavioral Risk Factor Surveillance System, 2019

Unintentional Injuries

As presented in this report previously, unintentional injuries were the third leading cause of death in Florida and the service area in 2019. Florida experienced an increase in unintentional injury death rates between the three-year cumulative data collection spans.

Exhibit 59: Leading Causes of Fatal Unintentional Injuries[48]

Age-Adjusted Rate Per 100,000	Florida		Lake County		Orange County		Osceola County		Seminole County	
	2017 - 2019	2018 - 2020	2017 - 2019	2018 - 2020	2017 - 2019	2018 - 2020	2017 - 2019	2018 - 2020	2017 - 2019	2018 - 2020
Falls	10.0	10.3	23.2	24.8	10.5	11.1	7.8	9.2	11.7	15.0
Motor Vehicle Crashes	14.4	14.7	19.0	20.3	11.7	11.2	14.8	13.8	10.7	10.3
Drowning	2.0	2.0	2.0	2.5	1.5	1.4	2.1	2.2	2.2	2.2

Source: Florida Department of Health. Bureau of Vital Statistics Profile of Fatal Injuries

Exhibit 60: Hospitalizations & Deaths From Unintentional Injuries 2019

Age-Adjusted Rate Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Unintentional Falls					
Death Rate	10.0	25.2	11.7	7.8	18.0
Hospitalization Rate	243.9	288.0	293.4	286.8	298.9
Motor Vehicle Fatalities & Hospitalizations					
Death Rate	14.7	20.4	10.8	19.8	11.9
Hospitalization Rate	76.4	85.2	70.5	104.7	55.8
Firearm Injuries					
Non-Fatal Hospitalization Rate	4.2	4.3	1.2	3.8	4.7
Emergency Room Visits	14.4	9.4	11.3	6.5	6.9

Source: Florida Agency for Health Care Administration, 2019

- According to Exhibit 59, the leading cause of fatal unintentional injuries was motor vehicle crashes which decreased in all CFC counties except Lake County between 2017-2019 and 2018-2020. However, Exhibit 60 shows that the death rate from unintentional injuries related to motor vehicles was approximately twice as high in both Lake and Osceola counties compared to Orange and Seminole counties.

- According to Exhibit 60, Lake County had an exceptionally high death rate caused by unintentional falls in 2019 (25.2 per 100,000 people).

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[48]These deaths are reported by the decedent's county of residence. The 2019 data numbers overlap.

- Exhibit 60 shows that Orange County presents the highest rates of emergency room visits caused by firearm injuries and the lowest rate of non-fatal firearm injury hospitalizations. All service area counties report lower than state averages for firearm-related emergency room visits, though hospitalizations due to firearms injuries are higher in Lake and Seminole counties.

Deaths due to drowning have increased in Lake County since 2010, but have improved slightly in Orange County, Seminole County and statewide. In Osceola County notably, and in each of the geographies, the trend has been somewhat inconsistent.

Exhibit 61: Trend of Unintentional Drowning Deaths
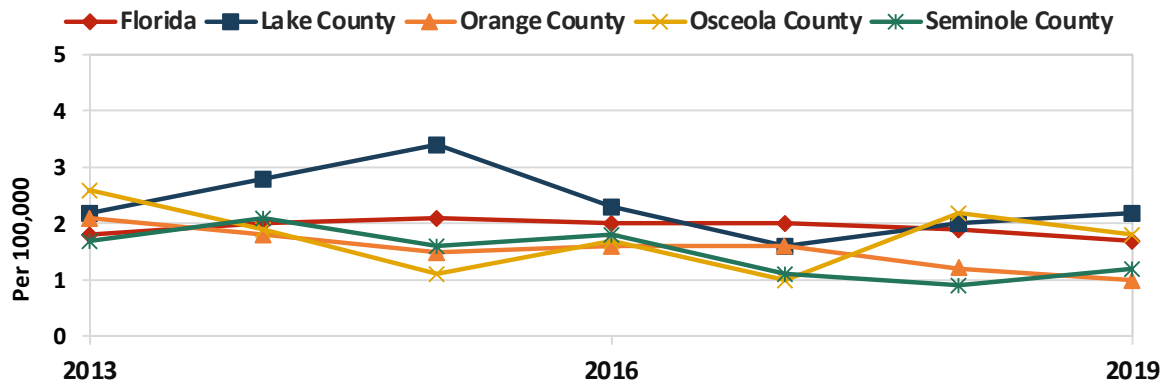
	Florida	Lake County	Orange County	Osceola County	Seminole County
2010	2.0	0.6	1.6	1.7	1.7
2011	1.8	1.7	1.1	2.2	2.7
2012	1.8	1.6	1.4	1.5	2.0
2013	1.8	2.2	2.1	2.6	1.7
2014	2.0	2.8	1.8	1.9	2.1
2015	2.1	3.4	1.5	1.1	1.6
2016	2.0	2.3	1.6	1.7	1.8
2017	2.0	1.6	1.6	1.0	1.1
2018	1.9	2.0	1.2	2.2	0.9
2019	1.7	2.2	1.0	1.8	1.2

Source: Department of Health, Bureau of Vital Statistics

Exhibit 62: Hospitalizations Ages 1-5 for Near Drownings

	Florida	Lake County	Orange County	Osceola County	Seminole County
Age-Adjusted Rate Per 100,000	8.6	3.8	5.5	10.2	2.6

Source: Florida Agency for Health Care Administration. 2017-2019

- Aggregately, service area drownings peaked in 2014 to 2016, but most areas have improved since then. In 2015, Lake County drownings per 100,000 population were approximately double the rate of any other service area county. It remains higher than Orange, Osceola and Seminole County rates, though it has decreased and is now more similar.

Health Care Access & Quality

Access to Care

Uninsured rates are higher across Florida and each service area county. However, Osceola County has a particularly large percentage of uninsured individuals. Over the five-year period, the percentage of the total population who do have health insurance has increased overall. Osceola County has historically had the lowest percentage of insured people out of the comparable counties. One in seven Osceola County adults (14.5%) and nearly one in 10 children (9.2%) are uninsured.

Exhibit 63: **Trend of Population with Health Insurance**

	Florida	Lake County	Orange County	Osceola County	Seminole County
2015	82.0%	85.7%	80.1%	78.1%	84.9%
2016	83.6%	86.7%	82.1%	80.3%	86.4%
2017	85.1%	87.8%	83.8%	81.6%	88.7%
2018	86.5%	88.4%	85.5%	84.2%	89.6%
2019	87.2%	89.7%	86.7%	85.5%	90.5%

Source: United States Census Bureau. American Community Survey, One-Year Estimates

Exhibit 64: Demographic Characteristics of Uninsured Population

Legend: United States ■ Florida ■ Lake County ■ Orange County ■ Osceola County ■ Seminole County

No health insurance coverage
- United States: 8.8%
- Florida: 12.8%
- Lake County: 10.3%
- Orange County: 13.3%
- Osceola County: 14.5%
- Seminole County: 9.5%

Uninsured Children (0-19)
- United States: 5.1%
- Florida: 7.2%
- Lake County: 5.5%
- Orange County: 7.1%
- Osceola County: 9.2%
- Seminole County: 5.3%
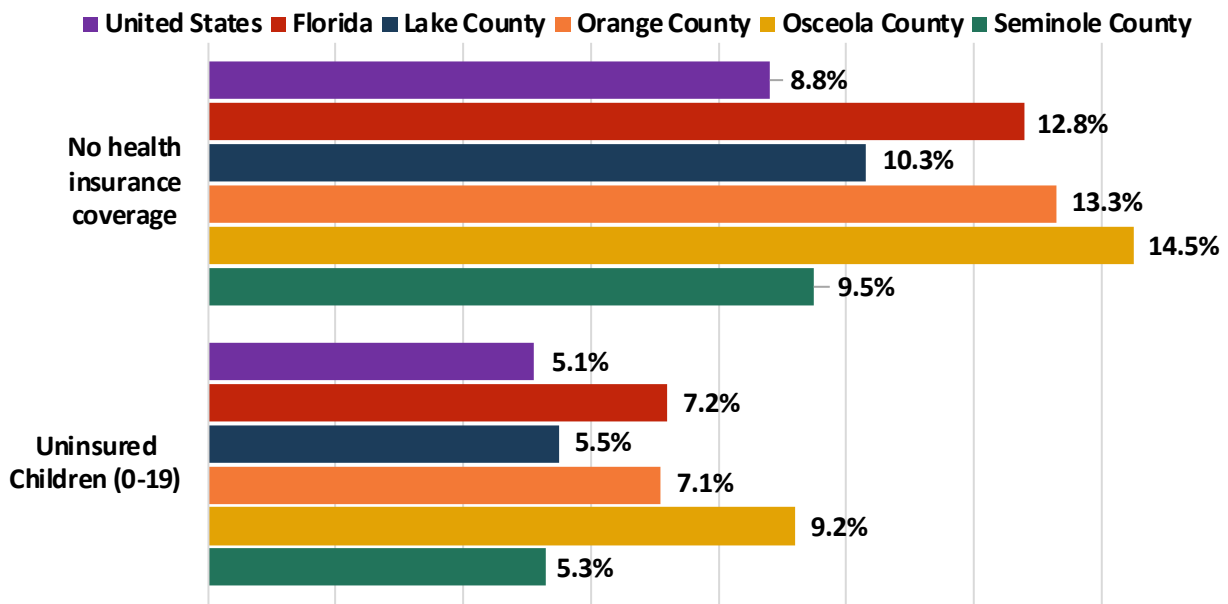
	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
With Health Insurance Coverage	91.2%	87.2%	89.7%	86.7%	85.5%	90.5%
With Private Health Insurance	67.9%	62.7%	64.5%	65.2%	58.5%	72.5%
With Public Coverage	35.1%	37.0%	42.7%	29.1%	35.1%	27.6%
No Health Insurance Coverage	8.8%	12.8%	10.3%	13.3%	14.5%	9.5%
Uninsured Children (0-19)	5.1%	7.2%	5.5%	7.1%	9.2%	5.3%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Note: In the exhibit above, the sum of those with Private Health Insurance, those with Public Health Insurance and those with No Health Insurance does not equal 100% since some individuals may have both public and private health insurance coverage.

Select Health Care Access Changes Since the Previous CHNA

Though the percentage of uninsured adults and children age 19 and younger decreased in Lake County between 2016/2017 and 2019/2020, the percent of people experiencing "poor or fair" health and mental health notably increased.[49]

Exhibit 65: Lake County Access Trends
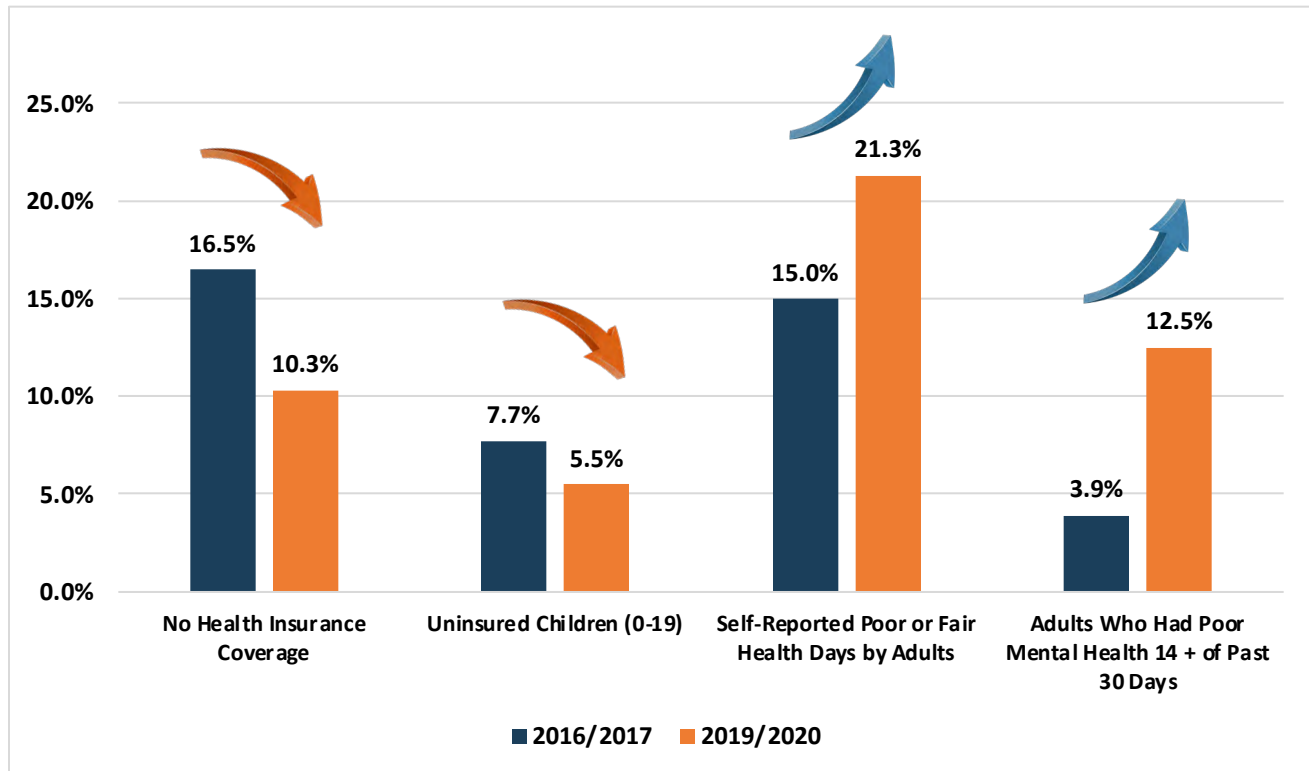
Lake County		
Measure	**2016/2017**	**2019/2020**
No Health Insurance Coverage (2016)	16.5%	10.3%
Uninsured Children (0-19) (2017, FLHealthCharts)	7.7%	5.5%
Self-Reported Poor or Fair Health Days by Adults (2016, County Health Rankings)	15.0%	21.3%
Adults Who Had Poor Mental Health 14 + of Past 30 Days (2016, County Health Rankings)	3.9%	12.5%

[49]County Health Rankings. Available at https://www.countyhealthrankings.org/app/florida/2019/measure/outcomes/42/map

As in other CFC counties, the percentage of uninsured adults and children age 19 and younger decreased in Orange County between 2016/2017 and 2019/2020 while the percent of people experiencing "poor or fair" health and mental health notably increased.

Exhibit 66: Orange County Access Trends
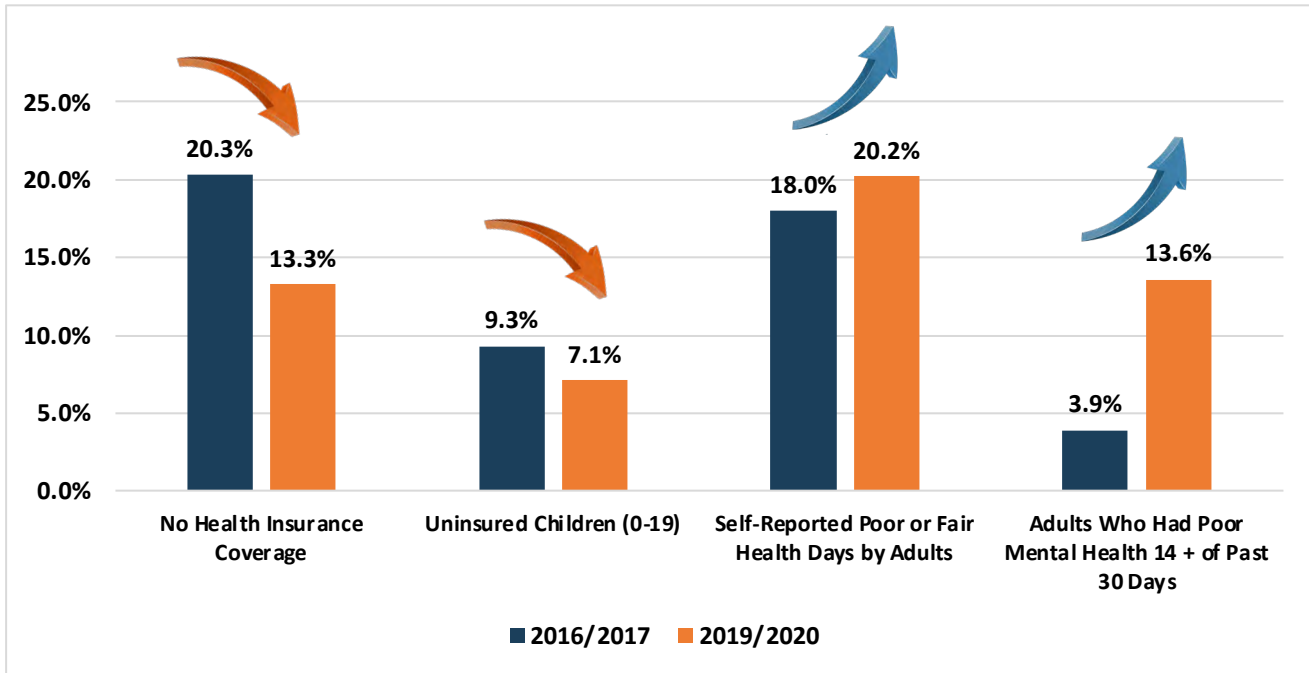
Orange County		
Measure	**2016/2017**	**2019/2020**
No Health Insurance Coverage (2016)	20.3%	13.3%
Uninsured Children (0-19) (2017, FLHealthCharts)	9.3%	7.1%
Self-Reported Poor or Fair Health Days by Adults (2016, County Health Rankings)	18.0%	20.2%
Adults Who Had Poor Mental Health 14 + of Past 30 Days (2016, County Health Rankings)	3.9%	13.6%

Adults and children age 19 and younger increased insurance coverage in Osceola County between 2016/2017 and 2019/2020, but the percent of people experiencing mental health notably increased.

Exhibit 67: **Osceola County Access Trends**
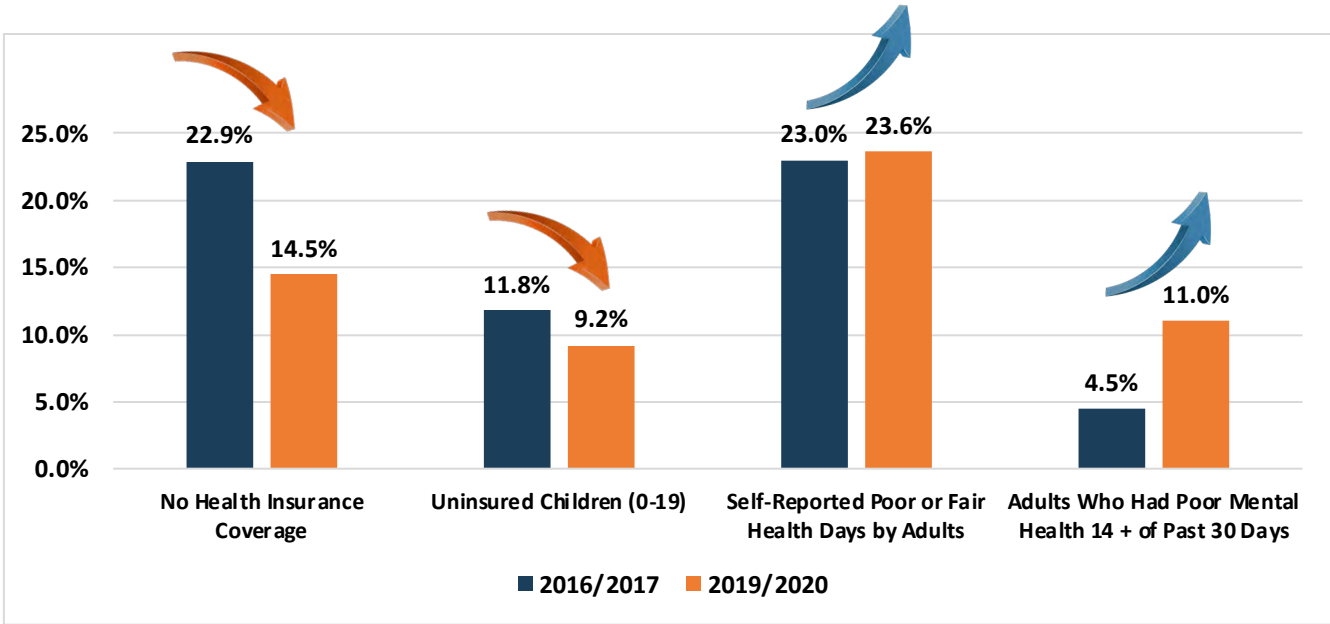
Osceola County		
Measure	**2016/2017**	**2019/2020**
No Health Insurance Coverage (2016)	22.9%	14.5%
Uninsured Children (0-19) (2017, FLHealthCharts)	11.8%	9.2%
Self-Reported Poor or Fair Health Days by Adults (2016, County Health Rankings)	23.0%	23.6%
Adults Who Had Poor Mental Health 14 + of Past 30 Days (2016, County Health Rankings)	4.5%	11.0%

All CFC counties (including Seminole County) exhibit a decrease in the percentage of uninsured adults and children age 19 and younger. In Seminole County between 2016/2017 and 2019/2020, the percent of people experiencing poor mental health notably increased.

Exhibit 68: Seminole County Access Trends
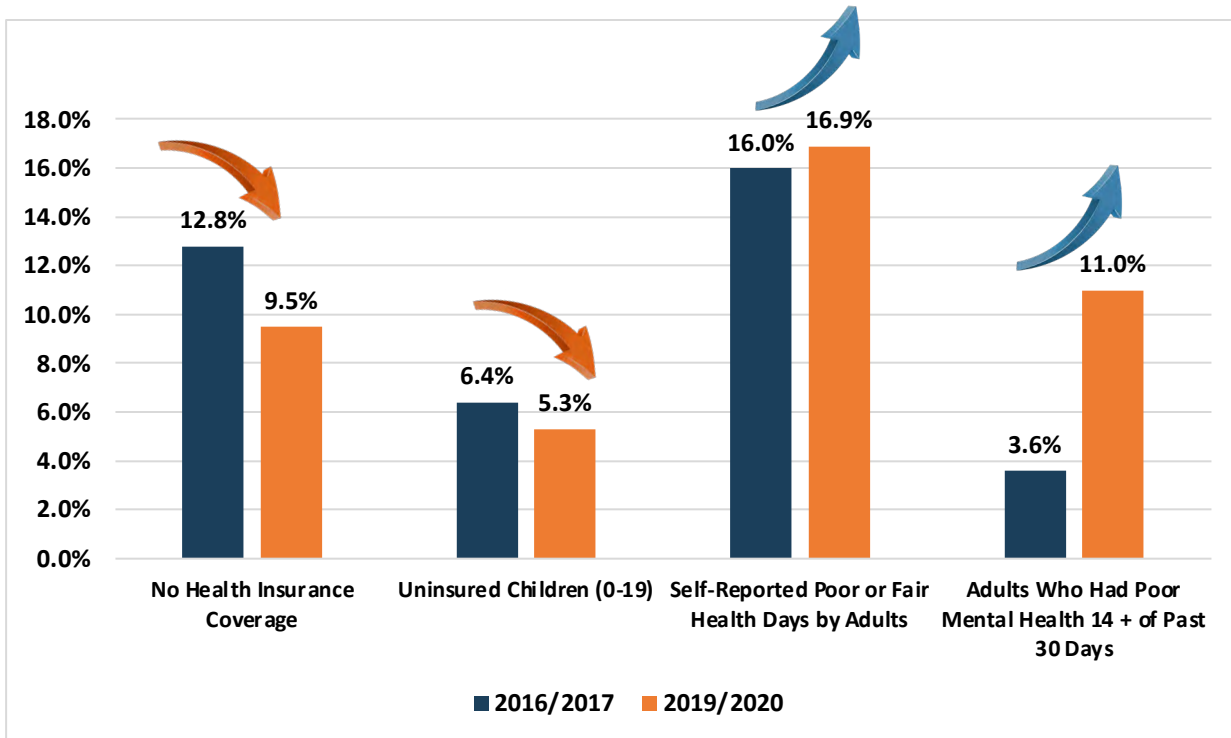
Seminole County		
Measure	**2016/2017**	**2019/2020**
No Health Insurance Coverage (2016)	12.8%	9.5%
Uninsured Children (0-19) (2017, FLHealthCharts)	6.4%	5.3%
Self-Reported Poor or Fair Health Days by Adults (2016, County Health Rankings)	16.0%	16.9%
Adults Who Had Poor Mental Health 14 + of Past 30 Days (2016, County Health Rankings)	3.6%	11.0%

General & Adult Preventative Health

The table below illustrates the percentage of adults who consider themselves to be in poor or fair health. In 2019, nearly a quarter of the residents in Osceola County reported being in poor or fair health.

Exhibit 69: Self-Reported Poor or Fair Health Days by Adults

Florida	Lake County	Orange County	Osceola County	Seminole County
19.7%	21.3%	20.2%	23.6%	16.9%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Exhibit 70: Adults with Good Physical Health
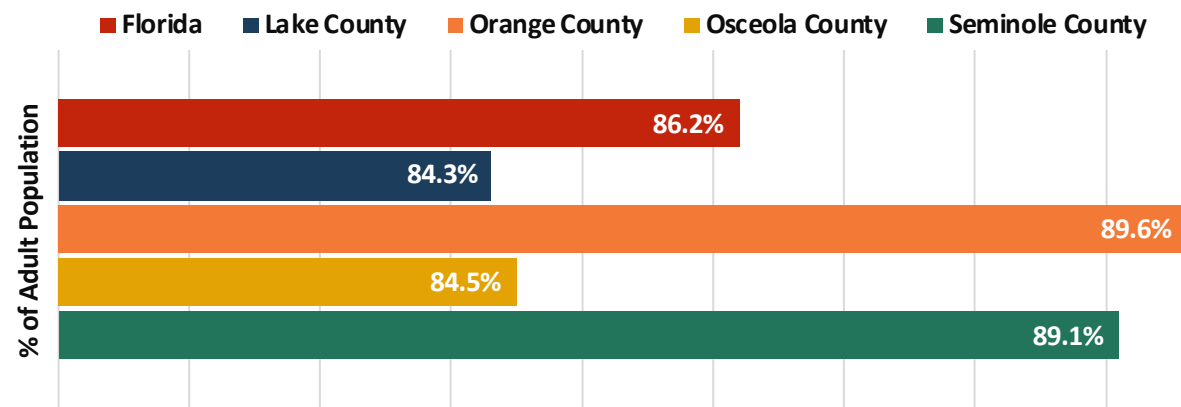
Florida	Lake County	Orange County	Osceola County	Seminole County
86.2%	84.3%	89.6%	84.5%	89.1%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- In 2019, 85% to nearly 90% of adults within the service area reported themselves to be in good physical health (Exhibit 70).

Preventive health is critically important to decreasing the prevalence of chronic diseases. Vaccinations, regular check-ups and routine screenings and exams are especially important to middle-aged and elderly populations. Additionally, the COVID-19 pandemic has undoubtedly created barriers for populations, especially those in vulnerable communities to access preventive care appointments. Preliminary studies show that mammograms and pap smears were down by 80% in April of 2020 compared to 2019 while prostate cancer screenings were down 70%.[50]

In 2019, over half of the population age 65 and over had received a flu shot in the past year statewide. This figure is echoed throughout the service area.

Exhibit 71: Older Adult Preventative Health

Age 65 & Over	Florida	Lake County	Orange County	Osceola County	Seminole County
Received a Flu Shot in The Past Year	58.3%	58.7%	51.9%	59.5%	54.7%
Have Ever Received a Pneumonia Vaccination	66.8%	43.4%	28.9%	30.1%	29.7%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- Flu shot percentages in the four service area counties largely mirror the Florida average. However, pneumonia vaccination rates are approximately half of the state rate.

- Pneumonia rates in the four service area counties are also well below the statewide and United States average. See Exhibit 71.

- As shown in the appendices, preventive screenings for women and sigmoidoscopy/colonoscopy rates within the four counties are also similar to the Florida averages.

[50]Health Care Cost Institute. The Impact of COVID-19 on the Use of Preventive Health Care, 2021.

Dental Care

Regular preventive dental care is essential for good overall health, but research suggests people are unable to afford dental care more than other types of health care. Additionally, many people live in communities where they do not have access to fluoridated water and school sealant programs, healthy foods and public transportation to get to dental appointments.[51]

Exhibit 72: Adults Who Visited Dentist in Past Year
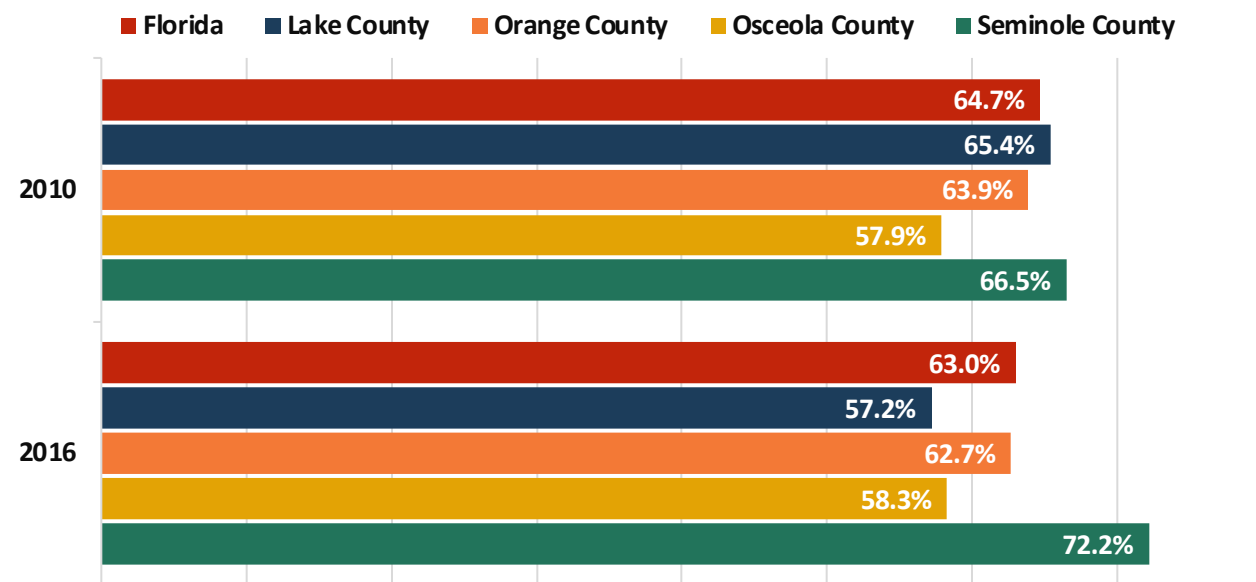
	Florida	Lake County	Orange County	Osceola County	Seminole County
2010	64.7%	65.4%	63.9%	57.9%	66.5%
2016	63.0%	57.2%	62.7%	58.3%	72.2%

Source: Florida Behavioral Risk Factor Surveillance System

- Dental visit percentages were similar across three of the four service area counties and the Florida average in 2010. However, the deviation among counties in 2016 is much more pronounced. Seminole County adults visited the dentist at a notably higher rate than others in 2016.

[51]Center for Chronic Disease Prevention & Health Promotion. Division of Oral Health, Disparities in Oral Health. Note: As of when the data was extracted, 2017 to 2020 data was not available.

Household income is correlated with dental visits, as households earning more than $50,000 per year are approximately 50% more likely to have seen a dentist within the past year than households making less than $25,000. The graph below indicates that people who earn higher incomes in Florida were more likely to have seen a dentist in the past year.

Exhibit 73: Adults Who Visited Dentist Past Year by Income in Florida
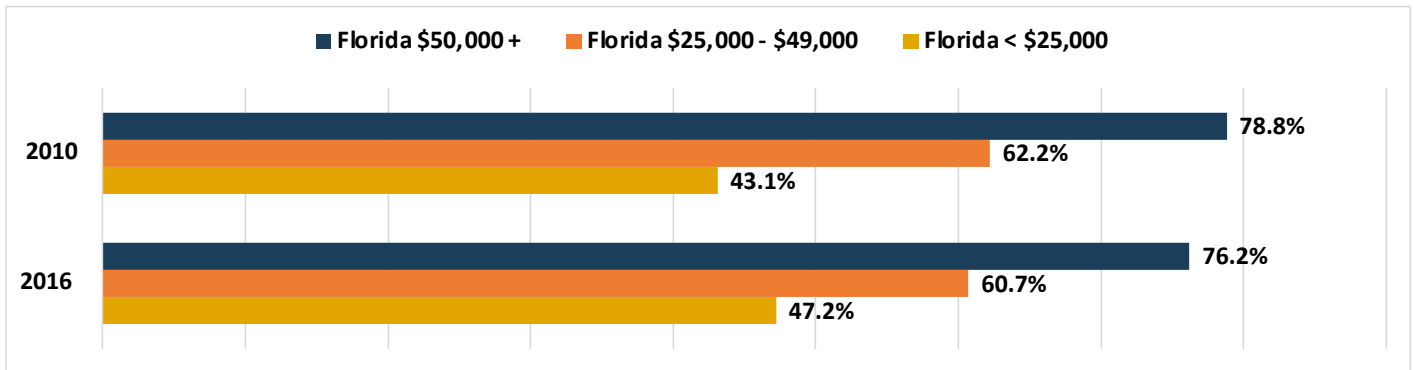
Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 74: Adults Who Visited Dentist Past Year by Income

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2010	43.1%	62.2%	78.8%	42.2%	64.5%	78.5%	39.5%	55.2%	75.9%	36.7%	49.7%	74.5%	49.0%	56.1%	79.5%
2016	47.2%	60.7%	76.2%	30.1%	54.3%	75.1%	50.3%	62.7%	75.3%	47.4%	62.9%	68.5%	52.3%	73.1%	81.8%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 75: Adults Who Visited Dentist Past Year by Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18-44	45 - 64	65 +	18-44	45 - 64	65 +	18-44	45 - 64	65 +	18-44	45 - 64	65 +	18-44	45 - 64	65 +
2010	60.0%	66.1%	69.4%	65.9%	62.9%	67.0%	65.4%	62.0%	67.3%	53.5%	59.4%	64.0%	67.2%	64.0%	72.9%
2016	60.1%	62.6%	68.4%	53.3%	51.3%	66.7%	59.5%	64.6%	69.5%	66.9%	48.8%	54.8%	71.9%	70.6%	75.4%

Source: Florida Behavioral Risk Factor Surveillance System

Child & Adolescent Health

Research indicates that establishing healthy behaviors to prevent chronic disease is easier and more effective during childhood and adolescence than trying to change unhealthy behaviors during adulthood.[52]

In 2019, the service area presented a highly diverse population with a majority being White in each county (ranging from 62.8% in Orange County to 76.7% in Osceola County), yet with large percentages of racial or ethnic minorities under the age of 21.

Exhibit 76: Population Under 21 Years Old by Race & Ethnicity
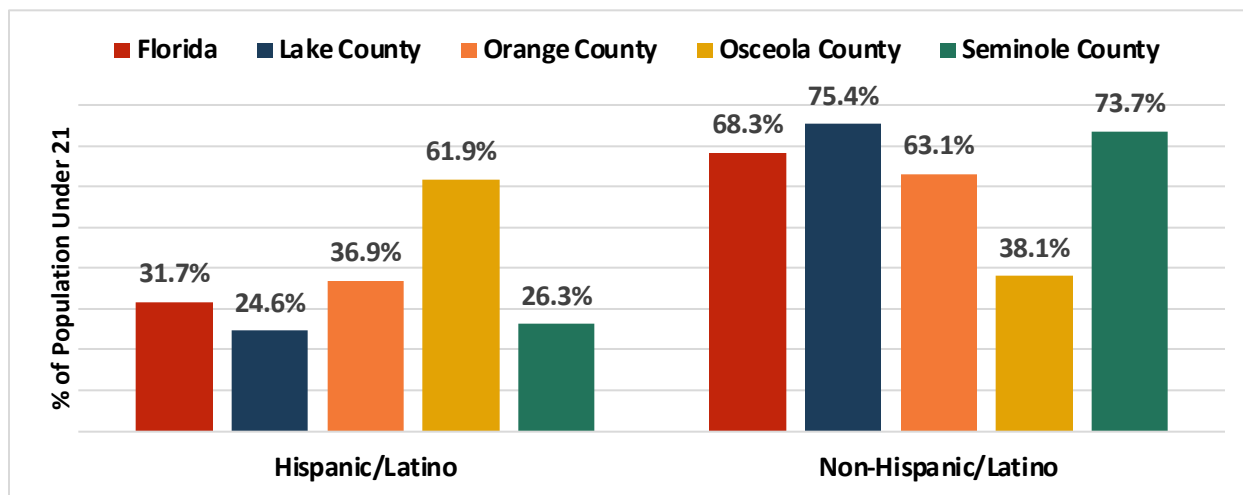
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
White	69.7%	75.8%	62.8%	76.7%	73.3%
Black/African American	22.1%	15.9%	26.8%	15.3%	15.6%
Other	8.2%	8.3%	10.4%	8.0%	11.2%
Hispanic/Latino	31.7%	24.6%	36.9%	61.9%	26.3%
Non-Hispanic/Latino	68.3%	75.4%	63.1%	38.1%	73.7%

Source: Florida Department of Health. Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Child Health Status Profile, 2019; Center for Chronic Disease Prevention & Health Promotion, Promoting Health for Children & Adolescents.

- Orange County presents the highest percentage of youth identifying as Black/African American (26.8%). In Osceola County, although a high percentage of youth are White, nearly two-thirds (61.9%) identify as Hispanic/Latino.

- In each service area county (as well as the state of Florida average), between one-third and two-thirds (or more) of youth are Hispanic/Latino.

[52]Center for Chronic Disease Prevention & Health Promotion, Promoting Health for Children & Adolescents.

Vaccinations throughout childhood are important because they help provide immunity before children are exposed to potentially life-threatening diseases.[53]

Exhibit 77: Child Immunizations[54]

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Two-Years-Old	83.5%	80.5%	86.7%	85.9%	82.0%
Kindergarten	93.8%	94.1%	91.5%	93.1%	93.0%

Source: Florida Department of Health. Behavioral Risk Factor Surveillance System, 2019

- Orange County and Osceola County childhood immunization rates among two-year olds are slightly better than the state rate (see Exhibit 77, above).

Shown below, emergency room visits by children age 5 to 19 increased notably in Seminole County.

Exhibit 78: Trend of Emergency Room Visits, Ages 5-19[55]

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2015	36,746	37,673	93,048	35,814	22,852
2016	38,405	37,673	36,169	48,159	27,193
2017	37,366	20,937	94,131	36,233	22,717
2018	37,296	39,801	36,394	47,850	27,119
2019	37,304	22,700	95,513	36,659	36,659

Source: Florida Department of Health, Behavioral Risk Factor Surveillance System

[53]National Center for Immunization & Respiratory Diseases.
[54]Refer to the State Immunization Surveys by year for the applicable definition of completed immunizations. Vaccination rates refer to the measure of four or more doses of diphtheria, tetanus toxoids, and acellular pertussis (DTaP) vaccine, three or more doses of inactivated poliovirus vaccine (IPV), one or more doses of measles, mumps and rubella (MMR) vaccine, three or more doses of Haemophilus influenzae type b (Hib) vaccine, three or more doses of hepatitis B vaccine, one or more doses of varicella vaccine (or physician documented disease history), and four or more doses of pneumococcal conjugate vaccine (PCV).
[55]Includes Licensed Mental Health Counselors, Clinical Social Workers, and Marriage and Family Therapists.

While asthma is considered hereditary, children are more likely to experience the condition if they have allergies, are around tobacco smoke or air pollution or if they experience co-morbidities such as being overweight or obese.[56] Lifestyle factors also increase the risk of children being diagnosed with diabetes. Diabetes diagnosed in childhood is linked to risk factors including being overweight and physical inactivity. Orange and Osceola counties have higher rates of asthma hospitalizations than the Florida average among age groups 5-11 and 12-18.

Exhibit 79: **Hospitalizations in Children for Asthma & Diabetes**

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Diabetes Hospitalizations					
1 - 5	17.3	16.9	11.7	17.0	15.5
5 - 11	40.2	52.5	24.2	48.3	30.9
12 - 18	133.2	40.2	122.3	183.2	59.3
Asthma Hospitalizations					
1 - 5	476.6	535.2	288.3	412.1	297.6
5 - 11	305.0	288.9	365.9	306.8	216.3
12 - 18	413.4	383.2	570.2	519.4	467.2

Source: Florida Department of Health. Behavioral Risk Factor Surveillance System, 2019

- Hospitalization rates attributable to diabetes increase with age, as the hospitalization rate for children between the ages of 12 and 18 in Florida (as well as Orange and Osceola counties) is seven times higher compared to children aged one to five.

- Osceola County youth ages 12 to 18 have notably higher hospitalization rates caused by diabetes than the Florida average.

- Diabetes hospitalization rates for youth ages 5-11 in Lake County are higher than statewide and service area averages.

- Orange County presents a lower diabetes hospitalization rate than the Florida average for all age groups of children. However, asthma hospitalization rates (except for those age five and under) are higher than Florida.

- Compared to statewide and service area averages, Seminole County has the lowest asthma hospitalization rates for ages 5-11.

- There may be some correlation between hospitalizations and physical activity, as Seminole County (and Lake County to a lesser extent) tend to have slightly lower asthma and diabetes hospitalization and higher percentages of physically active students. See Exhibit 79.

[56]Mayo Clinic, Childhood Asthma.

Youth Behavior & Safety

This section focuses on the behavior of children and adolescents as well as those who may be more at risk of experiencing poor health outcomes. The School Environmental Safety Incident Reporting system collects data on incidents of crime, violence and disruptive behaviors that occur on school grounds, school transportation and at off-campus, school-sponsored events. Although most (approximately nine of 10) students say that they feel safe at school, where aberrations exist, there is some correlation with out-of-school suspensions.

More safety incidents occurred in Florida schools in 2019 compared to 2020; however, it is important to note the following data was collected prior to the COVID-19 pandemic.

Exhibit 80: School Safety Indicators

	Florida	Lake County	Orange County	Osceola County	Seminole County
Students Who Felt Unsafe at School	9.1%	16.0%	8.4%	8.4%	10.6%
School Environmental Safety Incidents, Per 1,000 Students Grades K – 12					
2019	30.5	29.3	26.3	8.9	21.6
2020	23.5	20.1	38.1	6.8	16.1
Out of School Suspensions Per 1,000 Students					
Grades K-12	52.8	82.8	39.0	68.2	50.1

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Child Health Status Profile, 2020; Suspensions: Florida Department of Education, Education Information & Accountability Services, 2017-2019

- In 2020, 16% of middle and high school students between the ages of 11 and 17 did not go to school because they felt they would be unsafe at school or on their way to school at least once in the prior 30 days.[57]

- Osceola County students were absent more frequently compared to other service area counties in 2019.[58]

- The 2017-2019 cumulative rate of out-of-school suspensions in service area counties ranged from 39.0 per 1,000 students in Orange County to 82.8 per 1,000 students in Lake County. Lake County students also indicated that they felt unsafe at school at a higher rate than in other areas.

- In 2020, Orange County schools reported environmental safety incidents approximately 70% higher than the Florida average, yet out-of-school suspensions were 25% lower than the Florida average.

[57]Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Child Health Status Profile, 2020; Suspensions: Florida Department of Education, Education Information & Accountability Services, 2017-2019
[58]Ibid.

Bullying can affect physical and emotional health, both in the short term and later in life. It can lead to physical injury, social problems, emotional problems and even death. Those who are bullied are at increased risk for mental health problems, headaches and problems adjusting to school. Bullying also can cause long-term damage to self-esteem.[59] It is important to note that the 2020 Florida Youth Substance Abuse Survey was completed by youth in February and March of 2020, right before the start of the pandemic.

The majority of youth reported bullying — most commonly being taunted or teased. Bullying incidents in the four service area counties were similar to the Florida average; however, cyberbullying was less common in Lake and Orange counties.

Exhibit 81: **Youth Reported Bullying Behavior**

2020	Florida	Lake County	Orange County	Osceola County	Seminole County
Skipped school because of bullying	9.3%	9.2%	9.8%	8.8%	8.5%
Was ever kicked or shoved	31.4%	30.6%	33.7%	27.3%	36.2%
Was ever taunted or teased	57.0%	59.1%	59.5%	51.1%	60.3%
Was a victim of cyberbullying	27.5%	11.8%	10.9%	22.6%	28.4%

Source: Florida Youth Substance Abuse Survey, 2020

• Statewide and in the service area, more than half of students were taunted or teased; approximately one in three were kicked or shoved.

[59]National Institute of Health, How does bullying affect health and well-being?

Exhibit 82: **At-Risk Children**

	Florida	Lake County	Orange County	Osceola County	Seminole County
Students with Emotional or Behavioral Disability (Grades K-12)	0.5%	1.1%	0.2%	0.4%	0.5%
Students Absent 21 + Days	11.3%	13.9%	12.1%	13.8%	8.0%
Children Receiving Mental Health Treatment Services (Per 1,000)					
Ages 1 - 5	2.8	0.6	1.3	0.2	3.4
Homeless & Unaccompanied Youth					
Homeless Students[60]	79,949	1,984	5,402	3,318	1,481
Unaccompanied Youth	6,952	91	136	76	168

Source: Florida Department of Children and Families, 2019; Mental health treatment services: Florida Department of Children and Families, 2019; Homeless and unaccompanied youth: The Shimberg Center for Housing Studies, Header Controller Homelessness and Education in Florida: Students and Schools, 2018-2019 & Florida Department of Education PK-12 Education Information Services District Homeless Record Counts 2019-2020 Survey, 2019-2020

Exhibit 83: **Reported Cases of Child Physical & Sexual Abuse for Children Between Ages 5-11**

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Child Abuse	765.9	360.0	630.4	518.6	595.9
Sexual Violence	58.5	42.3	51.9	97.2	37.5
Children Under 18 in Foster Care[61]	496.8	393.3	307.8	272.3	338.9

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics & Performance Management School-aged Child & Adolescent Profile, 2017-2019

• Reports of child abuse and sexual violence in Lake, Orange, Osceola and Seminole counties are generally lower than the Florida average with the exception of sexual violence in Osceola County.

• The 2017-2019 cumulative rate of child physical abuse for children between the ages of five to 11 was the highest in Orange County followed by Seminole County.

• Osceola County presents a much higher rate of sexual violence for children between the ages of five to 11.

[60]Includes elementary, middle & high school students.
[61]2019 Data Only.

Children in Seminole County were more likely to be in mental health treatment within the service area. Suicide rates among children 12 to 18 in Lake County are 200% to 300% higher than in other service area counties. See Exhibit 84.

Exhibit 84: Youth Suicide Rate 2017-2019
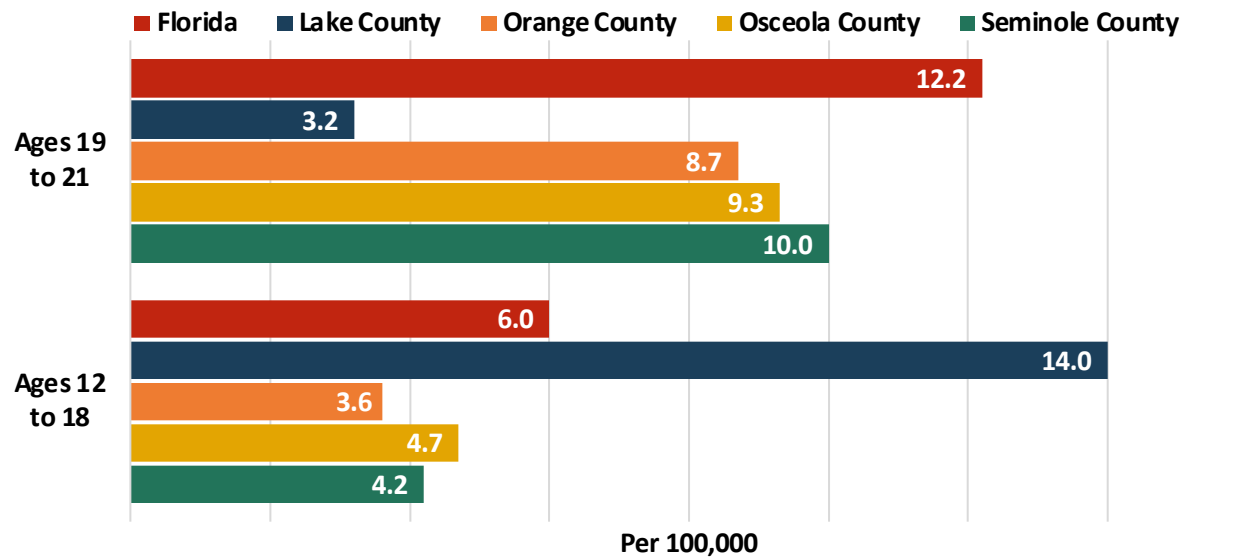
Age-Adjusted Rate per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Ages 19-21	12.2	3.2	8.7	9.3	10.0
Ages 12-18	6.0	14.0	3.6	4.7	4.2

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics & Performance Management School-aged Child & Adolescent Profile, 2017-2019

- Between 2017 and 2019, the suicide rate for children and adolescents in Lake County was over double the rate of comparative counties at 14 deaths per 100,000 children aged 12 to 18.

- Lake County also presents the lowest suicide rate within the service area for young adults aged 19 to 21.

Youth Substance Use

In 2019, Lake and Seminole counties had the highest drug-related juvenile arrest rates per 100,000 youth of the four service area counties. In 2020, there were fewer drug-related arrests overall for those under age 17. However, it is important to note that most school-aged children were at home due to the pandemic.

Exhibit 85: Annual Juvenile Drug Arrests

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2019	199.9	221.1	107.3	68.5	236.2
2020	78.7	94.7	31.9	27.3	40.2

Source: Florida Department of Law Enforcement

Exhibit 86: Substance Use Trends

2020	Florida	Lake County	Orange County	Osceola County	Seminole County
Middle School Students, Past 30-Day Substance Use					
Smoked cigarettes	1.1%	0.7%	0.8%	1.3%	0.0%
Vaped Nicotine	5.8%	5.5%	3.9%	2.2%	4.7%
Used alcohol	8.2%	6.2%	6.3%	5.9%	5.7%
Binge drank	3.4%	3.5%	1.9%	2.6%	1.6%
Used Marijuana/hashish	3.8%	3.4%	2.9%	2.0%	3.4%
Vaped Marijuana	3.0%	3.0%	2.9%	1.2%	2.1%
High School Students, Past 30-Day Substance Use					
Smoked cigarettes	2.4%	2.6%	3.6%	2.1%	4.6%
Vaped Nicotine	15.6%	15.1%	13.5%	9.7%	16.1%
Used alcohol	19.9%	21.9%	19.6%	15.1%	20.2%
Binge drank	9.2%	10.7%	6.9%	7.8%	11.0%
Used Marijuana/hashish	15.9%	14.3%	14.2%	12.4%	16.9%
Vaped Marijuana	10.6%	10.5%	9.6%	7.9%	12.2%

Source: 2020 Florida Youth Substance Abuse Survey, County Data Tables

- Nicotine, marijuana and alcohol use among service area middle school students are generally lower than the Florida average rate.

- Seminole County substance use rates among high schoolers is typically somewhat higher than that of other CFC counties.

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Youth Nutrition and Physical Activity

The National School Lunch Program, established in 1946 under the National School Lunch Act, provides free and reduced-price lunches to schoolchildren from economically disadvantaged families. An increase in this percentage indicates a greater proportion of school students are economically disadvantaged. The percentage of students eligible for free or reduced-cost lunch in the four service area counties is slightly lower than the Florida average; approximately half of the students qualify.[62]

Exhibit 87: Students Eligible for Free or Reduced Lunch
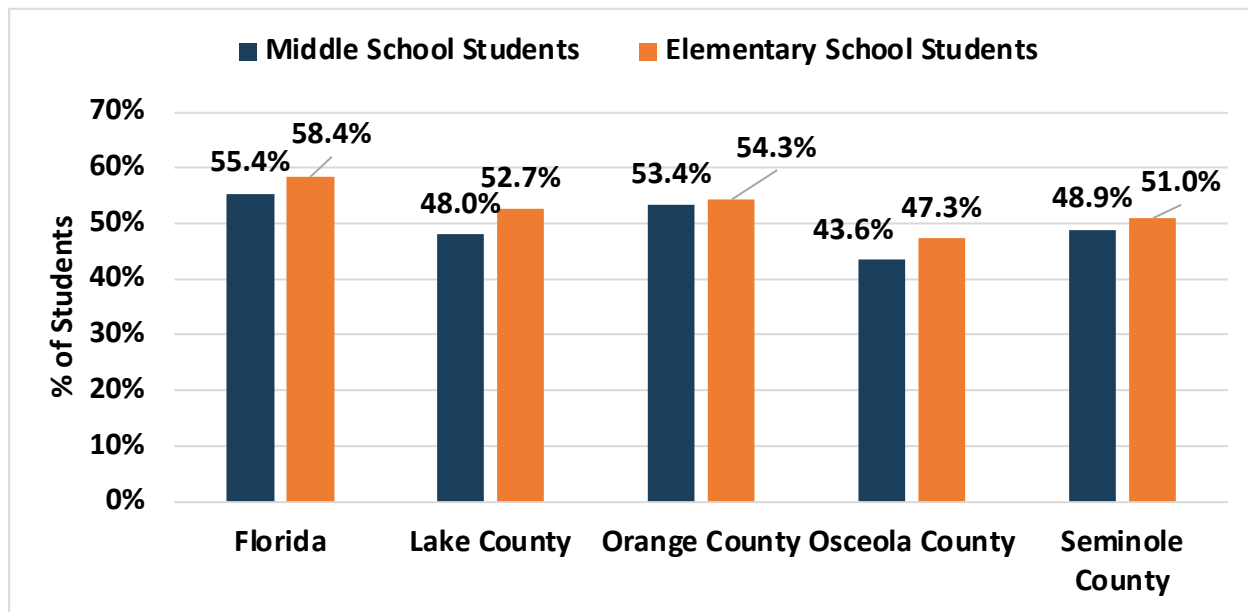
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Middle School Students	55.4%	48.0%	53.4%	43.6%	48.9%
Elementary School Students	58.4%	52.7%	54.3%	47.3%	51.0%

Source: Florida Department of Education, Education Information and Accountability Services, 2019

[62]Note that in Lake County, schools that participate in the Community Eligibility Provision are able to provide a healthy breakfast and lunch at no charge for ALL students enrolled during the 2020-2021 School Year.

The following table shows that many children suffer from being physically inactive and/or obese.

Exhibit 88: Physical Activity & Obesity in Youth

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Obese Students					
High School Students	14.3%	15.4%	13.2%	14.6%	11.2%
Middle School Students	13.2%	12.7%	13.9%	9.4%	10.0%
Physically Active Students[63]					
High School Students	21.7%	23.5%	19.3%	17.3%	24.5%
Middle School Students	26.6%	25.4%	23.3%	20.6%	21.5%

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management School-aged Child and Adolescent Profile, 2019

- The data indicates a correlation between reduced physical activity and increased obesity among middle schoolers and high schoolers.

- Shown in Exhibit 88, over 15% of Lake County high school students are considered obese, which is higher than the statewide rate (14.3%).

- Approximately 14% of middle school students in Orange County are considered obese.

- Middle school students in the service area are physically active at rates lower than the state average (26.6%), with Lake County having the highest rates at 25.4% and Osceola County having the lowest rates (20.6%).

Maternal Health

Birth rates provide a standardized measure for monitoring the general increase or decrease in births. Additionally, by looking at maternal and infant–related indicators health care systems may better be able to predict future public health challenges for families, communities and the health care system.

Overall, the 2019 birth rate for Lake and Seminole counties was below the statewide average.

Exhibit 89: Birth Rates per 1,000 in 2019

Florida	Lake County	Orange County	Osceola County	Seminole County
10.3	9.7	12.0	12.0	9.8

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

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[63]Self-Reported being active for At Least 60 Minutes on All 7 of The Past Seven Days.

Maternal deaths among Black/African American women in Florida is more than twice as high as for Whites. In recent years, Hispanics/Latinos also tend to have higher mortality rates than non-Hispanics.[64]

Exhibit 90: Maternal Death Rates by Race and Ethnicity (State of Florida)
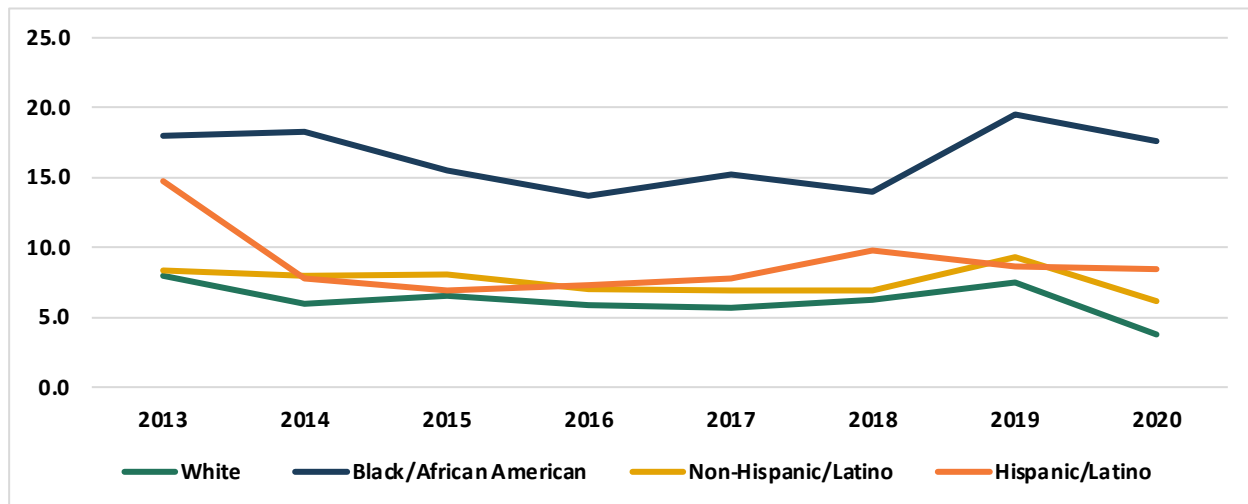
Data Year	White	Black/African American	Non-Hispanic/Latino	Hispanic/Latino
2013	8.0	18.0	8.4	14.8
2014	6.0	18.3	8.0	7.8
2015	6.6	15.5	8.1	6.9
2016	5.9	13.7	7.0	7.3
2017	5.7	15.2	6.9	7.8
2018	6.3	14.0	6.9	9.8
2019	7.5	19.5	9.3	8.7
2020	3.8	17.6	6.2	8.5

Note: Rates by county by race and ethnicity are available,[65] yet small sample sizes limit the usefulness of the data.

[64]Florida Health Charts, "The World Health Organization defines a maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. Using the World Health Organization definition allows comparison of these data with other states, the United States and other countries. The maternal deaths per 100,000 live births represents the risk of maternal death associated with each pregnancy."
[65]Rates by county by race and ethnicity available at https://www.flhealthcharts.gov/ChartsReports/rdPage. aspx?rdReport=InfantDeath.DataViewer&cid=0392

Exhibit 91: Maternal Characteristics

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Births to Unwed Mothers	52.8%	36.0%	43.5%	48.2%	36.0%
Repeat Births to Mothers Ages 15-17	6.3%	7.5%	4.0%	0.0%	0.0%
Births to Mothers 19 & Older without High School Education	10.9%	10.7%	9.7%	7.2%	5.7%
Births to Obese Mothers at Time Pregnancy Occurred	27.1%	30.9%	24.9%	27.8%	25.4%
Births to Mothers with First Trimester Prenatal Care	75.9%	77.1%	78.5%	81.4%	80.0%
Births Covered by Medicaid	46.7%	46.7%	43.7%	55.8%	36.8%
Self-Pay for Delivery Payment Source	6.2%	4.4%	8.4%	5.2%	3.7%

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

- The percentage of new mothers aged 19 or older without a high school education is highest in Lake County, although not much different from the statewide percentage. Orange, Osceola and Seminole counties present significantly lower percentages. The same three counties present significantly higher percentages of births to mothers who had prenatal care within the first trimester, compared to the statewide figure as well as Lake County.

- In total, approximately 11.5% of mothers between the ages of 15 and 17 within the service area have given birth to at least two children.

- Approximately 25% to 31% of mothers in each county service area were considered obese at the time of pregnancy.

Infant mortality refers to the percentage of infant deaths occurring from birth to 364 days old. In Lake County, nearly 9% of all babies born in 2019 died before reaching their first year of life, the highest within the service area.

Exhibit 92: Infant Characteristics[66]

2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Low Birth Weight	8.8%	8.2%	8.7%	8.0%	6.8%
Infant Mortality, per 1000	6.0	8.5	5.8	4.7	6.9
Teen Birth Rate (Under 18), per 1000	2.3	2.6	2.0	2.0	1.2

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

- Nearly 9% of babies born in Florida in 2019 were considered to be low birth weight (2,500 grams, 5.5 pounds), in line with most service areas. Seminole County presents a slightly lower percentage of babies born underweight (6.8%).

- Lake County presents the highest teen birth rate within the service area, with 2.6 births per 1,000 women under age 18.

[66]Low Birth Weight, Percentage of Live Births Under 2,500 Grams. Infant Mortality, 0-364 Days From Birth Per 1,000 Live Births. Teen Births (0-18) Per 1,000 Live Births.

Linkage Between Workforce Issues and Behavioral Health

Workforce and behavioral health issues are commonly linked. Behavioral health issues may impact the productivity or efficiency of staff members (e.g., when the staff member or his/her family is challenged by behavioral health issues), as well as the general capacity of service providers. As one provider serving all four CFC counties said, "It is difficult to find a counselor when a significant percentage of them have cut back their hours to deal with their own stress-related issues."

On a national level, the behavioral health impact on business is enormous.

- One in five (47.6 million) U.S. adults suffer from one or more mental health issues annually.
- 200 million days are lost from work each year due to depression alone – 27 workdays per employee in a year.
- Employers that support mental health see a return of $4 for every dollar invested in mental health treatment.[67]
- Approximately 62% of all missed workdays per year are due to a mental health condition.
- "Employees experiencing mental distress use, on average, nearly $3,000 more in health care services per year than their peers. The cost of days lost averages $4,783 per year per employee, and the costs of turnover averages $5,733 per year per employee."[68]
- "According to data supplied by the American Psychiatric Association, employees with unresolved depression experience a 35% reduction in productivity, contributing to a loss to the U.S. economy of $210.5 billion a year in absenteeism, reduced productivity and medical costs."[69]

[67]Source: Forbes Finance Council, Emil VasilevForbes Councils Member. Available at https://www.forbes.com/sites/forbesfinancecouncil/2020/01/08/the-financial-cost-of-ignoring-mental-health-in-the-workplace/?sh=55b835e95e92
[68]National Safety Council. Available at https://www.nsc.org/newsroom/new-mental-health-cost-calculator-demonstrates-why#:~:text=Employees%20experiencing%20mental%20distress%20use,Distress%20varies%20greatly%20across%20occupations - .Mind the Workplace - MHA Workplace Health Survey 2021 2.12.21.pdf (mhanational.org)
[69]McLean Hospital and Harvard Medical School. Available at https://www.mcleanhospital.org/essential/what-employers-need-know-about-mental-health-workplace#:~:text=According%20to%20data%20supplied%20by,reduced%20productivity%2C%20and%20medical%20costs.

A recent national survey of over 5,000 employees across 17 U.S. industries (i.e., the "Work Health Survey") showed that six of seven people (83%) reported feeling some degree of burnout, with 40% strongly agreeing with the statement that they are experiencing burnout. Other survey results are reflected in the table below.

Workplace and Behavioral Health

Category	Percentage
Employees who feel acknowledging BH is important	97%
Employers who are described as being committed to BH	68%
Employees reporting that workplace affects BH	85%
Employees emotionally drained from work	83%
Employees who disagree that employer provides safe and welcoming BH environment	56%
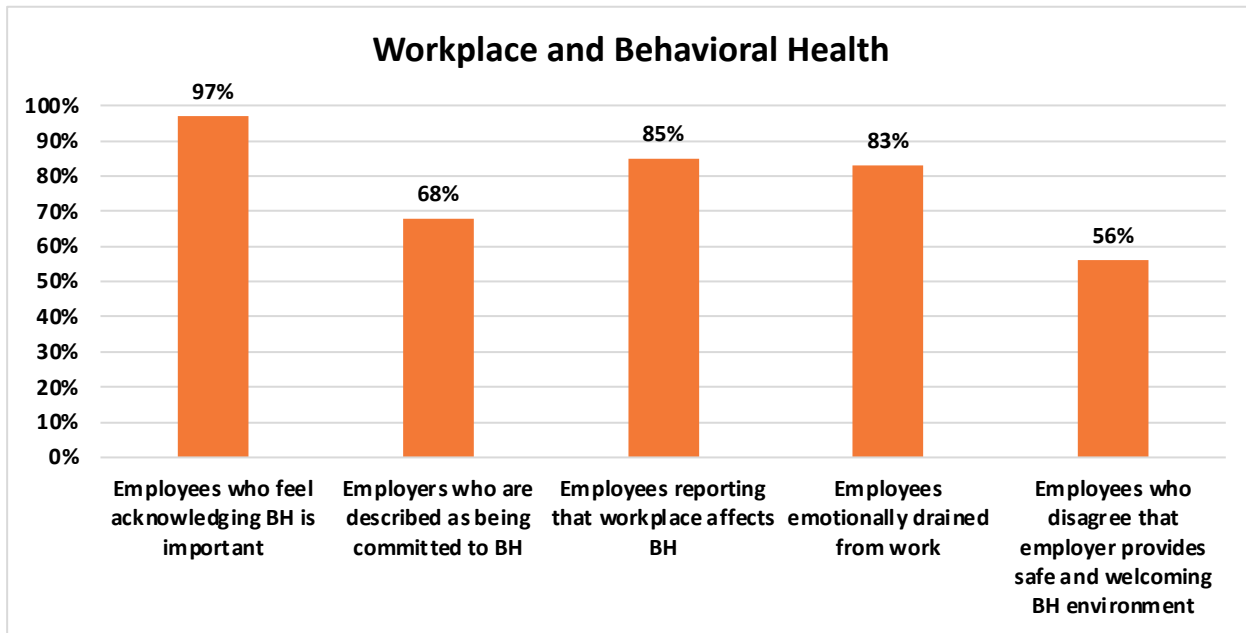
In addition to individuals' challenges, many report hiding their behavioral health status from employers out of fear that they will lose their job. Many employees included in the survey say that they do not receive adequate support from supervisors to help manage stress. However, when support is provided, they indicate that open, honest discussions between supervisors and employees about job stressors helps their performance and job satisfaction.

- Nearly three in five (56%) feel that their employer does not provide a safe environment for employees who live with mental illness. Over 56% of respondents disagree that their employers provide a safe, welcoming environment for employees with mental illness.
- Despite 97% of survey respondents stating that acknowledging mental health is important, only 68% of employers are described as being committed to mental health by their employees.

Workforce in the Health Care Sector

The COVID-19 pandemic has taken a heavy toll on health care providers across all disciplines, as those who have remained on the front lines of the pandemic have reported suffering from stress, trauma, burnout and increased behavioral health challenges.[70] It is important to note that the data below was captured prior to the start of the pandemic.

Unlike the other three service area counties, Orange County has a relatively high ratio of dental and medical care providers – higher than the Florida average.

Exhibit 93: Total Licensed Providers

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Dentists	56.7	40.3	58.3	17.4	63.0
Physicians	310.0	215.5	381.1	136.4	252.6
Family Practice Physicians	19.2	18.3	21.9	8.4	28.8
Internists	47.5	40.1	54.7	22.8	39.1
OB/GYNs	9.3	6.2	13.1	5.2	9.1
Pediatricians	22.0	10.4	39.8	9.8	16.3

Source: Florida Department of Health. Agency for Health Care Administration, 2019

- Orange County has approximately 20% more physicians, internists, OB/GYNs and pediatricians per capita than the Florida average and notably more than the other three service area counties (which are near or below the state average in all provider categories).

- NOTE: In regions where provider ratios are low, access to care is more heavily reliant on issues such as transportation, health literacy and awareness of available services (and ways to access them) and care navigation or case management.

Exhibit 94: Care Facilities by Type

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Hospital Beds	311.2	244.5	346.9	300.3	201.8
Acute Care Beds	251.8	213.8	276.6	260.9	165.2
Specialty Beds	59.4	30.7	70.3	39.3	36.6
Nursing Home Beds	401.9	484.3	311.6	325.5	265.2

Source: Florida Department of Health. Agency for Health Care Administration, 2019

- Orange County presents a notably higher ratio of all care facility beds while Seminole and Lake counties, in most instances, have fewer care facility beds compared to the Florida average.

[70]American Hospital Association. Fact Sheet: Strengthening the Health Care Workforce, May 2021.

Violent Crime

Crime is a social determinant of health. The Federal Bureau of Investigation's uniform crime index establishes a standardized definition of crime classification overcoming differences in individual state statutes. Monitoring changes in types of crime helps in planning prevention strategies and public awareness programs.[71]

Lake and Seminole counties report fewer violent crimes – especially murders and robberies – than other service area counties or the statewide average.

Exhibit 95: Violent Crime Incidence[72]
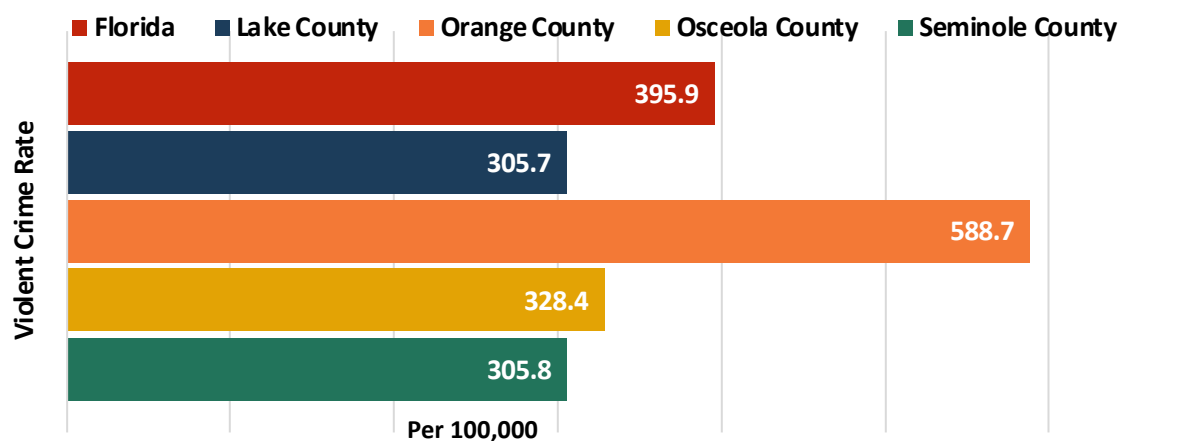
	Florida	Lake County	Orange County	Osceola County	Seminole County
Violent Crime Rate	395.9	305.7	588.7	328.4	305.8
Murder	5.2	3.9	6.3	4.5	2.9
Rape	39.5	38.5	52.9	39.9	47.1
Robbery	82.3	47.1	132.1	45	49.4
Aggravated Assault	268.9	216.2	367.4	239	206.3
Forcible Gender Offenses	55.4	51.6	75.3	56.1	54.8
Domestic Violence Offenses	505.2	502.5	615.5	563.6	546.3

Source: Florida Department of Law Enforcement, 2017-2019

- Orange County violent crime rates were high (588.7 deaths per 100,000 residents) – 48.7% higher than the Florida rates.

- Rape rates are notably higher than the statewide average in Orange and Seminole counties.

[71]Florida Health Charts, Violent Crime.
[72]The rate of Violent Crimes includes murder, rape, robbery and aggravated assault.

Violent crimes decreased slightly from 2018 to 2020; the data was likely impacted by COVID-19 pandemic lockdowns.

Exhibit 96: Violent Crime Rate Trend
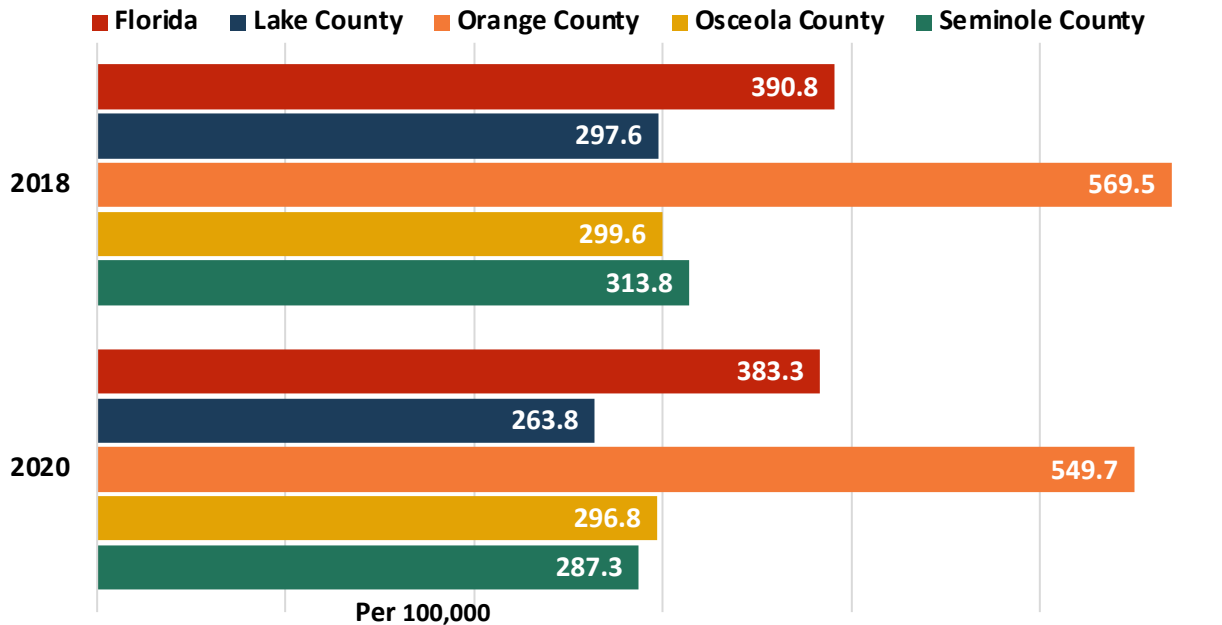
	Florida	Lake County	Orange County	Osceola County	Seminole County
2018	390.8	297.6	569.5	299.6	313.8
2020	383.3	263.8	549.7	296.8	287.3

Source: Florida Department of Law Enforcement

Exhibit 97: Theft-Related Crime

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Larceny	1,792.4	1,385.5	2,356.4	1,490.1	1,462.5
Burglary	356.4	421.1	495.0	380.8	292.9
Motor Vehicle Theft	195.9	157.5	275.1	123.2	109.6

Source: Florida Department of Law Enforcement, 2017-2019

- Orange County has notably higher than statewide average rates for all types of theft-related crime.

- Seminole County has the lowest rates of burglary and motor vehicle theft and larceny rates that are also below state averages.

- While Lake and Osceola counties both have lower than Florida average rates of larceny and motor vehicle theft, their figures for burglary exceed those of the state as a whole.

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Reported incidents of domestic violence decreased slightly from 2016 to 2020, yet pandemic-related incidence is expected to mask 2020 and 2021 levels.

Exhibit 98: Trend of Domestic Violence Offenses
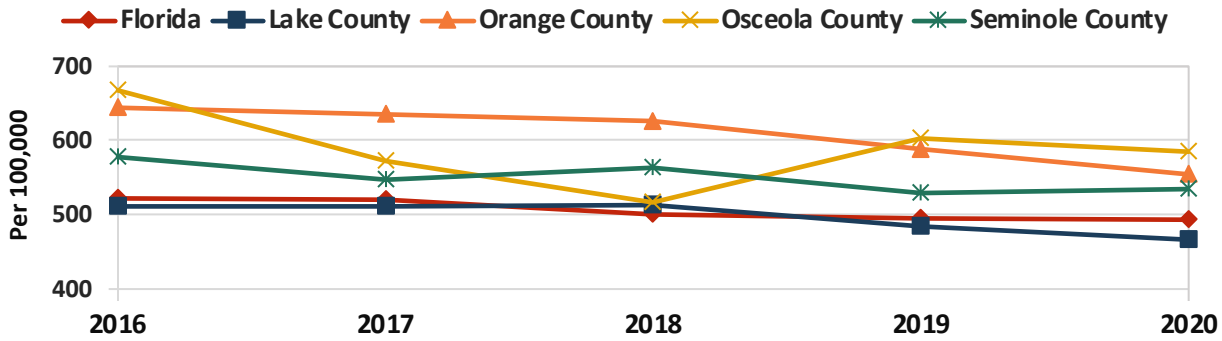
	Florida	Lake County	Orange County	Osceola County	Seminole County
2016	522.2	510.3	643.7	666.8	577.3
2017	520.4	511.1	634.4	571.8	547.2
2018	500.6	512.3	625.2	516.9	563.4
2019	495.1	484.9	587.9	601.9	528.8
2020	492.2	465.8	553.8	584.1	533.5

Source: Florida Department of Law Enforcement

- The incidence of reported domestic violence in the service area has decreased at a faster rate than the statewide average from 2016 to 2020. However, the rates in all service area counties except Lake County are higher than the Florida average.

- Between 2016 and 2020, the overall rates of domestic violence offenses have declined within the service area and statewide.

- However, in Osceola County between 2018 and 2019, the rate of domestic violence offenses increased by nearly 15%. Rates plateaued in 2020 showing a slight decline.

- Orange County has experienced a steady decline in reported domestic violence rates over the past five years.

Mental Health & Substance Use Disorder

Preliminary research indicates that as a result of the COVID-19 pandemic, the existence of an emotional epidemic curve and a high probability of an increased burden of mental health issues in the post-pandemic era is certain. The current evidence and published literature related to previous epidemics suggest that mental health issues may arise after the peak of the pandemic, with increased prevalence among the vulnerable population and people with risk factors.[73] The following data indicate the percentage of adults who reported poor mental health at least 14 out of the past 30 days.[74]

This is a large and growing challenge to Central Florida. Approximately one in eight service area adults reported notable mental health challenges in 2019; this number likely skyrocketed in 2020 and 2021. This appears to be a significant and ongoing challenge – especially noting the rapid population growth rates in most areas. A higher percentage of the population struggling with mental health issues, married with population growth, implies an accelerated number of men, women and families in need of mental health support. In Lake and Orange Counties, more adults report poor mental health at least 14 days out of the past 30 days in 2019 compared to 2013.

[73]BJM Journal. Mental health in the post-COVID-19 era: challenges and the way forward, 2020.
[74]Note: For terminology, Behavioral Health is the promotion of mental health, resilience, and well-being; the treatment of mental and substance use disorders; and the support of those who experience and/or are in recovery from these conditions, along with their families and communities. Behavioral health conditions and the behavioral health field have historically been financed, authorized, structured, researched, and regulated differently than other health conditions.[74]

Exhibit 99: Adults Who Had Poor Mental Health 14 + of Past 30 Days
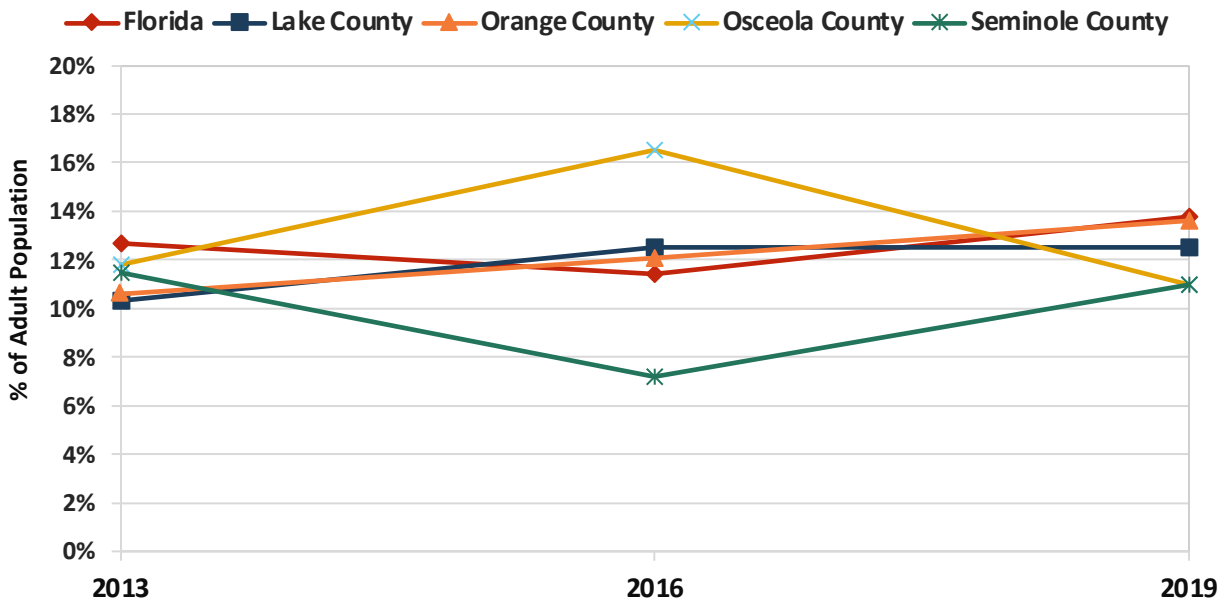
	Florida	Lake County	Orange County	Osceola County	Seminole County
2013	12.7%	10.3%	10.6%	11.8%	11.5%
2016	11.4%	12.5%	12.1%	16.5%	7.2%
2019	13.8%	12.5%	13.6%	11.0%	11.0%

Source: Florida Behavioral Risk Factor Surveillance System

- With some variation by geography over time, there has generally been an increase in the percentage of adults reporting mental health challenges in each county. However, from 2016 to 2019, a decrease was reported in Osceola County, and Lake County remained stable.

- Tables in the appendix show that the increase in mental health needs is fairly consistent across counties, ages groups, genders, income levels and races and ethnic groups (with non-Hispanic/Latino residents in Osceola County being a slight exception). The tables provide detailed incidence rates for each of these population categories.

Mental Health Care Capacity

The state of Florida has a notable shortage of providers. The state-based Health Professional Shortage Area (HPSA) data has only 19% of providers needed to achieve a level of not being designated as an HPSA. Statewide, this indicates that over 380 additional professionals are needed.[75] On a per-capita basis, this suggests that the service area needs a minimum of 46 additional providers to meet 2019 needs. This number is likely higher in 2022 given the reported increase in mental health needs nationwide and locally.

Exhibit 100: Licensed Mental Health Providers

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Licensed Mental Health Counselors	57.3	46.4	71.1	30.9	103.9
Licensed Psychologists	23.4	8.4	15.1	5.2	21.9
Licensed Clinical Social Workers	49.7	31.7	37.4	21.1	56.6
Behavioral or Mental Health Professionals	117.1	84.1	119.2	54.6	176.1
Total	**247.5**	**170.6**	**242.8**	**111.8**	**358.5**

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics & Performance Management's Suicide and Behavioral Health Profile, 2020

Exhibit 101: Total Psychiatric Beds

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Adult Psychiatric Beds	20.6	16.8	22.6	19.3	15.0
Child and Adolescent Psychiatric Beds	3.0	0.0	6.8	0.0	1.7

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics & Performance Management's Suicide and Behavioral Health Profile, 2020

- Osceola County (111.8) and Lake County (170.6) have far fewer per capita total mental health providers than Orange County (242.8) and Seminole County (358.5).

- Seminole County has about 40% more mental health providers per capita than the state average. Across all counties, there is a widespread shortage of licensed mental health providers.

- The number of psychiatric beds is generally low across the service area except for Orange County. However, since there is a pronounced shortage of beds in Osceola, Lake and Seminole counties, residents from those counties requiring inpatient care may largely require services in Orange County – exacerbating the service area capacity issue.

- Capacity is severe for inpatient children and adolescents in Orange County. It is important to note that there are no beds in Lake and Osceola counties and a small number in Seminole County. Moreover, Lake and Osceola counties have the least number of mental health counselors per 100,000 residents. Note the total population of these service areas (Lake County, 345,867; Osceola County, 351,955).

[75]Kaiser Family Foundation. Mental Health Workforce, 2021.

Exhibit 102: Hospitalizations for Mental & Behavioral Health Disorders by Age in Florida

Per 100,000	Drug & Alcohol-Induced Mental Disorders	Mood & Depressive Disorders	Schizophrenic Disorders	Eating Disorders	Hospitalizations Attributable to Mental Disorders
Total Hospitalizations	166.9	430.3	235.7	11.5	928.4
Under 18	5.9	446.2	18.1	18.1	599.9
18-21	85.0	742.0	269.9	30.4	1,262.3
22-24	131.4	594.0	386.3	19.4	1,230.9
25-44	263.0	497.3	415.3	11.8	1,256.7
45-64	275.4	460.0	300.6	6.5	1,093.9
65-74	134.1	252.9	140.6	4.6	593.7
75 +	39.0	139.9	75.1	6.8	413.0

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics & Performance Management's Suicide and Behavioral Health Profile, 2019

- In 2019, there were 928.4 hospitalizations per 100,000 people caused by mental health disorders/illnesses in Florida.

- Mood and depressive disorders were the most common primary diagnosis upon admission across all age groups.

- Those within the ages of 45 to 64 present the highest rate of hospitalizations caused by a drug or alcohol-induced mental disorder. Eating disorder-related hospitalizations were most common for those between the ages of 18 and 21. Within the service area, Orange County presents the highest rate of hospitalizations related to mental health disorders, primarily mood and depressive disorders.

Exhibit 103: Hospitalizations for Mental & Behavioral Health Disorders

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Hospitalizations	1,006.0	859.2	1,120.6	845.7	963.9
Drug & Alcohol-Induced Mental Disorders	166.9	134.8	116.8	131.8	115.7
Mood & Depressive Disorders	430.3	471.0	621.8	443.8	610.9
Schizophrenic Disorders	235.7	193.5	300.8	191.0	155.9
Eating Disorders	11.5	11.3	10.6	7.9	9.7

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics & Performance Management's Suicide and Behavioral Health Profile, 2019

Suicide rates for all ages between 2017 and 2019 ranged from 9.6 in Orange County to 19.7 deaths per 100,000 in Lake County. Firearms were the leading means of suicide in every service area county.

Exhibit 104: Suicide Rate
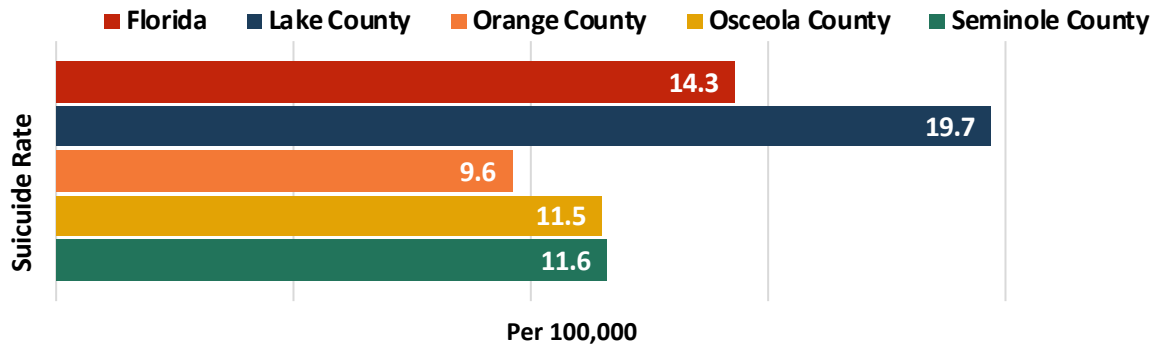
	Florida	Lake County	Orange County	Osceola County	Seminole County
Age-adjusted Rate Per 100,000	14.3	19.7	9.6	11.5	11.6

Source: Florida Department of Health. Bureau of Vital Statistics, 2018 -2020

There are surges in completed suicides in the 20-24 age group and the 45-54 age group; both groups may be particularly vulnerable to major life transitions.

Exhibit 105: Means of Suicide by Age in Florida[76]

Per 100,000	Firearm	Drug Poisoning	Suffocation	Cut/Pierce	Non-Drug Poisoning	Other	Total
Cumulative Rate	9.5	2.1	4.4	0.3	0.4	1.2	18.1
Ages 10-14	0.7	0.1	1.1	0.1	0.0	0.2	2.2
Ages 15-19	4.2	0.3	2.7	0.1	0.2	0.8	8.5
Ages 20-24	7.6	0.8	4.5	0.3	0.3	0.9	15.0
Ages 25-34	7.2	1.2	5.6	0.3	0.3	1.4	16.3
Ages 35-44	7.4	1.4	5.8	0.2	0.4	0.9	16.2
Ages 45-54	9.6	3.5	6.6	0.5	0.5	1.5	22.1
Ages 55-64	12.9	3.8	5.3	0.6	0.7	2.0	25.3
Ages 65-74	11.8	2.5	2.5	0.3	0.5	1.0	18.5
Ages 75 +	17.4	2.7	2.0	0.4	0.5	1.0	23.9

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management. Suicide and Behavioral Health Profile Suicide Deaths and Intentional Self-Harm Injuries, 2019

[76]Rates provided are crude rates, age-specific to the age range specified, Per 100,000.

Exhibit 106: Means of Suicide by County

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Cumulative Rate	18.1	24.5	11.5	16.2	12.6
Firearm	9.5	13.8	5.2	8.4	8.1
Drug Poisoning	2.1	4.1	1.8	1.6	1.2
Suffocation	4.4	5.7	2.6	4.4	2.6
Cut/Pierce	0.3	0.3	0.3	0.6	0.2
Non-Drug Poisoning	0.4	0.3	0.4	0.0	0.2
Other Mechanisms	1.2	0.3	1.1	0.9	0.5

Source: Florida Department of Health. Bureau of Community Health Assessment Division of Public Health Statistics & Performance Management. Suicide and Behavioral Health Profile Suicide Deaths and Intentional Self-Harm Injuries, 2019

Substance Use

The Behavioral Risk Factor Surveillance Survey defines binge drinking as, males having five or more drinks on one occasion, females having four or more drinks on one occasion.[77]

Binge drinking rates in the state have been relatively stable since 2002 with approximately 15% to 18% of adults engaging in heavy or binge drinking. Within the service area, reported heavy or binge drinking rates in Osceola County are nearly 50% lower than the state and other service area counties.

Exhibit 107: Adults Who Engage in Heavy or Binge Drinking
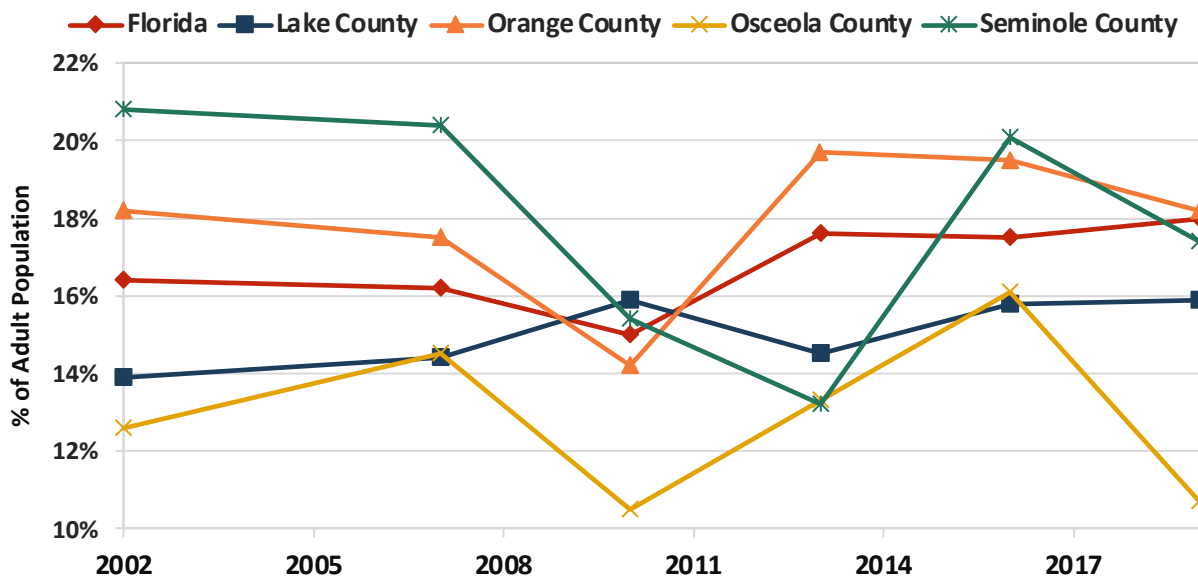
	Florida	Lake County	Orange County	Osceola County	Seminole County
2002	16.4%	13.9%	18.2%	12.6%	20.8%
2007	16.2%	14.4%	17.5%	14.5%	20.4%
2010	15.0%	15.9%	14.2%	10.5%	15.4%
2013	17.6%	14.5%	19.7%	13.3%	13.2%
2016	17.5%	15.8%	19.5%	16.1%	20.1%
2019	18.0%	15.9%	18.2%	10.7%	17.4%

Source: Florida Behavioral Risk Factor Surveillance System

- Fewer adults in Osceola County reported binge drinking in 2019 compared to other service area counties.

- Orange, Osceola and Seminole counties experienced a decrease in adult binge drinking from 2016 to 2019. Lake County experienced a slight increase (15.8% to 15.9%).

[77]BRFSS Prevalence & Trends Data Binge Drinking.

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In 2019, more than half of the adult population smoking tobacco tried to quit in the past year in all service area counties. Nearly 75% of this population tried quitting tobacco in Osceola County.

Exhibit 108: **Adult Tobacco Use**
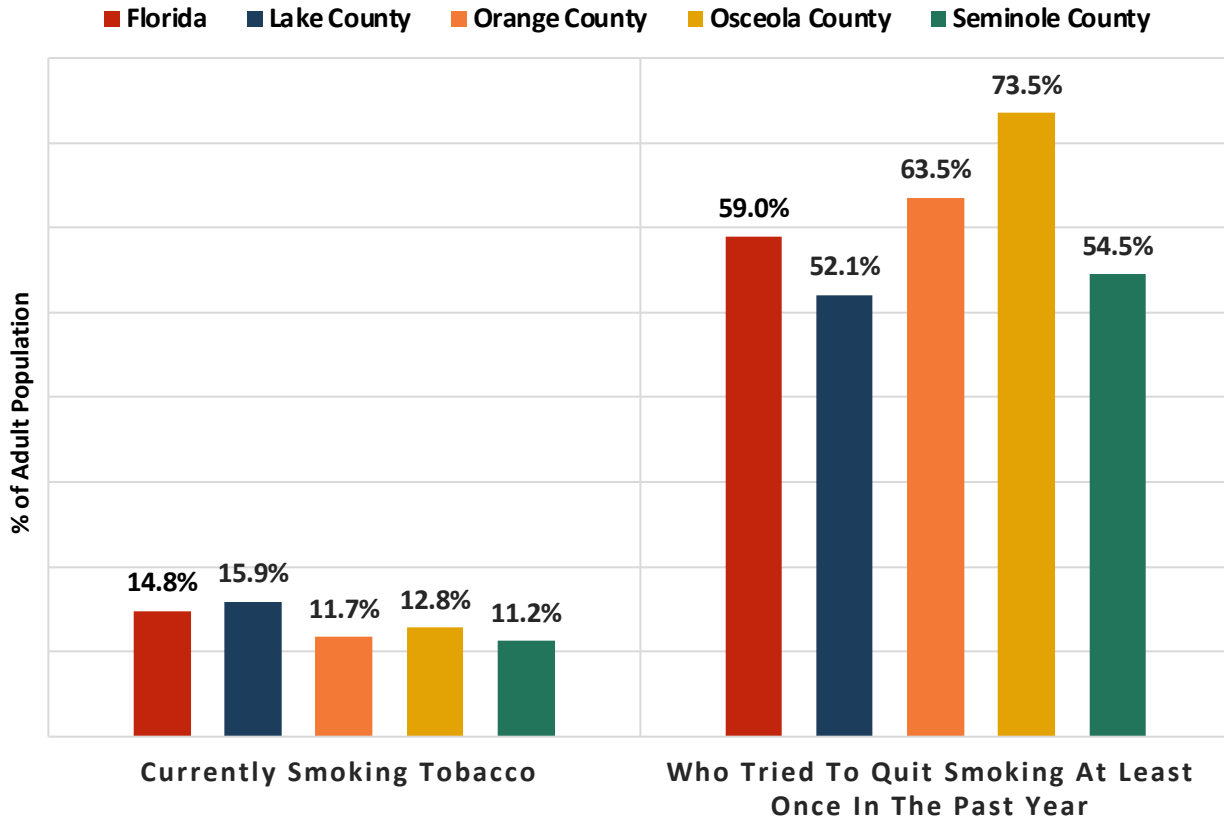
2019	Florida	Lake County	Orange County	Osceola County	Seminole County
Currently Smoking Tobacco	14.8%	15.9%	11.7%	12.8%	11.2%
Who Tried to Quit Smoking At Least Once in The Past Year	59.0%	52.1%	63.5%	73.5%	54.5%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

The table below displays a comparison of substance use-related overdose rates in 2013 and 2019 per 100,000 residents. Death rates related to fentanyl in all CFC counties but Orange County (where overdose death rates are historically the highest) have increased broadly.

Exhibit 109: Rate of Overdose Deaths

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2013					
Benzodiazepine	ND	33.0	178.0	41.0	44.0
Cocaine	ND	11.0	124.0	13.0	14.0
Fentanyl	ND	3.0	37.0	3.0	2.0
Heroin	ND	ND	32.0	9.0	7.0
Methamphetamine	ND	2.0	5.0	4.0	1.0
Opioids	ND	37.0	252.0	64.0	54.0
2019					
Benzodiazepine	11.6	9.8	13.4	8.5	8.5
Cocaine	9.6	7.4	19.0	11.7	9.3
Fentanyl	11.3	12.3	21.6	14.1	10.2
Heroin	3.6	3.0	4.2	4.8	5.1
Methamphetamine	9.1	8.7	5.2	3.5	4.0
Opioids	23.6	22.1	34.7	24.8	17.4

Source: Florida Drug-Related Outcomes Surveillance & Tracking (FROST) System, 2019. Note: "ND" means "No Data available."

Exhibit 110: Percent Change of Overdose Deaths

2013-2019	Lake County	Orange County	Osceola County	Seminole County
Benzodiazepine	-70.3%	-92.5%	-79.3%	-80.7%
Cocaine	-32.7%	-84.7%	-10.0%	-33.6%
Fentanyl	310.0%	-41.6%	370.0%	410.0%
Heroin	ND	-86.9%	-46.7%	-27.1%
Methamphetamine	335.0%	4.0%	-12.5%	300.0%
Opioids	-40.3%	-86.2%	-61.3%	-67.8%

Source: Florida Drug-Related Outcomes Surveillance & Tracking (FROST) System

- Fentanyl deaths have skyrocketed in each county except Orange County – up over 300% from 2013 to 2019. See FROST data in Exhibit 110.

- Similarly, overdoses from methamphetamines increased by 300% or more in Lake and Seminole counties, was up slightly in Orange County and decreased by 12.5% in Osceola County.

- Deaths from opioids, heroin, cocaine and benzodiazepine declined in 2019 from 2013 in all counties.

- Although fully comparable data was not available at the state level from the FROST system, trends between 2017 and 2020 similarly show decreased deaths from benzodiazepine and rising death rates from fentanyl and methamphetamine.

The data shown in the table above is depicted in the series of charts below. Overdose deaths from most substances in most counties decreased from 2013 to 2019.
Note: Rates are per 100,000 population.

Exhibit 111: **Rate of Substance Overdose Deaths by County**
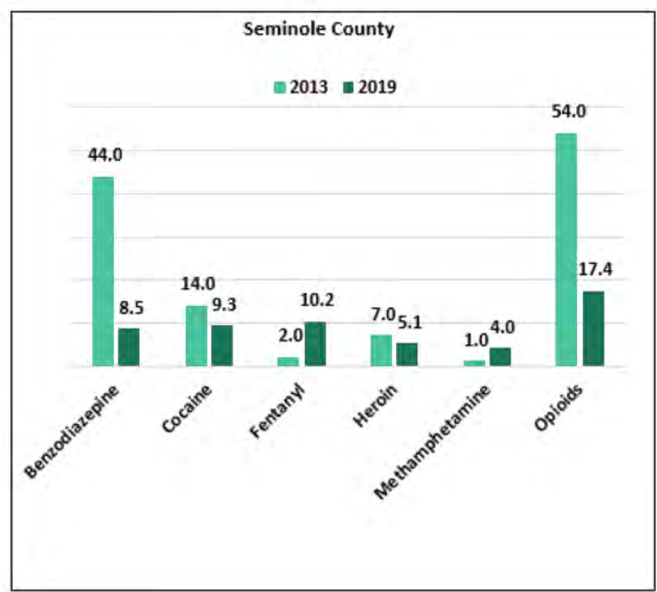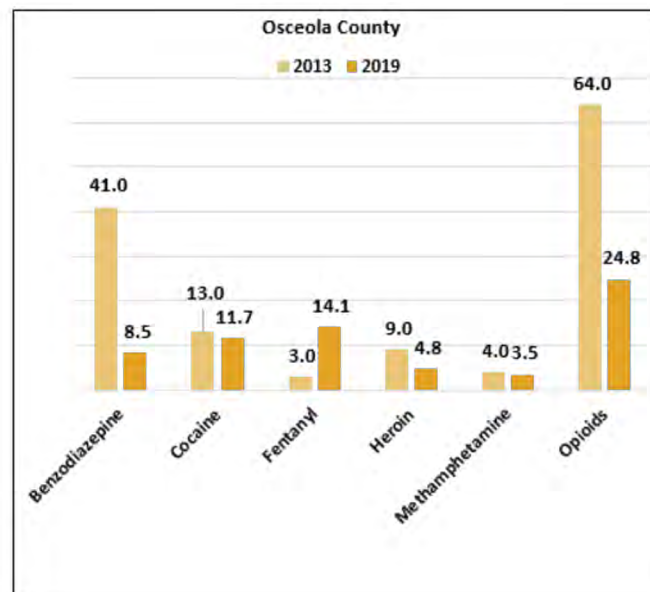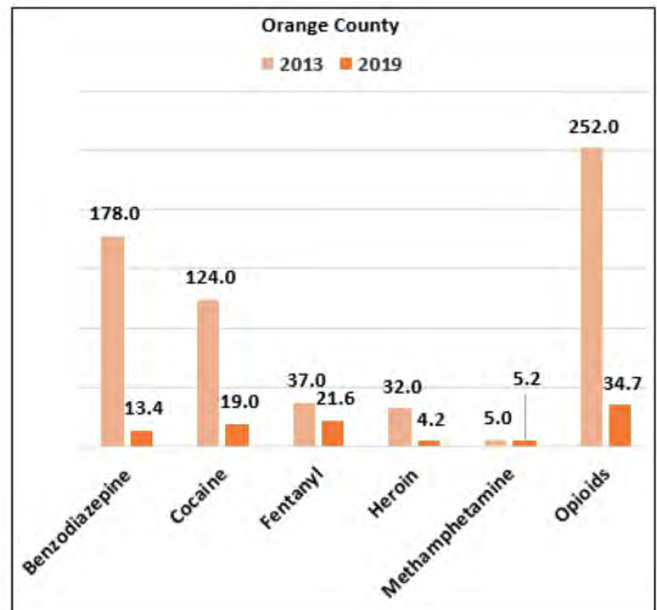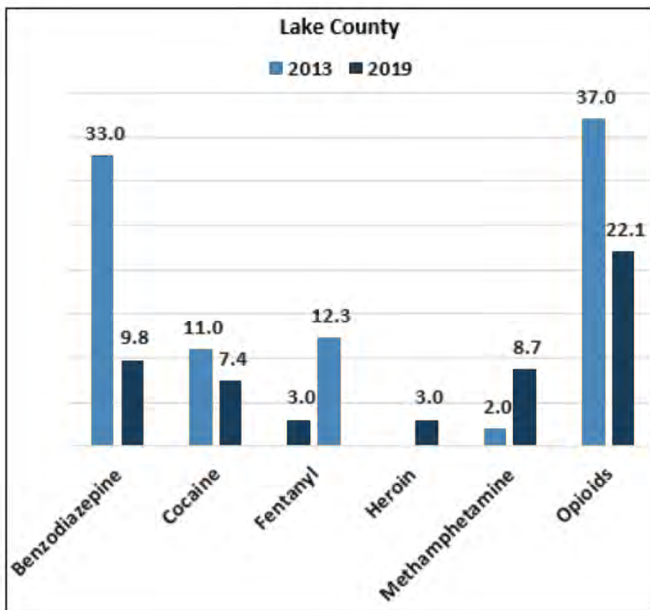
The Opioid Epidemic

For general context, note that fatal overdoses are rising at an unprecedented rate in the state of Florida, and Central Florida is rising even faster than the statewide average. In the greater Central Florida region, there were over 1,618 deaths between March 2020 and March 2021, a rate of 34.51 per 100,000 of the population. In Central Florida, there were 616 overdose deaths between March 2020 and March 2021, a 28% increase in the same period in 2019-2020. This equals 51 overdose deaths a month and over 1.5 a day.[78]

As shown in the graphic below, overall rates of prescriptions for opioids have declined within the service area, excluding Lake County, from 2018 to 2020. Between 2018 and 2020, Lake County has presented the highest rate of opioid prescriptions within the service area.

Exhibit 112: Trend of Opioid Prescribing Rates
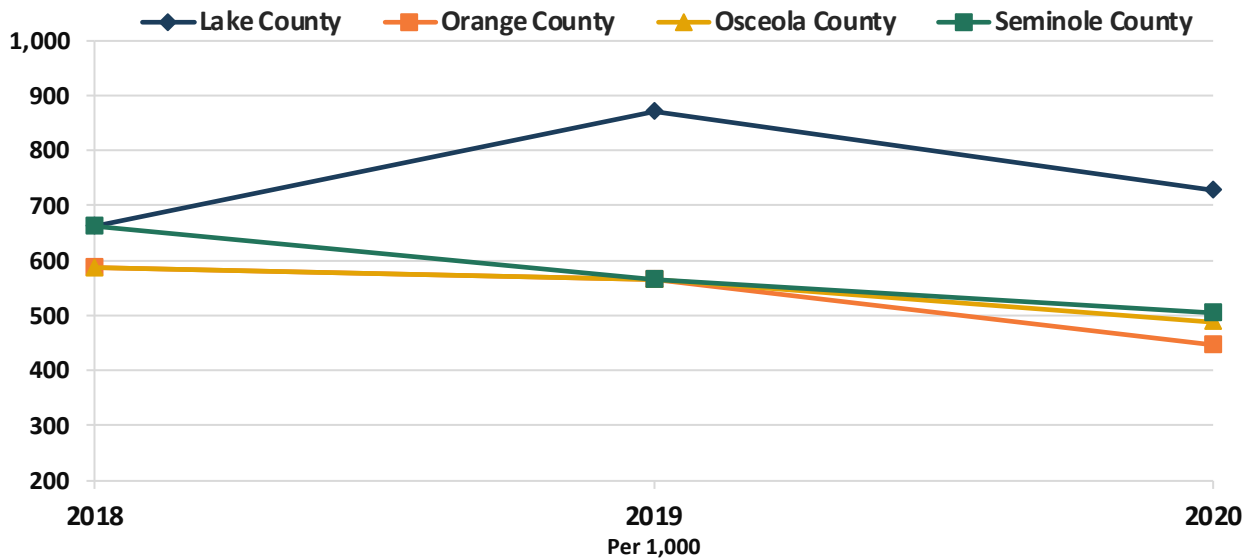
	Lake County	Orange County	Osceola County	Seminole County
2018	662.1	586.1	586.1	662.1
2019	871.5	566.4	566.4	566.4
2020	728.8	446.2	488.6	505.8

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Substance Use Dashboard

- Prescribing rates decreased in Orange, Osceola and Seminole counties by approximately 20% (see Exhibit 112).

[78]Project Opioid. The Changing Overdose Crisis in Central Florida: A Community Needs Assessment, 2021.

Exhibit 113: Trend of Opioid-Related Deaths
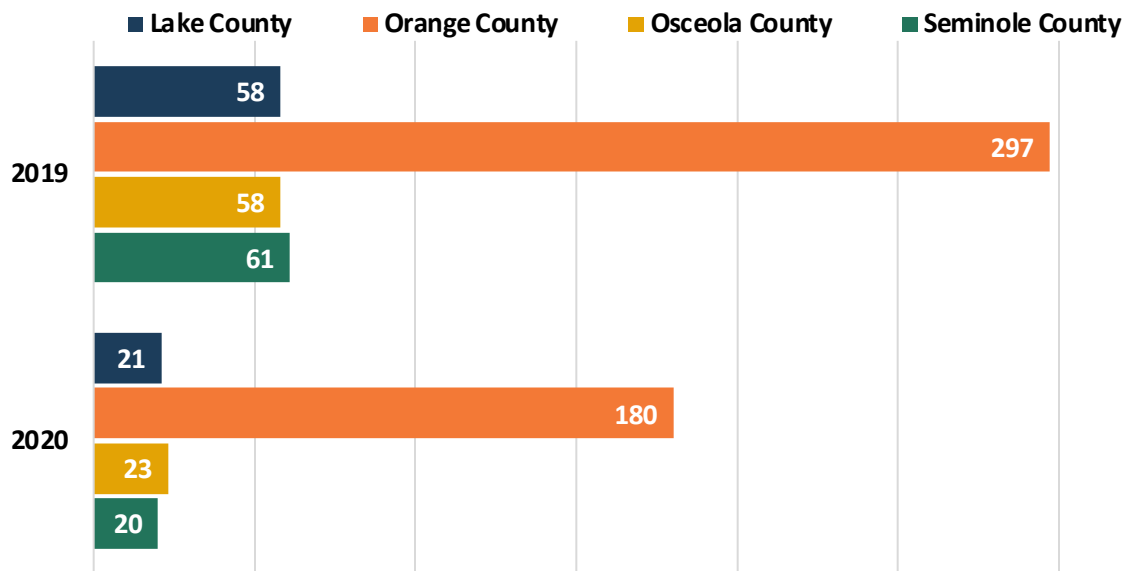
Florida		Lake County		Orange County		Osceola County		Seminole County	
2019	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
4,294	3,034	58	21	297	180	58	23	61	20

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2020

Note: The tables above correctly reflect data available when the CHNA research was conducted. However, currently available, revised data show an increase in opioid deaths in Florida as well as Orange and Osceola Counties in 2020 and a decrease in opioid-related deaths in Lake and Seminole Counties. Further information is available Florida Health Substance Use Dashboard, https://www.flhealthcharts.gov/ChartsDashboards/.

Built Environment and Food Security

The neighborhoods people live in have a major impact on their health and well-being. For example, there are many available references showing the benefits of living near a park or "green space."[79] Many people in the United States live in neighborhoods with high rates of violence, unsafe air or water and other health and safety risks. Racial and ethnic minorities and people with low incomes are more likely to live in places with these risks. In addition, some people are exposed to things at work that can harm their health, like secondhand

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[79]For example, see https://www.nrpa.org/our-work/Three-Pillars/health-wellness/ParksandHealth/fact-sheets/parks-improved-mental-health-quality-life/

smoke or loud noises.[80] All service area counties generally have favorable environmental health; in "Fiscal Year 2019-20, Florida residents experienced good or moderate quality air 99.8% of the time. This meets the legislatively approved performance standard of 99.1%."[81]

Exhibit 114: Environmental Health Profile

	Florida	Lake County	Orange County	Osceola County	Seminole County
Air Pollution	7.7	8.3	7.0	7.9	6.0
Drinking-Water Violations	ND	No	Yes	Yes	Yes
Severe Housing Problems	0.20%	0.15%	0.21%	0.22%	0.16%

Source: Florida's Department of Environmental Protection, 2019

Exhibit 115: Population Living within 0.5 miles of a Park

Florida	Lake County	Orange County	Osceola County	Seminole County
40.1%	21.3%	25.5%	21.8%	38.7%

Source: Florida Environmental Public Health Tracking, 2019

Exhibit 116: Adults Who Are Sedentary

Florida	Lake County	Orange County	Osceola County	Seminole County
25.5%	26.4%	27.0%	29.0%	22.6%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

[80]Healthy People 2030. Neighborhood & Built Environment.
[81]State of Florida, Division of Air Resources Management – OPPAGA.

As general context, food insecurity refers to the U.S. Department of Agriculture (USDA) measure of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Research indicates that the pandemic ultimately ended years of declining rates of food insecurity — the lack of access to sufficient food because of limited financial resources.[82]

Regarding the data below, food insecurity in the service area is a prominent challenge. Although rates are similar to the statewide average, county-level data indicates that one in five children are food insecure and that the numbers are increasing rapidly. Osceola County experienced the largest increase of child food insecurity from 15.8% in 2019 to 22% in a two-year span.

Exhibit 117: Food Insecurity

	Florida	Lake County	Orange County	Osceola County	Seminole County
2019					
Food Insecure Population	12.0%	11.9%	11.2%	11.1%	10.1%
Food Insecure Children	17.1%	17.6%	16.0%	15.8%	10.1%
2021					
Food Insecure Population	13.3%	13.9%	14.2%	14.6%	11.9%
Food Insecure Children	19.1%	20.9%	21.1%	22.0%	15.8%

Source: USDA Food Environment Atlas, Map the Meal Gap from Feeding America

The food environment index from 2019 shows Lake and Osceola counties having less access to healthy foods and more food insecurity overall than Orange and Seminole counties. However, the service area as a whole rated better than Florida averages (according to data prior to the COVID-19 pandemic).

Exhibit 118: Food Environment Index

Florida	Lake County	Orange County	Osceola County	Seminole County
6.9	7.4	7.8	7.5	8.1

Source: USDA Food Environment Atlas, Map the Meal Gap from Feeding America

The Food Environment Index ranges from a scale of 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store.

2) Food insecurity estimates the percentage of the population that did not have access to a reliable source of food during the past year.

[82]Feeding America. The Impact of the Coronavirus on Food Insecurity in 2020 & 2021, March 2021.

Digital Trends Analysis

Over 4 billion people across the globe use the internet with approximately 3.2 billion using social media in 2018.[83] The internet and social media have become powerful channels to share information at home and around the world.

Approximately two-thirds of all U.S. adults (68%) are Facebook users and 75% of those users access Facebook at least daily. YouTube, while not considered a traditional social media platform, has increased in popularity in the recent years with 73% of U.S. adults reporting that they use it[84].

One in three Americans have searched online to determine a medical condition.[85] Of those who seek medical information online, 46% of the individuals sought attention from their medical provider. Reviewing online search interest and social media can help identify the most common, emerging and surging health care-related issues in the local community.

Approach

Crescendo analyzed the Google search trends from January 1, 2019, through March 31, 2022. Unfortunately, it is likely that the COVID-19 pandemic has skewed any search trends data along with changes to Google's search algorithm. The geography analyzed was Orlando-Daytona Beach-Melbourne.[86]

About Google Trends

Google Trends is a search trends feature from Google that shows how frequently a given search term is entered into Google's search engine relative to the site's total search volume over a given period. Google uses a relative score to measure the index of search activity. The maximum value, or peak popularity, is 100. For example, if the value for "Springfield" is 100 and the value for "donut" is 50, the number of searches for "donut" is half as popular as "Springfield." A score of 0 means there was not enough data for the term.

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[83]We Are Social. *Digital in 2018: World's Internet User Pass the 4 Billion Mark.* https://wearesocial.com/blog/2018/01/global-digital-report-2018
[84]Pew Research Center. *Social Media Use in 2018.* http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/
[85]Pew Research Center. Health Online 2013. http://www.pewinternet.org/2013/01/15/health-online-2013/
[86]Geography predetermined by Google Trends data. The Orland-Daytona Beach-Melbourne was the geography that best fit the service area.

Health Search Interest Overview

The following charts depict the search interest for health issues in the service area over a specific period.

Exhibit 119: Google Search Interest Over Time for "Health"
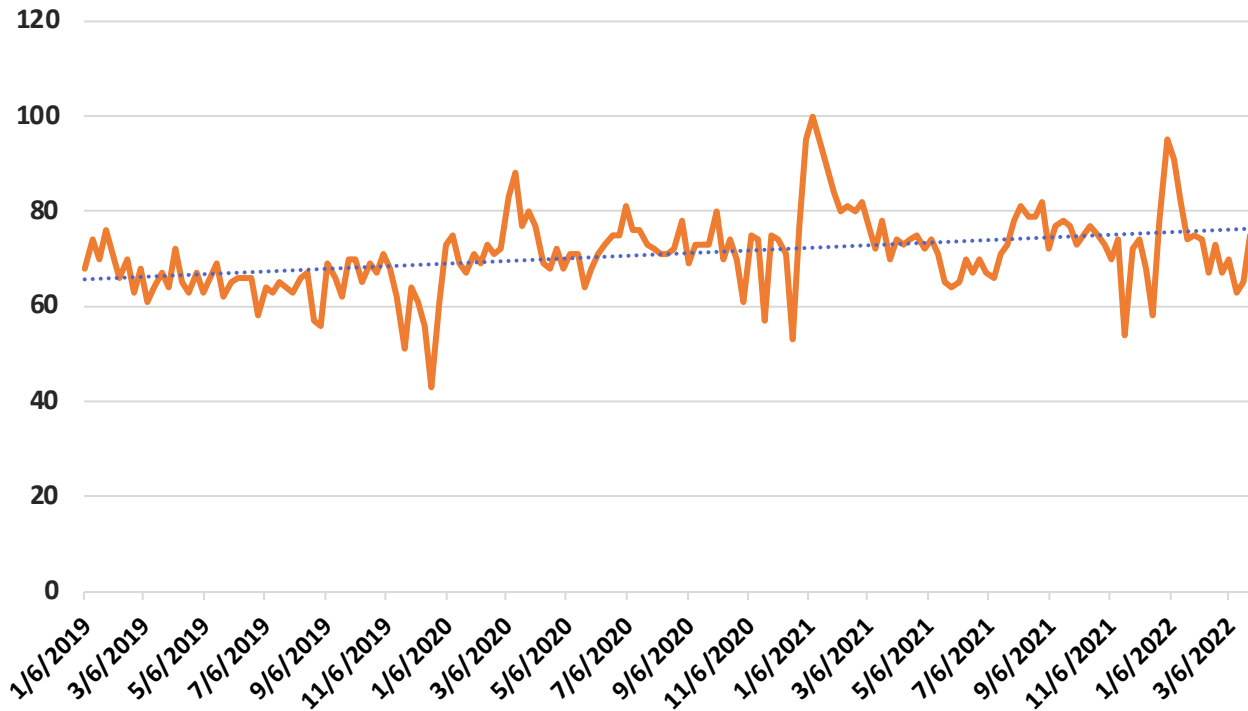
- Health is a broad base search term category that includes topics such as health, health care professional and a variety of health-related topics. Google searches for health-related topics began increasing in March 2020 due to the COVID-19 pandemic.
- Google users also searched for terms such as COVID-19 testing, mental health and specific health care providers/organizations, among others.

Exhibit 120: Google Search Interest Over Time for "Infectious Diseases"
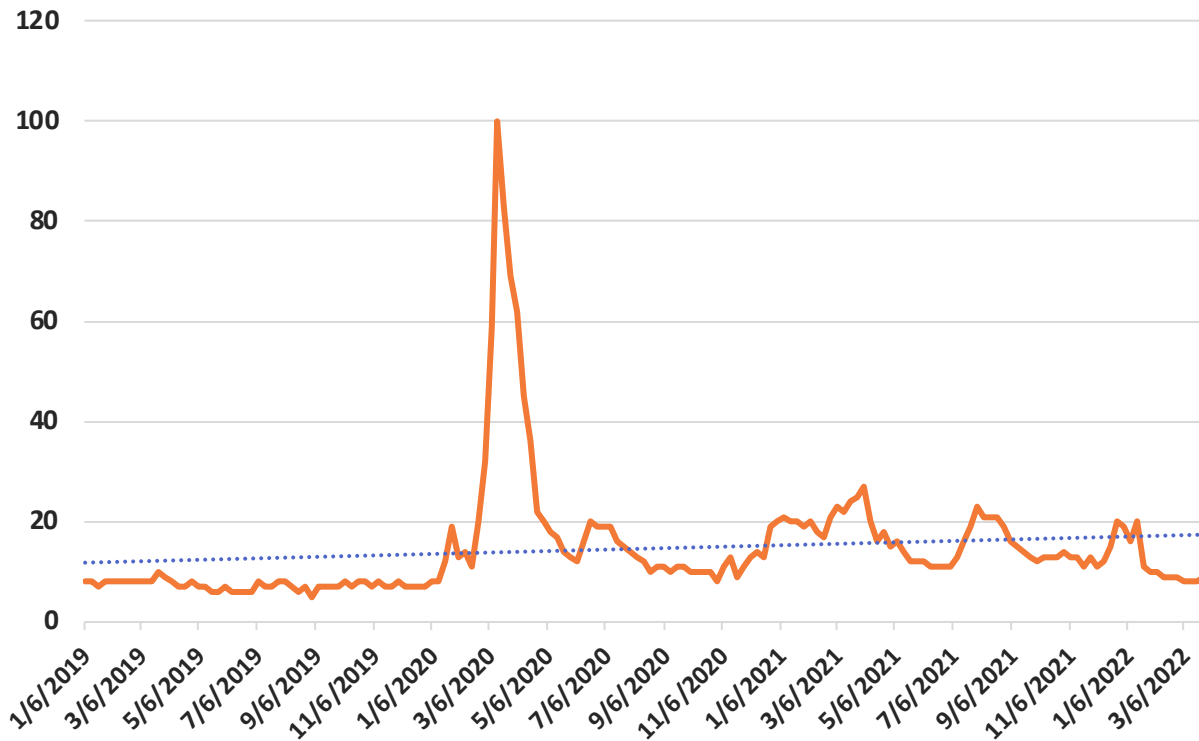
- In early March 2020, there was a significant increase in search terms related to infectious diseases due to the emerging COVID-19 pandemic that began sweeping the globe. From March 2020 through March 2022, there were slight increases in search interest that largely align with emerging COVID-19 variants and the release of the COVID-19 vaccines.

Exhibit 121: **Google Search Interest Over Time for "Food Bank"**
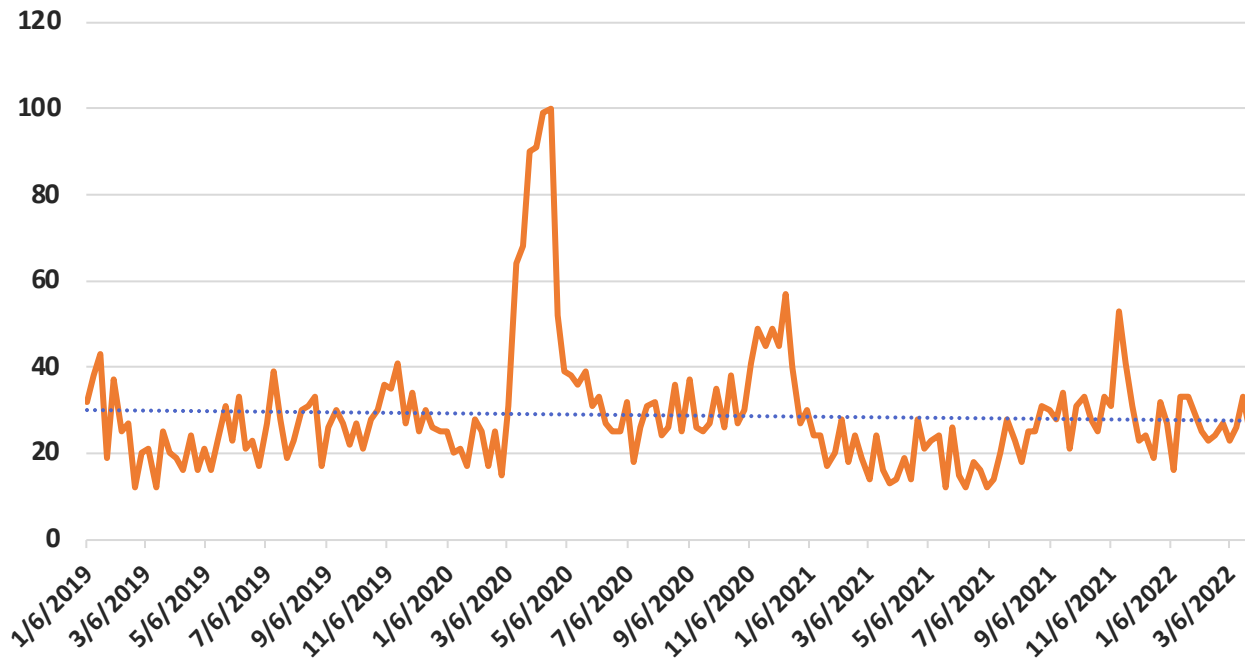
- The search term "food insecurity" is a merging term related to the COVID-19 pandemic. Search results related to "food bank" increased from March 2020 through June 2020 and periodically throughout the pandemic. The significant increase in search interest was likely due to business shutdowns and the high unemployment rates. The first Economic Impact Payments began being deposited in bank accounts on April 15, 2020, which likely led to a decrease in search interest for food banks.

Health care service site searches increased dramatically during the pandemic (since March 2020).

Exhibit 122: **Google Search Interest Over Time for "AdventHealth"**
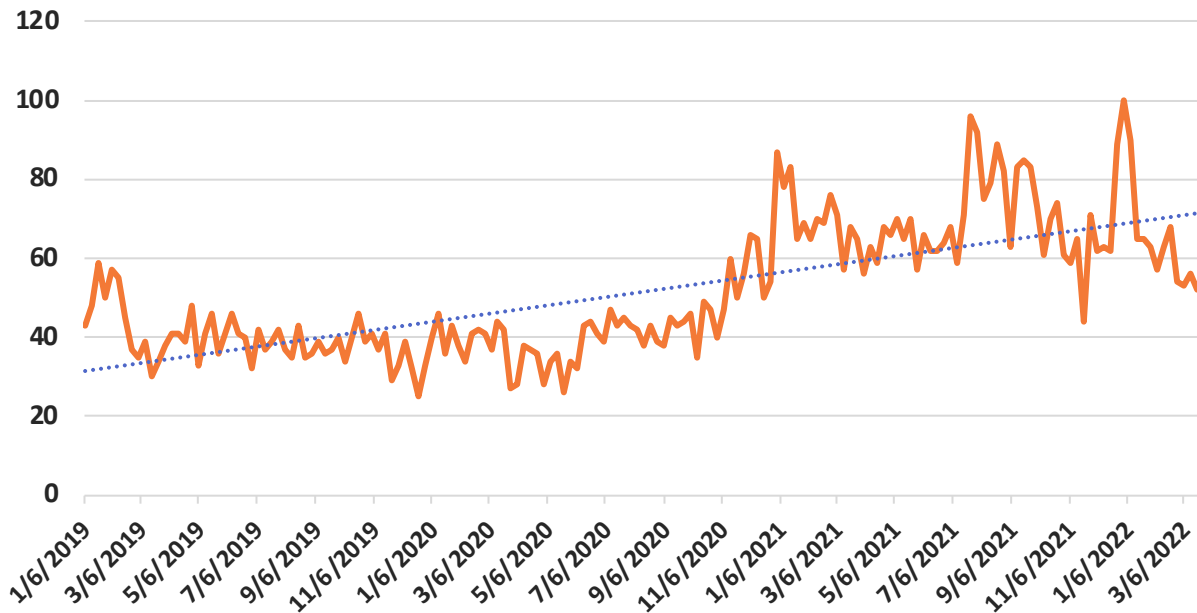
- Search interest for "AdventHealth" has increased since January 2019. The increases began around December 2020/January 2021, which aligns with the release of COVID-19 vaccines to the public.

Exhibit 123: Google Search Interest Over Time for "Orlando Health"
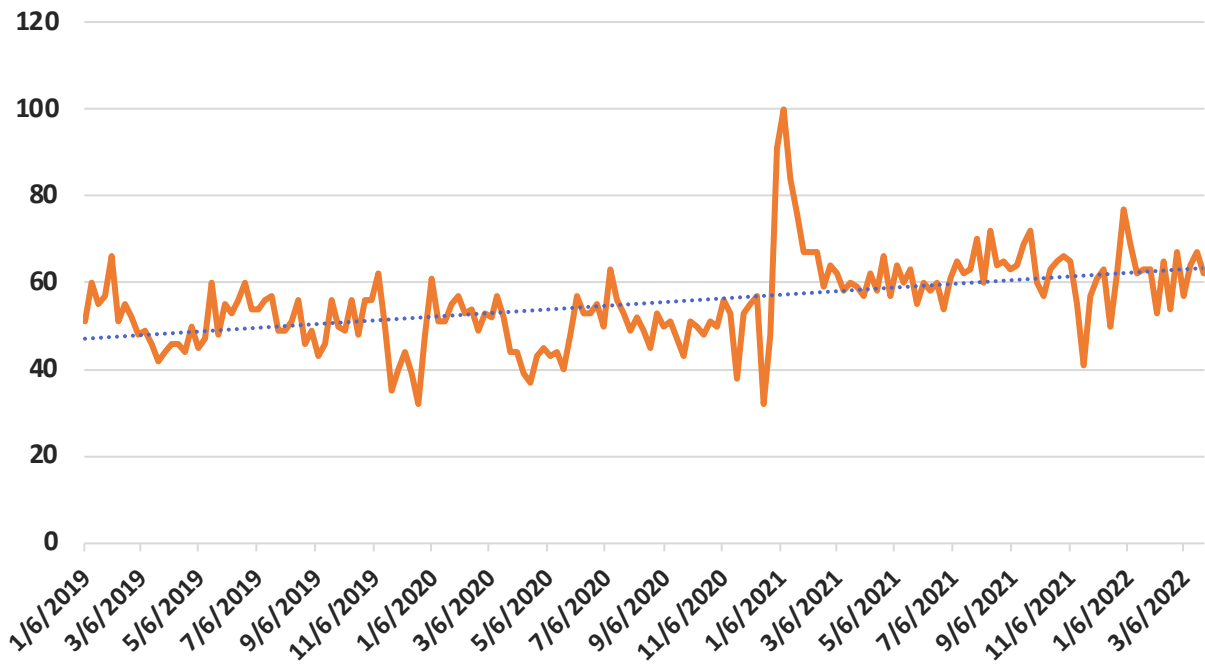
- Search interest for "Orlando Health" increased slightly since January 2019. The largest increase occurred in January and February 2021, which aligns with the release of COVID-19 vaccines to the public.

Note that similar searches were conducted for other CFC member organizations, but data volume was not sufficient to present.

Primary Qualitative Research

Outline and Approach

The core of the assessment involved substantial onsite data gathering, local knowledge and expertise and outreach efforts for community engagement. The primary qualitative mixed method approach engaged policy leaders, key stakeholders throughout the area, non-profit organization representatives, health care consumers, the criminal justice system, diversity representatives, people experiencing homelessness and others. The qualitative techniques used included:

- Equity Champions - Diversity Group Outreach
- Stakeholder One-to-One Interviews
- Focus Group Discussions

Equity Champions

As noted elsewhere in this report, reducing and eliminating health disparities begins with leadership and education about cultural competency. The CFC took a unique approach by creating a team of Equity Champions – 10 individuals or organizations who represented multi-racial and other marginalized communities and helped ensure qualitative research was culturally appropriate. A diverse group of participants were engaged.

One-to-One Interviews

One-to-one interviews were conducted with key community stakeholders, policymakers and local residents. Most of the 105 one-on-one interviews lasted approximately 20-30 minutes, although a few continued for over an hour providing the opportunity to have in-depth discussions about community-wide (and county-specific) strengths, barriers to health equity and action steps. Interviews were conducted between October 29, 2021 and January 31, 2022. Please find stakeholder interview table here.

	Count	Percent of Total
Male	38	36.2%
Female	67	63.8%
White	35	33.3%
Black / African American	31	29.5%
LatinX	28	26.7%
Asian	4	3.8%
Other / Unknown	7	6.7%
Hispanic	33	31.4%
Non-Hispanic	72	68.6%
TOTAL	105	100.0%

Focus Group Discussions

In addition to individual interviews, 30 focus group discussions (FGD's) were held - six to eight in each county, including multi-county groups at various scheduled dates from October 2021 through February 2022. In total, there were approximately 250 participants – 228 of whom submitted registrations that helped describe the demographic make-up of the groups. The groups allowed local voices to be heard to highlight areas of consensus as to what they see as the biggest community needs facing the community. [Note that not all focus group participants submitted a registration (providing profile information above). Therefore, percentages are approximations based on submitted registrations.]

The demographic breakdown of registered participants (of those who provided that information) is shown below.

Exhibit 124: Demographic Profile of Focus Group Participants

Demographic Category	Count	Percent of Group
Black/African American	60	26.3%
White	147	64.5%
Prefer not to answer	5	2.2%
Asian; White	1	0.4%
Asian	4	1.8%
I identify in another way	6	2.6%
Black/African American; White	2	0.9%
American Indian or Alaska Native	1	0.4%
White; Black/African American; American Indian or Alaska Native	1	0.4%
Asian; Black/African American	1	0.4%
No, not Hispanic/Latino	178	78.4%
Hispanic/Latino	44	19.4%
Prefer not to answer	5	2.2%
Man	60	26.3%
Woman	164	71.9%
Non-Binary/Genderqueer	2	0.9%
Prefer not to answer	2	0.9%
18-24	2	0.9%
25-34	44	19.3%
35-44	53	23.2%

Demographic Category	Count	Percent of Group
45-54	69	30.3%
55-64	41	18.0%
65-74	12	5.3%
75 or older	2	0.9%
Prefer not to answer	5	2.2%

The list of focus groups conducted, county focus and participant groups is exhibited in the table below. Each group was conducted with the support and assistance of CFC partners.

Exhibit 125: **Focus Group Discussion (FGD) List and Coverage Details**

County(ies) Served	Community Invited	Community Member Organization or, Community Member, if unaffiliated
Lake	Seniors	Variety of community contacts
Lake	Food insecurity/Affordable housing/Homelessness	Variety of community contacts
Lake	Mental health	Variety of community contacts
Lake	Domestic violence	Variety of community contacts
Multi-County	Collaborative members	Central Florida Collaborative
Multi-County	Access to care	PCAN
Multi-County	Access to care & food security	Health and Hunger Task Force
Multi-County	Mental health	Creating a Resilient Community Network
Multi-County	Providers & cultural competence/implicit bias	Black Nurses Rock
Multi-County	LGBTQ+ The Center	The Center
Multi-County	Housing - Central Florida evictions & foreclosures group	Central Florida evictions & foreclosures group
Multi-County	True Health leadership	True Health FQHC
Multi-County	Aspire providers	Mental health providers
Multi-County	Hospitality industry	Theme parks and other large employers in central Florida
Orange	Youth	Variety of community contacts
Orange	Access to care	Variety of community contacts
Orange	Maternal/Infant health/Black/African American moms	Variety of community contacts
Orange	Mental health	Mayors Council mental and behavioral health analysis
Orange/Multi	People living with disabilities	Center for Independent Living

County(ies) Served	Community Invited	Community Member Organization or, Community Member, if unaffiliated
Osceola	COVID impact/Faith-based community participants	Variety of community contacts
Osceola	Homelessness/Affordable housing/ Food security & service providers	Variety of community contacts
Osceola	Health Care - Osceola Health Leadership	Osceola Health leadership
Osceola	Community members (Spanish-speaking)	Hispanic community members
Seminole	Community stakeholders - OPIOID Council	Seminole County Opioid Council
Seminole	General health/Mental health/Substance use	Healthy Seminole Collaborative
Seminole	Youth - Children's Cabinet	Children's Cabinet
Seminole	Faith-based community members	Faith-based leaders
Seminole	Community Members – New Americans	Refugees and organizations serving new Americans
Multi-County	Asian American community	Asian American community

Qualitative Research Representation

In total, across both qualitative research stages over 350 individuals provided input from the following segments:

- General community members
- Health care services consumers
- Exceptionally high-need community groups
- Members of priority communities
- Executive leadership – Health care sector
- Executive leadership – Business and employment sectors
- Community service organizations
- Faith-based organizations
- Public Health Department leaders
- Governmental organizations

The combination of individual interviews and focus group discussions provided an in-depth perspective of high-level Current Environment topics impacting the general four-county service area. In addition, several more Granular Qualitative Research Themes and Insight were identified. The regional-level overview and the granular insight illuminate core health-related issues (as well as strengths) critically important to the CHNA process, as they provide unique perspectives, detailed experiences, personal stories and diversity to the assessment.

The conclusions of the qualitative research are contained in two subsections:

- Current Environment: A higher-level overview of topics impacting the general four-county service area.
- Granular Qualitative Research Themes and Insight: An exploration of detailed insight regarding core health-related issues (as well as strengths).

A discussion of each sub-section follows.

Current Environment

The large Central Florida Collaborative service area is home to over 2.5 million people.[87] Diversity of landscape and demographics characterize the area. The following section is designed to provide a glimpse into the current community health landscape of Central Florida.

Strengths

Every community has strengths that can be shared and celebrated throughout the CHNA process. Many individuals who participated in the qualitative research highlighted positive aspects of living and working in the Central Florida region. The growing diversity of the population was mentioned by numerous stakeholders in all four counties. One stakeholder said, "[It's] a very diverse community with lots of really good people with great ideas." Another stakeholder said, "With diversity comes interesting things to do that we didn't use to have. It's also attracting younger, highly educated, diverse individuals; so, now there is a breadth of thought leaders."

The Central Florida region is home to numerous non-profit organizations throughout the four counties. A majority of the stakeholders agreed that many organizations are very collaborative and have developed supportive partnerships over the years with a goal to break down silos. A stakeholder in Osceola County said, "There is a willingness of various partners to come together to tackle big picture issues. There's a sense that everyone is welcomed to try to craft solutions and to include what you might not consider a traditional partner." Another stakeholder said, "Passion for helping people has brought people together."

Many stakeholders commented on the positive economic impact of the local theme parks and tourism industry. There was also consensus that the weather is generally nice year-round with many opportunities for outdoor activities and recreation.

Top Challenges

Just as every community has its strengths, it also has its challenges, especially when it comes to the health care system and community health. Challenges and barriers were identified at three levels: Policy, Advocacy and System; Community; and Individual.

Policy, Advocacy and System Level

Many of the challenges identified through the qualitative research were issues at a state or national level and require policy and regulatory change within state and federal laws or systemwide regulations to reduce the impact felt by individual community members. Some of the more common comments related to (1) the complex health care system, (2) financial issues and (3) non-profit organization funding and sustainability. Each is briefly described below.

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

Complex Health Care System

The health care system can be complicated for individuals to understand and navigate, even for those who work within the health care industry. Many stakeholders identified that the health care system is siloed and there is a lack of navigation and care coordination between different providers. Additionally, an individual's health insurance plan or their ability to pay for services adds another level of complexity when navigating the system. For example, a stakeholder said, "Knowing where to go is a challenge. Insurance often dictates what providers you can see."

Many hospitals and health clinics were already faced with nursing and other health care provider shortages before the COVID-19 pandemic which has only increased the shortages. A Federally Qualified Health Center leader said, "We are just doing the best we can for the community." Many of those interviewed report trying to hire new health care staff (especially for behavioral health) but running into difficulties due to the low reimbursement rates and higher wages from competitors or other industries. Pandemic-related burnout was noted as a factor leading to provider attrition, and there were anecdotal reports of nurses switching to travel nursing, which impacts local capacity.

Financial

One of the most significant barriers to accessing health care in the Central Florida region is access to financial resources. Florida is not a Medicaid expansion state, which means there is an income bracket of people whose household incomes are too high to qualify for Medicaid but too low to receive the Affordable Care Act (ACA) exchange subsidies. This is known as the coverage gap. Across Florida, there are 415,000 people who have no realistic access to health insurance without Medicaid expansion.[88] One behavioral health provider said, "Florida is not a Medicaid expansion state, so access to care for a variety of reasons can be difficult. Even with Medicaid, many people still rely on the state system, especially people with severe mental illness."

The Central Florida region's economy is very dependent on the tourism and hospitality industries. Wage structures in some sectors of this part of the economy are low. As one local Orlando-based community service provider said, "It's a high tourist destination, so there is a large population of hospitality workers. Wages have not kept up with the rising costs of living." The low median wages and accelerating housing prices in the area have contributed to the growing affordable housing crisis (and the related impact on community health).

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[88]Florida and the ACA's Medicaid Expansion. https://www.healthinsurance.org/medicaid/florida/#:~:text=No%20ACA%20Medicaid%20eligibility%20expansion,them%20to%20have%20Medicaid%20instead.

Non-Profit Funding and Sustainability

The Central Florida region is home to hundreds of non-profit organizations ranging in size and mission. Many of the stakeholders who participated in interviews or focus groups were leaders at many of these non-profit organizations throughout the region. For many of the smaller organizations, especially ones that work primarily with the region's priority populations, funding is one of the top challenges they experience. Numerous leaders spoke to funding limitations hindering their ability to grow their services. One executive director of a small non-profit said, "The small non-profits seem to get the crumbs of larger funding sources, which leads to funding inequality."

Community Level

Community level challenges are a step below system-level challenges, but there is an overlap between system, community and individual level challenges. Community level challenges generally affect the wider population as a whole and not just select individuals within a community. Some of the key community level challenges are described below (e.g., rapid population growth, behavioral health, health care access and awareness of services).

Rapid Population Growth in Central Florida

Florida had the second fastest-growing population next to Texas in 2021 with over 211,196 people moving to the Sunshine state between July 1, 2020, and July 1, 2021.[89] The 2020 U.S. Census Bureau data shows that Osceola County saw the second largest population growth in Florida since 2010 with a 45% population increase.[90] Lake County is not far behind with a population growth of 29% since 2010. The rapid population growth in Central Florida was identified as one of the top challenges in the qualitative research by many stakeholders.

Many stakeholders throughout the four-county Central Florida region identified the lack of infrastructure to handle the growing population as one of the most pressing needs. Infrastructure includes roads, housing and more. One stakeholder in Lake County said, "Growth has been exponential. It was an agrarian-based economy, but now the farms are gone and the people can't afford to live there." With the growing population and low median wage, especially in the Greater Orlando area, affordable housing has become another area of major concern. One stakeholder said, "Housing is a core challenge. Housing burden leads to a chain reaction to bad health care."

[89]Saunders J. Florida saw the second-highest population growth in nation over last year. Orlando Weekly. https://www.orlandoweekly.com/Blogs/archives/2021/12/22/florida-saw-second-highest-population-growth-in-nation-over-last-year
[90]Sandoval E. Census shows big population growth in Florida. Click Orlando. https://www.clickorlando.com/news/local/2021/08/13/census-shows-big-population-growth-in-florida-heres-where/

A lack of affordable housing is often a primary obstacle for individuals who are struggling in the community. Without stable housing, individuals may face homelessness, become unemployed and/or experience health crises. One stakeholder said, "affordable housing is a huge problem. Our homeless population continues to grow and continues to become more visible in the populated downtown areas." Another stakeholder said, "We've seen a huge increase of local families living in motels. It's not a great place to live, and we are hitting rock bottom on figuring out where else we can send them. There are no shelters. There's not any available, affordable housing."

Behavioral Health

Driven by the opioid epidemic and COVID-19 pandemic, the acuity of behavioral health in the community has increased significantly in the Central Florida region and across the country. One silver lining of the COVID-19 pandemic is that people tend to be somewhat more candid about mental health issues. However, mental health is still very much stigmatized in the community. Stigma is especially prevalent in priority populations such as Black/African American and Hispanic/Latino communities. One behavioral health provider said, "The pandemic has been a gift and a curse. It highlights the need for behavioral health in the community for people in power to see." One African American public health official in Lake County told a personal story in a focus group about her son. "My younger son has Medicaid and he's in counseling, but I pay $95 dollars a session out-of-pocket so we can see a quality provider that looks like him," she said. When it comes to health care providers, especially behavioral health, diversity and representation matter; many respondents indicate that the regional provider pool dramatically lacks the needed diversity and representation.

Many behavioral health facilities, especially ones striving to offer a diverse provider base, are chronically understaffed which has led to long wait times for many patients. The wait time for psychiatrists is especially long. One provider at a local behavioral health clinic said, "There's staffing issues across the gambit. Employment is very difficult right now and in the behavioral health industry, we're always challenged with the pay as it's not easy work. It's not a new problem, but it's continuing to be a problem."

Several stakeholders identified that the opioid epidemic is not going away anytime soon. If anything, over the course of the pandemic, substance use has increased. One stakeholder said, "First responders are having to carry more and more Narcan with them." Stakeholders also identified the lack of services and providers, for both mental health and substance use, for youth and adolescents. One stakeholder in Seminole County said, "Over the past eight months, the acuity of needs has increased, and there is a residential bed shortage. We saw an increase of self-harm/suicide in minors aged 13 to early 20s." Note: Narcan is a drug often administered to offset the impact of a narcotics overdose.

One stakeholder at an FQHC said, "If you can't meet the basic needs [of an individual], it's hard to meet their behavioral needs. In running a Medication Assisted Treatment (MAT) clinic, our biggest

challenge is addressing those basic needs like food and shelter." Many other stakeholders identified the importance of assisting with housing, transitions, nutrition and other basic needs to help people with mental health [challenges] maintain some stability in the community.

Health Care Access is Not Equitable Across the Region

Stakeholders identified a variety of potential barriers and challenges people may experience when it comes to accessing health care services. Common barriers include lack of transportation or inadequate public transportation system, lack of health insurance or the ability to pay and mistrust of the health care industry. The COVID-19 pandemic has exacerbated the mistrust of the health care industry in many priority populations[91] and also the general community. One stakeholder said, "COVID highlighted many community disparities about access to care – ability to pay, transportation and ability to continue preventive care and early intervention." Language is another barrier disproportionately affecting priority populations, as much health information is not available in all languages commonly spoken in the community.

For people with disabilities, the lack of accessibility in both the built and digital world is difficult. One community member with a physical disability said, "Not many providers have lifts to help patients get on examination tables." Another stakeholder said, "Transportation requires planning. I can't make a 9:00 am or 10:00 am appointment because it takes a while to get ready. It could be longer because I'm a chair rider." For many of the Center for Independent Living (CIL) focus group participants, obtaining a COVID-19 vaccination was difficult, as the vaccine registration website was not accessible for someone with vision impairment, and transportation to and from appointments was incredibly difficult for many.

Awareness of Community Services

There is a general consensus among various stakeholders across the four-county region that community-wide awareness of what services and resources are available is low. Word of mouth tends to be the best method to share information, especially in priority populations.

Individual Level

Many of the identified challenges and barriers at the system and community level trickle down, and they impact the community residents who make up the over 2.8 million people who live in the Central Florida region. For many community residents, the social determinants of health (SDoH) and Adverse Childhood Experiences (ACEs)[92] are driving factors in not receiving adequate health care and maintaining their own health. Some of the key individual challenges (e.g., affordable housing, chronic disease, wages and access to care) and their local impact are briefly described below.

[91]Priority populations include communities historically underrepresented, such as Black/African American communities, Hispanic/Latino communities, members of the LGBTQ+ community and others.
[92]More information about ACEs can be found at the CDC website: https://www.cdc.gov/violenceprevention/aces/index.html.

Affordable Housing Crisis

The affordable housing crisis is one of the top challenges impacting the Central Florida region and across the country. The COVID-19 pandemic has added to the housing crisis over the past two years, as more people continued to move to the area, which led to rising apartment/home rental costs in an already low-availability market. When stakeholders were asked to identify what they believed are the top three challenges that the community currently faces, housing was almost always listed.

The lack of affordable housing is a root cause driver of many other needs and challenges in the community. As one stakeholder said, "Housing burden leads to a chain reaction to bad health care." The rapid rise in housing costs combined with low median wages has led to an increase in people experiencing homelessness and housing instability in the region. Increased numbers of families are reported to be living in motels and other unstable housing options. One stakeholder said, "It's not uncommon for theme park employees to live in their cars in the theme park's parking lot because they can't afford other housing."

Chronic Disease

Many barriers contribute to increasing chronic disease rates, especially in more outlying rural communities in Central Florida. One stakeholder said, "Osceola County is a large geography. If you're in a rural area, then access to healthy food and health care is limited." Transportation is one of the barriers for many people to getting to grocery stores and health clinics. One local Executive Director of a food-focused non-profit said, "Transportation is one of the challenges to accessing food. In 2015, we identified 16 food desert neighborhoods in Central Florida."

Other stakeholders identified the lack of prevention and education programs, especially in the youth population, in the region as another contributing factor to high chronic disease rates in the community. Health literacy and culturally appropriate health information were also identified as challenges for the growing diverse communities of Central Florida. While there is a perception among stakeholders that the number of bilingual providers is increasing in the region, the need is still being unmet, perhaps especially for Asian languages. A member of the Asian community said, "Among Asian community members, having a certified interpreter is very good but rare."

The Wage Gap

The Central Florida region's economy is historically built on hospitality and tourism. Unfortunately, hospitality and tourism jobs tend to have a higher percentage of lower-wage jobs (compared to some other economic sectors). In October 2021, Disney announced that it is

raising its minimum wage to $15.00 per hour for all cast members.[93] The current minimum wage (recently increased) is closer to the living wage needed for one adult with no children living in the Greater Orlando area calculated by the MIT Living Wage tool.[94] However, with inflation and the continuing rise of housing-related costs, the new minimum wage may still not be enough for many hospitality and tourism workers to live in a safe, non-cost-burdened[95] home.

Access to Care

Throughout the qualitative research process, many challenges and barriers to accessing health care and social services in the Central Florida region were identified. Many of the top barriers have been identified in the sections above. A list recapping the most common barriers for individuals includes:

- Transportation gaps and inefficiencies with the public transportation system
- Lack of health insurance or the financial ability to pay for services, including insurance copays
- Long wait times to see providers
- Awareness of resources, services and providers in the community
- Health literacy and health information available in multiple languages
- Mental health stigma

[93]Russon G. Walt Disney World's $15-an-hour wage could pave way for higher Central Florida pay. Orlando Sentinel. https://www.orlandosentinel.com/business/tourism/os-disney-contract-wage-increase-20180827-story.html
[94]MIT Living Wage Calculator. https://livingwage.mit.edu/metros/36740
[95]"Cost-burdened" is a term used by the U.S. Department of Housing and Urban Development to refer to situations in which total housing costs exceed 30% of total household income.

Qualitative Research Themes

There are seven high-level action areas that are most representative of respondents' consensus across both the qualitative interviews and the focus group discussion. Simply, in the words of one 95-year-old interviewee, there was a time when if you needed medical care, your top concern was hoping that the doctor's medical advice and treatment was effective and that you recovered quickly and wholly.

Now, there are additional challenges, especially around accessing care for mental health and substance-related conditions, as well as knowing even where to begin to access efficient and effective care for many conditions. The science of medicine and general community health resources — medical advice and treatments — have improved greatly over the years. However, to the interviewee's point, truly benefitting from the advice and treatments can be challenging. Across the Central Florida Collaborative region there is a growing consensus that:

- Mental health and substance use disorders (SUD) were in an urgent state before the pandemic, but they are now an even greater problem. Due to the ongoing, uncertain and wide-ranging impact of the COVID-19 pandemic, mental health and substance use disorders are expected to further proliferate.

- Access to care is a complicated issue with many facets that need to be addressed now. Capacity, awareness of services, location/availability and hours of operation, ability to pay, motivation to seek care, case management and health equity are high on the list. The changing health care landscape continues to impact all facets of access to care.

Mental Health including Crisis Care Services (separate from substance use disorder services)

Substance Use Disorder Care Services

Access to Care — Capacity and Service Location

Access to Care — Health Equity

Urgent Needs Among Ultra High-Risk Communities

Social Determinants of Health Issues such as Access to Affordable, Nutritious Food and Other Basic Needs

Community Awareness of Services and Ways to Get Help (including select case management and care navigation)

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- There are some critically urgent health needs and population groups that require immediate intervention and support from a broad segment of the community.
- Working-aged people want good jobs that pay wages that allow them to afford housing, education and transportation.

A summary of the seven major qualitative research themes is shown in the graphic above and described in-depth on the following pages.

The following high-level themes are most representative of respondents' consensus in both the qualitative interviews and the focus group discussion. Please note, the themes are not in prioritized order.

Mental Health including Crisis Care Services (separate from substance use disorder services)

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

Within this theme, some of the specific, high-need priorities included the following:

- Crisis services for youth (including suicide prevention)
- Mental health outpatient services capacity – especially in rural areas and among BIPOC communities
- Inpatient bed capacity for adults and youth
- Transition care for inmates being released from jail
- Access to mental health services (all types) regardless of ability to pay

The following are other representative comments from across the service area.

Community Wisdom & Insight about Mental Health

"Mental health is at the convergence of most issues in the area. Not that addressing the issue would magically solve everything, but everything else would benefit. Mental health is affected by income, health, pandemics and drugs. The opposite is also true — mental health impacts all these things."
- Multi-county service provider

"Teen suicide is up dramatically nationally. I don't know what it's like here [i.e., Central Florida/Orange County], but crisis services need to be on guard to help. I'm not sure how well the Sheriff's Office, the school system, the health systems work together, but I hope that they are working together to keep our kids safe."
- Lower-income Osceola County resident

"Individuals living alone are just so damaged by the fear and social isolation caused by the COVID. Kids, too. Part of healthy development as a teenager is the whole social aspect. Tragically impacted over the last two years."
- Youth services non-profit agency director

"There are plenty of counselors in Orlando — especially if you have insurance. Rural areas struggle. Of course, in rural areas, public transportation isn't good, and people tend to have less money, I think."
- Lake County resident

"My [relative] recently got out of jail. First, try finding a job or an apartment with a felony on your record! Geez; it's almost impossible. The worst thing, though, is that he had a mental health and drug problem going into jail. The jail counselors — he liked and thought they were good. But, transitioning back into the community — pre-release connections — wasn't good. He went right back into the environment that got him into trouble in the first place. I hope he'll be okay."
- Orange County service provider

"Mental health has been a problem for years. Now EVERYONE has been living through a traumatic event [i.e., COVID-19]. People previously at-risk or struggling with normal life issues have been pushed over the edge. This is a 'burning stove' issue to me."
- Mother of three middle school and high school-age children

"I read something a while back saying that the majority of jail inmates have a mental health problem; I'm surprised that it isn't 100%. If there isn't something in place to address this really acute group, tragedies will continue."
- Rural Osceola County non-profit agency representative

"A lot of Black/African American [people] in my neighborhood could use some counseling but aren't likely to seek it. Some do. Others — from what I hear — can't find a counselor that is affordable and 'looks like them.'"
- Seminole County African American woman

Substance Use Disorder Care Services

Among Americans aged 12 years and older in a 2021 study, 31.9 million are current illegal drug users (used within the last 30 days) – excluding use of prescription drugs.[96]

- 11.7% of Americans aged 12 and over use illegal drugs. See sources / footnotes below.
- 53 million or 19.4% of people aged 12 and over have used illegal drugs or misused prescription drugs within the last year.
- If alcohol and tobacco are included, 165 million or 60.2% of Americans aged 12 years or older currently abuse drugs (i.e., used within the last 30 days).

In Florida, even though prescriptions for opioid-based medications have declined in recent years, provisional data from the Florida Department of Health shows that 2020 drug overdose deaths were up 55% from 2018 and 43% from 2019.

- Deaths from overdose in 2018 were 54 per 100,000; deaths from opioid overdose in 2020 were 94 per 100,000.[97]
- The number of people that died in the state of Florida daily in 2018 from a drug overdose was 33; the number of people that died in the state of Florida daily by the end of 2020 due to drug overdose is approximately 55 per day. See sources / footnotes below.
- Fentanyl caused the most drug overdose deaths in Florida in 2019 (3,244), which represented a 38% increase over the previous year (2,348). Most (93%) are ruled accidental.
- When comparing January-August of 2019 to the same time period in 2020, the emergency medical service (EMS) administered 5,769 more units of Naloxone in 2020, a 28% increase over the same timeframe in 2019.[98]

[96]National Center for Drug Abuse Statistics, 2021. Available at https://drugabusestatistics.org/
[97]The COVID-19 Overdose Crisis, 2021. Available at https://projectopioid.org/wp-content/uploads/2020/12/PO-2020-Data-Study-Final_New-Section.pdf
[98]Florida Health, Substance Use Dashboard. Available at https://www.flhealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=SubstanceUse.Overdose

Among Florida youth, 30-day use of alcohol, marijuana/hashish and prescription painkillers has declined since 2010 across racial and ethnic lines.[99] However, vaping has emerged as a growing substance use choice, as Florida students reported a past-30-day rate of 11.4% for vaping — much more (approximately 500%) than the rate of cigarette use.

Within this theme, some of the specific, high-need issues included the following:

- Crisis services and community awareness of available resources
- Stigma reduction — especially among the Hispanic/Latino communities (Osceola County and elsewhere)
- Support for family members of a person being treated for SUD
- Transition support for inmates with a previous SUD diagnosis when released from incarceration
- Education and early intervention for school-age children

[99]2021 Florida Youth Substance Abuse Survey. Available at https://www.myflfamilies.com/service-programs/samh/prevention/fysas/2021/docs/2021%20FYSAS%20Statewide%20Data%20Tables.pdf

Community Wisdom & Insight about Substance Use

"People with a SUD can get good care here [i.e., Orange County], but the problem is transitioning and after-care. Transitional housing, respite care, pre-release transitions for inmates, school-based intervention and care, family support … these are less available. Very few people know about them – those that do exist."
- Homeless services provider

"I'm guessing that [a high percentage] of the homeless are using drugs. Can you blame them?!"
- Member of the homeless community

"I read that a large percentage of the fentanyl in this country is being shipped into this country from [overseas] … I don't know if that's true or not, but if we don't seriously crack down on the supply side of things – as well as educating and providing early intervention and care – we are going to lose a lot of good people."
- General community member

"Experimentation is – unfortunately – part of being a kid. This isn't experimenting! Kids or adults are being poisoned in record numbers."
- Community member who works with school systems

"This isn't any longer just something afflicting low-income families. Poor, middle, rich – everyone is impacted. That said, African American communities and lower-income households are at greater risk because of either stigma or economics."
- School teacher in Orange and Lake counties

"We see the issue [i.e., SUD] a lot. Mental health care is a systemic need. We haven't broken it down by percentage, but there is a large number of clients who have this need [i.e., mental health issues]. They use it as an excuse to keep abusing drugs. In all my housing cases that don't involve money, most others are that mental health or substance use issues are causing disruptions."
- Service provider serving Lake, Seminole and Orange counties

Access to Care – Capacity and Service Location

According to the U.S. CDC, COVID-19 cases have stressed hospital systems, negatively affected health care and public health infrastructures and degraded national critical functions.[100] Hospital space, direct care staff, support staff and other resources led some facilities to adopt crisis standards of care in which the focus of medical decision-making shifted from achieving the best outcomes for individual patients to addressing the immediate care needs of larger groups of patients.[101]

Exhibit 126: Four-county Physician Shortage Area

None of county is a shortage area   Part of county is a shortage area   Whole county is a shortage area
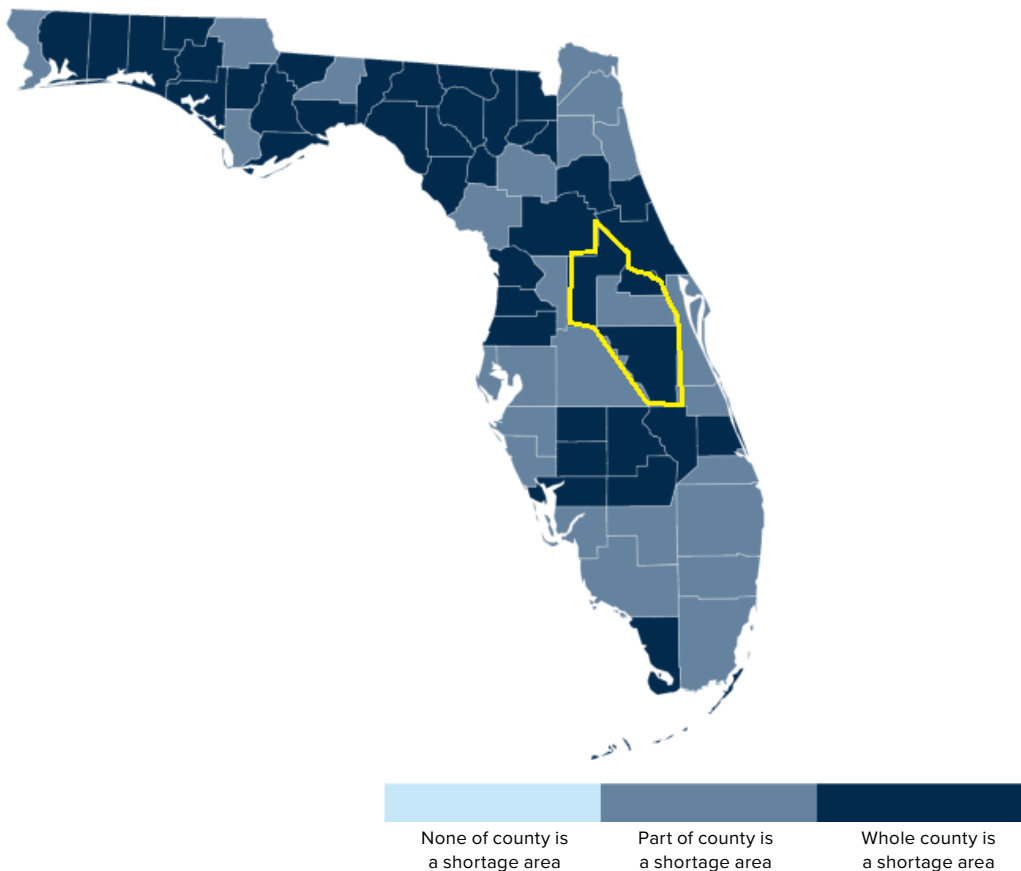
- Shown in Exhibit 126 above, like the rest of the state, much of the four county service area is designated as a Health Professional Shortage Area (HPSA). As shown

[100]Cybersecurity & Infrastructure Security Agency. Health care and public health sector. Washington, DC: US Department of Homeland Security, Cybersecurity & Infrastructure Security Agency; 2020. https://www.cisa.gov/health care-and-public-health-sectorexternal icon; Cybersecurity & Infrastructure Security Agency. National critical functions. Washington, DC: US Department of Homeland Security, Cybersecurity & Infrastructure Security Agency; 2020. https://www.cisa.gov/national-critical-functionsexternal icon
[101]US CDC, Morbidity and Mortality Weekly Report, "Impact of Hospital Strain on Excess Deaths During the COVID-19 Pandemic — United States, July 2020–July 2021". Available at https://www.cdc.gov/mmwr/volumes/70/wr/mm7046a5.htm

in the map, all of Lake, Osceola and Seminole counties are considered to be Primary Care Health Professional Shortage Areas. Much of Orange County is also an HPSA.[102] Similar maps for dental health professionals and mental health professionals reflect similar conclusions and shortages.

Being exacerbated by the pandemic, an October 2021 U.S. Department of Labor report shows that the health care industry has lost 524,000 workers since February 2020. Related medical professional supply trends in Central Florida could present long-term, structural challenges.

Within this theme, some of the specific, high-need issues included the following:

- Recruitment and retention of the current provider base in light of the impact of COVID-19 on the direct care and supportive services base (as well as the impact of the growing population)
- Mobile services – primary care and specialized medical care – in a rural portion of Osceola, Lake and Seminole counties
- Primary care and specialized medical care providers embedded in priority communities such as medical offices in Hispanic/Latino or Black/African American communities preferably staff by providers and support services staff who are demographically reflective of the community that they serve
- Care navigators, case managers, Community Health Workers and similarly licensed professionals who can help patients transition from one doctor to another or one level of care to another
- Psychiatrists for adults and (especially) youth, as well as outpatient counselors for priority communities such as LGBTQ+, Hispanic/Latino and Black/African American, regardless of ability to pay

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[102]Rural Health Information Hub, 2022. Available at https://www.ruralhealthinfo.org/charts/5?state=FL

Exhibit 127: **Four-county Dental Professional Shortage Area**

Health Professional Shortage Areas: Dental Care, by County, 2022 - Florida

| None of county is a shortage area | Part of county is a shortage area | Whole county is a shortage area |
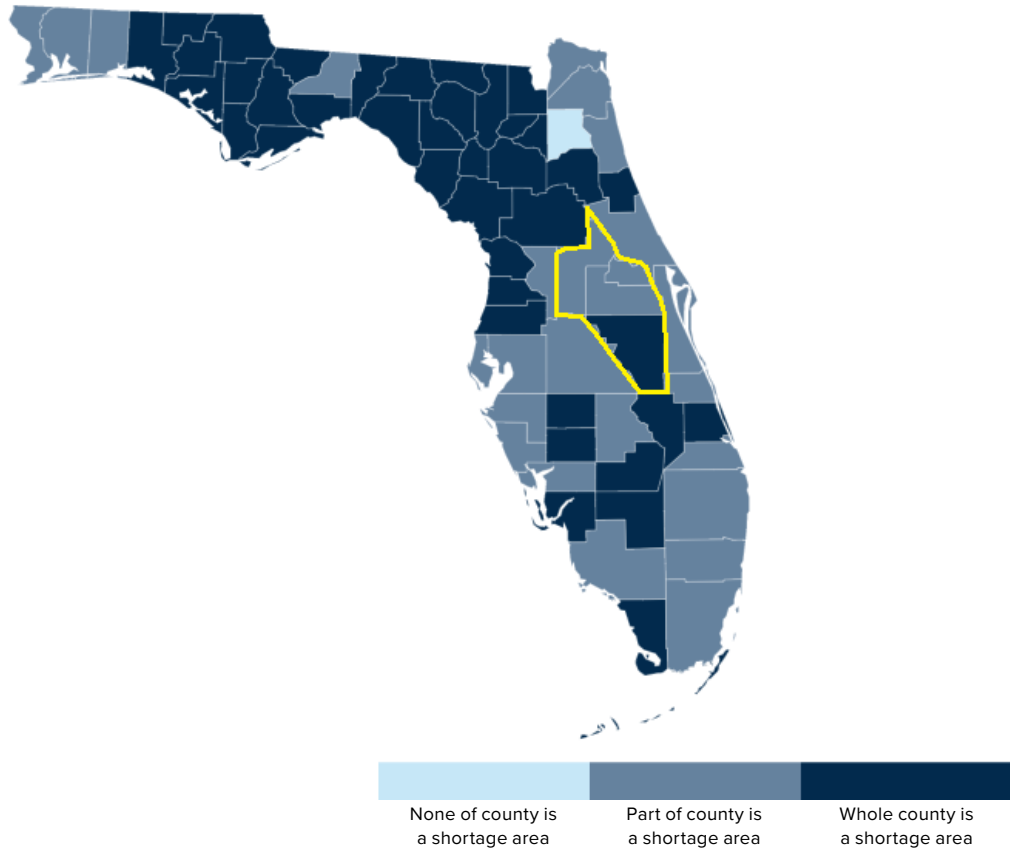
- As shown in the map above (Exhibit 127) and the one below (Exhibit 128), Osceola County presents a dental and mental health shortage area.

Mental Health Professionals

Exhibit 128: **Four-county Mental Health Professional Shortage Area**

Health Professional Shortage Areas: Mental Health, by County, 2022 - Florida

| None of county is a shortage area | Part of county is a shortage area | Whole county is a shortage area |
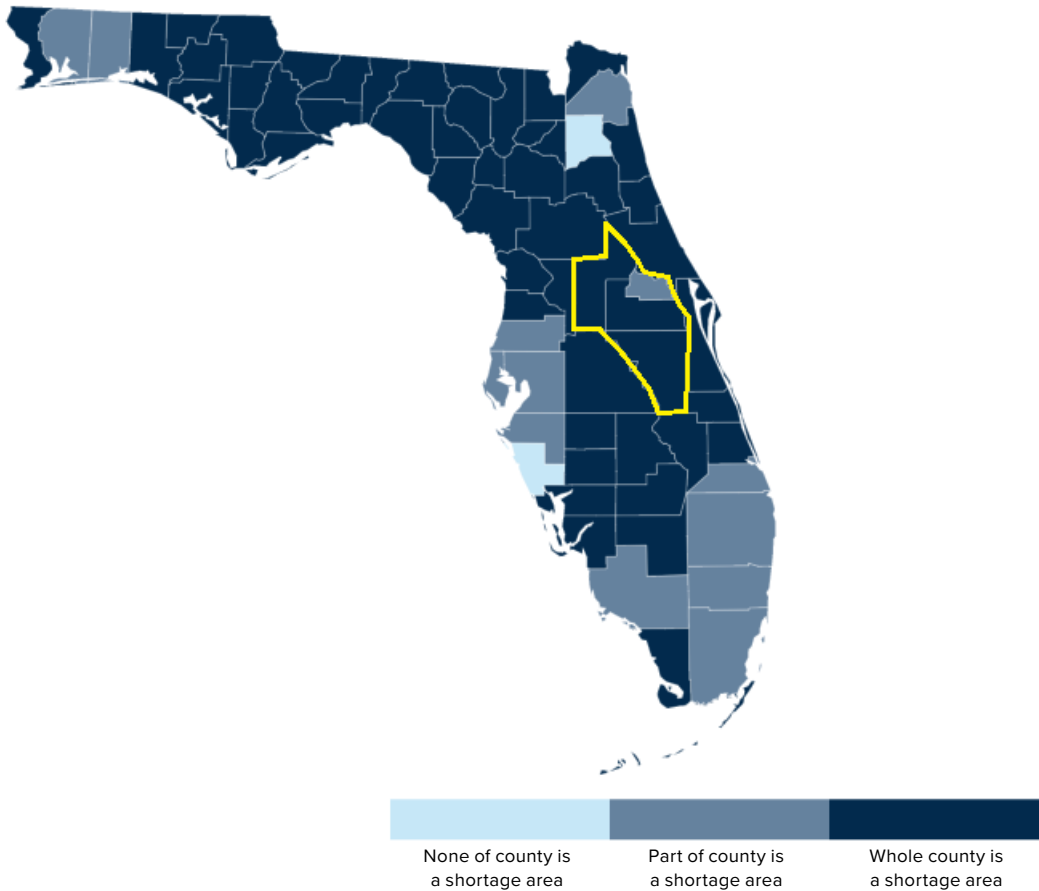
- Nearly all of interior Florida and the panhandle are mental health shortage areas.
- In the CFC service area, only Seminole County is not currently classified as a shortage area.

Note: A description of each CFC partners' service area and licensed hospital beds are listed in appendix 4.

Community Wisdom & Insight about Health Care Access

"The biggest issue is dental! Dental care is generally discriminatory - you can say, 'No, we will not care for that patient!' Only two dentists treat people with disabilities."
- General community member in a stakeholder interview

"Three areas in Lake County are in bad socioeconomic condition: East [east of 473], West [west of 473], South [south of the Turnpike, approximately]. There are few free clinics in those parts of Lake County. Because of that, the EMS is overused to go to hospital ERs for primary care. There are related ethnic barriers."
- Economic development representative

"Mental health capacity is the number one issue – pre-COVID, during COVID, post-COVID. The impact of COVID has isolated many individuals - especially those social, community aspects of care. We never know what is coming down the road – variants, lockdowns, shortages. All of which and the related impact on home finances and home dynamics impact people's security."
- General community member in a stakeholder interview

"There remains a big need for English language education; the health care system is WAY different for newcomers. We need to recognize the multicultural, multilanguage needs at all levels of care. The hospitals get it and usually have multilingual staff. Services for undocumented people are different in an outpatient, clinic setting – education, health care, fear around being undocumented."
- General community member in a stakeholder interview

"The system [i.e., capacity] is okay if you have good insurance and a good income. Florida is not a Medicaid Expansion state, so there are large gaps between insured and uninsured. With health insurance, the cost of care is still very high. With insurance but low income, they simply can't afford care. These are the same people that can't have healthy food. There is a nasty cycle. Without insurance, living below 200% FPL – Catholic Charities and other clinics are available to serve them. However, even for them, they don't have enough providers, many people who may need them don't know how to access the care and there are related health equity barriers – languages, stigma, hours of operation, locations and others."
- Public health system administrator

"Diabetes and heart disease care is hard to get for low-income families and those in the donut hole – lower income but not low enough to qualify for free care. These issues are related to healthy lifestyles; these are more difficult to maintain when you struggle to make ends meet. The number of providers is scarce and getting more scarce. Even for [free care] Catholic Charities which rely on volunteer providers, there are fewer and fewer 'volunteers.'"
- General community member working for a local non-profit organization

"Nursing, dentists and assisted living facilities for the homeless – major capacity issues everywhere. But even in Orlando where health care is generally good, it's a problem."
- Community-based nurse

"Preventive care and delayed care are leading to a more acute patient population. We need more community/ neighborhood-level health literacy and information about accessing care. Don't tell the communities what they need; work with people we trust. When they tell us something, we'll listen."
- General community member in a stakeholder interview

"The 'Syndemic': Pandemic plus HIV and other related chronic health-related issues.' The regional health system is excellent. Obviously, if you live in a rural area, it is farther to a doctor's office – I get it. "Syndemic" issues are overwhelming a system capacity that was pre-COVID "rightsized." Now, especially with it being harder to keep people [i.e., medical staff and support staff], we are structurally and operationally in a capacity crisis."
- General community member in a stakeholder interview

"Most people just don't know where to go for addictions care – especially if it is for their kids. Even though underrepresented communities may suffer more, it spans all income levels. SUD – crisis care in the schools, "discreet"-feeling alternatives for adults, information/stigma-busting that affirms with our family, friends, neighbors, communities – people we love – it's okay, I've got you. Let's get some help."
- General community member in a stakeholder interview

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Access to Care & Health Equity

Nationally, COVID-19 has resulted in health and financial crises and challenges for families, which disproportionately affect communities of color and illuminate underlying health and economic disparities. A 2020 Kaiser Family Foundation (KFF) article presents a summary of select health conditions by race and ethnicity, and it provides insight into how the health and financial impacts of COVID-19 may vary across racial/ethnic groups. For example, the article notes the following:

> "Communities of color are at increased risk for experiencing serious illness if they become infected with coronavirus due to higher rates of certain underlying health conditions compared to Whites;
> "Communities of color will likely face increased challenges accessing COVID-19 – related testing and treatment since they are more likely to be uninsured and to face barriers to accessing care than Whites; and
> "Communities of color face increased financial and health risks associated with COVID-19 due to economic and social circumstances."

Other data suggest COVID-19 is disproportionately affecting groups of color. For example, in Washington, DC, Black [people] make up 45% of the population but 59% of early pandemic deaths (i.e., as of April 6, 2020). In Louisiana, Black/African American [people] make up 32% of the population and over 70% of early COVID-19 deaths. Moreover, the KFF survey found that Hispanics/Latinos are more likely than Americans overall to see COVID-19 as a major threat to health and finances.[103]

In Florida, financial status (i.e., household income) is highly correlated to racial and ethnic status. As noted earlier in this assessment, Whites tend to have higher incomes than others. With higher incomes comes greater access to care, and operational and system barriers are more daunting among non-Whites than Whites.[104] Even though qualitative research respondents and others recognize the wonderful diversity of the Central Florida region, health equity remains an unmet goal. For example, Medicaid Expansion (or similar financial supports) would disproportionately, and positively, impact underrepresented communities since more than half (57%) of the uninsured who stand to gain Medicaid coverage with expansion are Hispanic/Latino, Black/African American or other people of color.

[103]Kaiser Family Foundation, "Communities of Color at Higher Risk for Health and Economic Challenges due to COVID-19," 2020. Available at https://www.kff.org/coronavirus-covid-19/issue-brief/communities-of-color-at-higher-risk-for-health-and-economic-challenges-due-to-covid-19/
[104]The Commonwealth Fund, "Why Even Healthy Low-Income People Have Greater Health Risks Than Higher-Income People," 2018. Available at https://www.commonwealthfund.org/blog/2018/healthy-low-income-people-greater-health-risks

Within this theme, some of the specific, high-need issues included the following:

- Additional training for providers caring for members of priority communities (e.g., LGBTQ+, Black/African American, Black/African American/Caribbean, Hispanic/Latino, new American and others)
- Create ongoing initiatives to continually hear the voices of underserved community members and engage them via local, trusted community resources to enact change
- Recruitment and retention of a culturally diverse and informed workforce
- Locate primary care, mental health, dental and SUD treatment facilities in lower-income and priority communities
- Additional access to free or low-cost health care services
- Build multilingual and multicultural health literacy and community awareness of ways to access services

Community Wisdom & Insight about Underserved Populations

"As a gay man, I have health issues different from straight men. Unfortunately, most doctors are totally unaware of the different way that I need to be cared for. I shouldn't have to spend half of my doctor's office visit time educating my doctor about ways to provide care to me!"
- General community member and health care service provider

"I'm a health care professional. I spent three days looking for a Black/African American doctor. That's who I thought would best understand me and the issues I'm facing. There aren't many! I'm concerned that as needs grow – especially in underserved communities – and doctors leave the profession, this will be a growing problem unless we accelerate efforts to address it now!"
- Black/African American health care service provider

"Dental care [for] people from cultures where dental health is a new thing is a really hard time finding a dentist."
- General community member

"Most hospitals build community clinics where they can make the most money, and I can't blame them for doing that. But they are missing the greater needs in the Black/African American, Hispanic/Latino and Arabic communities."
- General community member and active youth services professional

"My community wants to be part of the solution for our community. Not for us without us. In the past, there have been times when a needs assessment was conducted, and then we never heard from anyone! Unacceptable! If there were two identical programs, one offered by AdventHealth and one visible led by local, known community members, the latter would work; the former would likely fail or not do as well."
- General community member

"I can reach the Hispanic/Latino Community. I live here and have connected with my neighbors and community members for 50 years. I trust them, they trust me."
- Director of a community-based organization serving the Hispanic community

"It is hard enough to find a dentist if you have insurance. Try finding that "needle in a haystack" if you are Medicaid, Medicare, or self-pay! Since COVID, dental issues have become explosive: people aren't getting preventive care as often; some providers have left the field; everyone is scared of getting sick; more people are getting medically sicker or using drugs; so dental problems are becoming more acute. It's a growing mess!"
- General community member

"People who don't speak English and those who are undocumented are scared to get health care. There aren't even materials to share with them. We need, at least, more printed and social media messaging in THEIR languages about how to get care. This seems like a pretty easy one to tackle!"
- Hispanic community member

Urgent Needs Among Ultra High-Risk Communities

There are select, ultra-high-risk communities (UHRC) in every community. UHRCs tend to be comprised of relatively small numbers of individuals, yet ones who require urgent support to meet basic health and life requirements. UHRC status may be based on expenditures, life expectancy, risk of death or other factors noted in individual communities. The status can also relate to high-need communities often overlooked or thought of as too complex for an individual organization or community to embrace or assist.

Within this theme, some of the specific, high-need issues included the following:

- Adaptive equipment for people living with long-term disabilities
- Mental health and suicide prevention for youth — especially teenage girls[105]
- Mobile health primary care services to non-urban parts of Osceola, Lake and Seminole counties and BIPOC communities in all four counties

[105]Data available at https://www.today.com/health/attempted-suicide-rate-rises-u-s-teen-girls-amid-pandemic-t232364

Community Wisdom & Insight about Health Care Access

"Our kids are literally and figuratively dying – suicides, mental health, drugs. Especially girls in high school and middle school. We can't wait for a committee to think about prioritizing things. We need to address this NOW!"
- Orange County mother; school system employee

"I am a quadriplegic. My income is very low, and my medical needs are high. Medicaid and Medicare help with the cost of care, but that isn't my issue. It takes me – with the help of two people – three hours to get ready to go to the doctor. Then, arranging capable transportation is terrible. Driver doesn't know how to deal with me! Access to offices is also not always good – sometimes it is, though. I need a modest amount of lifts and [other adaptive equipment]. Without a few -- what to me are basics, I'm probably not going to make it."
- A man permanently living with disabilities

"There is a disconnect around primary care. Let's say there are 30 doctors within 10 miles of where you live: no access problem, right? Well, let's say that only half take the insurance that you have or accept a sliding fee scale. Now the 30 doctors become 15. Two-thirds of the remaining ones don't speak my language, so I'm down to five. Of the five, three aren't taking new patients, and the others have a six-month waiting list. I made up these numbers, but I think that they are close and certainly get my point across. Is there access for primary care? Yes. Is there really access to primary care for many racial or ethnic people of color, not so much. This is why people of color are getting sick and dying faster than others!"
- Single mother living in Osceola County

"Everyone has PTSD [Post Traumatic Stress Syndrome] of some level. COVID is going to ebb and flow, wax and wane for a long time. A lot of people are stressed out because just when you think it is safe to go back to your regular life, some new variant pops up that is likely to kill you or keep you out of work – financially killing you. No one can really let their guard down. Maybe that's why you're seeing elevated cases of domestic violence and abuse."
- Osceola County public safety representative

"As a blind Black/African American woman, I'm doing alright! Basic services are available to help me, but I see a lot of my friends [in the disability community] who just need some basic equipment to help them live their lives! If they had the equipment or some of it, they would be less of a drag on the health care system and they and their families would live a better life. Short-term money, long-term benefits and financial savings. People talk about Adverse Childhood Experiences, well, this is a way to mitigate some of those ACEs."
- African American woman living with a permanent disability

"We just don't have the same level of services as Orlando, and, you know, that's okay. We chose to live in a rural area and don't expect everything to be here. However, primary, basic care in rural areas is at a critical point, though. Especially with COVID, people just will not travel as much and many don't have access to the internet for telehealth – which in my opinion, is helpful but not "the answer" like some people say."
- Lake County leader of a community service site

"If you live in Orlando or Kissimmee, you're doing okay because hospitals and doctors are close. Where I live [central/south Osceola County], you pretty much have to cross off a whole afternoon to go to the doctor. This is also a rural area where people don't make a lot of money; it's us that are less likely to be able to afford to take a half-day off of work to see a doctor."
- Osceola County resident

"My husband has a permanent disability due to a traumatic brain injury. Caring for him is a full-time job. I love him and will do everything to help. When doing so, I can't work a regular job and my kids don't get the attention they deserve. This is urgent for us. We need some additional support to care for him and to acquire some of the devices that he needs to live a reasonably good life."
- Spouse of a man permanently living with disabilities

Social Determinants of Health Issues such as Access to Affordable Nutritious

Food and Other Basic Needs

Foundational to physical health are factors such as shelter, food, clothing and warmth, which remain essential for survival and well-being. Just before the COVID-19 pandemic, the Urban Institute found that nearly 40% of American families struggled to meet at least one basic need for health care, housing, utilities or food.

Access to healthy and affordable food is a known challenge in the four-county service area and is more prevalent in rural communities. Affordable, quality housing is also an entrenched issue. For example, in Orange and Osceola counties, nearly six of 10 (58%) households are considered cost-burdened (i.e., paying more than 30% of household income for housing costs). Almost three of 10 (27%) pay more than 50% of their wages. Among the top 20 metro areas in Florida, Orlando is tied for 2nd for having the highest percentage of cost-burdened households, trailing only Miami-Dade, per the Shimberg Center for Housing Studies.[106]

Access to safe and affordable childcare is an essential building block to the overall quality of life for families in the United States. Parents and caregivers have more opportunities to pursue a career and higher education that contribute to stability and financial security. During the pandemic, daycare facilities closed and childcare programs were put on pause. This only worsened the already high cost of care as providers are heavily reliant on parent fees, accounting for 52% of total industry revenue. In 2020, mothers spent eight hours a day on average on direct or indirect childcare last year *while* simultaneously working an average of six hours on weekdays.

In Florida, a recent study of the social determinants of health and the impact on life expectancy shows statistically significant variations based on race/ethnicity, social status (e.g., household income) and other factors.[107]

Within this theme, some of the specific, high-need issues included the following:

- Access to affordable, quality housing
- Additional childcare services, especially for special needs children, would facilitate greater access to care for lower-income families
- Greater access to healthful, affordable foods particularly in Orange County priority communities (which largely parallel the food deserts map on the next page, Exhibit 129)

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[106]As referenced in the Orlando Business Journal, 10/21/2021. Available at https://www.bizjournals.com/orlando/news/2021/10/21/editors-notebook-affordable-housing-in-orlando.html

[107]Melix, B.L., Uejio, C.K., Kintziger, K.W. et al. Florida neighborhood analysis of social determinants and their relationship to life expectancy. BMC Public Health 20, 632 (2020). https://doi.org/10.1186/s12889-020-08754-x

As shown in the exhibit below, the CFC service area includes several food deserts. The more detailed set of maps on the next page provides a clearer view of county-level deserts.
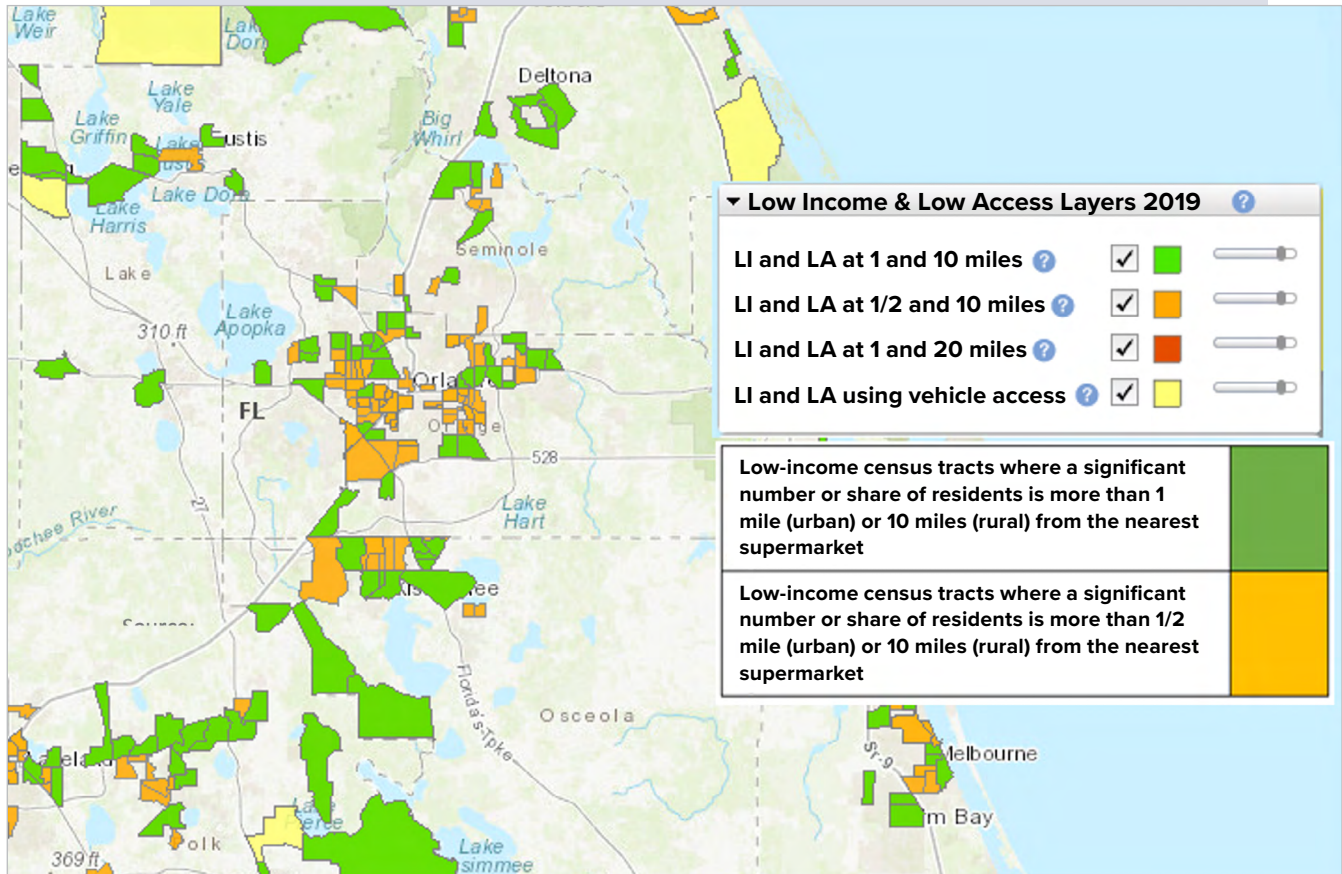
Food insecurity and food deserts are fairly common in each of the CFC counties. See Exhibit 130 below.

Exhibit 130: Food Deserts Maps by County

Lake County
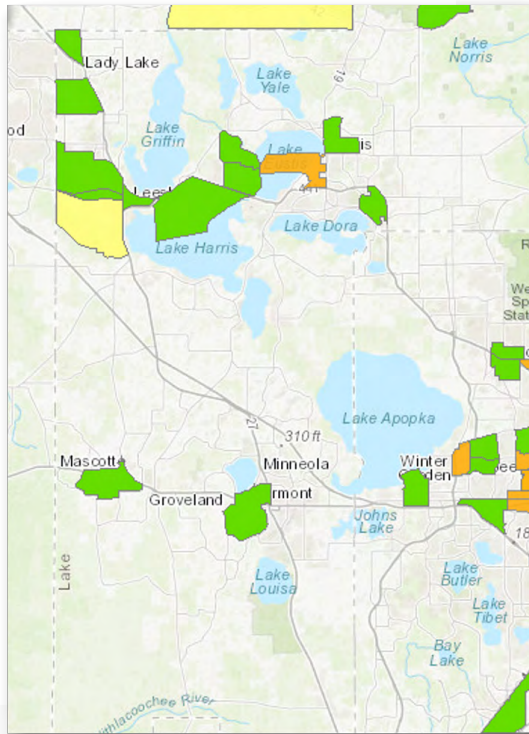
Osceola County
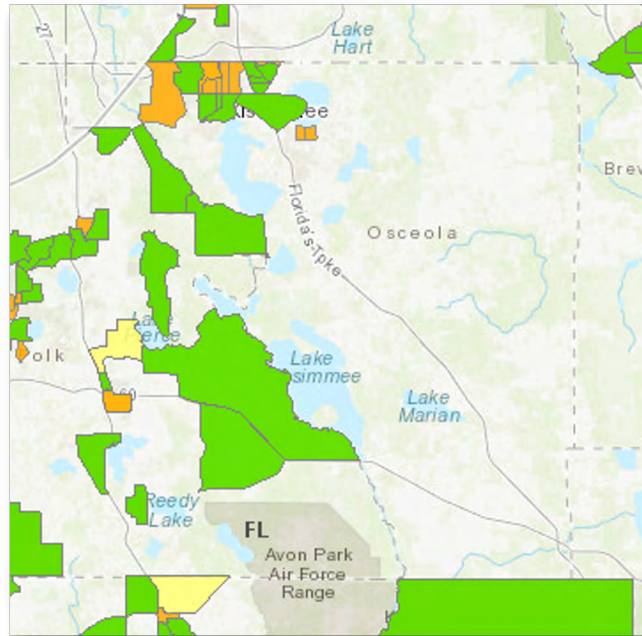
Orange County
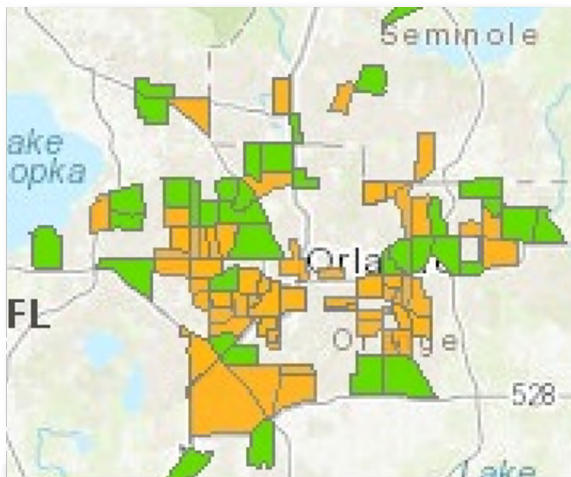
Seminole County
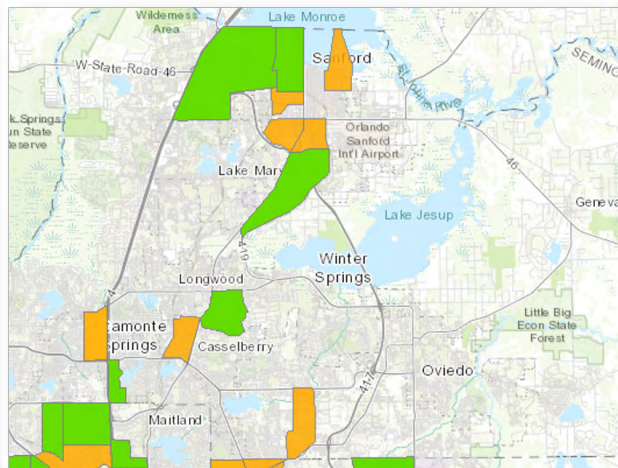
Community Wisdom & Insight about Basic Needs

"I'm paying $1,900 per month for a one-bedroom apartment in Orlando. If I, or someone like me, pays that much — even with a decent income — you don't have enough money for other things like health care — screenings and non-urgent things. Also, there's not much of a social scene for millennials. Why should I pay $1,900 per month in a city with no social draw when I can pay the same amount in L.A. or Dallas and have a very different social life? The issue is that a lot of young medical professionals — especially those without families won't stay here."
- Single mother of a teenage child

"Simple. If you don't have childcare, you can't go to the doctor very easily. When that happens, you don't get 'issues' fixed until they become 'problems.'"
- Young mother of two children

"If you live in Orlando, you may be able to catch a bus. Even there, public transportation isn't great. However, if you live anywhere else [in the four-county service area] or especially in south Osceola and other rural areas, you absolutely must have a car . . . or a friend who does."
- Multi-county resident

"The gap with nutrition is teaching [people] how to eat properly . . . . I don't think there's a gap in the food that we can get; the gap is how to prepare and ways to honor cultural traditions around eating while keeping it healthy."
- Lake County African American community member

"Before COVID-19 anyone could get a job, but now it's not the case. [There are] lots of service-based jobs, the school system is one of the largest employers in the area, but they struggle to find qualified people to work for them . . . . The trades are pretty hot right now. There is still some stigma around trade schools, but that's mostly gone now."
- Young father of two

"Addressing basic needs demands structural changes. Deep engagement and relationship building of local groups in the Black/African American and Hispanic/Latino neighborhoods - the more these threads are woven in, and oppression is acknowledged and addressed, it can lead to solutions. Until they are listened to and deployed to enact change, we won't be able to address the issues – any issues!"
- Osceola County Hispanic/Latino community

"There are good opportunities to live a healthy lifestyle in Orlando. Parks, hiking trails, pools, lots of other things. It would be nice if the local hospitals REALLY did more to KEEP people healthy – sponsor more daily or weekly events – even ones that don't have anything directly to do with health care! Become PART of our communities not just 'part' of them."
- LGBTQ+ community member

"Nearly a quarter of the kids in Lake, Orange and Osceola counties don't have enough to eat. Seminole is a little better, but 'one' is still one too many."
- Public Health expert knowledgeable about the service area

"There are several grocery stores, but cost can be a barrier. Getting quality fresh produce is difficult; Second Harvest, churches, health centers and non-profits are working hard to provide food to anyone who needs food. We support the local food pantry, but the need has increased due to the pandemic."
- Orange County lower-income resident

"The pandemic has made us realize how important the collaboration between organizations is. Pre-pandemic, we were working with parents, especially moms, who skip meals to feed their kids. During the pandemic, they have better access to food or supports to buy food, but no transportation to get there."
- Seminole County resident

Community Awareness of Services and Ways to Get Help (including select case management and care navigation)

Awareness of available services and general health literacy impacts community members' ability to access health care services, understand health-related information and partner with clinicians in making health care decisions. Cultural differences and other factors demand that messaging must be presented in various, culturally competent ways to maximize the number of community members aware of the health care framework. Implementing health literacy universal precautions requires all staff members, from the front office staff to the medical director, to know how health literacy affects patients.[108]

Awareness of services in a culturally competent manner is driven by effective community outreach and collaborations. Throughout the U.S., health care systems and community partners have developed partnerships to address the social determinants of health, medical, behavioral health and integrated care needs of their communities. Many of these collaborations were in place before COVID-19; however, the pandemic highlighted the critical nature of these relationships across Central Florida. Since early 2020, many service area counties' health systems and community groups (even competitors) have forged relationships to meet the breadth of health-related needs and tried to more efficiently deploy resources.

Within this theme, some of the specific, high-need priorities included the following:

- Integrated case management and multiple health-related services under one roof for people experiencing homelessness.
- A centralized, updated, broadly used system that can be used to locate an array of community service providers based on the services offered, service site location, payment options or insurances accepted, languages are spoken, cultural aspects and other factors. The system would be usable by providers for referral purposes and would offer a community portal for public use. The system would also need to be easily accessible and heavily marketed.
- Co-located case managers and behavioral health providers at community-based primary care sites.

[108]Agency for Healthcare Research and Quality (AHRQ), 2021.

- Integrated community collaborations that include the schools, criminal justice system, health care providers and Public Health Departments designed to share information and ultimately identify and more efficiently serve high-need community members. The collaboration may require the development of a consortium of community leaders and other stakeholders who are incentivized to participate and fund the efforts.[109]

- Additional case managers, Community Health Workers and similarly credentialed professionals who can guide high-need patients – identifying financial resources, overcoming language and cultural issues, locating appropriate care and integrated care options, advancing access to care.

[109]A successful example of the consortium model is the Maine Health Management Coalition. Details available upon request.

Community Wisdom & Insight about Services and Ways to Get Help

"It would be nice to have a health care 'quarterback' – someone, some place where you could contact that would give you a one-stop-shop place to figure out what would be best. Then they could tell you where to get that help, help you schedule appointments with doctors that take your insurance, speak your language and are good."
- General community member

"A friend of mine recently got out of jail. He was in there because of a drug problem. When he was in jail, he got practically no counseling and minimal medical support to help him detox. When he was released, he went right back to his old ways. I know, and he knows, that it's his own fault, but with a little counseling about avoiding returning to bad habits, he might be in a different place now."
-Seminole County African American community member

"The different pieces of the health system are good. One of the things that my family recently struggled with was that my uncle had diabetes, then some other doctor put him on antidepressants. The problem was that the doctors didn't talk to each other. Things worked out okay, but it would have been a whole lot easier if there was better communication between different doctors – hospitals, too."
-Lake County African American community member

"I have a lot of health care issues. I'm in the health care field, and even I didn't know where to initially turn for some things!"
-Health care professional

"The Orlando area has a LOT of great resources. The hospitals are excellent, there are lots of clinics and special services for people. It is truly a gem of a place in many ways. Sure, there is always room for improvement. One of the biggest issues is a simple awareness of where to go when you have a medical issue. Whether you are rich or poor, Black or White, it doesn't matter, in my opinion. Everyone needs an additional way — an easy, open-door — to get initial answers about where to go for help. Easier said than done, but this would also allow us to better use services that already exist before we go adding things [i.e., new services]."
-Community member and theme park staff member

"One of the problems is that my [doctor] isn't really sure of who she should refer me to. I try one place, and they don't take my insurance. She sends me somewhere else, and I can't get an appointment for six months. After a third unsuccessful try, I just went to the E.R. downtown. They [addressed the immediate medical issue], but then they referred me to follow-up care. The 'who do I go to' merry-go-round started all over again!"
- Orange County chronic disease patient

"Especially with the pandemic, who knows where to go for help? If you find someone, they might only be seeing patients virtually; I don't have [a smartphone]. I'm out of luck."
- Osceola County member of the Hispanic/ Latino community
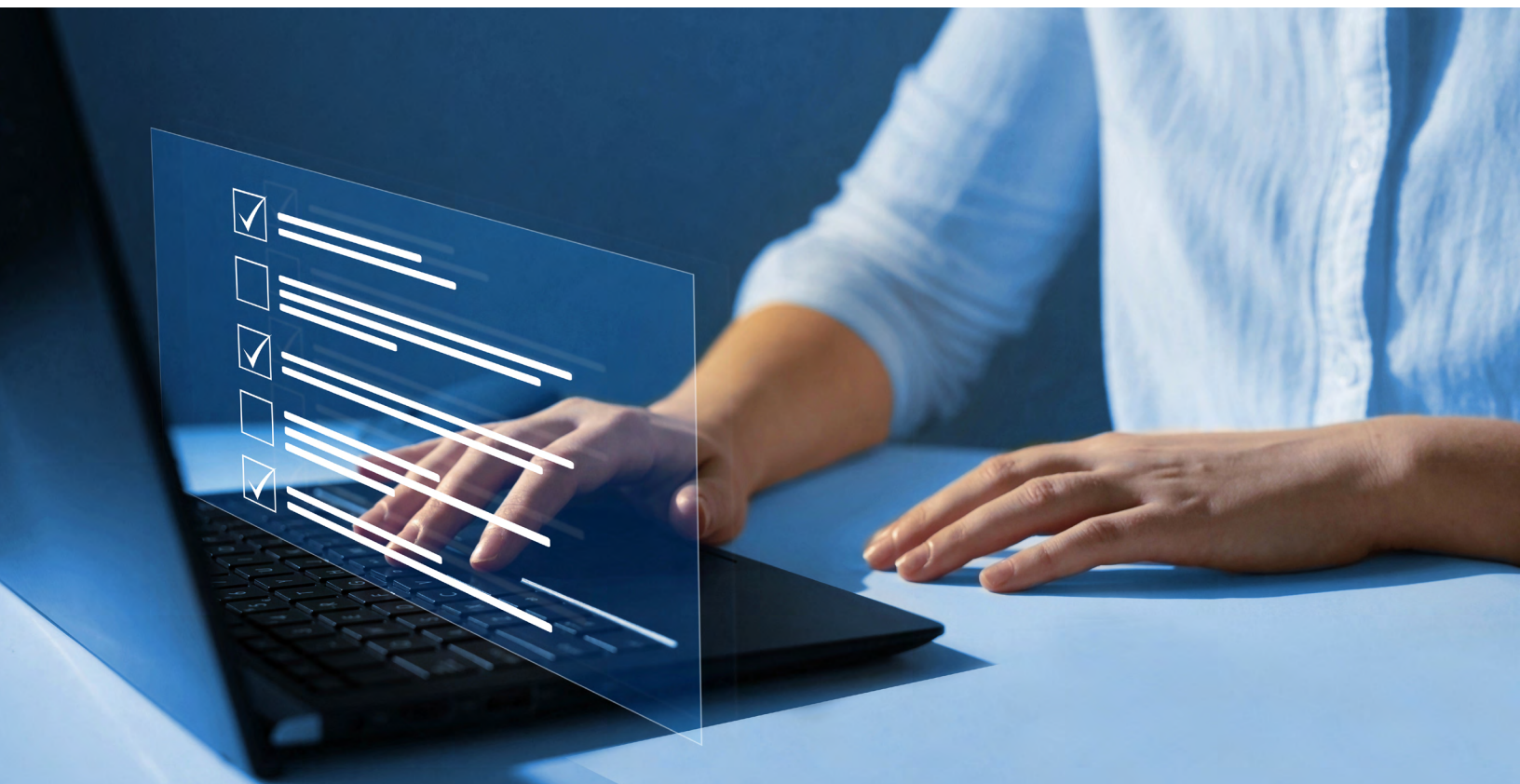
Primary Quantitative Community Survey

As part of the CHNA, the CFC conducted a broad-based community survey among residents of each of the four area counties. The survey instrument was largely structured on a similar tool being fielded by the All4HealthFL Collaborative[110] in the west central Florida region. The similar construction allows CFC county-level analysis while affording the ability to compare results across a broader view, if desired.

The survey provided insight on a wide range of issues – including CHNA-related items and a host of others. This results summary includes the following sections:

- Survey Methodology
- Survey Respondent Profile
- Unmet Needs for Care
- Social Connectivity
- Bias
- Community Perceptions
- Health-related Needs for Youth
- Risky Behaviors
- Community-level Ranked, Health-related Needs
- Adverse Childhood Experiences

The tables and analysis reported in this section are focused primarily on the community needs-related questions. The information displayed includes bulleted observations, frequency tables and crosstabulations (i.e., survey responses sorted by race, ethnicity, age group or other respondent categories). The results show that the survey demographics – race, ethnicity, income – closely parallel regional population demographics.

The complete data tables, consistent with the All4HealthFL Collaborative, are contained in the appendices.

[110]We would like to recognize a SPECIAL THANKS to the All4HealthFL Collaborative team for their insight and professionalism in drafting the Community Survey used for the CFC project!

Survey Methodology

The CHNA research included a quantitative survey of approximately 4,000 individuals across the four-county service area. The survey results supplement other primary research activities – focus groups, interviews, access audit and others – and provide an empirical perspective on key project issues. Specifically, the confidential survey helped to further inform community members' perspectives and opinions about community health needs, currently available resources, services that should be added or modified and ways to help people get the care they need.

From December 29, 2021 to February 22, 2022, the survey was disseminated using online and paper questionnaires, and it was offered in five languages (English, Haitian/Creole, Portuguese, Spanish and Vietnamese). The questionnaire included closed-ended, need-specific evaluation questions; open-ended questions; and demographic questions. Research suggests that individuals sharing many of the demographic characteristics of the target population may provide socially desirable responses, and thus compromise the validity of the items. Special care was exercised to minimize the amount of this non-sampling error by careful assessment of design effects (e.g., question order, question wording, response alternatives). The survey was conducted to maximize accessibility and comprehensively evaluate community members' insights. It included a total of over 100 questions – 60 numbered questions (several questions had multiple "sub-questions" each).

Invitations to participate were provided to the community through e-mails from area agencies and the CFC project partners. Affiliated and non-affiliated community partners disseminated the survey through a wide variety of channels, including websites, social media, emails and via press releases.

Outreach was conducted throughout the four-county region, and the survey was open for approximately five weeks to maximize community involvement and analysis of results.

As noted above, a comprehensive set of data tables and the printed version of the survey can be found in the appendices. The following section provides a summary of survey respondent characteristics (e.g., demographics, etc.) and highlights the survey that focuses on the prioritized list of community needs.

Survey Respondent Profile

Survey respondents represent a wide cross-section of the Lake, Orange, Osceola and Seminole County area. The age group, racial, income-based and other demographic groups are well-represented in the survey response set.

There was solid representation from residents of each county, though Osceola County participation was particularly robust. Of the total 4,264 respondents, 3,699 indicated the county where they live.

Exhibit 131: Participants' County of Residence

In which county do you live?	Number	Percent
Lake	266	7.2
Orange	822	22.2
Osceola	1,729	46.7
Seminole	639	17.3
Other	243	6.6
Total	3,699	100.0

- Extensive outreach to community groups and sub-communities in Osceola County resulted in a particularly high level of participation.
- Other participants were most commonly from Volusia, Polk and other neighboring counties.

Note that in most of the following tables, analysis includes responses from only Lake, Orange, Osceola and Seminole counties (i.e., "Other County" responses are excluded).

Survey respondents represent a highly diverse set of community members – similar to racial, ethnic, age group and other demographic characteristics of the area (and as noted earlier in the secondary data section of the CHNA).

Exhibit 132: Participants' Demographic Characteristics

Demographic Questions	Percent
What is your age?	
18 to 24	5.1
25 to 34	17.2
35 to 44	21.4
45 to 54	17.9
55 to 64	18.1
65 to 74	14.1
75 or older	6.2
Which race best describes you?	
More than one race	7.7
Black/African American	12.2
American Indian or Alaska Native	0.4
Asian	2.6
Native Hawaiian or Pacific Islander	0.3
White	72.7
I identify in another way	4.1
Are you of Hispanic/Latino origin or descent?	
Yes, Hispanic/Latino	33.9
No, not Hispanic/Latino	66.1
What is your current gender identity?	
Man	20.4
Trans Woman/Trans Feminine Spectrum	0.1
Woman	78.4
Non-Binary/Genderqueer	0.4
Trans Man/Trans Masculine Spectrum	0.1
I identify in another way	0.6
Do you identify as LGBTQ+?	
Yes	7.6
No	92.4

As noted, the survey was available in five languages. Most participants chose to take the survey in English; however, there was a notable level of participation from community members speaking non-English languages.

Exhibit 133: Participants' Survey Language

Language Questions	Percent
In what language would you like to take the survey?	
English	87.5
Haitian Creole	0.5
Portuguese	0.2
Spanish	11.7
Vietnamese	0.0
What language do you MAINLY speak at home?	
Arabic	0.2
Chinese	0.1
English	80.0
French	0.2
German	0.0
Haitian Creole	0.8
Russian	0.1
Spanish	17.8
Vietnamese	0.1
Portuguese	0.6

- More than 10 home-spoken languages were reported by participants included in the survey.
- Of the participants, 87% chose to conduct the survey in English.

Note that columnar percentage may not add up to 100.0% due to rounding.

Survey participants represent a highly diverse set of educational attainment and income groups.

Exhibit 134: Participants' Educational Attainment and Income

Question	Percent
What is the highest level of school that you have completed?	
Less than high school	1.2
Some high school, but no diploma	1.9
High school diploma or GED	11.4
Some college, no degree	15.1
Vocational/Technical School	5.7
Associate degree	10.9
Bachelor's degree	25.9
Master's/Graduate or professional degree or higher	27.8
How much total combined money did all people living in your home earn last year?	
$0 to $9,999	5.7
$10,000 to $19,999	6.6
$20,000 to $29,999	7.5
$30,000 to $39,999	10.8
$40,000 to $49,999	7.0
$50,000 to $59,999	7.6
$60,000 to $69,999	6.6
$70,000 to $79,000	6.3
$80,000 to $89,999	5.5
$90,000 to $99,999	5.0
$100,000 to $124,999	10.4
$125,000 to $149,999	6.5
$150,000 or more	14.4

- Approximately one-third of respondents (30.6%) say that they have a household income less than $40,000. A similar percentage (29.6%) have no college degree. Note that the correlation between education and income is strong, yet it is not determinant.
- Approximately one-third (31.3%) earn over $100,000 annually.

Note that columnar percentage may not add up to 100.0% due to rounding.

Seven of 10 respondents (69.8%) have health insurance from an employer (46.5%) or Medicaid or Medicare (23.3%). However, a notable portion are uninsured or pay cash.

Exhibit 135: Participants' Health Insurance Type

How do you pay for most of your health care?	Percent
I pay cash/I don't have insurance	8.7
TRICARE	1.4
Medicare or Medicare HMO	23.3
Indian Health Services	0.2
Commercial health insurance (from Employer)	46.5
Veteran's Administration	1.3
Marketplace insurance plan	8.3
County health plan	3.6
Other	6.7

- Nearly one in 10 (8.7%) are uninsured or pay cash. Note that a recent Kaiser Family Foundation study, showed that nearly one-third (30.2%) of "non-elderly adults without coverage went without needed care in the past year because of the cost compared to 5.3% of adults with private coverage and 9.5% of adults with public coverage. Part of the reason for poor access among the uninsured is that many (40.8%) do not have a regular place to go when they are sick or need medical advice."[111]

[111]Kaiser Family Foundation, "Key Facts about the Uninsured Population," Jennifer Tolbert, Kendal Orgera, and Anthony Damico, November 2020. Available at https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/#:~:text=Uninsured%20adults%20are%20far%20more,or%20chronic%20diseases%20go%20undetected.

Unmet Needs for Care

Nearly one in 10 children who needed medical, dental and/or mental health care did not receive care, most commonly because families were unable to pay for care. Among adults, approximately one in five did not receive care.

Exhibit 136: Unmet Needs for Care

Was there a time in the PAST 12 MONTHS when you did NOT get needed care?	Percent who needed care but did not get it
Children who needed medical care	8.0
Children who needed dental care	11.1
Children who needed mental and/or behavioral health care	9.4
Adults needed medical care	17.7
Adults needed dental care	21.9
Adults needed mental health care	14.9

- Tables housed in the appendices indicate little difference between Black/African American and White respondents.
- As noted below, members of the LGBTQ+ community struggled more than non-members with these access-related issues.

Exhibit 137: Unmet Needs for Care in LGBTQ+ Population

Was there a time in the PAST 12 MONTHS when you did NOT get needed care? Percent who needed care but did not get it	LGBTQ+	Not LGBTQ+
Children who needed medical care	16.9%	7.4%
Children who needed dental care	24.6%	10.4%
Children who needed mental and/or behavioral health care	20.3%	8.8%
Adults needed medical care	33.8%	16.0%
Adults needed dental care	34.4%	21.0%
Adults needed mental health care	37.2%	13.2%

- Members of the LGBTQ+ community are approximately twice as likely as others to have needed care but not received it.
- More than one-third of the LGBTQ+ community needed medical, dental and/or mental health care but did not receive it.

As shown below, finances and the ability to schedule an appointment at a convenient time were the major barriers to receiving needed care.

Exhibit 138: Reasons for Unmet Needs for Care

Most common reasons why needed care was not received	Reasons
Children who needed medical care	• Unable to afford to pay for care • Unable to schedule an appointment when needed • Unable to find a doctor who takes my insurance
Children who needed dental care	• Unable to afford to pay for care • Unable to find a dentist who takes my insurance • Do not have insurance to cover dental care
Children who needed mental and/or behavioral health care	• Unable to afford to pay for care • Unable to find a doctor/counselor who takes my insurance • Unable to schedule an appointment when needed
Adults needed medical care	• Unable to schedule an appointment when needed • Unable to afford to pay for care • Doctor's office does not have convenient hours
Adults needed dental care	• Unable to afford to pay for care • Do not have insurance to cover dental care • Unable to schedule an appointment when needed
Adults needed mental health care	• Unable to afford to pay for care • Unable to schedule an appointment when needed • Am not sure how to find a • doctor/counselor

• Among adults who needed (but did not get) mental health care, in addition to finances and appointment times, respondents indicated that they struggled with knowing where to find a service provider.

Social Connectivity

National research shows that people more connected to family, friends and others have fewer mental health challenges and generally better health. Also, they also have higher self-esteem and are better at engaging others. The CFC survey results show that most people agree that they have social connections in their lives. See Exhibit 139.

Exhibit 139: Social Connections Summary (Percent who Disagree or Strongly Disagree)

Connections with the people in your life. Please tell us if you agree or disagree with each statement	Lake County	Orange County	Osceola County	Seminole County	Black/ African American	White
I am happy with my friend-ships and relationships	4.5%	6.6%	7.2%	8.1%	7.8%	8.3%
I have enough people I can ask for help at any time	13.1%	14.4%	17.9%	15.6%	17.3%	15.4%
My relationships and friend-ships are as satisfying as I would want them to be	11.7%	17.2%	13.9%	19.5%	17.1%	18.2%
I feel safe in my home	2.7%	3.4%	3.2%	3.5%	3.1%	16.7%

- One in six Osceola County residents (17.9%) indicated that they do not have enough people in their lives to ask for help.
- Nearly one in five Orange County (17.2%) and Seminole County (19.5%) residents indicate that relationships and friendships are not satisfying as they would want them to be – higher than Lake and Osceola counties.

There is some difference in the degree of social connectivity based on LGBTQ+ status, with those identifying as LGBTQ+ indicating less satisfaction with their relationships and friendships.

Exhibit 140: Social Connections Summary for LGBTQ+ (Percent who Disagree or Strongly Disagree)

Connections with the people in your life. Please tell us if you agree or disagree with each statement	LGBTQ+	Not LGBTQ+
I am happy with my friendships and relationships	7.9%	7.3%
I have enough people I can ask for help at any time	19.5%	16.2%
My relationships and friendships are as satisfying as I would want them to be	22.4%	15.4%
I feel safe in my home	5.2%	3.0%

- Approximately one in six people (LGBTQ+ community member or not) indicated that they do not have enough people they can ask for help at any time, and/or do not have relationships and friendships as satisfying as they would want them to be, though these figures are more favorable than those reported by people not identified as LGBTQ+.

Bias

Approximately two of five respondents indicate that they experience bias, or some similar event a few times per month or more frequently. General courtesy and "people act as if they think you are not smart" are the most common venues for the experiences.

Exhibit 141: Social Bias Experiences Summary

In your day-to-day life how often have any of the following things happened to you?	Percent saying, "A few times per month" or more
You are treated with less courtesy or respect than other people	23.6%
You receive poorer service than other people at restaurants or stores	10.5%
People act as if they think you are not smart	13.0%
People act as if they are afraid of you	5.2%
You are threatened or harassed	4.9%
You are not treated fairly by one or more parts of the judicial system (including law enforcement, courts, attorney, etc.)	2.5%
People criticized your accent or the way you speak	5.9%

- Nearly one of four (23.6%) say that they are treated with less courtesy or respect than other people. See Exhibit 141, above.
- Note below that experiences notably vary based on LGBTQ+ status and race.

Exhibit 142: Social Bias Experiences Summary for Race

In your day-to-day life how often have any of the following things happened to you?	Black/African American	White
You are treated with less courtesy or respect than other people	30.8%	21.9%
People act as if they think you are not smart	22.9%	10.8%
People act as if they are afraid of you	13.9%	3.7%
You are threatened or harassed	6.6%	4.3%
You are not treated fairly by one or more parts of the judicial system (including law enforcement, courts, attorney, etc.)	7.3%	1.5%
People criticized your accent or the way you speak	7.4%	3.6%
You receive poorer service than other people at restaurants or stores	18.5%	8.9%

- Black/African American community members are approximately twice as likely as Whites to experience bias, poor service, harassment and other behaviors. Note that Hispanics/Latinos and Non-Hispanics/Latinos are equally likely to experience these behaviors.
- Nearly one in three Black/African American residents indicated that they are treated disrespectfully on a regular basis (i.e., a few times per month or more).

LGBTQ+ status also impacts the degree to which people experience bias, harassment or other negative behaviors.

Exhibit 143: Social Bias Experiences Summary for LGBTQ+

In your day-to-day life how often have any of the following things happened to you? Percent saying, "A few times per month" or more	LGBTQ+	Not LGBTQ+
You are treated with less courtesy or respect than other people	37.2%	22.4%
You receive poorer service than other people at restaurants or stores	12.5%	10.4%
People act as if they think you are not smart	26.0%	11.7%
People act as if they are afraid of you	9.6%	4.7%
You are threatened or harassed	11.7%	4.3%
You are not treated fairly by one or more parts of the judicial system (including law enforcement, courts, attorney, etc.)	4.3%	2.3%
People criticized your accent or the way you speak	6.3%	5.5%

Bias, harassment or other negative behaviors are fairly consistent across all four counties.

Exhibit 144: Bias, Harassment or Other Negative Behaviors Summary

In your day-to-day life how often have any of the following things happened to you?	Lake County	Orange County	Osceola County	Seminole County
You are treated with less courtesy or respect than other people	23.4%	24.7%	22.7%	24.7%
You receive poorer service than other people at restaurants or stores	8.5%	11.3%	11.0%	9.7%
People act as if they think you are not smart	11.2%	14.1%	12.2%	13.3%
People act as if they are afraid of you	4.2%	6.4%	5.3%	3.9%
You are threatened or harassed	4.2%	5.6%	4.5%	4.1%
You are not treated fairly by one or more parts of the judicial system (including law enforcement, courts, attorney, etc.)	0.5%	3.7%	2.2%	2.3%
People criticized your accent or the way you speak	3.8%	5.9%	7.0%	3.7%

Community Perceptions and Needs

Community members shared their insights and opinions regarding a broad set of issues that impact the overall quality of life in their local neighborhoods. Overall, transportation, housing and the use of illegal drugs are issues most commonly identified as local problems.

Note in the table below that "agreeing" with some statements indicates that a problem exists (e.g., "Illegal drug use") while for others, "disagreeing" indicates a problem. In the table, the percentages that are bolded and underlined represent the percent of respondents indicating that the issue is a problem in their local community.

Exhibit 145: **Community Perceptions and Needs Summary**

Statements about the local community	% Agree	% Disagree
Illegal drug use/prescription medicine abuse is a problem in my community	**48.6**	16.6
I have no problem getting the health care services I need	65.8	**25.6**
We have great parks and recreational facilities	66.0	**20.3**
Public transportation is easy to get to if I need it	26.1	**50.3**
Ease of transportation and/or commuting is reasonable	32.7	**49.3**
There are plenty of jobs available for those who want them	48.9	**29.3**
Crime is a problem in my community	**34.6**	41.2
Air pollution is a problem in my community	**23.6**	51.6
I feel safe in my community	76.6	**13.6**
There are safe and affordable places to live in my community	37.2	**46.6**
The quality of health care is good in my community	54.5	**24.8**
There are good sidewalks for walking safely	60.7	**32.3**
I am able to get healthy food easily	72.5	**21.6**

- Transportation (i.e., public transportation, as well as commuting) is identified by approximately half of all respondents.
- Similarly, illegal drug use/prescription medicine abuse is also a highly rated challenge.
- Concerns about a lack of safe and affordable housing are also identified by nearly half of the respondents.

There are only isolated variations between counties regarding the identified needs. The following table shows the percent of respondents suggesting that the issue is an unmet community need.

Note: In the referenced table below, some statements are "negatively phrased" such as the first one: "Illegal drug use/prescription medicine abuse is a problem in my community." If a respondent was to "Agree" with the statement, doing so would suggest that it is seen as a community problem. These items are in bold and underlined. Alternatively, some statements are "positively phrases." For example: "I have no problem getting the health care services I need." In these cases, if a respondent was to "Disagree" with the statement, doing so would suggest that it is seen as a community problem.

Exhibit 146: Unmet Community Needs Summary

Percent of respondents suggesting that the issue is an unmet community need				
Statements about the local community	**Lake County**	**Orange County**	**Osceola County**	**Seminole County**
Illegal drug use/prescription medicine abuse is a problem in my community	*55.9%*	*48.7%*	*46.1%*	*49.3%*
I have no problem getting the health care services I need	26.4%	27.9%	24.6%	24.3%
We have great parks and recreational facilities	18.9%	18.4%	25.6%	10.1%
Public transportation is easy to get to if I need it	55.3%	48.2%	48.6%	54.0%
Ease of transportation and/or commuting is reasonable	41.0%	47.0%	52.5%	46.1%
There are plenty of jobs available for those who want them	24.7%	30.5%	30.9%	25.9%
Crime is a problem in my community	*37.9%*	*38.0%*	*35.3%*	*26.2%*
Air pollution is a problem in my community	*17.0%*	*29.2%*	*24.1%*	*22.0%*
I feel safe in my community	11.5%	16.5%	14.7%	9.0%
There are safe and affordable places to live in my community	43.4%	55.7%	41.0%	52.3%
The quality of health care is good in my community	20.3%	25.0%	27.0%	18.5%
There are good sidewalks for walking safely	38.1%	25.3%	37.0%	23.9%
I am able to get healthy food easily	19.8%	20.7%	23.5%	17.5%

- Across all counties, transportation, housing and the use of illegal drugs are core issues of concern.
- Housing costs are a greater concern in Orange County than others, though as noted, it is a major concern in all areas.
- Respondents from Osceola and Lake counties indicated that a lack of good sidewalks for walking safely is one of the top few community needs.

Within the LGBTQ+ community, all of the assessed needs are seen as being more acute – a higher percentage see each issue as an unmet need, compared to non-LGBTQ+ community members.

Exhibit 147: Unmet Community Needs Summary in LGBTQ+ Community

Percent of respondents suggesting that the issue is an unmet community need		
Statements about the local community	**LGBTQ+**	**Not LGBTQ+**
Illegal drug use/prescription medicine abuse is a problem in my community	*56.5%*	*48.6%*
I have no problem getting the health care services I need	35.9%	24.6%
We have great parks and recreational facilities	24.2%	19.9%
Public transportation is easy to get to if I need it	58.7%	50.2%
Ease of transportation and/or commuting is reasonable	56.5%	49.0%
There are plenty of jobs available for those who want them	38.3%	28.0%
Crime is a problem in my community	*37.3%*	*34.5%*
Air pollution is a problem in my community	*33.8%*	*22.2%*
I feel safe in my community	15.5%	13.3%
There are safe and affordable places to live in my community	60.8%	46.0%
The quality of health care is good in my community	31.5%	23.8%
There are good sidewalks for walking safely	38.6%	32.2%
I am able to get healthy food easily	29.9%	20.5%

Health-related Needs for Youth

The following set of data tables provides rankings for each of the evaluated needs and issues. Mental health including suicide prevention/substance use, basic needs (e.g., nutrition, dental care, immunizations, accidents/injuries, physical activity) and other special needs are the most common health needs of children across all counties. There is minimal deviation by county.

Exhibit 148: Health-related Needs for Youth Summary

What are the most important HEALTH needs for children in your community?					
Issue	Lake County	Orange County	Osceola County	Seminole County	Total CFC Area
Mental or Behavioral Health	1	1	1	1	1
Nutrition/Healthy Food	2	2	3	2	2
Dental Care	3	3	2	4	3
Special Needs (Physical/Chronic/Behavioral/ Developmental/ Emotional)	4	4	5	3	4
Accidents and Injuries	5	5	4	7	5
Immunizations (common childhood vaccines, like mumps, measles, chickenpox, etc.)	9	6	6	6	6
Physical Activity	6	7	7	5	7
Suicide Prevention	8	8	8	9	8
Infectious Diseases (including COVID-19)	14	9	12	8	9
Drug or Alcohol Use	12	11	10	11	10
Obesity	11	10	13	10	11
Asthma	13	13	9	17	12
Eye Health (vision)	16	15	11	14	13
Attention-Deficit/Hyperactivity Disorder (ADHD)	7	12	14	12	14
Respiratory Health Other than Asthma (RSV, cystic fibrosis)	19	16	16	15	15
Vaping, Cigarette, Cigar, Cigarillo or E-cigarette Use	10	14	17	13	16
Diabetes	17	17	15	19	17
Healthy Pregnancies and Childbirth (not teen pregnancy)	15	18	18	18	18
Safe Sex Practices and Teen Pregnancy	18	19	19	16	19
Medically Complex	20	20	21	20	20
Sexual Identity of Child	21	21	20	21	21

- Mental health and substance use issues rate higher than conventional primary care and specialized medical care issues.
- Respondents prioritize safe sex and sexual identity issues lower.
- There is strong recognition that Special Needs services are a high priority for youth.

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Health priorities are very consistent (with a few exceptions) between races.[112]

Exhibit 149: Health Priorities

What are the most important HEALTH needs for children in your community?			
Issue	Black/African American	White	Total CFC Area
Mental or Behavioral Health	1	1	1
Nutrition/Healthy Food	3	2	2
Dental Care	2	4	3
Special Needs (Physical/Chronic/Behavioral/ Developmental/ Emotional)	5	3	4
Accidents and Injuries	4	5	5
Immunizations (common childhood vaccines, like mumps, measles, chickenpox, etc.)	6	7	6
Physical Activity	8	6	7
Suicide Prevention	9	8	8
Infectious Diseases (including COVID-19)	13	9	9
Drug or Alcohol Use	14	10	10
Obesity	11	11	11
Asthma	10	13	12
Attention-Deficit/Hyperactivity Disorder (ADHD)	12	12	13
Eye Health (vision)	7	15	14
Vaping, Cigarette, Cigar, Cigarillo or E-cigarette Use	19	14	15
Respiratory Health Other than Asthma (RSV, cystic fibrosis)	15	16	16
Diabetes	17	19	17
Healthy Pregnancies and Childbirth (not teen pregnancy)	18	17	18
Safe Sex Practices and Teen Pregnancy	16	18	19
Medically Complex	20	21	20
Sexual Identity of Child	21	20	21

- Black/African American residents more highly prioritize eye care than White residents.
- There are also notable differences in infectious disease ratings.

[112]Note that comparisons with other races lacked the sample size required to make helpful comparisons. Also, the "Total" ranking may differ slightly compared with the previous table that included all responded (not only Black/African American and White).

Also pertinent to youth and families, participants identified other community concerns such as bullying, childcare, financial benefits and the impact of domestic violence that affect children's quality of life.

Exhibit 150: Other Important Needs or Concerns that Affect Child Health

Other important needs or concerns that affect child health in your community Percent indicating that the issue is a concern		
Rank	**Issue**	**Percent**
1	Bullying and other stressors in school	37.6%
2	Childcare - Access to or cost of childcare	36.3%
3	Financial benefits - Access to benefits (Medicaid, WIC, SNAP/Food Stamps)	34.1%
4	Domestic violence, child abuse and/or child neglect	26.3%
5	Housing	21.9%
6	Educational needs	20.8%
7	Social media	17.4%
8	Hunger or access to healthy food	16.7%
9	Parenting education (parenting skills for child development)	12.3%
10	Safe neighborhoods and places for children to play	11.4%

- More than one in four respondents indicated that bullying, childcare, financial benefits and the impact of domestic violence are concerns in their community.
- As shown below, there was little variation by county.

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Exhibit 151: Other Important Needs or Concerns that Affect Child Health by County

Other important needs or concerns that affect child health in your community Ranking by County					
	In which county do you live?				
Issue	Lake County	Orange County	Osceola County	Seminole County	Total CFC Area
Bullying and other stressors in school	1	3	1	2	1
Childcare - Access to or cost of childcare	5	1	3	1	2
Financial benefits - Access to benefits (Medicaid, WIC, SNAP/Food Stamps)	4	2	2	6	3
Domestic violence, child abuse and/or child neglect	3	6	4	3	4
Housing	7	5	5	9	5
Educational needs	2	4	6	8	6
Social media	8	7	7	4	7
Hunger or access to healthy food	6	8	8	5	8
Parenting education (parenting skills for child development)	10	9	10	7	9
Safe neighborhoods and places for children to play	9	11	9	10	10

Those identifying as Black/African American and White have similarly ranked other community concerns.

Exhibit 152: Other Important Needs or Concerns that Affect Child Health by Race

Other important needs or concerns that affect child health in your community, Ranking by Race			
Issue	Black/African American	White	Total CFC Area[113]
Bullying and other stressors in school	3	2	1
Childcare - Access to or cost of childcare	2	1	2
Financial benefits - Access to benefits (Medicaid, WIC, SNAP/Food Stamps)	1	3	3
Domestic violence, child abuse and/or child neglect	6	4	4
Housing	4	5	5
Educational needs	5	6	6
Social media	11	7	7
Hunger or access to healthy food	10	8	8
Parenting education (parenting skills for child development)	7	9	9
Safe neighborhoods and places for children to play	9	10	10
Crime and community violence	8	11	11

[113]Note that races other than Black/African American or White rate some issues such as "Bullying and other stressors in school" somewhat differently, so the "Total CFC Area" ranking is more than solely the average of Black/African American and White.

Risky Behaviors

Though not exclusively asking about children, the survey sought insight regarding perceptions of the importance of various risky behaviors. Substance misuse (including illegal drugs, alcohol and smoking/vaping) were among the biggest concerns. Distracted driving and nutrition were also highly ranked.

Exhibit 153: **Risky Behaviors Summary**

Risky behaviors. Which three do you believe are the most harmful to the overall health of your community?					
Issue	Lake County	Orange County	Osceola County	Seminole County	Total CFC Area
Illegal drug use/abuse or misuse of prescription medications	1	1	1	1	1
Distracted driving (texting, eating, talking on the phone)	5	2	2	2	2
Alcohol abuse/drinking too much alcohol (beer, wine, spirits, mixed drinks)	3	3	3	3	3
Poor eating habits	2	4	4	4	4
Lack of exercise	3	5	5	6	5
Vaping, Cigarette, Cigar, Cigarillo or E-cigarette Use	6	6	6	7	6
Vax - Not getting vaccinated to prevent disease	7	6	7	5	7
Dropping out of school	8	9	8	9	8
Guns - Not locking up guns	10	8	9	8	9
Unsafe sex including not using birth control	9	10	11	10	10
Seats - Not using seat belts/not using child safety seats	12	11	10	11	11
Pregnant - Not seeing a doctor while you are pregnant	11	12	12	13	12
Helmet - Not wearing helmets	12	13	13	12	13

- Note that detailed tables by race provide similar responses.

Health-related Needs

There is general consensus across county boundaries, races and LGBTQ+ status about the top health needs facing the community. The following table is presented somewhat differently than previous ones. The purpose is to easily reflect the similarities among respondent groups with regard to the ranking of community health needs.

Exhibit 154: Top Health Needs Facing the Community

Which of these do you believe are most important to address to improve the health of your community?	Overall Rank	Lake County	Orange County	Osceola County	Seminole County	Black / African American	White	LGBTQ+	Non-LGBTQ+
Mental Health Problems Including Suicide	1	2	1	2	1	1	1	1	1
Aging Problems (for example: difficulty getting around, dementia, arthritis)	2	3	6	1	2	4	2	4	2
Illegal Drug Use/Abuse of Prescription Medications and Alcohol Abuse/Drinking Too Much	3	4	3	3	3	3	3	2	3
Being Overweight	4	1	2	4	4	7	4	5	4
Domestic Violence/Rape/Sexual Assault/Human Trafficking	5	8	4	5	5	5	5	3	5
Diabetes/High Blood Sugar	6	6	5	7	7	2	8	10	6
Heart Disease/Stroke/High Blood Pressure	7	5	8	11	6	8	6	11	7
Cancers	8	7	10	6	9	9	7	13	8
Child Abuse/Neglect	9	9	9	8	10	10	9	6	9
Clean Environment/Air and Water Quality	10	10	7	9	8	6	10	7	10
Motor Vehicle Crash Injuries	11	12	12	10	13	12	11	12	11
Climate Change	12	13	11	12	12	13	12	8	12

Which of these do you believe are most important to address to improve the health of your community?	Overall Rank	Lake County	Orange County	Osceola County	Seminole County	Black / African American	White	LGBTQ+	Non-LGBTQ+
Infectious Diseases Like Hepatitis, TB and COVID-19	13	14	14	13	11	14	13	9	13
Dental Problems	14	11	15	14	15	15	14	16	15
Gun-Related Injuries	15	16	13	15	14	11	15	15	14
Respiratory/Lung Disease	16	15	18	16	16	20	16	17	16
Homicide	17	19	16	17	19	16	18	18	17
HIV/AIDS/Sexually Transmitted Diseases (STDs)	18	17	17	19	17	17	17	14	18
Teenage Pregnancy	19	18	19	18	18	18	19	19	18
Infant Death	20	20	20	20	20	19	20	20	20

- Mental health and substance misuse issues, challenges faced by seniors, lifestyle issues, chronic diseases and domestic violence or neglect are the most frequently identified health-related needs across all categories.

Adverse Childhood Experiences

Understanding Adverse Childhood Experiences
A CDC Fact Sheet

"Adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years). For example:
- experiencing violence, abuse or neglect
- witnessing violence in the home or community
- having a family member attempt or die by suicide

"Also included are aspects of the child's environment that can undermine their sense of safety, stability and bonding, such as growing up in a household with:
- substance use problems
- mental health problems
- instability due to parental separation or household members being in jail or prison

"ACEs are linked to chronic health problems, mental illness and substance use problems in adolescence and adulthood. ACEs can also negatively impact education, job opportunities and earning potential. However, ACEs can be prevented.

"ACEs can have lasting, negative effects on health, well-being, as well as life opportunities such as education and job potential. These experiences can increase the risks of injury, sexually transmitted infections, maternal and child health problems (including teen pregnancy, pregnancy complications and fetal death), involvement in sex trafficking and a wide range of chronic diseases and leading causes of death such as cancer, diabetes, heart disease and suicide.

"ACEs and associated social determinants of health, such as living in under-resourced or racially segregated neighborhoods, frequently moving and experiencing food insecurity, can cause toxic stress (extended or prolonged stress). Toxic stress from ACEs can negatively affect children's brain development, immune systems and stress-response systems. These changes can affect children's attention, decision-making and learning.

"Children growing up with toxic stress may have difficulty forming healthy and stable relationships. They may also have unstable work histories as adults and struggle with finances, jobs and depression throughout life. These effects can also be passed on to their own children. Some children may face further exposure to toxic stress from historical and ongoing traumas due to systemic racism or the impacts of poverty resulting from limited educational and economic opportunities."[114]

[114]US Centers for Disease Control and Prevention, Fast Facts, 2022. Available at https://www.cdc.gov/violenceprevention/aces/fastfact.html

Elevated numbers of ACEs are correlated with cascading, negative life and lifestyle outcomes ranging from disrupted neurodevelopment at a young age to higher levels of mental health impairment, chronic health conditions and even premature death. Note, though, that ACEs *influence* and are *correlated* to some negative outcomes, yet they do not necessarily determine or cause these outcomes.

There are potentially significant adult health benefits by lowering adverse childhood experiences. According to the U.S. CDC, the potential reduction of negative outcomes in adulthood by avoiding ACEs include 44% lower chance of experiencing a depressive disorder, 33% lower likelihood of becoming a regular cigarette smoker and many other potential benefits. See Exhibit 155, below.

Exhibit 155: Potential Reduction of Negative Outcomes in Adulthood by Avoiding ACEs
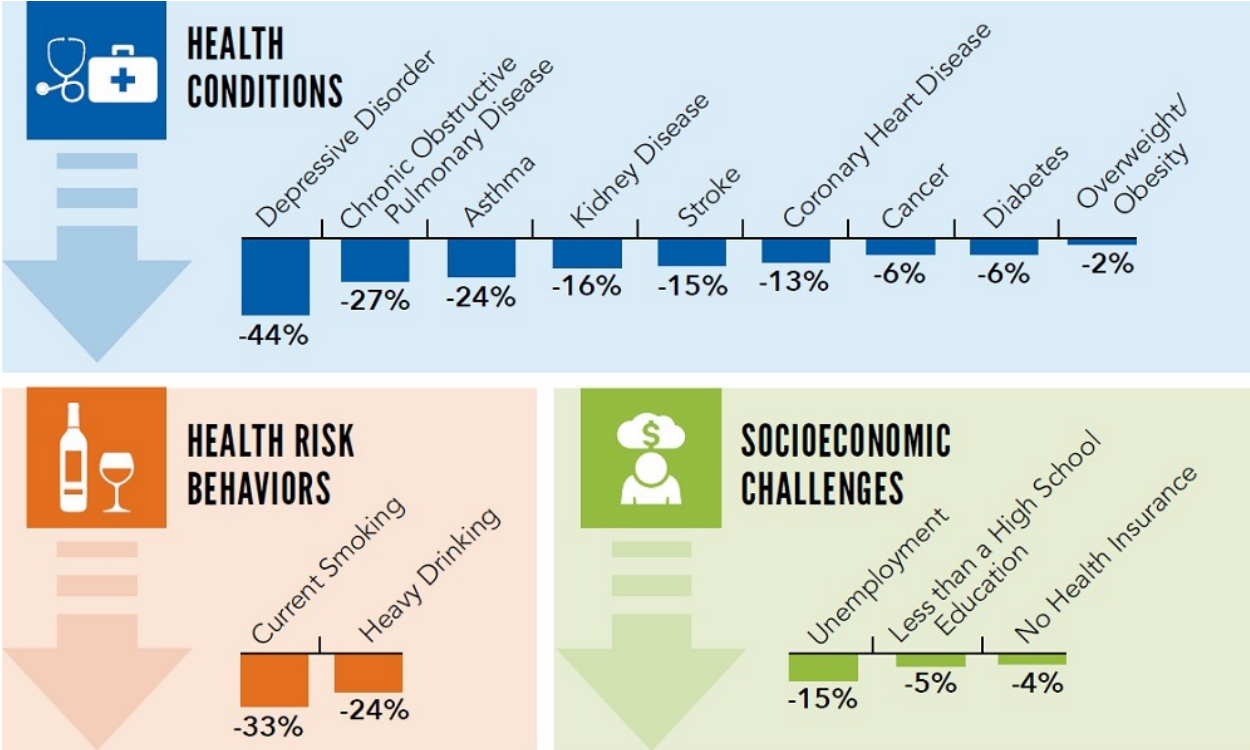
Source: National Center for Injury Prevention and Control, Division of Violence Prevention. Additional reference: CDC-Kaiser ACE Study

Total ACE Frequency within the Community Survey

Exhibit 156: ACE Prevalence within the Community (CFC Community Survey)

Number of Adverse Childhood Experiences	Number of Survey Respondents	Percent	Cumulative Percent
0	2,477	58.1%	58.1%
1	664	15.6%	73.7%
2	354	8.3%	82.0%
3	243	5.7%	87.7%
4	194	4.5%	92.2%
5	114	2.7%	94.9%
6	95	2.2%	97.1%
7	62	1.5%	98.6%
8	32	.8%	99.3%
9	14	.3%	99.6%
10	15	.4%	100.0%
Total	**4,264**	**100.0%**	

ACE Based on Self-reported LGBTQ+ Status

Exhibit 157: ACE Prevalence within the LGBTQ+ Community (CFC Community Survey)

Adverse Childhood Experiences		
	Do you identify as LGBTQ+?	
ACE	**Yes**	**No**
Lived with anyone who was depressed, mentally ill or suicidal	60.5%	37.8%
Lived with anyone who was a problem drinker or alcoholic	44.4%	40.3%
Lived with anyone who used illegal street drugs or who abused prescription medications	22.2%	15.5%
Lived with anyone who served time or was sentenced to serve time in prison, jail or other correctional facility	16.0%	9.0%
Parents were separated or divorced	51.2%	50.1%
Parents or adults experienced physical harm (slap, hit, kick, etc.)	32.1%	19.3%
Parent or adult physically harmed you (slap, hit, kick, etc.)	38.3%	27.9%
Parent or adult verbally harmed you (swear, insult or put down)	54.9%	37.6%
Adult or anyone at least 5 years older touched you sexually	39.5%	21.3%
Adult or anyone at least 5 years older made you touch them sexually	22.2%	11.6%
Adult or anyone at least 5 years older forced you to have sex	18.5%	5.9%

ACE Based on Household Income

Exhibit 158: ACE Prevalence by Household Income (CFC Community Survey)

ACE Issue	$0 to $10k	$10k to $20k	$20k to $30k	$30k to $40k	$40k to $50k	$50k to $60k	$60k to $70k	$70k to $80k	$80k to $90k	$90k to $100k	$100k to $125k	$125k to $150k	$150k or more
Lived with anyone who was depressed, mentally ill or suicidal	31.6%	33.3%	48.0%	38.3%	38.9%	40.7%	43.7%	30.7%	44.4%	38.6%	47.0%	48.0%	41.9%
Lived with anyone who was a problem drinker or alcoholic	29.1%	31.3%	44.1%	41.4%	41.6%	37.4%	43.7%	40.6%	43.3%	47.0%	50.6%	38.2%	38.4%
Lived with anyone who used illegal street drugs or who abused prescription medications	15.2%	17.7%	15.7%	17.9%	20.4%	17.1%	11.5%	16.8%	18.9%	14.5%	19.0%	21.6%	15.3%
Lived with anyone who served time or was sentenced to serve time in prison, jail or other correctional facility	8.9%	14.6%	9.8%	13.0%	15.9%	11.4%	9.2%	6.9%	7.8%	13.3%	11.3%	6.9%	7.9%
Parents were separated or divorced	49.4%	51.0%	54.9%	59.9%	62.8%	48.0%	54.0%	52.5%	42.2%	50.6%	45.2%	47.1%	48.3%
Parents or adults experienced physical harm (slap, hit, kick, etc.)	10.1%	27.1%	28.4%	19.1%	24.8%	26.0%	12.6%	12.9%	21.1%	22.9%	25.6%	18.6%	20.2%
Parent or adult physically harmed you (slap, hit, kick, etc.)	19.0%	34.4%	25.5%	21.6%	32.7%	40.7%	25.3%	27.7%	30.0%	31.3%	31.0%	33.3%	31.0%
Parent or adult verbally harmed you (swear, insult or put down)	20.3%	40.6%	36.3%	40.1%	40.7%	51.2%	39.1%	39.6%	41.1%	44.6%	41.1%	41.2%	41.4%
Adult or anyone at least 5 years older touched you sexually	15.2%	20.8%	25.5%	20.4%	33.6%	25.2%	14.9%	25.7%	27.8%	24.1%	25.0%	23.5%	23.2%
Adult or anyone at least 5 years older made you touch them sexually	6.3%	15.6%	14.7%	10.5%	15.9%	7.3%	8.0%	16.8%	15.6%	12.0%	11.3%	14.7%	13.8%
Adult or anyone at least 5 years older forced you to have sex	1.3%	16.7%	10.8%	5.6%	8.8%	6.5%	2.3%	7.9%	8.9%	6.0%	6.0%	4.9%	9.4%

ACE Based on Race

Exhibit 159: ACE Prevalence by Race (CFC Community Survey)

	Black/African American	Asian	White
Lived with anyone who was depressed, mentally ill or suicidal	33.0%	25.9%	41.6%
Lived with anyone who was a problem drinker or alcoholic	32.5%	29.6%	42.1%
Lived with anyone who used illegal street drugs or who abused prescription medications	18.6%	7.4%	15.8%
Lived with anyone who served time or was sentenced to serve time in prison, jail or other correctional facility	14.9%	ND	8.8%
Parents were separated or divorced	63.4%	25.9%	46.8%
Parents or adults experienced physical harm (slap, hit, kick, etc.)	25.8%	18.5%	19.5%
Parent or adult physically harmed you (slap, hit, kick, etc.)	20.6%	44.4%	30.2%
Parent or adult verbally harmed you (swear, insult or put down)	33.5%	48.1%	40.5%
Adult or anyone at least 5 years older touched you sexually	24.7%	18.5%	23.7%
Adult or anyone at least 5 years older made you touch them sexually	12.4%	11.1%	12.5%
Adult or anyone at least 5 years older forced you to have sex	6.2%	3.7%	7.2%

Access Audit

The access audits involved making multiple calls to representatives of local health services sites in the four-county area. The goal is to understand practical access to service issues perceived by clients and prospective clients, and the results provide insight to access gaps, improvement strategies and service variations. The service sites were "shopped" (i.e., called on the telephone) by Crescendo "shoppers" seeking to schedule an appointment or to learn about other factors that potentially impact consumer access to services. Calls were made at different times throughout the day. Over 45 calls were conducted; 32 of which resulted in either an interview or completed sets of information.

Exhibit 160: Sites of Completed Access Audit Calls

Facility/Organization	
Ability Housing	Hope CommUnity Center
AdventHealth Altamonte Springs	IDignity
AdventHealth Community Clinic Waterman	Impower
AdventHealth Orlando ER	Mental Health Association of Central Florida
Aspire	NAMI
CareSpot Urgent Care - Orlando Health	Orange Blossom Family Health
Catholic Charities of Central Florida Clinics	Orlando Health Orlando Regional Medical Center
Center for Independent Living	Orlando Health South Seminole Hospital
Centra Care Colonial Towne Center	Orlando Health Virtual Visit
Christian Service Center for Central Florida	Osceola Community Health Services
Community Health Centers, Inc.	Salvation Army Women & Children Shelter
Faith Neighborhoods Center	Second Harvest Food Bank
Florida Department of Health in Lake County	The Center Orlando
Florida Department of Health in Orange County	The Sharing Center
Florida Department of Health in Osceola County	True Health
Florida Department of Health in Seminole County	United Way-211
Healthy Start Osceola County	WIC Lake
Hebni	

The factors used to identify areas of opportunity during the calls includes:

- Ease of speaking with a person
- Ability of the site or facility to accept new clients
- Ability of the facility to refer the caller elsewhere when the desired services are not provided

- Staff members' ability to ask questions to define prospective client needs and other information prior to making an appointment (e.g., insurance coverage, appropriate levels of service, other access to care issues)

The results summarized below, help identify service access gaps, focus improvement strategies and identify any service variations based on geography, insurance status or other issues.

Observations

General Summary

Providers were contacted several times to ascertain the ability to collect information on its services regardless of the entry point.

In general, access to care was rather polarized. Among organizations at which calls were answered by an individual or by using an efficient automated attendant (63% of the total), callers received timely, detailed information regarding service site capabilities and access to initial appointments. Other organizations were occasionally characterized by being transferred to a general voice mail mailbox (in 12 instances these calls were not returned). In one case the mailbox was full and not accepting messages.

Additional observations are listed below.

Ease of Speaking with a Person

- The majority of sites had an automated answering machine (27 out of 35 sites).
- For someone who wants general information about the site, the phone tree options may be confusing to the caller due to unclear directions on the automated message number prompt system.
- Most of the telephone numbers (as listed on organizations' websites, i.e., a place where new clients may first look) resulted in a phone tree that many times went to voice mail. In many of those instances, the caller did not receive a callback.
- In two cases the receptionist was unable to answer the caller's questions. The caller was told that an appropriate staff member would call the caller, but the caller never received a call.
- During one phone call the voice mail was full and the caller could not leave a message.
- When a caller was able to speak to someone, the staff were nice and eager to help direct the caller to the appropriate information.

- In four instances, the caller spoke to a staff member who showed exemplary support. The staff member offered to share helpful information via email and asked probing questions about the patient to identify the most comprehensive way in which services could be provided.

    o For example, one staff member gave information for four providers in the area that the caller should contact. Another staff member told the caller about additional services in the area that would be useful for the patient that the caller was calling on behalf of.

- Language options are offered on 14 automated systems. Only Spanish language options were offered on 12 automated messages while two offered Spanish and Creole language options.

Information Available

When a caller was able to speak with someone, the staff members were extremely helpful and useful information was shared.

- All responding sites were accepting new clients, and most had available access to care immediately or within two weeks. A few sites had restrictions on accepting new clients based on zip code, economic status and insurance status. One mental and behavioral health center has a two- to three-month waiting list.
- Staff members were helpful to answer questions regarding the availability of services based on insurance.
- If insurance was unknown, staff provided helpful information on indigent or specialized medical care and the phone number to call.
- Staff generally asked questions about the patient's reason for the visit and offered helpful information accordingly.
- At three health care facilities and four basic needs facilities that primarily serve those who are low income, staff were quite helpful trying to assist the patient get care quickly.
- Callers were generally told to come into any office at any time (i.e., walk-ins) to get health care, behavioral health care or social services information and to begin the new patient/client process. Access to initial services was generally very good. Three sites encouraged callers to complete an application online or by phone in order to increase convenience for the caller, but for those who may not have access to the internet and/or technology, this could be a barrier to accessing services. Access to transportation or public transportation may be a barrier for patients accessing sites that require the patient to fill out intake paperwork at their office.

Needs Prioritization Process

Background

The Needs Prioritization Process brought together the summary of results from secondary research data references, qualitative research themes and the community survey. The summary and the process were described for the participants in an advance e-mail as follows:

Primary and secondary research

The needs included in the Prioritization Process were derived from the extensive secondary and primary research described below.

- **Secondary research**: Secondary research includes extensive amounts of data from the US Census Bureau; sites providing information on poverty and other social determinants of health measures; Florida Health Charts (FLHealthCharts); and many other validated data sources.
- **Primary research**: This includes a **community survey** with approximately 4,000 responses, results from **qualitative research** (i.e., approximately 50 in-depth stakeholder interviews and results from 30 focus groups).

Direct linkages between needs and data

Each of the needs in the prioritization process directly links to data observations and/or qualitative feedback. Supporting data and a detailed list of 50 needs in each county was created. Duplicates were removed and similar needs were combined. The resulting list of needs represents the items participants were asked to evaluate in the Prioritization Process. Crescendo then worked with four sets of project leaders – one set in each county – to implement a modified Delphi Method to construct a prioritized list of needs for each county. The full peer-reviewed Delphi process can be found in the appendix. The three-round approach described for the participants in advance included:

- **Round 1**: The first round asked participants to evaluate and comment on each need in a provided list via an online survey derived from primary and secondary research.
- **Round 2**: The second round asked participants to evaluate the same or similar list of needs, but this list showed their colleagues' comments. The purpose of this process was to provide participants with additional insight as they evaluated each need.
- **Round 3**: The third round was a set of four virtual working sessions of the prioritization teams to discuss the results of the first two steps of the Prioritization Process along with any other observations that may have been missed along the way. As a final step, leaders of each of the four counties assembled at a meeting in April 2022 to corporately review and affirm the county-level and total area list of prioritized needs. Details of county-level results are included in the following sections.

Community Needs Prioritization Process – List of Prioritized Needs

The prioritization process was conducted on a county-level, yet during the all-county meeting, project leaders from each county reviewed the following list of aggregated, prioritized needs:

1. Affordable, quality housing.
2. Mental health crisis services and community awareness of available resources.
3. Access to free or low-cost healthcare services for all residents.
4. Mental health outpatient services capacity.
5. Information sharing among providers.
6. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients.
7. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community.
8. Mental health stigma reduction.
9. Behavioral health outpatient services for children.
10. Co-located case managers and behavioral health providers at community-based primary care sites.
11. Access to care for seniors (e.g., transportation).
12. Mental health inpatient bed capacity.
13. Healthcare services in lower-income and priority communities.
14. Mental health and substance use disorder transition care for inmates being released from jail.
15. Childcare services, especially for children with special needs.

County-Specific Summaries & Health Equity Profiles

Health Equity Data Introduction

The following section highlights inequities and disparities that ultimately impact the health of individuals, families and the overall community. Health equity exists when individuals have equal opportunities to be healthy. The ability to be healthy is often associated with factors such as social position, race, ethnicity, gender, religion, sexual identity or disability. When these factors limit a person's ability to be healthy it can lead to health inequity.[115]

WHAT IS HEALTH EQUITY?

Equity is the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically or by other means of stratification.

–World Health Organization

Health equity means that everyone has a fair and just opportunity to be healthier.

This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

–Robert Wood Johnson Foundation

The route to achieving equity will not be accomplished through treating everyone equally. It will be achieved by treating everyone justly according to their circumstances.

–Paula Dressel, Race Matters Institute

Research shows that problems like poverty, unemployment, low educational attainment, inadequate housing, lack of public transportation, exposure to violence, and neighborhood deterioration (social or physical) shape health and contribute to health inequities.

–National Academy of Sciences

EQUALITY   EQUITY

Interaction Institute for Social Change
Artist: Angus Maguire

Source: Johns Hopkins, Alliance for a Healthier World. Health Equity, Defining a Complex Concept

[115]The Community Guide, Health Equity.

Health disparities indicate differences in health linked with social, economic and/or environmental disadvantages. Health disparities adversely affect communities who have systematically experienced greater barriers to healthcare, based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.[116]

Data Limitations and Details

The health equity data in the County-Specific Summaries was primarily captured from the Florida Health Charts (FLHealthCharts) database and the United States Census Bureau 2015-2019 American Community Survey (ACS) which covers a broad range of topics about social, economic, demographic and housing characteristics of the U.S. population. The primary advantage of using multiyear estimates is the increased statistical reliability of the data for less populated areas and small population subgroups.

In addition to limitations noted above and earlier in the report, it is important to note that some health equity data can have percentage changes that look dramatic simply because the raw counts of some populations are so small.

As part of county-specific summaries, there are data change tables utilizing The Social Vulnerability Index (SVI) model. The SVI was developed by the U.S. Centers for Disease Control and Prevention as a metric for analyzing data to identify vulnerable populations.

The SVI may be used to rank overall population well-being and mobility relative to County and State averages. The SVI can also be used to determine the most vulnerable populations during disaster preparedness and public health emergencies (e.g., pandemics). The SVI tables include 2021 Federal Reserve Economic Data (FRED) and note increases of more than 10% (up or down) from the 2010 American Community Survey 5-Year estimate and the FRED Economic Data. Each county-specific section includes: Overviews, Health Equity data profiles, Community Survey Highlights and a Prioritization Process Summary.

[116]Health.gov. How does Healthy People 2030 define health disparities and health equity?

Lake County

Executive Summary

Local resources, personal health and lifestyle disparities, and other factors significant impact length and quality of life. Geographic location, adverse childhood experiences and other characteristics – some of which reflect historically biases – have a dramatic impact on access to care.

The short list of health issues highlighted below are unique due to their geographic and social realities. The data points help illustrate some of the impacts that these health equity realities are having on individuals' health in Lake County.

- Over the past 10 years, the percentage of households who have a person with a disability has increased in Lake County to 17.0%. This is nearly 50% higher than the national average of 12.7%.
- The percentage of people living in mobile homes is much higher in Lake County (18.5%) than in Florida (8.9%) and the United States (6.2%).
- In Lake County, a higher percentage of minority populations are living in poverty - which is also reflected in lower median household income per year.
- Over 22% of Lake County residents who identified as Hispanic/Latino ethnicity could not see a doctor at least once in the past year due to cost – nearly double the percentage of Non-Hispanic/Latino White residents (11.5%).
- Overall, smoking behaviors have improved in Lake County.
- Black/African American residents in Lake County had stroke death rates of 56.8 per 100,000 while Hispanic/Latino residents had stroke death rates of 44.7 per 100,000 – both are higher than the Lake County average of 39.1 per 100,000.
- The population that identifies as Black/African American in Lake County also has the highest rates of breast cancer deaths of 22.4 per 100,000 - more than two times higher than the overall Lake County rate of 9.7 per 100,000. This group reports lower rates of breast cancer incidence than Lake County (108.7, 134.0, respectively) which suggests additional screening may be needed.
- Emergency room visits due to diabetes were over two times higher in Lake County residents who identify as Black/African American (538.4) than the Lake County average (241.4).
- Maternal mortality rates in Lake County are 19.8 per 100,000 live births. In Lake County, this number is highest in women who identify as White and Non-Hispanic/Latino (25.6, 25.5, respectively). Women who identify as Black/African American had the highest rates of severe maternal morbidity (24.2 per 1,000 delivery hospitalizations).

- In Lake County, mothers between the ages of 15 and 19 who were not married made up the largest percentage of women giving birth in that age group (96.5%).

- Approximately 13.3% of teen mothers in Lake County between the age of age 15 and 19 have given birth to multiple children.

- Lake County Women who identify as Black/African American had the highest percentage of births to infants of low birth rate (12.8%) and infants of very low birth weight (2.6%) – higher than the Lake County averages (8.2%, 1.2%, respectively).

Mt Dora Lighthouse | Lake County

Health Equity Profiles

Demographics

Lake County is rapidly growing in population and has an older population characterized by relatively high levels of people living with disabilities in addition to a growing percentage of community members representing ethnic and racial minorities.

As noted earlier, data in this SVI table comes from the 2019 American Community Survey 5-Year estimates (2015-2019 5-year estimates) and the 2021 Federal Reserve Economic Data (FRED), with trends and changes noted by arrows ⬆⬇. An upward arrow (⬆) indicates an increase of more than 10% from the 2010 American Community Survey 5-Year estimate and the FRED Economic Data, a downward arrow (⬇) indicates a decrease of more than 10%. If no arrow is present, there is no identified change from 2010.

Exhibit 161: Lake County Social Vulnerability Index[117]

	United States	Florida	Lake County
Lake County Population	324,697,795	20,901,636⬆	345,867⬆
Below Poverty	12.3%⬇	12.7%⬇	13.2%⬇
Unemployed	5.4%⬇	5.1%⬇	2.9%⬇
Median Income	$62,843⬆	$55,660⬆	$54,513⬆
Median Age	38.1	42.0	46.9
Age 65 +	15.6%⬆	20.1%⬆	26.5%⬆
Age 17 or Younger	22.6%	20.0%	19.3%
Household with Disability	12.7%	13.7%	17.0%⬆
Single-Parent Households	31.6%	30.2%	35.9%⬇
Ethnic Minority	39.3%⬆	46.1%⬆	30.3%⬆
Do Not Speak English	8.4%	11.9%	4.7%⬆
Multi-Unit Housing Structures	26.3%	30.5%	12.2%
Mobile Homes	6.2%	8.9%	18.5%⬇
No Vehicle	8.6%	6.3%	4.9%⬇

Source: American Community Survey, 2010 & 2019 5-Year Estimates

- Although median household income has risen in Lake County ($54,513), it remains slightly lower than the state and national average. Additionally, the percentage of Lake County residents living 100% below the Federal Poverty Level (FPL) has decreased by at least 10% since 2010.
- Over one-fourth of the population in Lake County is 65 years and older (26.5%), which is higher than the state (20.1%) and national (15.6%) figures.

[117]With 2010 Change Rates for Comparison Where Change Is Greater Than 10 Percent.

- Over the past 10 years, the percentage of households who have a person with a disability has increased in Lake County to 17.0% (compared to the national average of 12.7.)
- The percentage of single-parent households in Lake County (35.9%) is higher than in Florida (30.2%) and the United States (31.6%), despite a decrease in the past 10 years.
- Approximately 30.3% of residents in Lake County identify as an ethnic minority. In comparison to national and state figures, the percentage of people who do not speak English is lowest in Lake County (4.7%).
- The percentage of people living in mobile homes is much higher in Lake County (18.5%) than in Florida (8.9%) and the United States (6.2%). The percentage of people who have no vehicle has decreased over the past 10 years and remains low in Lake County (4.9%).

Tavares Pavilion | Lake County

Life expectancy by race and ethnicity reveals the consequences of health disparities, as the median life expectancy for members of the Black/African American community in Lake County is nearly three years shorter than the county average and four years shorter than the statewide average. Asian residents have a notably higher life expectancy than other races and the surrounding service area, state and national averages.

Exhibit 162: Median Life Expectancy[118] **by Race & Ethnicity**

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
U.S.	77.8	ND	72.0*	ND	ND	79.9	78.0
Florida	79.4	79.7	76.7	ND	ND	83.0	78.5
Lake County	78.1	78.2	75.5	90.2	ND	81.4	77.6

Sources: For state and county data except Asian and Other/Multiple Races: Florida Department of Health referencing data from 2018-2020 (https://www.flhealthcharts.gov/ChartsReports/rdPage.aspx?rdReport=ChartsProfiles.LifeExpectancyProfile&islYears=2020 retrieved June 9, 2022). For Asian and Other/Multiple Races data: County Health Rankings, referencing data from 2018-2020 (https://www.countyhealthrankings.org/app/florida/2022/measure/outcomes/147/data, retrieved June 9, 2022). For U.S. data: National Center for Health Statistics. 2021, referencing 2020 data (https://www.cdc.gov/nchs/products/databriefs/db427.htm, retrieved June 9, 2022).
*This data point represents those identified as Black/African American, not of Hispanic/Latino origin, while the other figures in this column are only indicative of race.

Bountiful Farms | Lake County

[118]Life expectancy is a theoretical estimate of the average number of years from birth a person is expected to live. It is based on current death rates by age. Persons moving into or out of a geographic area, getting older and changes in death rates may change this estimate.

Social Determinants of Health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks. Social determinants of health have a major impact on people's health, well-being and quality of life and heavily contribute to wide health disparities and inequities.[119] The following section draws attention to health-related disparities experienced by different races and ethnicities in Lake County focused on housing, education, employment, income and health care access. In Lake County, significant housing disparities exist for residents who identify as Asian, Other/Multiple Races, Black/African American and Hispanic/Latino. Racial and ethnic minorities in Lake County may face unique barriers to higher education. Black/African American and Hispanic/Latino individuals have lower college enrollment and graduation rates compared to White individuals. Latino individuals are most likely to attend college part-time, which reduces their odds of graduating.[120]

Educational attainment and unemployment rates in Lake County vary across each race and ethnicity, but those who identify as Hispanic/Latino present greater disparities.

Exhibit 163: Educational Attainment (percent high school diploma or higher)

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
U.S.	88.5%	90.7%	86.7%	87.3%	74.2%	70.3%	93.2%
Florida	88.5%	90.2%	83.7%	87.2%	82.1%	80.4%	93.0%
Lake County	90.0%	90.7%	85.6%	92.5%	85.9%	83.3%	91.7%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The number of Hispanic/Latino residents in Lake County who have a high school diploma is nearly seven percentage points lower than the County average (83.3% 90.0%, respectively).
- The population of Lake County residents who identify as Black/African American with a high school diploma is lower than the Lake County average (85.6%, 90.0%, respectively).

[119]Healthy People 2030. Social Determinants of Health.
[120]Healthy People 2030, Enrollment in Higher Education.

Housing in Lake County in 2020 remains a challenge even though the percentage of severely cost burdened households (i.e., those spending 50% or more of income on direct housing costs) is lower than the Florida average, 13% and 17%, respectively.[121] Additionally, fewer homes in Lake County have severe housing problems.[122]

Exhibit 164: Housing Challenges in Lake County

	Severe Housing Cost Burdened	Severe Housing Problems
Lake County	13%	14%
Florida	17%	19%

Exhibit 165: Population with a Bachelor's Degree or Higher by Race & Ethnicity
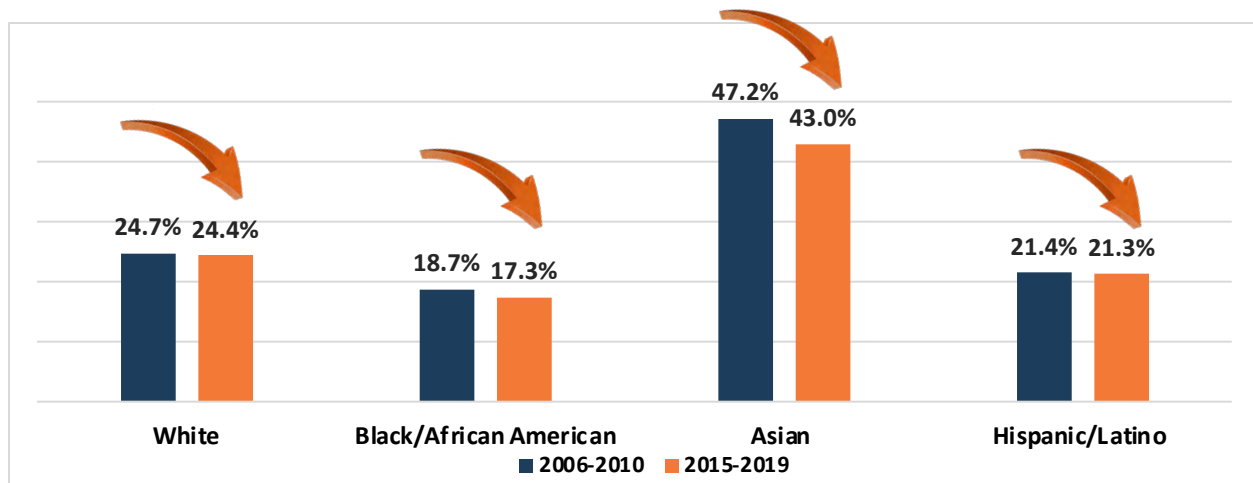
- Asian adults in Lake County are approximately twice as likely to have earned a Bachelor's degree or higher compared to others.
- Black/African Americans are the least likely to have earned similar academic levels, as about one in six (17.3%) have a Bachelor's degree or higher.
- Similarly, one in seven (14.0%) Blacks/African Americans have no high school diploma.

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[121]County Health Rankings. Available at https://www.countyhealthrankings.org/app/florida/2022/measure/factors/154/data. 2016-2020 5-year averages.
[122]Severe Housing Problems, Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities or lack of plumbing facilities. Available at https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-transit/severe-housing-problems.

Workplace inequalities among racial and ethnic minorities can have negative health consequences as those who are unemployed have reported feelings of depression, anxiety, low self-esteem, demoralization and stress.[123] The figures below represent the percentage of those from each demographic who were unemployed at the time of the measure. These figures are from before the COVID-19 pandemic.

Exhibit 166: Unemployed Civilian Labor Force

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
U.S.	5.4%	4.6%	9.2%	4.3%	7.3%	6.2%	4.4%
Florida	5.4%	4.7%	8.5%	4.4%	6.0%	5.0%	4.7%
Lake County	6.1%	5.5%	7.7%	5.5%	10.7%	6.8%	5.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

The Black/African American population in Lake County presents the lowest median household income.

Exhibit 167: Median Household Income

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
U.S.	$64,994	$68,943	$43,674	$91,775	$55,965	$54,632	$70,843
Florida	$57,703	$61,065	$43,418	$73,412	$53,706	$52,092	$63,474
Lake County	$55,792	$56,715	$44,681	$67,381	$53,906	$51,544	$57,308

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

[123]Healthy People 2030, Employment.

Similar to educational achievement data, median household incomes in Lake County differ notably between racial communities.

Exhibit 168: **Median Household Income by Race & Ethnicity**
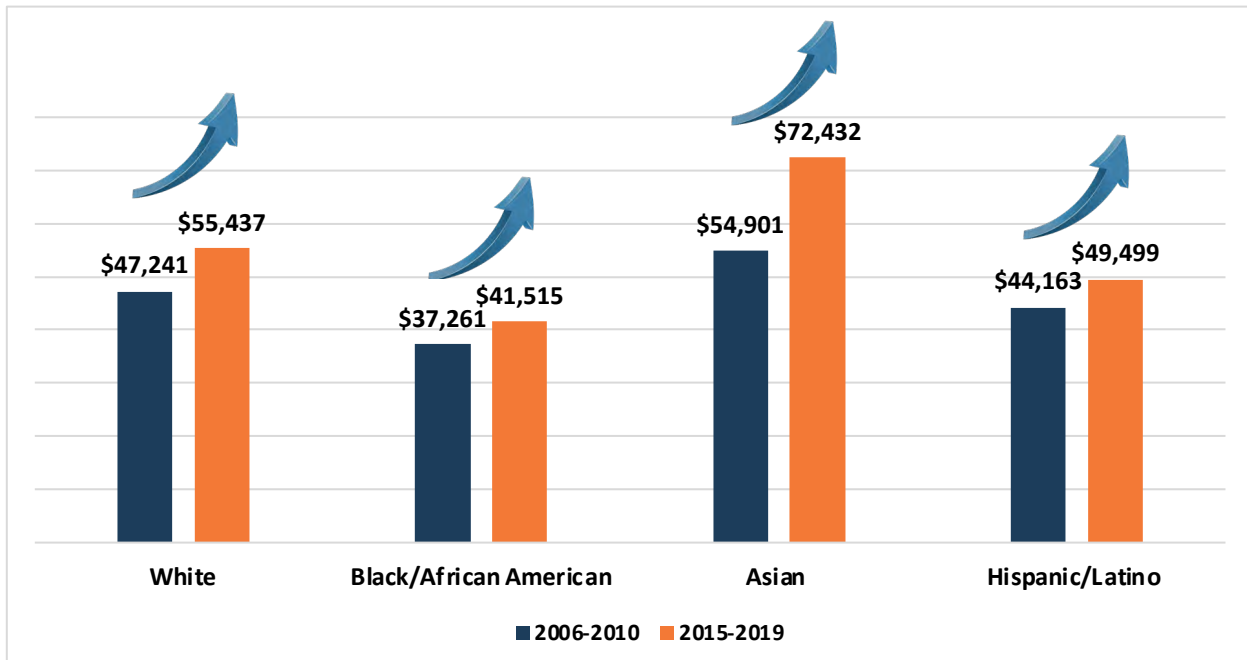
- Median household income for Lake County Asian community members is approximately 40% higher than for Whites.
- Median income levels for Lake County Whites and Black/African Americans increased about 20% from 2010 to 2019.
- Median incomes for Lake County Asians increased by more than 30% during the same time frame.

Racial and ethnic minorities living in poverty often present more adverse health outcomes compared to the White population in Lake County. Residents of impoverished communities are at increased risk for mental illness, chronic disease, higher mortality and lower life expectancy.[124] In Lake County, a higher percentage of minority populations are living in poverty - which is also reflected in lower median household income per year.

Exhibit 169: Population Living in Poverty

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	12.8%	10.6%	22.1%	10.6%	17.8%	18.3%	9.3%
Florida	13.3%	11.5%	20.7%	11.9%	15.6%	16.4%	9.7%
Lake County	11.1%	10.2%	18.3%	7.0%	12.2%	15.5%	9.1%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The percentage of people who identify as Black/African American, Other/Multiple Races or Hispanic/Latino living 100% below the federal poverty level (18.3%, 12.2%, 15.5%, respectively) is higher compared to people who identify as White (10.2%) and non-Hispanic/Latino (9.1%) in Lake County.

- Similar rates were seen in minority populations under 18 years old that live below the federal poverty level—26.4% Black/African American, 50.6% of another race and 28.2% Hispanic/Latino, higher than Lake County (19.2%). See Exhibit 169.

[124]Healthy People 2030, Poverty.

The percent of people living in poverty in Lake County is higher for Blacks/African Americans than Whites (about twice as high), yet it declined from 2010 to 2019.

Exhibit 170: Trends in Population Living in Poverty by Race or Ethnicity (1-Year Estimate)
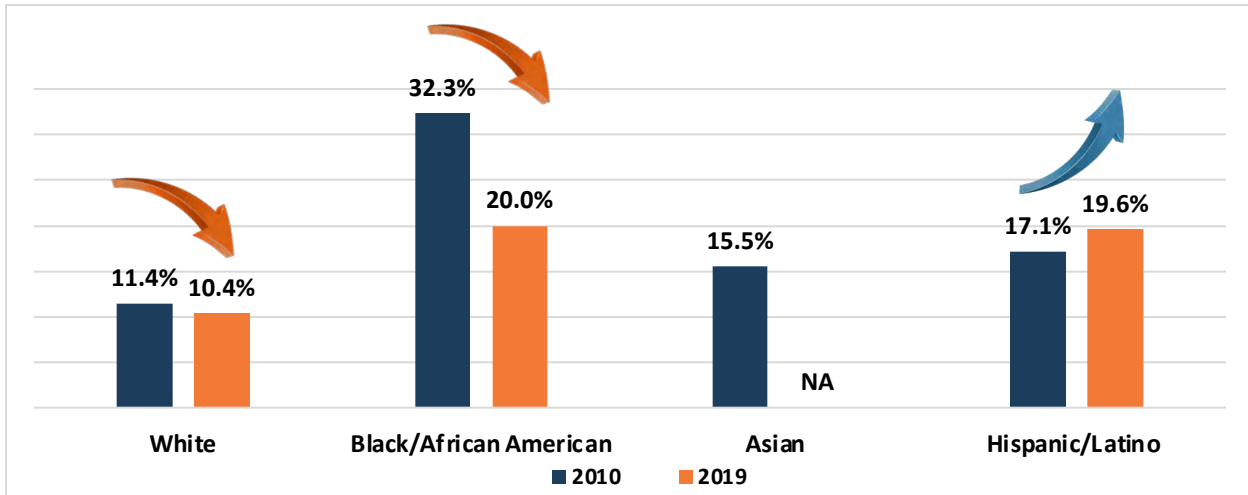
- Significant disparities exist for the Black/African American and Hispanic/Latino populations in Lake County compared to Whites or Asians living in poverty.
- The percent of Black/African Americans living in poverty decreased by approximately 12 percentage points from 2010 to 2019.
- The percent of the Hispanic/Latino population living in poverty increased approximately 2.5 percentage points from 2010 to 2019.
- Note that data for the Asian community was not available for 2019.

Inadequate health insurance coverage is one of the largest barriers to health care access, and the unequal distribution of coverage contributes to disparities in health. The consequences of not having health insurance are exacerbated within specific ethnicities. For example, research indicates that people who speak another language besides English are less likely to receive recommendations for preventative health screenings and immunizations. This factor, in addition to a lack of health insurance, only worsens health outcomes over time.[125] Over three-quarters of the population had health insurance but when looking at utilization of health care services and immunizations, numbers of utilization were low and vary by race and ethnicity.

Exhibit 171: Population with Health Insurance

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	91.3%	92.4%	90.1%	93.6%	84.6%	82.3%	94.1%
Florida	87.3%	88.5%	85.1%	88.6%	82.2%	81.4%	90.7%
Lake County	89.4%	89.5%	89.2%	91.9%	87.9%	84.9%	90.5%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
*Civilian noninstitutionalized population

Ferran Park | Lake County

[125]Healthy People 2030, Access to Primary Care.

Exhibit 172: Utilization of Health Care Services by Adults

2019	Lake County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
Adults who could not see a doctor at least once in the past year due to cost	13.6%	11.5%	16.5%	22.0%
Adults who have a personal doctor	73.2%	79.1%	63.3%	48.7%
Adults who said their overall health was good to excellent	78.7%	79.1%	83.6%	77.0%
Had a medical checkup in the past year	79.0%	83.0%	76.6%	57.6%
Visited a dentist or a dental clinic in the past year (2016)	57.2%	60.0%	24.9%	58.2%
Immunizations				
Received a flu shot in the past year	40.0%	44.5%	30.9%	25.3%
Have ever received a pneumonia vaccination	43.5%	48.7%	24.7%	29.3%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- In 2019, people who identified as Hispanic/Latino ethnicity in Lake County were the group with the highest percentage of adults who could not see a doctor at least once in the past year due to cost. Less than half of Hispanic/Latino residents had a personal doctor (48.7%) while more than three-fourths of non-Hispanic/Latino Whites had a personal doctor (79.1%).

- Approximately 57.6% of Hispanic/Latino residents had a medical checkup in the past year, much lower than non-Hispanic/Latino White residents (83.0%).

- Under 50% of the population of Lake County received immunizations for the flu and pneumonia. Immunizations for the flu in the past year were lowest in Hispanic/Latino populations (25.3%). Only 24.7% of non-Hispanic/Latino Black/African American residents have ever received a pneumonia vaccine.

Healthy Behaviors

Not everyone has the means and opportunity to make healthy decisions. Policies and programs put in place have marginalized some population groups and communities, keeping them from the support and resources necessary to thrive. Many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with a higher risk of cardiovascular disease, type 2 diabetes and obesity. Tobacco use is associated with heart disease, cancer and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers and cirrhosis.[126]

Exhibit 173: Adult Health Behaviors

	Lake County			White			Black/African American		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	19.2%	15.9%	-17.2%	18.6%	15.9%	-14.5%	19.5%	8.6%	-55.9%
Engage in Heavy or Binge Drinking	15.8%	15.9%	0.6%	15.2%	15.7%	3.3%	20.5%	18.5%	-9.8%
Obese	32.6%	30.3%	-7.1%	30.6%	29.7%	-2.9%	41.1%	35.6%	-13.4%
Overweight	32.2%	34.1%	5.9%	33.2%	36.3%	9.3%	28.7%	16.1%	-43.9%
Sedentary	29.3%	26.4%	-9.9%	27.1%	24.9%	-8.1%	30.1%	24.9%	-17.3%
Inactive or Insufficiently Active	58.4%	ND	ND	55.5%	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	44.5%	ND	ND	46.9%	ND	ND	ND	ND	ND
Meet Muscle Strengthening Recommendations	34.3%	29.6%	-13.7%	33.5%	30.4%	-9.3%	ND	29.6%	ND
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	ND	ND	ND	20.9%	18.2%	-12.9%	ND	ND	ND
Engage in Heavy or Binge Drinking	ND	ND	ND	14.9%	15.6%	4.7%	ND	ND	ND
Obese	ND	ND	ND	40.9%	36.8%	-10.0%	ND	ND	ND
Overweight	ND	ND	ND	27.0%	38.4%	42.2%	ND	ND	ND
Sedentary	ND	ND	ND	42.8%	37.5%	-12.4%	ND	ND	ND

[126]County Health Roadmaps & Rankings, Health Behaviors.

	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Inactive or Insufficiently Active	ND	ND	ND	70.9%	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	ND	ND	ND	33.4%	ND	ND	ND	ND	ND
Meet Muscle Strengthening Recommendations	ND	ND	ND	ND	25.1%	ND	ND	ND	ND

Source: Florida Behavioral Risk Factor Surveillance System

In Lake County, 100.8 per 100,000 people under 65 years had preventable hospitalizations from nutritional deficiencies. The nutritional deficiency death rate in Lake County was 2.2 per 100,000 but highest in those who identify as Black/African American (3.1).

Exhibit 174: Nutritionally Deficient Population

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Preventable Hospitalizations Under 65 from Nutritional Deficiencies	100.8	ND	ND	ND	ND	ND
Nutritional Deficiency Death Rate	2.2	2.2	3.1	ND	ND	2.3

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

Chronic Diseases

Research indicates that racial and ethnic minorities experience higher rates of diabetes, obesity, stroke, heart disease and cancer than the White population. In America, the risk of being diagnosed is 77% higher for those identifying as Black/African American and 66% higher among Hispanic/Latino residents, compared to the White population. Additionally, those identifying as Asian American, Native Hawaiian and Pacific Islander are at twice the risk of developing diabetes than the population overall.[127]

Adults in Lake County (2019) who have ever been told they have diabetes was 12.6% and ever been told they had a stroke was 4.1%.

Exhibit 175: Adult Chronic Disease Profile

2019	Lake County	Non-Hispanic/ Latino White	Non-Hispanic /Latino Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Ever Been Told They Had Diabetes	12.6%	13.7%	8.2%	ND	8.7%	ND
Ever Been Told They Had a Stroke	4.1%	4.9%	1.6%	ND	0.1%	ND

Source: Florida Behavioral Risk Factor Surveillance System, 2019

[127]Health Affairs. The United States Can Reduce Socioeconomic Disparities by Focusing on Chronic Diseases, 2017.

Exhibit 176: Chronic Disease Hospitalizations & Death Rates

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Hospitalization Rates						
Coronary Heart Disease	411.3	383.1	405.0	993.2	373.1	414.2
Congestive Heart Failure	1,482.0	1,303.8	2,405.0	3,341.3	1,324.5	1,497.7
Stroke	272.0	235.8	377.8	695.8	233.1	270.4
Death Rates						
Congestive Heart Failure	10.9	10.9	12.1	10.4	12.0	10.6
Stroke	39.1	38.2	56.8	ND	44.7	38.7
Coronary Heart Disease	112.7	113.0	114.8	ND	71.6	116.5
Chronic Liver Disease & Cirrhosis	14.8	16.0	8.3	ND	7.2	16.1
Nephritis, Nephrotic Syndrome & Nephrosis	5.6	5.1	13.1	ND	2.8	5.7

Source: Florida Agency for Health Care Administration, 2018 -2020

- The leading cause of hospitalizations per 100,000 in Lake County was congestive heart failure. The leading causes of death per 100,000 in Lake County were coronary heart disease and stroke. Variations in hospitalization and death rates are seen among race and ethnicity.

- Populations who identify as Black/African American and other race had the highest rates of hospitalization for coronary heart disease, congestive heart failure, and stroke compared to those who identify as White, Hispanic/Latino and non-Hispanic/Latino.

- Congestive heart failure and stroke death rates were highest in those who identify as Black/African American and Hispanic/Latino. This population had congestive heart failure death rates of 12.1 per 100,000 while Hispanic/Latino residents had rates of congestive heart failure death of 12.0 per 100,000, slightly higher than in Lake County (10.9). Black/African American residents had stroke death rates of 56.8 per 100,000 while Hispanic/Latino residents had stroke death rates of 44.7 per 100,000, higher than the Lake County average of 39.1 per 100,000.

- Those who identify as Hispanic/Latino had a coronary heart disease death rate of 71.6 per 100,000, lower than Lake County (112.7).

- Prevalence of chronic liver disease and cirrhosis deaths per 100,000 was 16.0 among White residents, 16.1 non-Hispanic/Latino which was higher than Lake County (14.8).

- More than twice as high as the Lake County death rate, nephritis, nephrotic syndrome and nephrosis death rate was 13.1 per 100,000 among Black/African American residents.

Although cancer incidence and mortality overall are declining in the United States, certain groups continue to be at increased risk of developing or dying from particular cancers. Due to social, environmental and economic disadvantages, racial and ethnic groups bear a disproportionate burden of cancer compared with other groups. Cancer disparities can also be seen when outcomes are improving overall but the improvements are not seen in some groups relative to other groups.[128]

The leading types of cancer in residents of Lake County in 2019 were breast and prostate. The leading cause of cancer death in Lake County was lung cancer. Disparities by race and ethnicity were seen across cancer incidence and death. The overall cancer-related death rate was higher in those who identify as Black/African American (195.4) in comparison to Lake County (153.0). Approximately 47% to 49% of all races and ethnicities received a diagnosis of their cancer is at an advanced stage.

Exhibit 177: Cancer Incidence

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Total Incidence Rate	532.2	523.0	464.7	281.2	364.7	551.4
Cervical Cancer	7.2	6.9	ND	ND	ND	7.4
Prostate Cancer	103.7	92.6	161.7	87.2	95.2	76.8
Breast Cancer	134.0	131.6	108.7	72.1	94.0	137.4
Colorectal Cancer	40.5	41.4	26.3	ND	27.6	42.1
Lung Cancer	66.6	68.1	40.7	31.3	32.0	33.9

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

[128]National Cancer Institute, Cancer Disparities.

Exhibit 178: Cancer Cases at Advanced Stage (Stage 3 or More) When Diagnosed

Lake County	White	Black/ African American	Other Race	Hispanic/Latino	Non-Hispanic/ Latino
47.4%	48.1%	49.0%	ND	47.7%	47.4%

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

Exhibit 179: Deaths Caused by Cancer

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Total Cancer Death Rate	153.0	151.1	195.4	123.3	108.8	156.3
Cervical Cancer	2.6	1.4	1.7	ND	2.4	1.1
Prostate Cancer	17.6	7.3	19.8	ND	6.4	8.1
Breast Cancer	9.7	8.5	22.4	ND	6.0	10.3
Colorectal Cancer	14.0	14.1	17.2	ND	9.2	14.6
Lung Cancer	38.4	40.1	24.0	ND	16.7	40.1

Source: Florida Department of Health, Bureau of Vital Statistics, 2018-2020

- The population that identifies as Black/African American presents the highest rates of breast cancer deaths of 22.4 per 100,000 more than two times higher than Lake County 9.7 per 100,000 but had lower rates of breast cancer incidence than Lake County (108.7, 134.0, respectively). This population also p resents the highest rate of colorectal cancer death rate of 17.2 per 100,000, higher than Lake County (14.0), but had much lower rates of colorectal cancer incidence than Lake County (26.3, 40.5, respectively).
- Overall cancer rates were higher in those who identify as non-Hispanic/Latino (551.4) than in Lake County (532.2). See Exhibit 177.
- Prostate cancer rates were higher in those who identify as Black/African American (161.7) than in Lake County (103.7). Compared to Lake County prostate cancer death (17.6), Black/African American residents had higher rates of death due to prostate cancer (19.8).
- Colorectal cancer was lowest in those who identify as Black/African American (26.3) and Hispanic/Latino (27.6) – approximately half as low as Lake County (40.5).
- Those who identify as White present slightly higher rates of lung cancer than Lake County (68.1, 66.6, respectively).

Emergency room visits due to diabetes were over two times higher in those who identify as Black/African American (538.4) than the Lake County average (241.4).

Exhibit 180: Diabetes Emergency Room Visits

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Emergency Room Visits Due to Diabetes	241.4	183.0	538.4	579.1	245.3	247.6
Preventable Hospitalizations Under 65 from Diabetes	178.9	ND	ND	ND	ND	ND
Hospitalizations from or with Diabetes	2,651.7	ND	ND	ND	ND	ND

Source: Florida Agency for Health Care Administration, 2018-2020

In Lake County, the prevalence of respiratory disease decreased from 2019 to 2020. In the tables that follow, CLRD is the acronym used for Chronic Lower Respiratory Disease.

Exhibit 181: Prevalence of Respiratory Disease[129]

Per 100,000	Lake County			White			Black/African American		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	407.3	296.9	-27.1%	241.1	182.9	-24.1%	815.7	660.1	-19.1%
Asthma Hospitalizations	68.4	39.8	-41.8%	43.7	22.2	-49.2%	120.6	99.1	-17.8%
Hospitalizations from CLRD (Including Asthma)	322.1	176.5	-45.2%	285.2	154.5	-45.8%	413.3	267.8	-35.2%
CLRD Death Rate	45.4	38.6	-15.0%	47.3	39.3	-16.9%	32.2	42.7	32.6%
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	1,464.5	837.7	-42.8%	488.9	317.2	-35.1%	388.1	296.1	-23.7%
Asthma Hospitalizations	225.5	131.3	-41.8%	86.8	55.6	-35.9%	61.9	38.6	-37.6%
Hospitalizations from CLRD (Including Asthma)	613.4	315.4	-48.6%	280.9	142.4	-49.3%	324.6	183.7	-43.4%
CLRD Death Rate	ND	ND	ND	21.9	12.2	44.3%	47.2	41.0	-13.1%

Source: Florida Agency for Health Care Administration

[129]Note: All Rates of Death in This Report Are Age-Adjusted

Non-fatal unintentional injury hospitalizations in Lake County had rates of 761.3 per 100,000 people in 2019 and 725.5 per 100,000 in 2020. In 2019, those who identify as White and non-Hispanic/Latino had the highest rates of unintentional poisoning death rate (31.9, 32.3, respectively), drug poisoning death rate (35.5, 35.9, respectively) and unintentional falls death rate (26.4, 26.0, respectively).

Exhibit 182: Unintentional Injuries, 2019

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Unintentional Injury Hospitalizations	761.3	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	82.6	84.1	78.9	58.9	42.8	88.5
Unintentional Poisoning Death Rate	28.6	31.9	21.4	0.0	12.3	32.3
Drug Poisoning Death Rate	31.7	35.5	21.4	0.0	12.3	35.9
Hospitalizations for Non-Fatal Unintentional Falls	288.0	277.9	156.9	571.6	197.8	289.6
Unintentional Falls Death Rate	25.2	26.4	16.0	8.1	11.0	26.0
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	82.8	70.6	82.5	195.9	48.1	80.6
Motor Vehicle Crash Death Rate	20.4	19.6	25.2	25.6	10.8	ND
Hospitalizations for Non-Fatal Traumatic Brain Injuries	129.2	123.6	79.7	258.3	52.7	133.4
Traumatic Brain Injury Death Rate	22.5	23.9	18.1	ND	12.0	25.2
Hospitalizations for Non-Fatal Firearm Injuries	6.2	2.4	32.4	0.0	0.0	4.4
Firearms-Related Death Rate	14.5	16.1	7.9	0.0	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	3.1	1.4	14.9	0.0	0.0	2.4
Unintentional Death Rate Due to Fire	0.3	0.1	2.1	0.0	0.0	ND
Unintentional Drownings Death Rate	2.2	1.2	7.1	0.0	3.2	ND

Source: Florida Agency for Health Care Administration, 2019

- The population that identifies as Black/African American had the highest rates of hospitalizations for non-fatal firearm injuries (32.4), hospitalizations for non-fatal unintentional firearm injuries (14.9), unintentional death due to fire (2.1) and unintentional death due to drowning (7.1) - all higher rates than Lake County (6.2, 3.1, 0.3, 2.2, respectively).
- Those who identify as Black/African American and of another race, had the highest rates of motor vehicle crash death rate (25.2, 25.6, respectively).
- Hospitalizations for non-fatal unintentional falls (571.6), hospitalizations for non-fatal motor vehicle traffic-related injuries (195.9) and hospitalizations for non-fatal traumatic brain injuries (258.3) in those who identify as another race had rates close to two times higher than the Lake County average (288.0, 82.8, 129.2, respectively).

Exhibit 183: Unintentional Injuries, 2020

Per 100,000	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Unintentional Injury Hospitalizations	725.5	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	86.7	92.6	57.1	ND	66.6	88.7
Unintentional Poisoning Death Rate	30.6	34.8	13.1	ND	22.7	33.3
Drug Poisoning Death Rate	31.6	35.7	15.3	13.3	21.0	34.7
Hospitalizations for Non-Fatal Unintentional Falls	264.6	264.0	156.6	432.3	166.9	272.0
Unintentional Falls Death Rate	25.9	27.4	11.4	ND	16.2	26.4
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	82.7	68.6	56.0	248.5	55.6	79.6
Motor Vehicle Crash Death Rate	22.8	22.5	25.9	ND	24.0	21.3
Hospitalizations for Non-Fatal Traumatic Brain Injuries	116.6	117.4	54.3	189.9	43.8	124.0
Traumatic Brain Injury Death Rate	27.4	28.3	20.1	ND	17.8	29.1
Hospitalizations for Non-Fatal Firearm Injuries	9.0	5.1	22.4	ND	ND	8.6
Firearms-Related Death Rate	17.6	16.2	29.4	10.3	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	6.6	4.8	ND	ND	ND	6.1
Unintentional Death Rate Due to Fire	0.0	0.0	0.0	ND	0.0	0.0
Unintentional Drownings Death Rate	2.9	2.8	4.9	ND	0.0	3.3

Source: Florida Agency for Health Care Administration, 2020

- The population that identifies as White and non-Hispanic/Latino had the highest rates of deaths due to unintentional poisoning (34.8, 33.3, respectively), deaths due to drug poisoning (35.7, 34.7, respectively), deaths due to unintentional falls (27.4, 26.4, respectively) and death due to traumatic brain injury (28.3, 29.1, respectively).

- Those who identify as Black/African American race had low rates of unintentional injury and death compared to the Lake County average. Motor vehicle crash death was 25.9 per 100,000. Hospitalizations for non-fatal firearm injuries (22.4), firearms-related death (29.4) and deaths due to unintentional downing (4.9) were notably higher than rates in Lake County (9.0, 17.6, 2.9, respectively).

- Hospitalizations for non-fatal unintentional falls, hospitalizations for non-fatal motor vehicle traffic-related injuries and hospitalizations for non-fatal traumatic brain injuries were highest in those who identify as another race (432.3, 248.5, 189.9, respectively). Hospitalizations for non-fatal unintentional firearm injuries were highest in those who identify as non-Hispanic/Latino at a rate of 6.1 per 100,000 but slightly lower than the Lake County average of 6.6 per 100,000.

Black/African American as well as Hispanic/Latino communities are disproportionately affected by HIV compared to other racial and/ethnic groups. In 2019, the Black/African American community represented 13% of the United States population, but 40% of people with HIV. Hispanic/Latino and Latino-identified residents represented 18.5% of the population, but 25% of people with HIV.[130]

The data below shows HIV and AIDS diagnoses and death in residents of Lake County. When looking at rates by race and ethnicity, disparities are seen in those who identify as Black/African American and Hispanic/Latino.

Exhibit 184: HIV & AIDS Diagnoses

Per 100,000 (except as noted)	Lake County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino
Adults Less Than 65 Who Have Ever Been Tested for HIV (2019)	49.1%	47.8%	55.0%	52.8%	ND
Population with HIV (2020)	297.4	181.3	1,059	335.7	289.8
2017-2019					
HIV Diagnoses	12.3	10.7	6.5	26.4	9.8
AIDS Diagnoses	5.1	2.8	16.3	8.8	4.5

Source: Florida Department of Health, Bureau of Communicable Diseases

Exhibit 185: HIV & AIDS Death Rate

	Lake County	White	Black/African American	Hispanic/ Latino	Non-Hispanic/ Latino
Per 100,000	1.4	0.8	5.9	0.6	1.7

Source: Florida Department of Health. Bureau of Communicable Diseases, 2018-2020

- The population with HIV within the Black/African American community is almost four times higher than in Lake County average. HIV and AIDS death rate was highest in those who identify as Black/African American (5.9).
- Those who identify as Hispanic/Latino had the highest HIV diagnoses of 26.4 per 100,000, more than twice as high as Lake County (12.3).
- Those who identify as Non-Hispanic/Latino Black/African American had the highest AIDS diagnoses of 16.3 per 100,000, approximately three times higher than Lake County (5.1).

[130]Hiv.Gov, Impact on Racial And Ethnic Minorities.

Homicide & Suicide

Between 2019 and 2020, homicide rates in Lake County nearly doubled, while the suicide rate decreased by 2.2 percentage points.

Exhibit 186: Homicide & Suicide Deaths by Race

Per 100,000	Lake County		White		Black/African American	
	2019	**2020**	**2019**	**2020**	**2019**	**2020**
Homicide	3.3	6.1	3.6	3.3	2.4	22.0
Suicide	20.0	17.8	22.5	20.2	5.4	9.7

Source: Florida Department of Health. Bureau of Vital Statistics

Exhibit 187: Homicide & Suicide Deaths by Ethnicity

	Hispanic/Latino		Non-Hispanic/Latino	
	2019	**2020**	**2019**	**2020**
Homicide	3.8	4.8	ND	6.1
Suicide	3.8	6.2	ND	19.9

Source: Florida Department of Health. Bureau of Vital Statistics

- In 2019, the homicide rate was highest in those who identify as White (3.6) and Hispanic/Latino (3.8) similar to the Lake County total (3.3). Suicide rates were also highest in those who identify as White, 22.5 per 100,000, slightly higher compared to Lake County (20.0).
- In 2020, those who identified as non-Hispanic/Latino had the highest rate of suicide at 19.9 per 100,000, slightly higher than Lake County (17.8). Additionally, homicide rates were highest among those who identified as Black/African American (22.0) almost four times higher than the Lake County average (6.1).

Maternal Health

Historically, maternal mortality in the United States has been a key indicator of the overall health of a population. Maternal mortality reflects the whole health system and illustrates the socio-cultural, political and economic philosophy of society. Over the past two decades, the United States maternal mortality rate has not improved while decreasing for other regions of the world. Significant racial and ethnic disparities persist in both the rate of women in the United States who die due to complications of pregnancy or delivery and the rate that women experience negative health consequences due to unexpected pregnancy or childbirth outcomes.[131]

Severe Maternal Morbidity is the presence of a complication during a hospital delivery. Complications during pregnancy or delivery can lead to negative outcomes for the woman and the infant. Monitoring the trend and disparities in severe maternal morbidity allows public health and medical professionals to take steps to improve the health of women and children.

Maternal mortality in Lake County (2018-2020) was highest in women who identify as White and Non-Hispanic/Latino (25.6, 25.5, respectively), higher than in Lake County (19.8). Women who identify as Black/African American had the highest rates of severe maternal morbidity (24.2).

Exhibit 188: Maternal Fatalities[132]

	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Maternal Mortality per 100,000 live births	19.8	25.6	ND	ND	ND	25.5
Severe Maternal Morbidity per 1,000 delivery hospitalizations	16.7	14.3	24.2	18.6	13.5	17.5

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

Exhibit 189: Prenatal Care

	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Births to Mothers with First-Trimester Prenatal Care	78.3%	79.5%	75.8%	ND	74.2%	79.5%
Births to Mothers with No Prenatal Care	2.6%	2.6%	2.6%	ND	2.6%	0.4%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

[131]United States Commission on Civil Rights 2021 Statutory Enforcement Report, Racial Disparities in Maternal Health.
[132]Maternal Deaths, Rate Per 100,000 Live Births. Severe Maternal Morbidity, Rate Per 1,000 Delivery Hospitalizations.

- In Lake County, the maternal mortality rate was 19.8 per 100,000 live births while severe maternal morbidity was 16.7 per 1,000 delivery hospitalizations.
- The lowest percentage of individuals receiving first-trimester prenatal care were women who identify as Hispanic/Latino, while those who identify as non-Hispanic/Latino made up the lowest percentage of women who received no prenatal care.
- More than three-quarters of pregnant mothers received first trimester prenatal care (78.3%). A very small percentage of mothers received no prenatal care (2.6%).

In Lake County, mothers between the ages of 15 and 19 who were not married made up the largest percentage of women giving birth in that age group (96.5%).

Exhibit 190: Maternal Characteristics

	Lake County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Repeat Births to Mothers Ages 15-19	13.3%	14.2%	19.8%	ND	13.7%	15.8%
Births to Unwed Mothers Ages 15-19	96.5%	92.7%	99.1%	ND	90.3%	95.4%
Births to Unwed Mothers Ages 15-44	46.0%	42.8%	67.6%	ND	47.7%	45.5%
Births to Mothers Who Are Underweight at the Time Pregnancy Occurred[133]	4.1%	4.0%	3.3%	ND	3.6%	4.2%
Births to Mothers Who Are Overweight at the Time Pregnancy Occurred[134]	26.6%	26.6%	26.7%	ND	30.3%	25.5%
Births to Mothers Who Are Obese at Time Pregnancy Occurred[135]	35.7%	32.0%	37.7%	ND	30.2%	30.8%
Births with Inter-Pregnancy Interval[136]	34.8%	35.2%	34.7%	ND	30.5%	36.1%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Approximately 13.3% of teen mothers between the age of age 15 and 19 have given birth to multiple children, 96.5% of teen mothers were not married and 46.0% of women aged 15 to 44 were not married (67.6% in the Black/African American community).
- Approximately 35.7% of all mothers were obese at the time pregnancy occurred.

[133] BMI <18.5
[134] BMI 25.0-29.9
[135] BMI >= 30
[136] < 18 Months.

In Lake County, the three-year cumulative sum (2018 to 2020) indicates that just over 10% of infants were born preterm, 8.2% of infants were born at low birth weight, 1.2% of infants were born at very low birth weight and 84.3% of infants of very low birth weight were born in subspeciality perinatal centers. County-wide rates of fetal deaths were 5.7 per 1,000 deliveries and sudden unexpected infant deaths were 0.5 per 1,000 deliveries.

Exhibit 191: Infant Characteristics

	Lake County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Preterm Births[137]	10.3%	9.9%	13.1%	8.9%	9.6%	10.5%
Very Low Birth Weight Infants Born in Subspecialty Perinatal Centers	84.3%	86.8%	85.0%	ND	79.4%	85.7%
Low Birth Weight[138]	8.2%	7.3%	12.8%	ND	7.9%	8.4%
Very Low Birth Weight[139]	1.2%	1.2%	2.6%	ND	1.5%	1.3%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

Exhibit 192: Fetal & Infant Fatalities

Per 1,000 Deliveries	Lake County	White	Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino
Fetal Deaths	5.7	4.6	12.3	4.1	6.0
Infant Deaths (0-364 days)	6.2	5.4	5.2	6.8	5.9
Sudden Unexpected Infant Deaths	0.5	0.1	1.3	0.0	0.4

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Women who identify as Black/African American had the highest percentage of births to infants of low birth rate (12.8%) and infants of very low birth weight (2.6%) – higher than Lake County (8.2%, 1.2%, respectively).
- Women who identify as Black/African American had rates of fetal death and sudden unexpected infant deaths (12.3, 1.3, respectively) more than double those of Lake County (5.7, 0.5, respectively).

[137] < 37 Weeks of Gestation.
[138] <2500 Grams.
[139] < 1500 Grams.

Community Survey Highlights

The community survey conducted for the CFC included over 4,000 total responses. As shown below, there were 266 responses from Lake County residents.

Exhibit 193: Survey Responses by County

In which county do you live?					
		Responses	**Total Percent**	**Net Percent**	**Cumulative Percent**
	Lake	266	6.2	7.2	7.2
	Orange	822	19.3	22.2	29.4
	Osceola	1729	40.5	46.7	76.2
	Seminole	639	15.0	17.3	93.4
	Other	243	5.7	6.6	100.0
	Total	**3,699**	**86.7**	**100.0**	
	No Response	565	13.3		
Total		**4,264**	**100.0**		

As a result of the survey, the highest priority needs included the following:

1. Affordable, quality housing
2. Mental health care services for seniors
3. Suicide prevention
4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Dental care for children, especially those from low income or other priority communities
6. Community services to reduce illegal drug use and abuse or misuse of prescription medications
7. Access to free or low-cost health care services for all residents
8. Access to primary care services
9. Support for family members of a person being treated for substance use disorder
10. Mental health outpatient services capacity
11. Mental health crisis services and community awareness of available resources
12. Childcare services, especially for children with special needs
13. Youth mental health services
14. Suicide prevention initiatives in middle and high schools
15. Mental health and substance use disorder transition care for inmates being released from jail

Prioritization Process Summary

As noted above, the secondary data analysis, qualitative research and community survey generated a list of approximately 50 granular needs. The needs were then prioritized by a group of Lake County leaders using the Modified Delphi method (i.e., a three-stage mixed qualitative and quantitative) process. The results of the prioritization process yielded a rank-ordered set of prioritized needs falling into five specific categories. The top 15 granular needs were then folded under the five specific categories. Please see the results below.

Top Five Needs

- Increase system capacity
- Enhance mental health (including substance use disorder) outreach and treatment
- Streamline access to care
- Refine primary care and specialized medical care (e.g., chronic conditions) services
- Address housing and other social determinants

Top 15 Granular Issues

1. Affordable, quality housing
2. Mental health care for seniors services
3. Suicide prevention
4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Dental care for children, especially those from low income or other priority communities
6. Community services to reduce illegal drug use and abuse or misuse of prescription medications
7. Access to free or low-cost health care services for all residents
8. Access to primary care services
9. Support for family members of a person being treated for substance use disorder
10. Mental health outpatient services capacity
11. Mental health crisis services and community awareness of available resources
12. Childcare services, especially for children with special needs
13. Youth mental health services
14. Suicide prevention initiatives in middle and high schools
15. Mental health and substance use disorder transition care for inmates being released from jail

Top 15 Granular Issues within the Five Top Needs

Increase system capacity

     5. Dental care for children, especially those from low income or other priority communities

     4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community

     10. Mental health outpatient services capacity

     12. Childcare services, especially for children with special needs

Enhance Mental Health (including Substance Use Disorder) outreach and treatment

     2. Mental health care for seniors services

     3. Suicide prevention

     6. Community services to reduce illegal drug use and abuse or misuse of prescription medications

     9. Support for family members of a person being treated for substance use disorder

     13. Youth mental health services

     14. Suicide prevention initiatives in middle and high schools

     15. Mental health and substance use disorder transition care for inmates being released from jail

Streamline access to care

     7. Access to free or low-cost health care services for all residents

     8. Access to primary care services

     11. Mental health crisis services and community awareness of available resources

Refine primary care and specialized medical care (e.g., chronic conditions) services

     ## Ongoing programs to address core chronic disease issues and leading causes of death and/or hospitalization[140]

Support additional affordable, quality housing

     1. Affordable, quality housing

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[140]Note that the double "pound signs, ##" indicate that the referenced need was contributed by community leaders during Round 3 of the prioritization process.

Citrus Tower | Lake County

Orange County

Executive Summary

Health, wellness, and related needs significantly impact quality of life. The place where we are raised, adverse childhood experiences and other characteristics (often impacted by historically linked discrimination or exclusion) impact an individual's health and well-being.

The short list of health issues highlighted below are unique due to their geographic and social realities. The data points help illustrate some of the impacts that these health equity realities are having on individuals' health in Orange County.

- In Orange County, 60% of residents identify as an ethnic minority – second highest of all the CFC counties and higher than the statewide percentage (46.1%), and the United States (39.3%).
- Black/African American residents had a higher percentage of individuals who are 25 years and older without a high school diploma (15.2%) compared to the Orange County average (11.5%).[141]
- Median household income was lowest in those who identify as Black/African American ($47,486) and highest in those who identify as non-Hispanic/Latino ($77,143).
- The percentage of people who identify as Black/African American and Hispanic/Latino in Orange County had higher rates of living below the federal poverty level (18.8%, 17.9%, respectively) than people who identify as White (12.4%) and non-Hispanic/Latino (9.1%).
- The Orange County average for flu immunizations was very low – 22.3% of Hispanic/Latino residents, 22.5% of non-Hispanic/Latino Black/African American residents and 36.0% of non-Hispanic/Latino White residents received a flu vaccine in the past year.
- The prostate cancer incidence rate was highest in those who identify as Black/African American (125.8) and nearly 50% higher than the rate of those identifying as white (80.5).
- In 2019, those who identify as White had the highest death rates of unintentional injury (51.6), unintentional poisoning (23.2), drug poisoning (24.3) —all higher than the average rates in Orange County (44.3, 17.8, 19.0, respectively).
- By race and ethnicity those who identify as non-Hispanic/Latino Black/African American had HIV & AIDS death and diagnosis rates over two times higher than Orange County as a whole.

[141]American Community Survey, 201602019 5-year averages.

- Maternal mortality was highest in women who identify as Black/African American (31.9) more than two times higher than the maternal mortality average in Orange County (12.2).
- Women who identify as Black/African American had higher rates of fetal death, infant deaths and sudden unexpected infant deaths (11.7, 10.6, 1.5, respectively) than Orange County (7.0, 5.7, 0.8, respectively).

Take Flight | Orange County

Health Equity Profiles

Demographics

Notable SVI characteristics are seen in the table below across the United States, Florida and Orange County. Data in this table comes from the 2019 American Community Survey 5 -Year, with trends and changes noted by arrows ↑↓. An upward arrow (↑) indicates an increase of more than 10% from the 2010 American Community Survey 5-Year estimate, a downward arrow (↓) indicates a decrease of more than 10%. If no arrow is present, there is no identified change from 2010.

Exhibit 194: Orange County Social Vulnerability Index[142]

	United States	Florida	Orange County
Orange County Population	324,697,795	20,901,636↑	1,349,746↑
Below Poverty	12.3%↓	12.7%↓	12.6%↓
Unemployed	5.4%↓	5.1%↓	3.4%↓
Median Income	$62,843↑	$55,660↑	$58,254↑
Median Age	38.1	42.0	35.1
Age 65 +	15.6%↑	20.1%↑	11.6%↑
Age 17 or Younger	22.6%	20.0%	22.4%
Household with Disability	12.7%	13.7%	11.4%↑
Single-Parent Households	31.6%	30.2%	30.0%
Ethnic Minority	39.3%↑	46.1%↑	60.0%↑
Do not Speak English	8.4%	11.9%	13.9%
Multi-Unit Housing Structures	26.3%	30.5%	33.5%
Mobile Homes	6.2%	8.9%	3.7%↓
No Vehicle	8.6%	6.3%	5.7%

Source: American Community Survey, 2010 & 2019 5-Year Estimates

- The percentage of people that live below the poverty line has decreased at the national, state and Orange County levels (12.3%, 12.7%, 12.6%, respectively) in 2019 versus 2010.
- The median household income per year in Orange County ($58,254) is higher than the state median income per year ($55,660).
- The percentage of the population who are 65 years and older has increased at the national, state and Orange County levels.
- Over the past 10 years, the percentage of households who have a person with a disability has increased in Orange County to 11.4%.
- In Orange County, 60% of residents identify as an ethnic minority, higher than the statewide percentage (46.1%) and the United States (39.3%).

[142]With 2010 Change Rates for Comparison Where Change Is Greater Than 10%

Health disparities indicate differences in health linked with social, economic and/or environmental disadvantages. Health disparities adversely affect communities who have systematically experienced greater barriers to health, based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.[143]

Black/African American residents have the lowest life expectancy in Orange County (78.4) and when compared to state averages (79.4), though it is higher than the national average (77.8).

Exhibit 195: Median Life Expectancy[144] by Race & Ethnicity

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	77.8	ND	72.0*	ND	ND	79.9	78.0
Florida	79.4	79.7	76.7	ND	ND	83	78.5
Orange County	80	80.2	78.4	89.1	ND	82.8	79.3

Sources: For state and county data except Asian and Other/Multiple Races: Florida Department of Health referencing data from 2018-2020 (https://www.flhealthcharts.gov/ChartsReports/rdPage.aspx?rdReport=ChartsProfiles.LifeExpectancyProfile&islYears=2020 retrieved June 9, 2022). For Asian and Other/Multiple Races data: County Health Rankings, referencing data from 2018-2020 (https://www.countyhealthrankings.org/app/florida/2022/measure/outcomes/147/data, retrieved June 9, 2022). For U.S. data: National Center for Health Statistics. 2021, referencing 2020 data (https://www.cdc.gov/nchs/products/databriefs/db427.htm, retrieved June 9, 2022).
*This data point represents those identified as Black/African American, not of Hispanic/Latino origin, while the other figures in this column are only indicative of race.

[143]Health.Gov. How Does Healthy People 2030 Define Health Disparities And Health Equity?
[144]Life expectancy is a theoretical estimate of the average number of years from birth a person is expected to live. It is based on current death rates by age. Persons moving into or out of a geographic area, getting older and changes in death rates may change this estimate.

Social Determinants of Health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks. Social determinants of health have a major impact on people's health, well-being and quality of life and heavily contribute to wide health disparities and inequities.[145] The following section draws attention to health-related disparities experienced by different races and ethnicities in Orange County focused on housing, education, employment, income and health care access.

Racial and ethnic minorities may face unique barriers to higher education. Black/African American and Hispanic/Latino individuals have lower college enrollment and graduation rates compared to White individuals, and Hispanic/Latino individuals are most likely to attend college part-time, which reduces their odds of graduating.[146] Educational attainment and unemployment rates in Orange County vary across race and ethnicity, but those who identify as Black/African American or Hispanic/Latino had greater disparities.

Exhibit 196: Educational Attainment (percent high school diploma or higher)

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	88.5%	90.7%	86.7%	87.3%	74.2%	70.3%	93.2%
Florida	88.5%	90.2%	83.7%	87.2%	82.1%	80.4%	93.0%
Orange County	88.7%	91.2%	83.6%	87.5%	84.9%	83.8%	94.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The percentage of Hispanic/Latino residents in Orange County who have a high school diploma or higher is nearly five percentage points lower than the County average (83.8%, 88.7%, respectively).

[145]Healthy People 2030. Social Determinants of Health.
[146]Healthy People 2030, Enrollment in Higher Education.

Orange County housing challenges are very similar to the state averages. The percentage of severely cost burdened households (i.e., those spending 50% or more of income on direct housing costs) and those with severe housing problems are at, or near, the Florida average.[147]

Exhibit 197: Housing Challenges in Orange County

	Severe Housing Cost Burdened	Severe Housing Problems
Orange County	18%	21%
Florida	17%	19%

Educational attainment (i.e., the percent of adults with a Bachelor's degree) changed little in Orange County within racial and ethnic groups in 2019. However, notable disparities exist between groups.

Exhibit 198: Population with a Bachelor's Degree or Higher by Race & Ethnicity
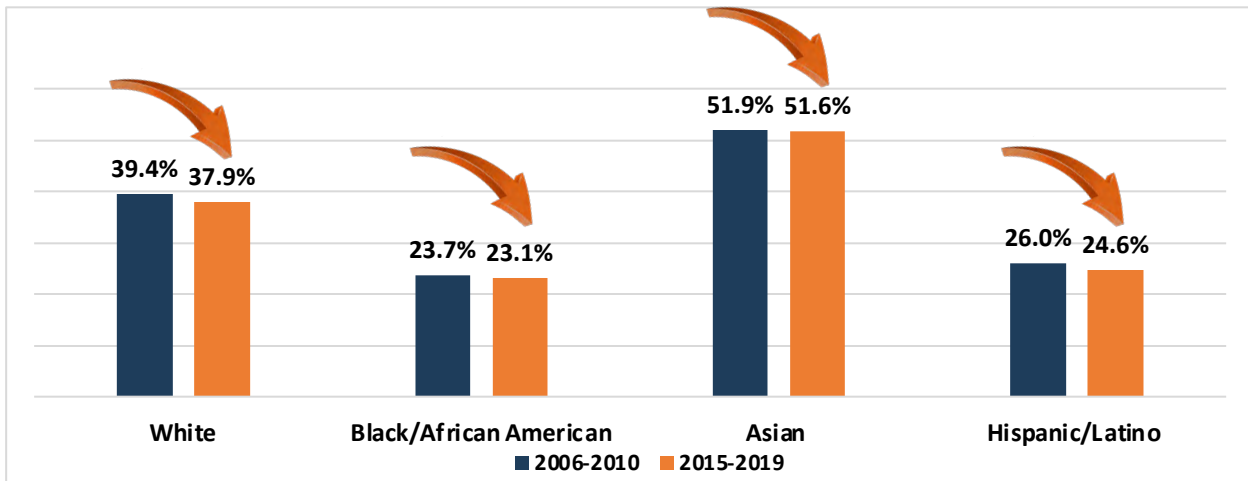
Source: American Community Survey, 2019 5-Year Estimates.

- The Asian community in Orange County has the highest population with a Bachelor's degree.
- The Black/African American community has the lowest population with a Bachelor's degree.
- All racial and ethnic groups experienced a decrease of individuals with a Bachelor's degree in the 2015-2019 period.

[147]Severe Housing Problems, Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities or lack of plumbing facilities. Available at https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-transit/severe-housing-problems.

Workplace inequalities among racial and ethnic minorities can have negative health consequences as those who are unemployed have reported feelings of depression, anxiety, low self-esteem, demoralization and stress.[148] The figures below represent the percentage of those from each demographic who were unemployed at the time of the measure. These figures are from before the COVID-19 pandemic.

Exhibit 199: Unemployed Civilian Labor Force

	Total*	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	5.4%	4.6%	9.2%	4.3%	7.3%	6.2%	4.4%
Florida	5.4%	4.7%	8.5%	4.4%	6.0%	5.0%	4.7%
Orange County	5.5%	4.2%	8.6%	5.9%	6.7%	5.3%	3.9%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- Orange County residents who identify as Black/African American had an unemployment rate of 8.6% - higher than the Orange County average and individuals of different races and ethnicities.

Exhibit 200: Median Household Income

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	$64,994	$68,943	$43,674	$91,775	$55,965	$54,632	$70,843
Florida	$57,703	$61,065	$43,418	$73,412	$53,706	$52,092	$63,474
Orange County	$61,416	$67,656	$47,486	$79,563	$54,595	$49,945	$77,143

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- Median household income was lowest among those who identify as Black/African American ($47,486) and highest in those who identify as White, not Hispanic/Latino. ($77,143).

[148]Healthy People 2030, Employment.

Median household income in Orange County increased similarly from 2010 to 2019. However, Black/African Americans earn notably less than Whites, Asians or Hispanic/Latinos.

Exhibit 201: Trends in Median Household Income by Race and Ethnicity
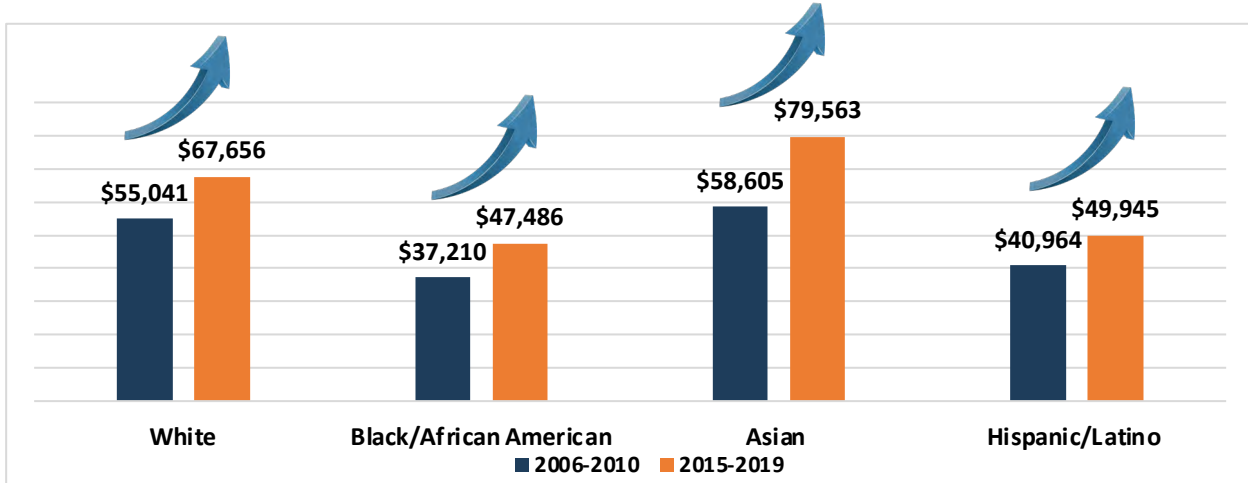
Racial and ethnic minorities living in poverty often present more adverse health outcomes compared to the White population. Residents of impoverished communities are at increased risk for mental illness, chronic disease, higher mortality and lower life expectancy.[149]

In Orange County, minority populations had higher rates of living in poverty which also reflected lower median household income averages.

Exhibit 202: Population Living in Poverty

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	12.8%	10.6%	22.1%	10.6%	17.8%	18.3%	9.3%
Florida	13.3%	11.5%	20.7%	11.9%	15.6%	16.4%	9.7%
Orange County	14.2%	12.4%	18.8%	12.8%	15.4%	17.9%	9.1%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The percentage of people who identify as Black/African American, Other/Multiple Races and Hispanic/Latino had higher rates of living below the federal poverty level (18.8%, 15.4%, 17.9%, respectively) than people who identify as White (12.4%) and White, not-Hispanic/Latino (9.1%).

149Healthy People 2030, Poverty.

The percent of people living in poverty in Orange County declined for each racial and ethnic group (2010 to 2019). However, there were disparities between groups.

Exhibit 203: Trends in the Percent of People Living in Poverty

Population Living in Poverty by Race (1-Year Estimates)

White: 13.3% (2010), 11.0% (2019)
Black/African American: 24.3% (2010), 18.2% (2019)
Asian: 11.2% (2010), 9.5% (2019)
Hispanic/Latino: 22.4% (2010), 15.7% (2019)
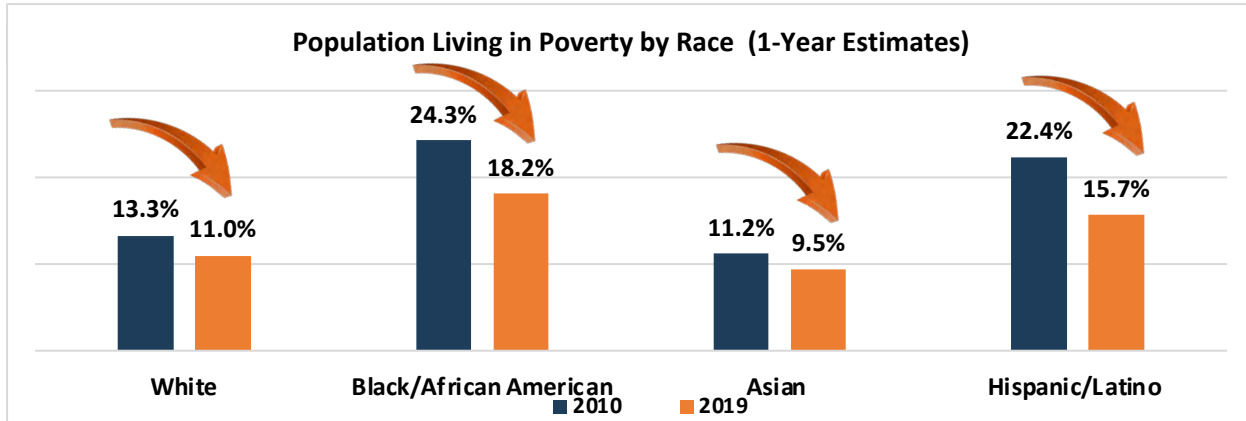
- The Black/African American population has the highest percentage of individuals living in poverty.

Inadequate health insurance coverage is one of the largest barriers to health care access, and the unequal distribution of coverage contributes to disparities in health. The consequences of not having health insurance are exacerbated within specific ethnicities. For example, research indicates that people who speak another language besides English are less likely to receive recommendations for preventative health screenings and immunizations. This factor, in addition to a lack of health insurance, only worsens health outcomes over time.[150] Over three-quarters of the population had health insurance, but utilization of health care services and immunization numbers varied by race and ethnicity.

Exhibit 204: Population with Health Insurance

	Total*	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	91.3%	92.4%	90.1%	93.6%	84.6%	82.3%	94.1%
Florida	87.3%	88.5%	85.1%	88.6%	82.2%	81.4%	90.7%
Orange County	86.8%	88.5%	85.8%	87.5%	81.1%	82.2%	91.3%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
*Civilian noninstitutionalized population

- Orange County residents that are Hispanic/Latino, Black/African American and of another race had lower percentages of having health insurance (82.2%, 85.8% and 81.1%) than the Orange County average (86.8%).

[150]Healthy People 2030, Access to Primary Care.

Exhibit 205: Utilization of Health Care Services by Adults

2019	Orange County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
Adults who could not see a doctor at least once in the past year due to cost	15.2%	11.4%	16.0%	19.1%
Adults who have a personal doctor	67.0%	70.9%	67.5%	59.0%
Adults who said their overall health was good to excellent	79.8%	86.5%	76.9%	74.9%
Had a medical checkup in the past year	75.2%	73.9%	81.8%	72.1%
Visited a dentist or a dental clinic in the past year (2016)	62.7%	67.5%	63.6%	55.5%
Immunizations				
Received a Flu Shot in The Past Year	28.4%	36.0%	22.5%	22.3%
Have Ever Received a Pneumonia Vaccination	28.9%	34.7%	23.3%	25.4%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- People who identify as Hispanic/Latino were the group with the highest percentage of adults who could not see a doctor at least once in the past year due to cost. Only 59.0% of Hispanic/Latino residents had a personal doctor, lower than non-Hispanic/ Latino White residents (70.9%).

- In 2016, 55.5% of Hispanic/Latino residents visited a dentist or a dental clinic in the past year, lower than the Orange County average (62.7%).

- The Orange County average for flu immunizations was very low – 22.3% of Hispanic/ Latino residents, 22.5% of non-Hispanic/Latino Black/African American residents and 36.0% of non-Hispanic/Latino White residents received a flu shot in the past year.

- Approximately 23.3% of non-Hispanic/Latino Black/African American residents have ever received a pneumonia vaccination, lower than non-Hispanic/Latino White residents, Hispanic/Latino residents and the Orange County average.

Beautiful Day | Orange County

Healthy Behaviors

Not everyone has the means and opportunity to make healthy decisions. Policies and programs put in place have marginalized some population groups and communities, keeping them from the support and resources necessary to thrive. Many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with a higher risk of cardiovascular disease, type 2 diabetes and obesity. Tobacco use is associated with heart disease, cancer and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers and cirrhosis.

Exhibit 206: Adult Health Behaviors

	Orange County			White			Black/African American		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	12.4%	11.7%	-5.6%	15.3%	9.2%	-39.9%	13.4%	15.5%	15.7%
Engage in Heavy or Binge Drinking	19.5%	18.2%	-6.7%	25.8%	19.5%	-24.4%	12.9%	13.0%	0.8%
Obese	27.5%	31.2%	13.5%	26.1%	26.3%	0.8%	31.9%	38.3%	20.1%
Overweight	34.8%	34.7%	-0.3%	30.8%	37.3%	21.1%	42.1%	29.8%	-29.2%
Sedentary	27.9%	27.0%	-3.2%	23.5%	21.6%	-8.1%	22.5%	30.1%	33.8%
Inactive or Insufficiently Active	56.9%	ND	ND	50.8%	ND	ND	46.5%	ND	ND
Meet Aerobic Recommendations	44.5%	ND	ND	50.5%	ND	ND	54.1%	ND	ND
Meet Muscle Strengthening Recommendations	45.0%	30.6%	-32.0%	43.0%	34.8%	-19.1%	52.9%	29.9%	-43.5%
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	ND	ND	ND	10.0%	11.6%	16.0%	ND	ND	ND
Engage in Heavy or Binge Drinking	ND	ND	ND	16.6%	22.0%	32.5%	ND	ND	ND
Obese	ND	ND	ND	28.4%	33.9%	19.4%	ND	ND	ND
Overweight	ND	ND	ND	38.5%	38.5%	0.0%	ND	ND	ND
Sedentary	ND	ND	ND	35.6%	34.2%	-3.9%	ND	ND	ND
Inactive or Insufficiently Active	ND	ND	ND	ND	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	ND	ND	ND	42.6%	26.5%	-37.8%	ND	ND	ND
Meet Muscle Strengthening Recommendations	ND	ND	ND	26.5%	ND	ND	ND	ND	ND

Source: Florida Behavioral Risk Factor Surveillance System

In Orange County 101.2 per 100,000 people under 65 had preventable hospitalizations from nutritional deficiencies. The nutritional deficiency death rate in Orange County was 3.9 per 100,000 but was highest in those who identify as non-Hispanic/Latino (4.3).

Exhibit 207: Nutritionally Deficient Population

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Preventable Hospitalizations Under 65 from Nutritional Deficiencies	101.2	ND	ND	ND	ND	ND
Nutritional Deficiency Death Rate	3.9	3.8	3.8	ND	2.8	4.3

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

Pulse Wall | Artist: Unknown | Orange County

Chronic Diseases

Health equity exists when individuals have equal opportunities to be healthy. The ability to be healthy is often associated with factors such as social position, race, ethnicity, gender, religion, sexual identity or disability. When these factors limit a person's ability to be healthy it can lead to health inequity.[152] The following sections highlight inequities and disparities within Orange County that ultimately impact the health of individuals, families and the overall community.

Exhibit 208: Adult Chronic Disease Profile

2019	Orange County	Non-Hispanic/ Latino White	Non-Hispanic /Latino Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Ever Been Told They Had Diabetes	9.5%	8.8%	7.4%	ND	12.1%	ND
Ever Been Told They Had a Stroke	3.0%	2.0%	2.6%	ND	3.9%	ND

Source: Florida Behavioral Risk Factor Surveillance System, 2019
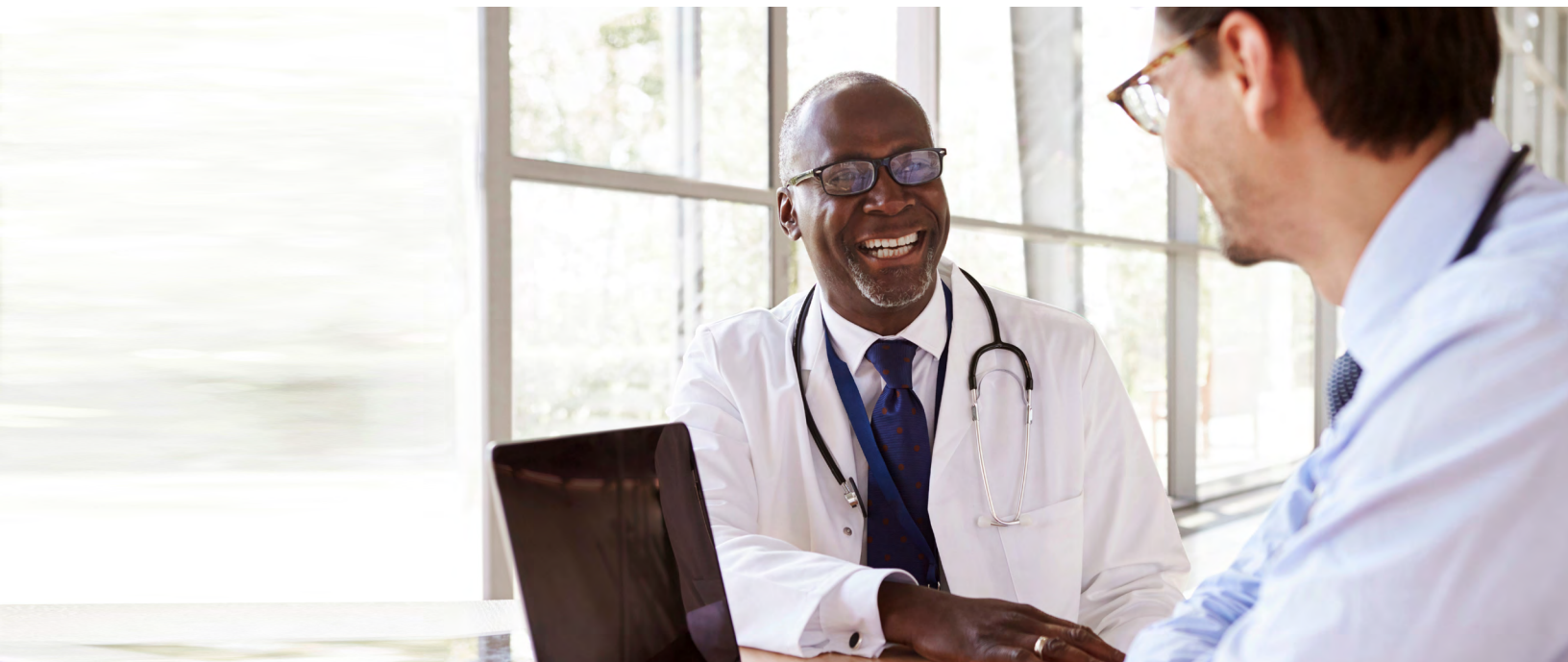
[152]The Community Guide, Health Equity.

Exhibit 209: Chronic Disease Hospitalizations & Death Rates

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Hospitalization Rates						
Coronary Heart Disease	283.8	229.1	275.3	766.4	272.2	282.6
Congestive Heart Failure	1,592.9	1,196.3	2,316.7	3,466.8	1,296.3	1,682.3
Stroke	263.1	186.6	370.5	683.4	220.8	272.4
Death Rates						
Congestive Heart Failure	14.6	14.4	17.0	9.3	11.9	15.3
Stroke	53.3	52.7	57.5	ND	48.5	54.6
Coronary Heart Disease	88.4	89.4	89.5	ND	65.0	94.7
Chronic Liver Disease & Cirrhosis	9.5	10.9	6.0	ND	9.2	9.4
Nephritis, Nephrotic Syndrome & Nephrosis	11.2	9.6	18.2	ND	2.2	3.6

Source: Florida Agency for Health Care Administration, 2018-2020

- The leading cause of hospitalizations per 100,000 in Orange County was congestive heart failure. The leading cause of death per 100,00 in Orange County was coronary heart disease. Variations in hospitalization and death rates were seen among race and ethnicity.
- Residents in Orange County (2018-2020) who identify as other race had the highest rates of chronic disease hospitalizations of coronary heart disease (766.4), congestive heart failure (3,466.8) and stroke (683.4).
- Residents who identify as Black/African American had the highest death rates of congestive heart failure (17.0), stroke (57.5) and nephritis, nephrotic syndrome and nephrosis (18.2).
- Coronary heart disease death was highest in those who identify as non-Hispanic/Latino at 94.7 per 100,000.
- Chronic liver disease and cirrhosis death were highest in those who identify as White (10.9).

Human Trafficking Mural | Artist: Alejandro "Revel" Ruiz | Orange County

The total cancer incidence rate in Orange County (2016-2018) was 424.5 per 100,000. The leading type of cancer in residents of Orange County was breast cancer. The total cancer death rate in Orange County was 142.7 per 100,000. The leading cause of cancer death in Orange County was lung cancer. Disparities by race and ethnicity were seen across cancer incidence and death.

Exhibit 210: Cancer Incidence

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Total Incidence Rate	424.5	428.2	370.3	388.0	324.8	458.1
Cervical Cancer	8.7	9.1	9.1	5.8	9.5	8.3
Prostate Cancer	90.5	80.5	125.8	80.3	74.8	95.4
Breast Cancer	117.4	117.1	97.5	125.8	85.6	127.5
Colorectal Cancer	39.5	39.7	33.0	40.5	36.1	40.8
Lung Cancer	49.6	52.2	41.7	33.0	26.8	33.9

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

- Prostate cancer incidence rate was highest in those who identify as Black/African American (125.8).
- Breast cancer incidence rate was highest in those who identify as non-Hispanic/Latino (127.5). The breast cancer death rate was highest in those who identify as Black/African American (13.5).
- Lung cancer incidence rate was highest in those who identify as White (52.2). The lung cancer death rate was highest in those who identify as non-Hispanic/Latino (33.7).

Exhibit 211: Cancer Cases at Advanced Stage When Diagnosed

Orange County	White	Black/ African American	Other Race	Hispanic/Latino	Non-Hispanic/ Latino
48.9%	48.0%	54.6%	ND	48.5%	49.0%

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

Exhibit 212: Deaths Caused by Cancer

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Overall Cancer Death Rate	142.7	144.9	148.8	ND	111.7	151.6
Cervical Cancer	2.4	1.3	1.7	ND	1.3	1.3
Prostate Cancer	21.3	7.9	14.7	ND	8.1	9.0
Breast Cancer	10.7	10.3	13.5	ND	7.9	11.8
Colorectal Cancer	13.0	13.0	14.3	ND	10.7	13.7
Lung Cancer	29.7	31.9	25.0	ND	16.4	33.7

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

Emergency room visits due to diabetes were over two times higher in those who identify as other race than in Orange County (224.9).

Exhibit 213: **Diabetes Emergency Room Visits**

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Emergency Room Visits Due to Diabetes	224.9	137.8	399.2	515.7	252.9	211.8
Preventable Hospitalizations Under 65 from Diabetes	143.0	ND	ND	ND	ND	ND
Hospitalizations from or with Diabetes	2,990.4	2,131.7	4,265.4	7,621.8	3,097.1	2,920.3

Source: Florida Agency for Health Care Administration, 2018-2020

- Orange County hospitalizations from or with diabetes in those who identify as other race (7,621.8) were over two and a half times higher than the Orange County average (2,990.4).

Exhibit 214: Prevalence of Respiratory Diseases

Per 100,000	Orange County			White			Black/African American		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	573.1	356.4	-37.8%	315.7	190.0	-39.8%	899.6	586.6	-34.8%
Asthma Hospitalizations	94.0	56.8	-39.6%	50.9	32.7	-35.8%	155.2	86.7	-44.1%
Hospitalizations from CLRD (Including Asthma)	284.4	187.6	-34.0%	211.3	146.5	-30.7%	377.1	239.7	-36.4%
CLRD Death Rate	28.8	29.5	2.4%	33.7	32.4	-3.9%	17.3	23.3	34.7%
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	1,471.5	908.9	-38.2%	745.1	423.1	-43.2%	484.1	320.8	-33.7%
Asthma Hospitalizations	257.0	50.9	-80.2%	125.7	72.5	-42.3%	82.2	51.2	-37.7%
Hospitalizations from CLRD (Including Asthma)	621.9	370.8	-40.4%	276.8	158.9	-42.6%	284.8	197.6	-30.6%
CLRD Death Rate	ND	ND	ND	14.8	17.0	14.9%	33.2	33.4	0.6%

Source: Florida Agency for Health Care Administration, 2019

Non-fatal unintentional injury hospitalizations in Orange County had rates of 489.8 per 100,000 in 2019 and 463.3 per 100,000 in 2020. Hospitalizations for non-fatal unintentional falls decreased from 2019 to 2020 but remained the highest unintentional injury (293.4, 277.2 per 100,000, respectively). Rates of unintentional injuries and unintentional death by race and ethnicity presented disparities in Orange County.

Exhibit 215: Unintentional Injuries, 2019

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Unintentional Injury Hospitalizations	489.8	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	44.3	51.6	25.0	31.0	35.3	46.6
Unintentional Poisoning Death Rate	17.8	23.2	5.4	6.4	14.9	18.8
Drug Poisoning Death Rate	19.0	24.3	6.0	8.8	15.8	20.1
Hospitalizations for Non-Fatal Unintentional Falls	293.4	279.0	139.5	740.4	223.7	306.6
Unintentional Falls Death Rate	11.7	12.9	5.6	ND	5.4	13.5
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	67.7	42.6	77.4	222.8	58.5	67.7
Motor Vehicle Crash Death Rate	10.8	11.5	9.3	9.3	12.4	9.7
Hospitalizations for Non-Fatal Traumatic Brain Injuries	76.6	59.6	53.9	234.3	57.4	80.0
Traumatic Brain Injury Death Rate	15.1	15.4	12.6	ND	12.1	15.6
Hospitalizations for Non-Fatal Firearm Injuries	7.2	1.4	18.7	18.1	4.9	7.7
Firearms-Related Death Rate	9.6	8.2	15.6	4.5	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	1.2	0.5	2.2	3.7	ND	1.4
Unintentional Death Rate Due to Fire	0.2	0.3	0.0	ND	0.0	0.3
Unintentional Drownings Death Rate	1.0	0.7	1.5	ND	0.8	0.0

Source: Florida Agency for Health Care Administration, 2019

- In 2019, those who identify as White had the highest death rates of unintentional injury (51.6), unintentional poisoning (23.2), drug poisoning (24.3) —all higher than the average rates in Orange County (44.3, 17.8, 19.0, respectively).

- The population that identifies as Black/African American had the highest rates of death due to firearms (15.6), which was higher than the Orange County average (9.6).

- Those who identify as other race had the highest rates of hospitalizations for non-fatal unintentional falls, non-fatal motor vehicle traffic-related injuries, non-fatal traumatic brain injuries and non-fatal unintentional firearm injuries.

- The population that identifies as Hispanic/Latino had a mortality rate of 12.4 per 100,000 motor vehicle crash.

- Those who identify as non-Hispanic/Latino had the highest rate of death due to unintentional falls (13.5).

- Hospitalizations for non-fatal firearm injuries were highest in those who identified as Black/African American (18.7), much higher than the Orange County average (7.2).

In 2020, those who identify as White had the highest unintentional injury death rates. Black / African American populations had high rates of hospitalizations for non-fatal firearms (28.5) and hospitalizations for non-fatal unintentional firearm injuries (7.0)—higher than the average in Orange County (10.0, 2.9, respectively).

Exhibit 216: Unintentional Injuries, 2020

Per 100,000	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Unintentional Injury Hospitalizations	463.3	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	53.8	59.8	41.7	ND	41.0	57.3
Unintentional Poisoning Death Rate	23.2	28.1	14.8	ND	17.2	25.4
Drug Poisoning Death Rate	23.7	28.9	14.4	8.8	17.5	26.0
Hospitalizations for Non-Fatal Unintentional Falls	277.2	267.9	142.2	624.0	207.4	294.8
Unintentional Falls Death Rate	13.2	15.2	5.5	ND	7.0	15.0
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	62.5	36.9	67.8	228.4	61.2	59.1
Motor Vehicle Crash Death Rate	11.5	11.1	14.3	ND	11.7	10.7
Hospitalizations for Non-Fatal Traumatic Brain Injuries	77.4	62.2	57.0	227.5	59.6	83.1
Traumatic Brain Injury Death Rate	18.7	18.6	18.5	ND	14.2	20.1
Hospitalizations for Non-Fatal Firearm Injuries	10.0	1.4	28.5	22.3	5.3	11.6
Firearms-Related Death Rate	11.1	8.5	20.0	5.5	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	2.9	0.6	7.0	7.9	2.1	2.9
Unintentional Death Rate Due to Fire	0.2	0.1	0.3	ND	0.2	0.2
Unintentional Drownings Death Rate	1.7	1.4	1.6	ND	2.2	1.5

Source: Florida Agency for Health Care Administration, 2020

- Those who identify as Black/African American had high death rates of motor vehicle crashes and firearms-related death rates (14.3, 20.0, respectively) compared to Orange County (11.5, 11.1, respectively).
- Those who identify as other race had high rates of hospitalizations for non-fatal unintentional falls, non-fatal motor vehicle traffic-related injuries and non-fatal traumatic brain injuries (624.0, 228.4, 227.5, respectively) compared to Orange County (277.2, 62.5, 77.4, respectively).

Black/African American and Hispanic/Latino communities are disproportionately affected by HIV compared to other racial and ethnic groups. In 2019, the Black/African American community represented 13% of the United States population, but 40% of people with HIV. Hispanic/Latino residents represented 18.5% of the population, but 25% of people with HIV.[153]

The data below shows HIV and AIDS diagnoses and death in residents of Orange County in 2017-2019. When looking at rates by race and ethnicity, disparities were seen in those who identify as non-Hispanic/Latino Black/African American and Hispanic/Latino.

Exhibit 217: HIV & AIDS Diagnoses

Per 100,000 (except as noted)	Orange County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino
Adults Less Than 65 Who Have Ever Been Tested for HIV (2019)	54.2%	45.5%	68.7%	56.8%	ND
Population with HIV (2020)	654.4	449.2	1,393.0	547.7	706.2
2017-2019					
HIV Diagnoses	34.3	18.1	68.6	38.5	32.4
AIDS Diagnoses	13.5	7.1	34.4	10.4	15.0

Source: Florida Department of Health, Bureau of Communicable Diseases 2017-2019

- Those who identify as non-Hispanic/Latino Black/African American had the highest HIV diagnoses of 68.6 per 100,000, two times higher than Orange County (34.3). See Exhibit 206.
- Those who identify as non-Hispanic/Latino Black/African American had the highest AIDS diagnoses of 34.4 per 100,000, more than twice as high as Orange County (13.5).

Exhibit 218: HIV & AIDS Death Rate

	Orange County	White	Black/African American	Hispanic/ Latino	Non-Hispanic/ Latino
Per 100,000	3.2	1.7	9.2	2.2	3.6

Source: Florida Department of Health. Bureau of Communicable Diseases, 2018-2020

- Those who identify as Black/African American had HIV & AIDS death rates over two times higher than Orange County. See Exhibit 218.

[153]Hiv.Gov, Impact on Racial And Ethnic Minorities.

Homicide & Suicide

Between 2019 and 2020 homicide rates in Orange County increased, while the suicide rate decreased.

Exhibit 219: Homicide & Suicide Deaths by Race

Per 100,000	Orange County		White		Black/African American	
	2019	**2020**	**2019**	**2020**	**2019**	**2020**
Homicide	6.5	8.0	3.7	4.4	16.3	20.1
Suicide	9.6	8.9	10.5	10.2	6.2	5.3

Source: Florida Department of Health. Bureau of Vital Statistics

Exhibit 220: Homicide & Suicide Deaths by Ethnicity

Per 100,000	Hispanic/Latino		Non-Hispanic/Latino	
	2019	**2020**	**2019**	**2020**
Homicide	4.7	4.6	4.7	4.6
Suicide	6.7	6.9	6.7	6.9

Source: Florida Department of Health. Bureau of Vital Statistics

- In 2019, homicides rates in those who identify as Black/African American (16.3) were twice as high compared to the Orange County rate (6.5). In 2020, those who identify as Black/African American (20.1) had rates more than two times higher than Orange County (8.0).
- In 2020, suicide rates for those who identify as White (10.2) were higher than in Orange County (8.9).

Maternal Health

Historically, maternal mortality in the United States has been a key indicator of the overall health of a population. Maternal mortality reflects the whole health system and illustrates the socio-cultural, political and economic philosophy of society. Over the past two decades, the United States maternal mortality rate has not improved while maternal mortality rates have decreased for other regions of the world. Significant racial and ethnic disparities persist in both the rate of women in the United States who die due to complications of pregnancy or delivery and the rate that women experience negative health consequences due to unexpected pregnancy or childbirth outcomes.[154]

Severe maternal morbidity is the presence of a complication during a hospital delivery. Complications during pregnancy or delivery can lead to negative outcomes for the woman and the infant. Monitoring the trend and disparities in severe maternal morbidity allows public health and medical professionals to take steps to improve the health of women and children.

Exhibit 221: Maternal Fatalities

Per 100,000 Live Births	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Maternal Mortality	12.2	6.3	31.9	ND	0.0	15.6
Severe Maternal Morbidity per 1,000	18.2	11.7	26.9	19.9	15.8	19.7

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Maternal mortality was highest in women who identify as Black/African American (31.9), more than two times higher than the maternal mortality average in Orange County (12.2).
- In Orange County, the maternal mortality rate was 12.2 per 100,000 births while severe maternal morbidity was 18.2 per 1,000 delivery hospitalizations.

[154]United States Commission on Civil Rights 2021 Statutory Enforcement Report, Racial Disparities in Maternal Health.

Exhibit 222: Prenatal Care

	Orange County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Births to Mothers with First-Trimester Prenatal Care	78.7%	81.1%	71.4%	ND	78.1%	79.1%
Births to Mothers with No Prenatal Care	2.8%	2.1%	4.8%	ND	2.5%	3.0%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Women with the lowest percentage of receiving first-trimester prenatal care were women who identify as Black/African American (71.4%).
- Women who identify as Black/African American made up the highest percentage of women who received no prenatal care (4.8%).
- More than three-quarters of pregnant mothers received first trimester prenatal care (78.7%). A very small percentage of mothers received no prenatal care (2.8%).

In Orange County, mothers between the ages of 15 and 19 were mostly unmarried at the time of giving birth (94.4%).

Exhibit 223: Maternal Characteristics

	Orange County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Repeat Births to Mothers Ages 15-19	1.6%	12.2%	16.5%	ND	12.8%	14.5%
Births to Unwed Mothers Ages 15-19	94.4%	92.5%	98.3%	ND	92.4%	96.5%
Births to Unwed Mothers Ages 15-44	43.8%	39.2%	62.8%	ND	50.0%	40.1%
Births to Mothers Who Are Underweight at the Time Pregnancy Occurred[155]	3.4%	3.2%	3.0%	ND	3.1%	3.6%
Births to Mothers Who Are Overweight at the Time Pregnancy Occurred[156]	27.5%	27.6%	28.0%	ND	29.5%	26.3%
Births to Mothers Who Are Obese at Time Pregnancy Occurred[157]	25.3%	23.2%	34.7%	ND	25.0%	25.5%
Births with Inter-Pregnancy Interval[158]	30.1%	29.9%	31.5%	ND	26.2%	32.4%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Approximately 27.5% of all mothers were overweight at the time pregnancy occurred.
- Among Black/African American mothers ages 15 and 19, one in six (16.5%) have had multiple children, 98.3% of Black/African American teen mothers were not married and 62.8% of Black/African American mothers aged 15 to 44 were not married.

[155] BMI <18.5
[156] BMI 25.0-29.9
[157] BMI >= 30
[158] < 18 Months.

In Orange County, the three-year cumulative sum, 2018 to 2020, indicates that 10.5% of infants were born preterm, 8.7% of infants were born at low birth weight, 1.7% of infants were born at very low birth weight; 94.0% of infants with very low birth weight were born in subspeciality perinatal centers. County-wide rates of fetal deaths were 7.0 per 1,000 deliveries, infant deaths were 5.7 per 1,000 deliveries and sudden unexpected infant deaths were 0.8 per 1,000 deliveries.

Exhibit 224: Infant Characteristics

	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Preterm Births[159]	10.5%	9.2%	14.0%	ND	9.9%	10.8%
Very Low Birth Weight Infants Born in Subspecialty Perinatal Centers	94.0%	94.3%	94.1%	ND	93.7%	94.4%
Low Birth Weight[160]	8.7%	6.8%	13.4%	ND	7.4%	9.4%
Very Low Birth Weight[161]	1.7%	1.1%	3.1%	ND	1.4%	1.8%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

Exhibit 225: Fetal & Infant Fatalities

Per 1,000 Deliveries	Orange County	White	Black/ African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Fetal Deaths	7.0	5.4	11.7	ND	5.6	6.9
Infant Deaths (0-364 days)	5.7	3.9	10.6	ND	4.3	6.1
Sudden Unexpected Infant Deaths	0.8	0.7	1.5	ND	0.7	0.9

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Preterm births were highest in mothers who identify as Black/African American (14.0%). See Exhibit 224.
- Women who identify as Black/African American had the highest percentage of births to infants of low birth rate (13.4%) and infants of very low birth weight (3.1%) – higher than Orange County (8.7%, 1.7%, respectively).
- Women who identify as Black/African American had higher rates of fetal death, infant deaths and sudden unexpected infant deaths (11.7, 10.6, 1.5, respectively) than Orange County (7.0, 5.7, 0.8, respectively). See Exhibit 225.

[159] < 37 Weeks of Gestation.
[160] <2500 Grams.
[161] < 1500 Grams.

Community Survey Highlights

The community survey conducted for the CFC included over 4,000 total responses. As shown below, there were 822 responses from Orange County residents.

Exhibit 226: Survey Responses by County

In which county do you live?				
County	Responses	Total Percent	Net Percent	Cumulative Percent
Lake	266	6.2	7.2	7.2
Orange	822	19.3	22.2	29.4
Osceola	1729	40.5	46.7	76.2
Seminole	639	15.0	17.3	93.4
Other	243	5.7	6.6	100.0
Total	**3,699**	**86.7**	**100.0**	
No Response	565	13.3		
Total	**4,264**	**100.0**		

As a result of the survey, the highest priority needs included the following:

1. Affordable, quality housing
2. Mental health care services for seniors
3. Suicide prevention
4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Dental care for children, especially those from low income or other priority communities
6. Community services to reduce illegal drug use and abuse or misuse of prescription medications
7. Access to free or low-cost health care services for all residents
8. Access to primary care services
9. Support for family members of a person being treated for substance use disorder
10. Mental health outpatient services capacity
11. Mental health crisis services and community awareness of available resources
12. Childcare services, especially for children with special needs
13. Youth mental health services
14. Suicide prevention initiatives in middle and high schools
15. Mental health and substance use disorder transition care for inmates being released from jail

Prioritization Process Summary

As noted above, the secondary data analysis, qualitative research and community survey generated a list of approximately 50 granular needs. The needs were then prioritized by a group of Orange County leaders using the Modified Delphi method (i.e., a three-stage mixed qualitative and quantitative) process. The results of the prioritization process yielded a rank-ordered set of prioritized needs falling into five specific categories. The top 15 granular needs were then folded under the five specific categories. Please see the results below.

Top Five Needs

- Increase system capacity
- Enhance mental health (including substance use disorder) outreach and treatment
- Streamline access to care
- Refine primary care and specialized medical care (e.g., chronic conditions) services
- Address housing and other social determinants

Top 15 Granular Issues

1. Affordable, quality housing
2. Access to free or low-cost health care services for all residents
3. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
4. Mental health outpatient services capacity
5. Health care services in lower-income and priority communities
6. Mental health crisis services and community awareness of available resources
7. Youth mental health services
8. Access to healthful, affordable foods
9. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients
10. Greater access to primary care services in non-urban areas
11. Chronic disease early intervention and care (e.g., heart disease, stroke, high blood pressure)
12. Behavioral health outpatient services for children
13. Maternal & infant care
14. Training for providers caring for members of priority communities
15. Integrated case management and multiple health-related services under one roof for people experiencing homelessness

Top 15 Granular Issues within the Five Top Needs

Increase system capacity

2. Access to free or low-cost health care services for all residents
3. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Health care services in lower-income and priority communities
10. Greater access to primary care services in non-urban areas
14. Training for providers caring for members of priority communities

Enhance Mental Health (including Substance Use Disorder) outreach and treatment

4. Mental health outpatient services capacity
6. Mental health crisis services and community awareness of available resources
7. Youth mental health services
12. Behavioral health outpatient services for children

Streamline access to care

9. Case managers, Community Health Workers and similarly licensed professionals supporting patients with complex needs

Refine primary care and specialized medical care (e.g., chronic conditions) services

11. Chronic disease early intervention and care
13. Maternal & infant care

Housing and other social determinants

1. Support additional affordable, quality housing[162]
8. Access to healthful, affordable foods
15. Integrated case management and multiple health-related services under one roof for people experiencing homelessness

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[162]Note that quality, affordable housing effects several other community needs such as Need #3, Recruitment and retention of culturally diverse and informed providers who demographically reflect the community and Need #2, Access to free or low-cost health care services for all residents

Diversity Heart Mural | Artist: Luna Mosaic Arts | Orange County

Osceola County

Executive Summary

People cannot choose the circumstances of their birth, a variable that has significant impact on their well-being throughout their lives. Even the minds of babies begin to construct realities about the world almost immediately. From a mother's first touch, human brains create a feedback loop about the world. Geographic location, adverse childhood experiences and other characteristics - many of which are historically linked to discrimination or exclusion - have a dramatic impact on individuals' health and well-being.

The short list of health issues highlighted below are unique due to their geographic and social realities. The data points help illustrate some of the impacts that these health equity realities are having on individuals' health in Osceola County.

- The population in Osceola County has grown over the past 10 years, but the percentage of people who are age 65 and older is lower in Osceola County (13.0%) compared to the state or the nation. The median age (35.9) is also lower than the nation (38.1%).
- The percentage of people who are of an ethnic minority has increased in the county, the state and the nation. The percent of the population who identify as an ethnic minority in Osceola County (68.3) is higher than others across the service area, the state and the nation.
- Only a little over half of the Hispanic/Latino residents had a personal doctor (57.2%) while three-quarters of non-Hispanic/Latino Black/African American residents had a personal doctor (75.3%).
- Prostate cancer death rates were highest in those who identify as Black/African American at 15.4 per 100,000 — nearly 50% higher than the county average.
- In 2019, homicide rates were highest in those who identify as Black/African American - twice as high as the Osceola County average.
- In 2019, suicide rates were highest in those who identify as non-Hispanic/Latino at 19.9 per 100,000 — nearly 50% higher than Osceola County (13.8).
- County wide, maternal mortality was 22.5 with the highest number in women who identify as White and Hispanic/Latino (28.1, 25.0, respectively). Women who identify as Black/African American had the highest rates of severe maternal morbidity (19.1).
- Women who identify as Black/African American had higher rates of fetal deaths, infant deaths and sudden unexpected infant deaths (10.1, 9.0, 1.3, respectively) than the overall Osceola County rates (6.6, 4.9. 0.7, respectively).

Wild Ones | Artist: Steven Teller Arts | Osceola County

Health Equity Profiles

Demographics

Notable SVI characteristics are seen in the table below across the United States, Florida and Osceola County. Data in this table comes from the 2019 American Community Survey 5 -Year Estimates and the 2021 Federal Reserve Economic Data (FRED), with trends and changes noted by arrows ↑↓. An upward arrow (↑) indicates an increase of more than 10% from the 2010 American Community Survey 5-Year estimate and the FRED Economic Data, a downward arrow (↓) indicates a decrease of more than 10%. If no arrow is present, there is no identified change from 2010.

Exhibit 227: **Osceola County Social Vulnerability Index**

	United States	Florida	Osceola County
Osceola County Population	324,697,795	20,901,636↑	351,955↑
Below Poverty	12.3%↓	12.7%↓	14.5%
Unemployed	5.4%↓	5.1%↓	3.4%↓
Median Income	$62,843↑	$55,660↑	$52,279↑
Median Age	38.1	42.0	35.9
Age 65 +	15.6%↑	20.1%↑	13.0%↑
Age 17 or Younger	22.6%	20.0%	24.6%
Household with Disability	12.7%	13.7%	13.2%↑
Single-Parent Households	31.6%	30.2%	37.6%
Ethnic Minority	39.3%↑	46.1%↑	68.3%↑
Do not Speak English	8.4%	11.9%	19.9%
Multi-Unit Housing Structures	26.3%	30.5%	26.8%
Mobile Homes	6.2%	8.9%	7.4%↓
No Vehicle	8.6%	6.3%	5.2%

Source: American Community Survey, 2010 & 2019 5-Year Estimates

- The population (2015-2019 5-year average) in Osceola County (351,955) and Florida (20,901,636) has grown over the past 10 years. The percentage of people who are 65 years and older has risen but is lower in Osceola County (13.0%) than the state or the nation.

- The percentage of people that live below the poverty line has decreased in the United States (12.3%) and Florida (12.7%); however, it has remained largely unchanged (i.e., not improved) in Osceola County. Median income has risen at the national, state and county levels but is lowest in Osceola County ($52,279).

- Over the past 10 years, the percentage of households that have a person with a disability has increased in Osceola County (13.2%).

- The percentage of people who are of an ethnic minority has increased in the county, state and the nation. The percent of the population who identify as an ethnic minority in Osceola County (68.3) is higher than others across the service area, the state and the nation.

The median life expectancy for those who identify as Black/African American in Osceola County is 81.4 years, while for those who identify as Hispanic/Latino, the median life expectancy is 80.4 years. Both are higher than the Osceola County average (79.0).

Exhibit 228: Median Life Expectancy by Race & Ethnicity

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	77.8	ND	72.0*	ND	ND	79.9	78.0
Florida	79.4	79.7	76.7	ND	ND	83.0	78.5
Osceola County	79.0	78.5	81.4	87.9	ND	80.4	77.9

Sources: For state and county data except Asian and Other/Multiple Races: Florida Department of Health referencing data from 2018-2020 (https://www.flhealthcharts.gov/ChartsReports/rdPage.aspx?rdReport=ChartsProfiles.LifeExpectancyProfile&islYears=2020 retrieved June 9, 2022). For Asian and Other/Multiple Races data: County Health Rankings, referencing data from 2018-2020 (https://www.countyhealthrankings.org/app/florida/2022/measure/outcomes/147/data, retrieved June 9, 2022). For U.S. data: National Center for Health Statistics. 2021, referencing 2020 data (https://www.cdc.gov/nchs/products/databriefs/db427.htm, retrieved June 9, 2022).
*This data point represents those identified as Black/African American, not of Hispanic/Latino origin, while the other figures in this column are only indicative of race.

Social Determinants of Health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks. Social determinants of health have a major impact on people's health, well-being and quality of life and heavily contribute to wide health disparities and inequities.[163] The following section draws attention to health-related disparities experienced by different races and ethnicities in Osceola County focused on housing, education, employment, income and health care access.

Racial and ethnic minorities may face unique barriers to higher education. Black/African American and Hispanic/Latino individuals have lower college enrollment and graduation rates compared to White individuals. Hispanic/Latino individuals are most likely to attend college part-time, which reduces their odds of graduating.[164]

Osceola County had educational attainment of 86.1%. Approximately 13.9% of individuals 25 years or older in Osceola County did not have a high school diploma. Individuals who identify as Hispanic/Latino make up a smaller percentage of those that had graduated high school and a larger percentage of those who did not have a high school diploma.

Exhibit 229: Educational Attainment (percent high school diploma or higher)

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	88.5%	90.7%	86.7%	87.3%	74.2%	70.3%	93.2%
Florida	88.5%	90.2%	83.7%	87.2%	82.1%	80.4%	93.0%
Osceola County	86.1%	86.9%	84.9%	90.6%	83.5%	83.2%	90.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

[163]Healthy People 2030. Social Determinants of Health.
[164]Healthy People 2030, Enrollment in Higher Education.

Osceola County housing problems are very similar to the state averages, as the percentage of severely cost burdened households and the percent with severe housing problems are at, or near, the Florida average.[165]

Exhibit 230: Housing Challenges in Osceola County

	Severe Housing Cost Burdened	Severe Housing Problems
Osceola County	19%	21%
Florida	17%	19%

The percentage of adults in Osceola County with a Bachelor's degree or higher is similar for most racial and ethnic groups with the exception of Asians for which nearly half (47.4%) reached that achievement level.

Exhibit 231: Population with a Bachelor's Degree or Higher by Race & Ethnicity
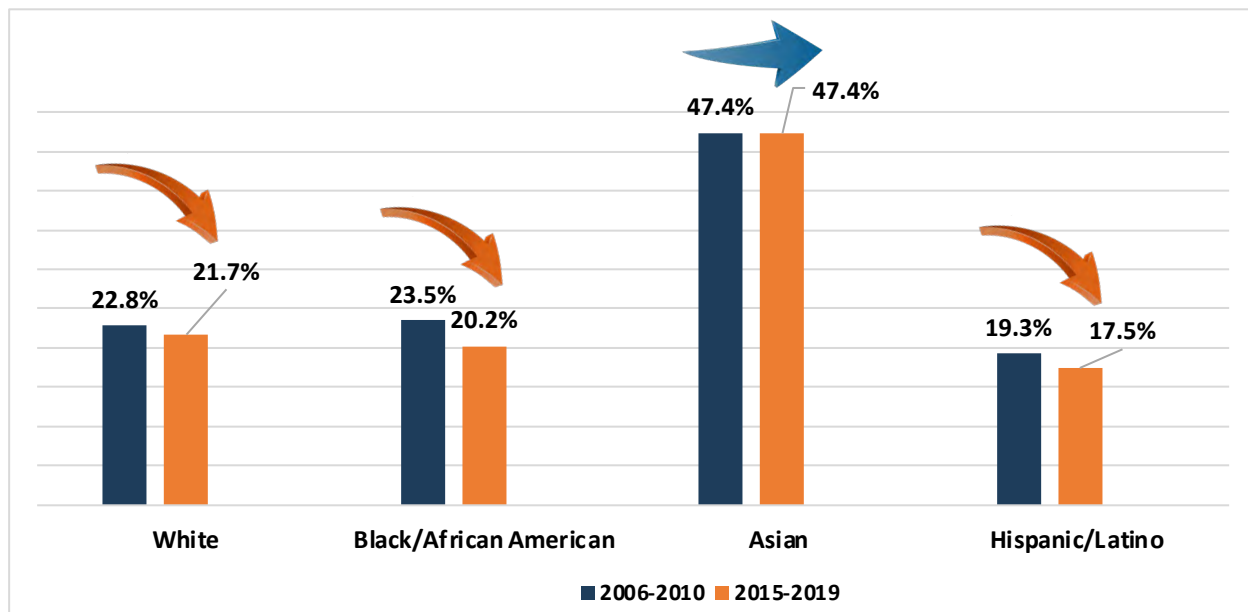
- The percentage of adults in almost all racial and ethnic groups in Osceola County with a Bachelor's degree or higher decreased slightly from 2010 to 2019.

[165]Severe Housing Problems, Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities or lack of plumbing facilities. Available at https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-transit/severe-housing-problems.

Osceola County residents who identify as Black/African American made up 6.6% of the unemployed civilian labor force which is higher than the average in Osceola County 5.7%). The figures below represent the percentage of those from each demographic who were unemployed at the time of the measure. These figures are from before the COVID-19 pandemic.

Exhibit 232: Unemployed Civilian Labor Force

	Total*	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	5.4%	4.6%	9.2%	4.3%	7.3%	6.2%	4.4%
Florida	5.4%	4.7%	8.5%	4.4%	6.0%	5.0%	4.7%
Osceola County	5.7%	4.9%	6.6%	10.8%	7.0%	5.4%	5.0%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Exhibit 233: Median Household Income

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	$64,994	$68,943	$43,674	$91,775	$55,965	$54,632	$70,843
Florida	$57,703	$61,065	$43,418	$73,412	$53,706	$52,092	$63,474
Osceola County	$55,538	$55,372	$53,743	$71,582	$54,341	$48,412	$63,036

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- Median household income in Osceola County was lowest for those who identify as Hispanic/Latino ($48,412) and Black/African American ($53,743).

Exhibit 234: Trends in Median Household Income by Race and Ethnicity
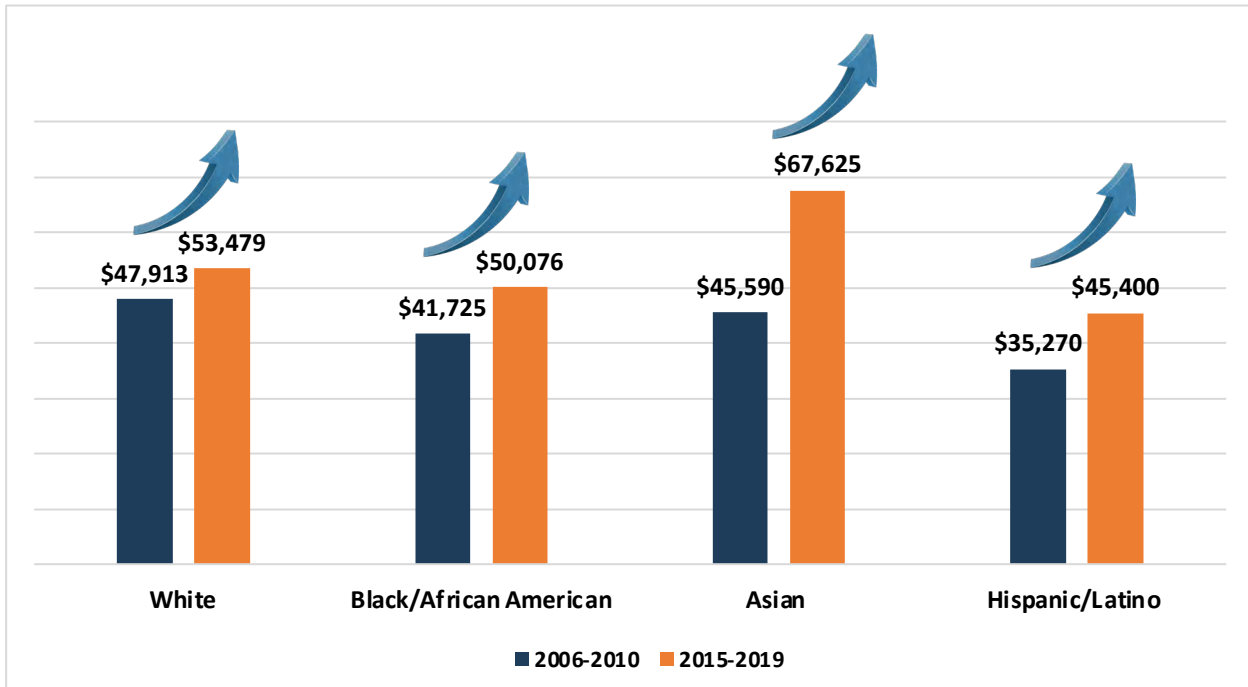
- In 2010, Asians and Whites in Osceola County earned approximately the same median income. In 2019, the disparity between Asians and Whites increased notably.
- Hispanic/Latino residents of Osceola County earned nearly 20% less (median) than Whites in 2019.
- Blacks/African Americans earned slightly less (about 7%) than Whites in 2019.

Racial and ethnic minorities living in poverty often present more adverse health outcomes compared to the White population. Residents of impoverished communities are at increased risk for mental illness, chronic disease, higher mortality and lower life expectancy.

Osceola County residents of racial and ethnic minorities made up higher percentages of the population living in poverty which also reflected lower median household income averages.

Exhibit 235: Population Living in Poverty

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	12.8%	10.6%	22.1%	10.6%	17.8%	18.3%	9.3%
Florida	13.3%	11.5%	20.7%	11.9%	15.6%	16.4%	9.7%
Osceola County	13.4%	12.9%	15.4%	13.8%	13.7%	15.7%	9.0%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Poverty levels differed somewhat in Osceola County from 2010 and in 2019 – there were modest changes within some racial and ethnic groups, and there were continuing disparities between racial and ethnic groups.

Exhibit 236: Trends in the Percent of the Population Living in Poverty by Race and Ethnicity (1-Year Estimates)
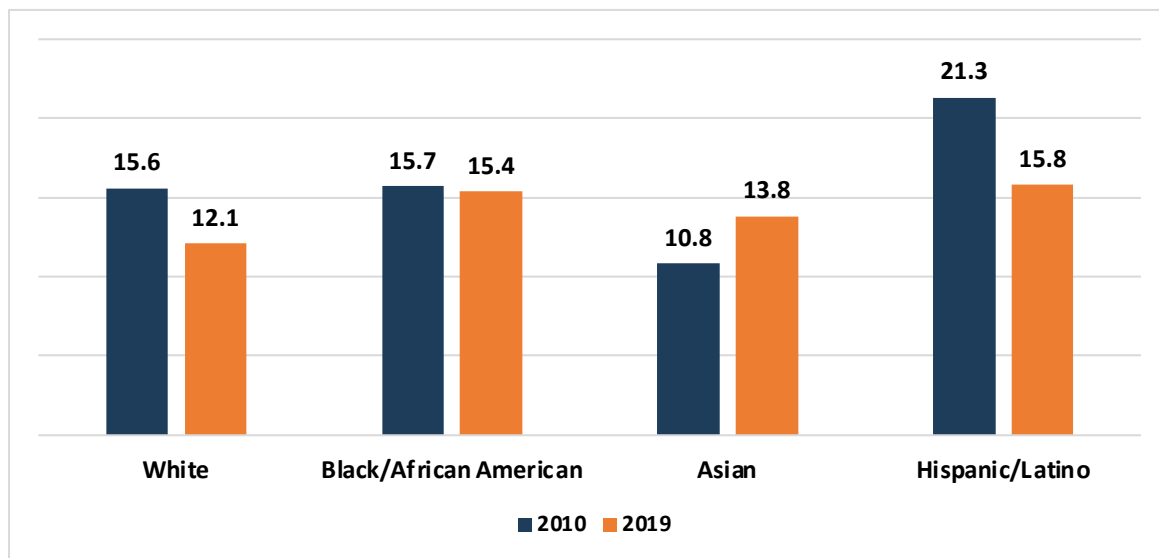
- The percent of Whites and Hispanics living in poverty decreased from 2010 to 2019
- The percent of Asians living in poverty increased slightly.

Inadequate health insurance coverage is one of the largest barriers to health care access, and the unequal distribution of coverage contributes to disparities in health. The consequences of not having health insurance are exacerbated within specific ethnicities. For example, research indicates that people who speak another language besides English are less likely to receive recommendations for preventative health screenings and immunizations. This factor, in addition to a lack of health insurance, only worsens health outcomes over time.[166] Over three-quarters of the population had access to health care, but utilization of health care services and immunizations varied by race and ethnicity.

Exhibit 237: Population with Health Insurance

	Total*	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/Latino
United States	91.3%	92.4%	90.1%	93.6%	84.6%	82.3%	94.1%
Florida	87.3%	88.5%	85.1%	88.6%	82.2%	81.4%	90.7%
Osceola County	86.8%	87.3%	84.7%	90.7%	85.7%	85.1%	90.3%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
*Civilian noninstitutionalized population

Exhibit 238: Utilization of Health Care Services by Adults

2019	Osceola County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
Adults who could not see a doctor at least once in the past year due to cost	20.3%	15.5%	15.1%	23.1%
Adults who have a personal doctor	64.9%	73.1%	75.3%	57.2%
Adults who said their overall health was good to excellent	76.4%	79.5%	65.2%	76.6%
Had a medical checkup in the past year	75.0%	77.4%	78.4%	73.4%
Visited a dentist or a dental clinic in the past year (2016)	58.3%	56.5%	46.0%	61.3%
Immunizations				
Received a flu shot in the past year	27.0%	36.7%	14.6%	23.1%
Have ever received a pneumonia vaccination	30.1%	36.6%	22.2%	28.2%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

[166]Healthy People 2030, Access to Primary Care.

- People who identify as Hispanic/Latino in Osceola County were the group with the highest percentage of adults who could not see a doctor at least once in the past year due to cost.

- Only a little over half of the Hispanic/Latino residents had a personal doctor (57.2%) while three-quarters of non-Hispanic/Latino Black/African American residents had a personal doctor (75.3%).

- Approximately 65.2% of non-Hispanic/Latino Black/African American residents said their overall health was good to excellent compared to 76.4% of the Osceola County average.

- In 2016, only 46% of non-Hispanic/Latino Black/African American residents visited a dentist or dental clinic in the past year.

- About three of ten (approximately 30%) of the population of Osceola County received immunizations for the flu and pneumonia. Immunizations for the flu in the past year were lowest in populations who identified as non-Hispanic/Latino Black/African American (14.6%). Only 22.2% of non-Hispanic/Latino Black/African American residents had ever received a pneumonia vaccine.

Cosmic Owl | Artist: German Lemus | Osceola County

Healthy Behaviors

Not everyone has the means and opportunity to make healthy decisions. Policies and programs put in place have marginalized some population groups and communities, keeping them from the support and resources necessary to thrive. Many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with a higher risk of cardiovascular disease, type 2 diabetes and obesity. Tobacco use is associated with heart disease, cancer and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers and cirrhosis.[167]

Exhibit 239: Adult Health Behaviors

	Osceola County			White			Black/African American		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	13.9%	12.8%	-7.9%	12.1%	15.5%	28.1%	ND	21.7%	ND
Engage in Heavy or Binge Drinking	16.1%	10.7%	-33.5%	15.5%	16.3%	5.2%	ND	4.5%	ND
Obese	31.9%	32.5%	1.9%	32.4%	36.7%	13.3%	48.1%	26.8%	-44.3%
Overweight	38.3%	42.8%	11.7%	31.6%	36.9%	16.8%	27.8%	60.8%	118.7%
Sedentary	34.5%	29.0%	-15.9%	34.4%	25.8%	-25.0%	31.4%	42.3%	34.7%
Inactive or Insufficiently Active	64.6%	ND	ND	61.2%	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	36.5%	ND	ND	39.1%	ND	ND	ND	ND	ND
Meet Muscle Strengthening Recommendations	31.1%	34.0%	9.3%	35.6%	35.5%	-0.3%	ND	25.1%	ND
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	ND	ND	ND	11.7%	9.6%	-17.9%	ND	ND	ND
Engage in Heavy or Binge Drinking	ND	ND	ND	14.6%	9.4%	-35.6%	ND	ND	ND
Obese	ND	ND	ND	30.6%	33.9%	10.8%	ND	ND	ND
Overweight	ND	ND	ND	44.9%	43.7%	-2.7%	ND	ND	ND
Sedentary	ND	ND	ND	36.9%	30.4%	-17.6%	ND	ND	ND
Inactive or Insufficiently Active	ND	ND	ND	69.5%	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	ND	ND	ND	31.6%	ND	ND	ND	ND	ND
Meet Muscle Strengthening Recommendations	ND	ND	ND	24.9%	37.3%	49.8%	ND	ND	ND

Source: Florida Behavioral Risk Factor Surveillance System

[167]County Health Roadmaps & Rankings, Health Behaviors.

In Osceola County 103.1 per 100,000 people under 65 years had preventable hospitalizations from nutritional deficiencies. The nutritional deficiency death rate in Osceola County was 5.7 per 100,000 but is highest in those who identify as Black/African American and Hispanic/Latino (8.8, 10.3, respectively).

Exhibit 240: **Nutritionally Deficient Population**

Per 100,000	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Preventable Hospitalizations Under 65 from Nutritional Deficiencies	103.1	ND	ND	ND	ND	ND
Nutritional Deficiency Death Rate	5.7	5.5	8.8	0.0	10.3	2.6

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

Osceola Heritage Park | Osceola County

Chronic Diseases

Research indicates that racial and ethnic minorities experience higher rates of diabetes, obesity, stroke, heart disease and cancer than the White population. In America, the risk of being diagnosed is 77% higher for Black/African American residents and 66% higher among Hispanic/Latino residents, compared to the White population. Additionally, Asian American, Native Hawaiian and Pacific Islander residents are at twice the risk of developing diabetes than the population overall.[168]

Adults in Osceola County in 2019 who have ever been told they have diabetes was 16.0% and ever been told they had a stroke was 4.4%.

Exhibit 241: Adult Chronic Disease Profile

2019	Osceola County	Non-Hispanic/ Latino White	Non-Hispanic /Latino Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Ever Been Told They Had Diabetes	16.0%	14.4%	13.9%	ND	18.3%	ND
Ever Been Told They Had a Stroke	4.4%	5.8%	4.0%	ND	4.0%	ND

Source: Florida Behavioral Risk Factor Surveillance System, 2019

[168]Health Affairs. The United States Can Reduce Socioeconomic Disparities by Focusing on Chronic Diseases, 2017.

Exhibit 242: Chronic Disease Hospitalizations & Death Rates

Per 100,000	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Hospitalization Rates						
Coronary Heart Disease	352.2	244.2	224.9	2064.6	332.1	352.1
Congestive Heart Failure	1608.5	1135.5	1420.2	9019.1	1496.3	1653.0
Stroke	260.4	169.5	286.2	1461.9	235.3	263.9
Death Rates						
Congestive Heart Failure	17.6	18.4	14.3	8.5	18.6	16.8
Stroke	57.4	60.1	53.0	ND	60.9	54.2
Coronary Heart Disease	101.7	107.2	72.2	ND	85.2	112.7
Chronic Liver Disease & Cirrhosis	11.2	13.0	2.4	ND	9.2	13.2
Nephritis, Nephrotic Syndrome & Nephrosis	15.0	14.5	17.5	ND	15.3	7.3

Source: Florida Agency for Health Care Administration, 2018-2020

- Seen in Exhibit 242, the leading cause of hospitalizations per 100,000 in Osceola County (2018-2020) was congestive heart failure. The leading cause of death per 100,000 in Osceola County was coronary heart disease. Variations in hospitalization and death rates were seen among race and ethnicity.

- Populations who identified as other race had the highest rates of coronary heart disease hospitalization (2,064.6), congestive heart failure hospitalization (9,019.1) and stroke hospitalization (1,461.9) compared to those who identify as White, Hispanic/Latino and non-Hispanic/Latino.

- Those who identified as White and Hispanic/Latino had the highest death rates of congestive heart failure (18.4, 18.6, respectively) and stroke (60.1, 60.9, respectively).

- Those who identify as non-Hispanic/Latino had a coronary heart disease death rate of 112.7 per 100,000.

- Prevalence of chronic liver disease and cirrhosis death in White residents (13.0) and non-Hispanic/Latino residents (13.2) was slightly higher than in Osceola County (11.2). Black/ African American residents had the lowest rate of chronic liver disease and cirrhosis (2.4).

- The death rate for nephritis, nephrotic syndrome and nephrosis for those who identify as Black/African American was 17.5 per 100,000. This was slightly higher than the Osceola County average of 15 per 100,000.

Although cancer incidence and mortality overall are declining in the United States, certain groups continue to be at increased risk of developing or dying from particular cancers. Due to social, environmental and economic disadvantages, racial and ethnic groups bear a disproportionate burden of cancer compared with other groups. Cancer disparities can also be seen when outcomes are improving overall but the improvements are not seen in some groups relative to other groups.[169]

The total cancer incidence rate in Osceola County (2016-2018) was 536.9 per 100,000. The leading types of cancer in residents of Osceola County were breast and prostate cancer. The total cancer death rate in Osceola County was 155.9 per 100,000.

The leading cause of cancer death in Osceola County was lung cancer. Disparities by race and ethnicity were seen across cancer incidence and death.

Exhibit 243: Cancer Incidence

Per 100,000	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Total Incidence Rate	536.9	536.6	373.7	711.4	372.6	652.7
Cervical Cancer	11.2	9.9	ND	33.8	9.3	13.1
Prostate Cancer	111.4	101.1	165.0	144.6	98.2	113.8
Breast Cancer	131.2	122.8	119.7	237.0	100.5	156.6
Colorectal Cancer	45.0	43.3	38.0	79.5	29.8	56.7
Lung Cancer	53.0	56.6	23.1	57.1	33.9	65.6

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

- Cervical cancer rates were higher in those who identify as another race (33.8) than in Osceola County (11.2). Cervical cancer death rates were highest in those who identify as Hispanic/Latino (3.2).
- Prostate cancer rates were higher in those who identify as Black/African American (165.0) than in Osceola County (111.4).

169National Cancer Institute, Cancer Disparities.

- Breast cancer rates were highest in those of other race (237.0) than in Osceola County (131.2). Breast cancer death rates were highest in those who identify as non-Hispanic/Latino (14.7).
- Colorectal cancer rates were highest in those who identify as other race (79.5).
- Lung cancer rates (65.6) and lung cancer death rates (41.3) were highest in those who identify as non-Hispanic/Latino.

Exhibit 244: Cancer Cases at Advanced Stage When Diagnosed

Osceola County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
42.6%	42.1%	49.6%	ND	47.6%	40.5%

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

Exhibit 245: Deaths Caused by Cancer

Per 100,000	Osceola County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Overall Cancer Death Rate	155.9	161.4	130.8	ND	125.5	177.3
Cervical Cancer	2.1	2.6	0.0	ND	3.2	1.2
Prostate Cancer	10.1	9.6	15.4	ND	7.7	11.6
Breast Cancer	12.4	12.2	10.0	ND	ND	14.7
Colorectal Cancer	14.5	15.2	13.5	ND	13.2	15.4
Lung Cancer	32.5	35.4	16.7	ND	19.7	41.3

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Prostate cancer death rates were highest in those who identify as Black/African American (15.4).
- Colorectal cancer death rates were highest in those who identify as non-Hispanic/Latino (15.4) and White (15.2).

Exhibit 246: Diabetes Emergency Room Visits

Per 100,000	Osceola County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Emergency Room Visits Due to Diabetes	234.5	145.3	284.5	1,263.5	259.8	209.5
Preventable Hospitalizations Under 65 from Diabetes	178.9	ND	ND	ND	ND	ND
Hospitalizations from or with Diabetes	3,577.3	2,346.4	3,130.0	2,200.0	3,853.9	375.5

Source: Florida Agency for Health Care Administration, 2018-2020

- In Osceola County (2018-2020), preventable hospitalizations of diabetes in those under 65 years were 178.9 per 100,000.
- In Osceola County, the rate of hospitalizations from or with diabetes was highest in those who identify as Hispanic/Latino (3,853.9) and lowest in those who identify as non-Hispanic/Latino (375.5).

Exhibit 247: Prevalence of Respiratory Diseases

Per 100,000	Osceola County			White			Black/African American		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	785.0	440.0	-43.9%	449.5	252.1	-43.9%	621.1	302.9	-51.2%
Asthma Hospitalizations	135.0	67.1	-50.3%	75.1	44.0	-41.4%	110.9	47.5	-57.2%
Hospitalizations from CLRD (Including Asthma)	392.9	206.9	-47.3%	297.9	166.4	-44.1%	208.2	100.3	-51.8%
CLRD Death Rate	35.7	32.7	-8.4%	39.8	37.2	-6.5%	15.9	11.7	26.4%
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	4,727.9	2,771.3	-41.4%	963.5	541.9	-43.8%	536.5	303.4	-43.4%
Asthma Hospitalizations	911.3	395.0	-56.7%	175.5	90.2	-48.6%	90.9	45.3	-50.2%
Hospitalizations from CLRD (Including Asthma)	1,937.3	954.1	-50.8%	394.8	196.6	-50.2%	375.5	211.3	-43.7%
CLRD Death Rate	4.0	ND	ND	26.7	20.4	-23.6%	41.5	42.4	2.2%

Source: Florida Agency for Health Care Administration, 2019

Note that the decrease of reported incidence of respiratory diseases in Osceola County may have been impacted by COVID-19 and people's reluctance or inaccessibility to seek care.

Unintentional injury hospitalizations in Osceola County had rates of 563.9 per 100,000 in 2019 and 496.0 per 100,000 in 2020. Hospitalizations for non-fatal unintentional falls decreased from 2019 to 2020 but remained the highest unintentional injury (286.8, 262.7 per 100,000, respectively).

Exhibit 248: Unintentional Injuries, 2019

Per 100,000	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Unintentional Injury Hospitalizations	563.9	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	51.4	55.8	31.1	32.9	46.0	55.0
Unintentional Poisoning Death Rate	18.6	20.9	9.4	7.6	18.7	19.0
Drug Poisoning Death Rate	19.4	21.6	11.4	7.6	18.7	20.1
Hospitalizations for Non-Fatal Unintentional Falls	286.8	212.9	137.9	1,388.4	219.4	314.3
Unintentional Falls Death Rate	7.8	8.1	6.1	ND	5.0	10.0
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	103.0	54.4	63.1	687.3	87.7	100.5
Motor Vehicle Crash Death Rate	19.8	21.6	9.8	ND	19.0	19.0
Hospitalizations for Non-Fatal Traumatic Brain Injuries	110.1	65.3	74.4	621.4	90.3	113.4
Traumatic Brain Injury Death Rate	18.4	20.0	14.0	ND	12.8	23.2
Hospitalizations for Non-Fatal Firearm Injuries	6.9	ND	26.5	27.8	3.2	11.6
Firearms-Related Death Rate	9.6	10.0	7.6	7.1	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	3.8	ND	15.0	ND	ND	6.7
Unintentional Death Rate Due to Fire	0.0	0.0	0.0	0.0	0.0	0.0
Unintentional Drownings Death Rate	1.7	1.1	3.9	ND	0.9	2.7

Source: Florida Agency for Health Care Administration, 2019

- Those who identify as Black/African American had the highest rate of hospitalizations for non-fatal unintentional firearm injuries (15.0) and unintentional drownings death rate (3.9) – higher than the Osceola County average (3.8, 1.7, respectively). Those who identify as non-Hispanic/Latino had the highest rate of deaths due to traumatic brain injury at 23.2 per 100,000.
- Residents who identify as Black/African American and other race had the highest rates of hospitalizations for non-fatal firearm injuries (26.5, 27.8, respectively), higher than the Osceola County average (6.9).

Exhibit 249: Unintentional Injuries, 2020

Per 100,000	Osceola County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Unintentional Injury Hospitalizations	496.0	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	51.6	56.8	29.3	ND	43.3	63.4
Unintentional Poisoning Death Rate	23.2	27.0	9.0	ND	17.8	31.5
Drug Poisoning Death Rate	23.7	26.9	11.1	11.3	17.4	33.5
Hospitalizations for Non-Fatal Unintentional Falls	262.7	229.5	129.0	1,222.8	204.6	290.1
Unintentional Falls Death Rate	15.1	15.2	7.3	ND	13.6	14.7
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	82.5	33.9	41.0	580.9	71.1	56.5
Motor Vehicle Crash Death Rate	10.0	10.0	11.0	ND	8.8	12.1
Hospitalizations for Non-Fatal Traumatic Brain Injuries	98.9	56.7	34.8	569.6	77.5	91.0
Traumatic Brain Injury Death Rate	18.8	20.8	8.4	ND	17.6	20.5
Hospitalizations for Non-Fatal Firearm Injuries	7.8	2.5	16.2	42.0	5.2	7.9
Firearms-Related Death Rate	8.5	8.8	8.8	3.4	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	4.5	ND	9.1	28.0	3.0	5.5
Unintentional Death Rate Due to Fire	0.8	0.9	0.0	ND	0.0	1.5
Unintentional Drownings Death Rate	1.2	0.9	1.9	ND	0.9	1.3

Source: Florida Agency for Health Care Administration, 2020

- Osceola County residents who identify as other race had the highest rates of hospitalizations for non-fatal unintentional falls (1,222.8), non-fatal traumatic brain injuries (569.6), non-fatal firearm injuries (42.0) and non-fatal unintentional firearm injuries (28.0).
- Those who identify as non-Hispanic/Latino had the highest drug poisoning death rate 33.5 per 100,000, higher than the Osceola County average of 23.7 per 100,000.

The data below shows HIV and AIDS diagnoses and death in residents of Osceola County. When looking at rates by race and ethnicity, disparities are seen in those who identify as non-Hispanic/Latino Black/African American.

Exhibit 250: HIV & AIDS Diagnoses

Rates Per 100,000	Osceola County	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino
Adults Less Than 65 Who Have Ever Been Tested for HIV (2019)	56.5%	41.7%	58.5%	64.0%	ND
Population with HIV (2020)	404.4	275.8	859.8	418.0	387.6
2017-2019					
HIV Diagnoses	24.8	13.1	44.0	29.7	19.0
AIDS Diagnoses	9.4	4.9	16.6	11.5	6.9

Source: Florida Department of Health, Bureau of Communicable Diseases

Exhibit 251: HIV & AIDS Death Rate

	Osceola County	White	Black/African American	Hispanic/Latino	Non-Hispanic/Latino
Per 100,000	1.6	1.6	2.4	1.6	1.4

Source: Florida Department of Health. Bureau of Communicable Diseases, 2018-2020

- The population with HIV in Osceola County was 404.4 per 100,000, but by race and ethnicity, those who identify as non-Hispanic/Latino Black/African American had rates more than twice as high (859.8).
- Those who identify as non-Hispanic/Latino Black/African American had the highest AIDS diagnoses of 16.6 per 100,000, approximately two times higher than Osceola County (9.4).
- HIV and AIDS death rate was highest in those who identify as Black/African American (2.4).

Homicide & Suicide

Between 2019 and 2020 homicide rates in Osceola increased from 3.0 to 5.1 per 100,000 residents.

Exhibit 252: Homicide & Suicide Deaths by Race

Per 100,000	Osceola County		White		Black/African American	
	2019	**2020**	**2019**	**2020**	**2019**	**2020**
Homicide	3.0	5.1	2.2	4.9	5.4	7.1
Suicide	13.8	9.2	15.4	9.8	8.2	5.8

Source: Florida Department of Health, Bureau of Vital Statistics

Exhibit 253: Homicide & Suicide Deaths by Ethnicity

Per 100,000	Hispanic/Latino		Non-Hispanic/Latino	
	2019	**2020**	**2019**	**2020**
Homicide	1.9	4.3	4.2	6.6
Suicide	6.9	3.6	19.9	15.9

Source: Florida Department of Health, Bureau of Vital Statistics

- In 2019, homicide rates were highest in those who identify as Black/African American, twice as high as the Osceola County average.
- In 2019, suicide rates were highest in those who identify as non-Hispanic/Latino at 19.9 per 100,000, higher than Osceola County (13.8).

Maternal Health

Historically, maternal mortality in the United States has been a key indicator of the overall health of a population. Maternal mortality reflects the whole health system and illustrates the socio-cultural, political and economic philosophy of society. Over the past two decades, the United States maternal mortality rate has not improved while maternal mortality rates have decreased for other regions of the world. Significant racial and ethnic disparities persist in both the rate of women in the United States who die due to complications of pregnancy or delivery and the rate that women experience negative health consequences due to unexpected pregnancy or childbirth outcomes.[170]

Severe maternal morbidity is the presence of a complication during a hospital delivery. Complications during pregnancy or delivery can lead to negative outcomes for the woman and the infant. Monitoring the trend and disparities in severe maternal morbidity allows public health and medical professionals to take steps to improve the health of women and children.

Maternal mortality was highest in women who identify as White and Hispanic/Latino (28.1, 25.0, respectively), higher than in Osceola County (22.5). Women who identify as Black/African American had the highest rates of severe maternal morbidity (19.1).

Exhibit 254: Maternal Fatalities[171]

Per 100,000 Live Births	Osceola County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Maternal Mortality per 100,000 live births	22.5	28.1	ND	ND	25.0	18.9
Severe Maternal Morbidity per 1,000 delivery hospitalizations	11.7	6.3	19.1	15.7	11.7	12.1

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- In Osceola County, the maternal mortality rate was 22.5 per 100,000 births while severe maternal morbidity was 11.7 per 1,000 delivery hospitalizations.

[170]United States Commission On Civil Rights 2021 Statutory Enforcement Report, Racial Disparities in Maternal Health.
[171]Maternal Deaths, Rate Per 100,000 Live Births. Severe Maternal Morbidity, Rate Per 1,000 Delivery Hospitalizations.

Exhibit 255: Prenatal Care

	Osceola County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Births to Mothers with First-Trimester Prenatal Care	81.1%	82.3%	75.9%	ND	82.0%	79.5%
Births to Mothers with No Prenatal Care	2.4%	2.1%	3.7%	ND	2.0%	3.0%

Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Women with the lowest percentage of receiving first-trimester prenatal care were those who identify as Black/African American (75.9%).
- More than three-quarters of pregnant mothers in Osceola County received first trimester prenatal care (81.1%). A very small percentage of mothers received no prenatal care (2.4%).

Black/African American women are also at greater prenatal risk statewide – not only in Osceola County. As noted earlier in the report, Black/African American mothers are approximately three time more likely to die from maternal issues than Whites.

Exhibit 256: Prenatal Care (State of Florida)

Data Year	White	Black/African American	Non-Hispanic	Hispanic
2013	8.0	18.0	8.4	14.8
2014	6.0	18.3	8.0	7.8
2015	6.6	15.5	8.1	6.9
2016	5.9	13.7	7.0	7.3
2017	5.7	15.2	6.9	7.8
2018	6.3	14.0	6.9	9.8
2019	7.5	19.5	9.3	8.7
2020	3.8	17.6	6.2	8.5

Maternal Death Rates by Race and Ethnicity (State of Florida)
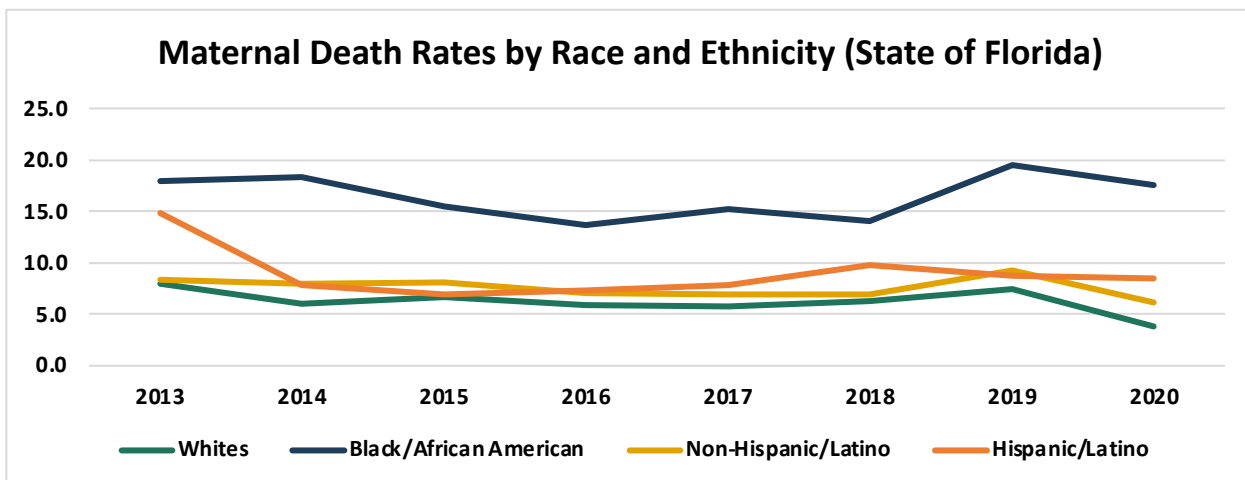
In Osceola County, mothers between the ages of 15 and 19 were unlikely to be married (90.9%). Repeat births to mothers are similar among the different racial and ethnic groups. Obesity rates in pregnant women are highest among Black/African American mothers.

Exhibit 257: Maternal Characteristics

	Osceola County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Repeat Births to Mothers Ages 15-19	11.0%	11.3%	10.1%	ND	11.1%	10.7%
Births to Unwed Mothers Ages 15-19	90.9%	90.3%	98.6%	ND	90.0%	93.7%
Births to Unwed Mothers Ages 15-44	48.2%	48.9%	55.7%	ND	53.5%	40.3%
Births to Mothers Who Are Underweight at the Time Pregnancy Occurred[172]	3.6%	3.4%	3.2%	ND	3.5%	3.8%
Births to Mothers Who Are Overweight at the Time Pregnancy Occurred[173]	28.8%	28.9%	29.2%	ND	29.5%	27.8%
Births to Mothers Who Are Obese at Time Pregnancy Occurred[174]	28.6%	28.0%	35.8%	ND	28.6%	28.5%
Births with Inter-Pregnancy Interval[175]	28.3%	27.9%	28.3%	ND	25.4%	32.6%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Approximately 28.8% of all mothers were overweight at the time pregnancy occurred, while 28.6% were obese at the time pregnancy occurred.

[172] BMI <18.5.
[173] BMI 25.0-29.9.
[174] BMI >= 30.
[175] < 18 Months.

In Osceola County the three-year cumulative sum, 2018 to 2020, indicates that 10.3% of infants were born preterm, 8.1% of infants were born with low birth weight, 1.4% of infants were born with very low birth weight and 87.0% of infants with very low birth weight were born in subspeciality perinatal centers. County-wide rates of fetal deaths were 6.6 per 1,000 deliveries, infant deaths were 4.9 per 1,000 deliveries and sudden unexpected infant deaths were 0.7 per 1,000 deliveries.

Exhibit 258: Infant Characteristics

	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/Latino
Preterm Births[176]	10.3%	9.8%	13.4%	ND	10.0%	10.7%
Very Low Birth Weight Infants Born in Subspecialty Perinatal Centers	87.0%	92.9%	78.0%	ND	92.1%	81.7%
Low Birth Weight[177]	8.1%	7.3%	12.3%	ND	7.4%	9.2%
Very Low Birth Weight[178]	1.4%	1.0%	3.2%	ND	1.3%	1.5%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Osceola County women who identify as Black/African American made up the highest percentage of preterm births (13.4%), births to infants of low birth rate (12.3%) and very low birth weight (3.2%) — higher than Osceola County (10.3%, 8.1%, 1.4%, respectively).

[176] < 37 Weeks of Gestation.
[177] <2500 Grams.
[178] < 1500 Grams.

Exhibit 259: Fetal & Infant Fatalities

Per 1,000 Deliveries	Osceola County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Fetal Deaths	6.6	6.0	10.1	ND	5.5	7.7
Infant Deaths (0-364 days)	4.9	4.6	9.0	ND	5.6	3.6
Sudden Unexpected Infant Deaths	0.7	0.6	1.3	ND	0.9	0.4

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Women in Osceola County who identify as Black/African American had higher rates of fetal deaths, infant deaths and sudden unexpected infant deaths (10.1, 9.0, 1.3, respectively) than the overall Osceola County rates (6.6, 4.9. 0.7, respectively).

Community Survey Highlights

The community survey conducted for the CFC included over 4,000 total responses. As shown below, there were 1,729 responses from Osceola County residents.

Exhibit 260: Survey Responses by County

In which county do you live?				
County	**Responses**	**Total Percent**	**Net Percent**	**Cumulative Percent**
Lake	266	6.2	7.2	7.2
Orange	822	19.3	22.2	29.4
Osceola	1729	40.5	46.7	76.2
Seminole	639	15.0	17.3	93.4
Other	243	5.7	6.6	100.0
Total	**3,699**	**86.7**	**100.0**	
No Response	565	13.3		
Total	**4,264**	**100.0**		

As a result of the survey, the highest priority needs included the following:

1. Affordable, quality housing
2. Mental health care services for seniors
3. Suicide prevention
4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Dental care for children, especially those from low income or other priority communities
6. Community services to reduce illegal drug use and abuse or misuse of prescription medications
7. Access to free or low-cost health care services for all residents
8. Access to primary care services
9. Support for family members of a person being treated for substance use disorder
10. Mental health outpatient services capacity
11. Mental health crisis services and community awareness of available resources
12. Childcare services, especially for children with special needs
13. Youth mental health services
14. Suicide prevention initiatives in middle and high schools
15. Mental health and substance use disorder transition care for inmates being released from jail

Prioritization Process Summary

As noted above, the secondary data analysis, qualitative research and community survey generated a list of approximately 50 granular needs. The needs were then prioritized by a group of Osceola County leaders using the Modified Delphi method (i.e., a three-stage mixed qualitative and quantitative) process. The results of the prioritization process yielded a rank-ordered set of prioritized needs falling into five specific categories. The top 15 granular needs were then folded under the five specific categories. Please see the results below.

Top Five Needs

- Increase system capacity
- Enhance Mental Health (including substance use disorder) outreach and treatment
- Streamline access to care
- Refine primary care and specialized medical care (e.g., chronic conditions) services
- Address housing and other social determinants

Top 15 Granular Issues

1. Affordable, quality housing
2. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients
3. Childcare services, especially for children with special needs
4. Employment opportunities & equal wages
5. Greater access to primary care services in non-urban parts of Lake, Orange, Osceola and Seminole counties
6. Adaptive equipment for people living with long-term disabilities
7. Mental health outpatient services capacity
8. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
9. Mental health inpatient bed capacity
10. Access to care for seniors (e.g., transportation)
11. Integrated case management and multiple health-related services "under one roof" for people experiencing homelessness
12. Co-located case managers and behavioral health providers at community-based primary care sites
13. Youth mental health services
14. Benefits and financial support for young families with children (i.e., Medicaid, WIC, SNAP/ Food Stamps)
15. Specialty outpatient diabetes care

Top 15 Granular Issues within the Five Top Needs

Increase system capacity

    8. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community

Enhance Mental Health (including substance use disorder) outreach and treatment

    7. Mental health outpatient services capacity

    9. Mental health inpatient bed capacity

    13. Youth mental health services

Streamline access to care

    2. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients

    3. Childcare services, especially for children with special needs

    6. Adaptive equipment for people living with long-term disabilities

    10. Access to care for seniors (e.g., transportation)

    12. Co-located case managers and behavioral health providers at community-based primary care sites

    14. Benefits and financial support for young families with children

Refine primary care and specialized medical care (e.g., chronic conditions) services

    15. Specialty outpatient diabetes care

Housing and other social determinants

    1. Affordable, quality housing

    4. Employment opportunities & equal wages

    5. Greater access to primary care services in non-urban parts of Lake, Orange Osceola and Seminole Countie

    11. Integrated case management and multiple health-related services "under one roof" for people experiencing homelessness

Monument of States | Osceola County

Seminole County

Executive Summary

People cannot choose the circumstances of their birth, a variable that has significant impact on their well-being throughout their lives. Even the minds of babies begin to construct realities about the world almost immediately. From a mother's first touch, human brains create a feedback loop about the world. Geographic location, adverse childhood experiences and other characteristics - many of which are historically linked to discrimination or exclusion - have a dramatic impact on an individual's health and well-being.

The short list of health issues highlighted below are unique due to their geographic and social realities. The data points help illustrate some of the impacts that these health equity realities are having on individuals' health in Seminole County.

- The percentage of households below the poverty line has decreased in the county with Seminole County levels (9.3%) lower than those in the nation (12.3%) and the state (12.7%) respectively.
- A higher percentage of minority populations in Seminole County are living in poverty which is also reflected in lower median household incomes by race. The average median income for those who identify as White is $74,451 compared to the median income of $49,139 for those who identify as Black/African American.
- Only 57.8% of Hispanic/Latino residents had a personal doctor while 77.6% of non-Hispanic/Latino White residents had a personal doctor.
- In Seminole County the rate of hospitalizations from or with diabetes was 2,247.1 per 100,000 but for Black/African American residents (4,143.2)
- Unintentional injury death rate, unintentional poisoning and traumatic brain injury death rate were highest in those who identify as White and non-Hispanic/Latino.
- The population with HIV in Seminole County was 288.5 per 100,000, but by race and ethnicity, those who identify as non-Hispanic/Latino Black/African American had rates over three times higher than in Seminole County.
- Homicide rates were highest in those who identify as Black/African American (16.9), more than three times higher than the Seminole County average (4.0).
- Suicide rates were highest in those who identify as White at 12.7 per 100,000.
- Women who identify as Black/African American had higher rates of fetal death, infant deaths and sudden unexpected infant deaths (11.1, 15.7, 3.1, respectively) than Seminole County as a whole (6.7, 6.3, 1.0, respectively).

Nurture at Cranes Roost | Seminole County

Health Equity Profiles

Demographics

Notable SVI characteristics are seen in the table below across the United States, Florida and Seminole County. Data in this table comes from the 2019 American Community Survey 5 -Year Estimates and the 2021 Federal Reserve Economic Data (FRED), with trends and changes noted by arrows ↑↓. An upward arrow (↑) indicates an increase of more than 10% from the 2010 American Community Survey 5-Year estimate and the FRED Economic Data, a downward arrow (↓) indicates a decrease of more than 10%. If no arrow is present, there is no identified change from 2010.

Exhibit 261: **Seminole County Social Vulnerability Index**

	United States	Florida	Seminole County
Seminole County Population	324,697,795	20,901,636↑	461,402↑
Below Poverty	12.3%↓	12.7%↓	9.3%↓
Unemployed	5.4%↓	5.1%↓	3.2%↓
Median Income	$62,843↑	$55,660↑	$66,768↑
Median Age	38.1	42.0	39.2
Age 65 +	15.6%↑	20.1%↑	15.2%↑
Age 17 or Younger	22.6%	20.0%	21.2%↓
Household with Disability	12.7%	13.7%	11.7%↑
Single-Parent Households	31.6%	30.2%	34.2%
Ethnic Minority	39.3%↑	46.1%↑	39.7%↑
Do not Speak English	8.4%	11.9%	6.5%↑
Multi-Unit Housing Structures	26.3%	30.5%	26.8%
Mobile Homes	6.2%	8.9%	2.9%
No Vehicle	8.6%	6.3%	4.0%

Source: American Community Survey, 2010 & 2019 5-Year Estimates

- The population in Florida (20,901,636) and Seminole County (461,402) has grown over the past 10 years. However, the percentage of residents in Seminole County under 18 years of age has decreased to 21.2% of the population (Note: the downward arrow indicates a decrease of more than 10% from 2010).
- The percentage of households that are below the poverty line in 2019 decreased in the county with Seminole County levels (9.3%) lower than those in the nation (12.3%) and the state (12.7%). See Exhibit 261.
- Median income has risen in the United States, Florida and Seminole County. The median income in Seminole County ($66,768) is higher than in Florida and the United States ($55,660, and $62,843 respectively).

- The population of those aged 65 years and older has increased at the national, state and county levels. The percentage of those 65 years and older in Seminole County is 15.2%, lower than the average in Florida (20.1%) and the United States (15.6%).
- Over the past 10 years, the percentage of households who have a person with a disability has increased in Seminole County (11.7%).
- The percentage of the population of ethnic minorities has increased in the past 10 years in the United States, Florida and Seminole County (39.3%, 46.1%, 39.7%, respectively). Those who do not speak English have increased in Seminole County and make up 6.5% of the population.

Median life expectancy in Seminole County for those who identify as Hispanic/Latino was 83.6 years, higher than Seminole County (80.3). Median life expectancy for those who identify as Black/African American was 77.9 years, lower than Seminole County (80.3).

Exhibit 262: Median Life Expectancy by Race & Ethnicity

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	77.8	ND	72.0*	ND	ND	79.9	78.0
Florida	79.4	79.7	76.7	ND	ND	83.0	78.5
Seminole County	80.3	80.6	77.9	87	ND	83.6	79.8

Sources: For state and county data except Asian and Other/Multiple Races: Florida Department of Health referencing data from 2018-2020 (https://www.flhealthcharts.gov/ChartsReports/rdPage.aspx?rdReport=ChartsProfiles.LifeExpectancyProfile&islYears=2020 retrieved June 9, 2022). For Asian and Other/Multiple Races data: County Health Rankings, referencing data from 2018-2020 (https://www.countyhealthrankings.org/app/florida/2022/measure/outcomes/147/data, retrieved June 9, 2022). For U.S. data: National Center for Health Statistics. 2021, referencing 2020 data (https://www.cdc.gov/nchs/products/databriefs/db427.htm, retrieved June 9, 2022).
*This data point represents those identified as Black/African American, not of Hispanic/Latino origin, while the other figures in this column are only indicative of race.

Social Determinants of Health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks. Social determinants of health have a major impact on people's health, well-being and quality of life and heavily contribute to wide health disparities and inequities.[179]

Racial and ethnic minorities may face unique barriers to higher education. Black/African American and Hispanic/Latino individuals have lower college enrollment and graduation rates compared to White individuals. Hispanic/Latino individuals are most likely to attend college part-time, which reduces their odds of graduating.[180]

Educational attainment and unemployment rates in Seminole County vary across race and ethnicity, but those who identify as Black/African American have greater disparities.

Exhibit 263: **Educational Attainment (percent high school diploma or higher)**

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	88.5%	90.7%	86.7%	87.3%	74.2%	70.3%	93.2%
Florida	88.5%	90.2%	83.7%	87.2%	82.1%	80.4%	93.0%
Seminole County	94.4%	95.5%	90.8%	91.9%	91.3%	91.1%	96.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The percentage of Seminole County residents who identify as Black/African American and have graduated high school was 90.8%, lower than the County average (94.4%).

Seminole County housing issues are slightly better than the state average. However, approximately one in six 2020 households are severely cost burdened (14%) or have severe housing problems (17%).[181]

Exhibit 264: **Housing Challenges in Seminole County**

	Severe Housing Cost Burdened	Severe Housing Problems
Seminole County	14%	17%
Florida	17%	19%

Source: County Health Rankings

[179]Healthy People 2030. Social Determinants of Health.
[180]Healthy People 2030, Enrollment in Higher Education.
[181]Severe Housing Problems, Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities or lack of plumbing facilities. Available at https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/physical-environment/housing-transit/severe-housing-problems.

Educational attainment (i.e., the percent of adults with a Bachelor's degree or higher) notably differs by race and ethnicity with Blacks/African Americans much less likely to have earned a bachelor's degree.

Exhibit 265: Trend in Educational Attainment (percent with a Bachelor's degree or higher) by Race and Ethnicity
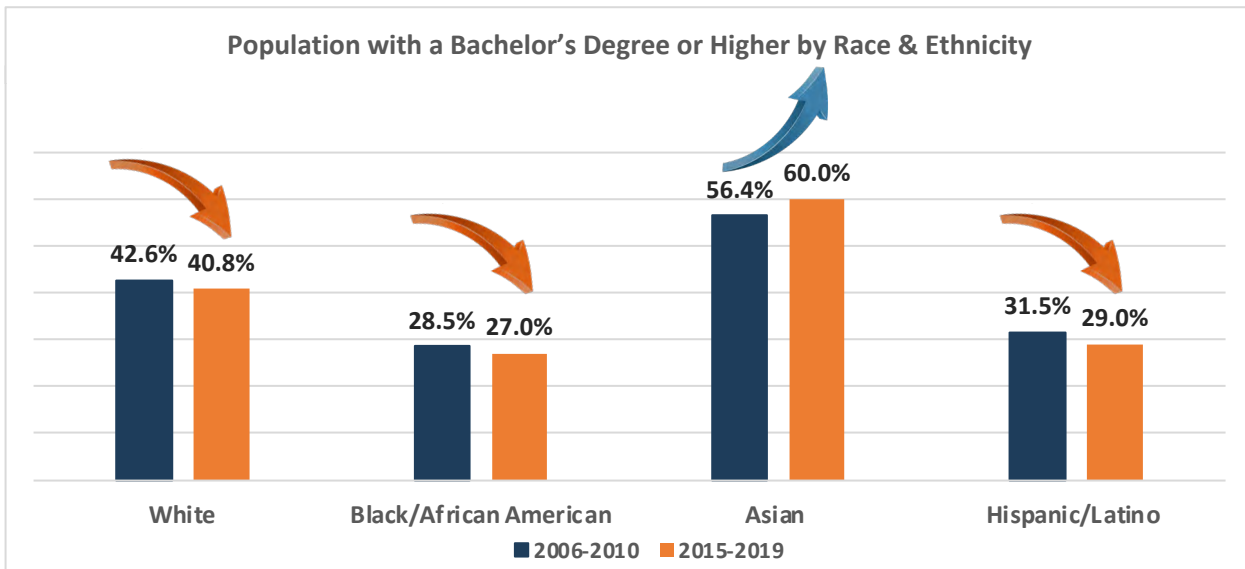
Source: American Community Survey, 2015-2019

Note: The data above references two data points: the 5-year period ending 2010 (i.e., 2006-2010) and the 5-year period ending 2019 (i.e., 2015-2019).

Workplace inequalities among racial and ethnic minorities can have negative health consequences as those who are unemployed have reported feelings of depression, anxiety, low self-esteem, demoralization and stress.[182]

Exhibit 266: Unemployed Civilian Labor Force

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	5.4%	4.6%	9.2%	4.3%	7.3%	6.2%	4.4%
Florida	5.4%	4.7%	8.5%	4.4%	6.0%	5.0%	4.7%
Seminole County	4.6%	4.1%	7.2%	3.5%	5.4%	4.7%	4.0%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- Seminole County residents who identify as Black/African American made up 7.2% of the unemployed civilian labor force, higher than the Seminole County average and individuals of different races and ethnicities.

[182]Healthy People 2030, Employment.

Racial and ethnic minorities living in poverty often present more adverse health outcomes compared to the White population. Residents of impoverished communities are at increased risk for mental illness, chronic disease, higher mortality and lower life expectancy.

A higher percentage of minority populations in Seminole County are living in poverty which is also reflected in lower median household incomes by race.
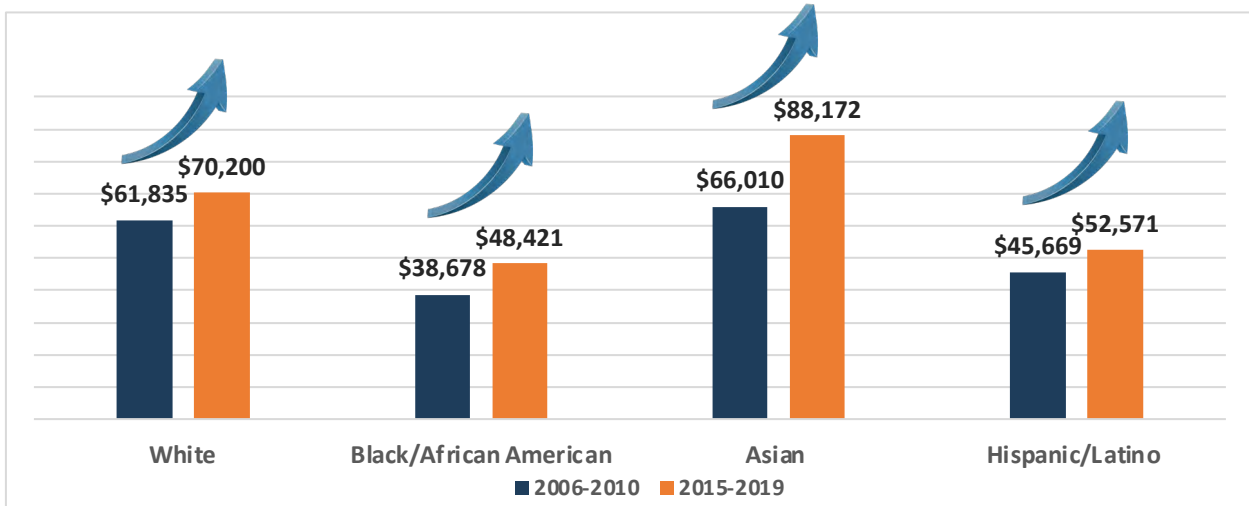
Exhibit 267: Median Household Income

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	$64,994	$68,943	$43,674	$91,775	$55,965	$54,632	$70,843
Florida	$57,703	$61,065	$43,418	$73,412	$53,706	$52,092	$63,474
Seminole County	$70,297	$74,451	$49,139	$87,925	$54,945	$57,141	$76,799

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The average median income for those who identify as White is $74,451 compared to the median income of $49,139 for those who identify as Black/African American.

The median household income differs substantially among racial and ethnic groups in Seminole County.

Exhibit 268: Trend in Median Household Income by Race and Ethnicity

- Asians in Seminole County (more likely to have higher educational attainment) had median household income of over $88,000 in 2019 – over 30% since 2010 (the largest percent increase of any racial or ethnic group).
- Black/African American households' median income increased almost 30% over the same time period. Incomes for White and Hispanic/Latino residents also increased but not by as high of a percentage.
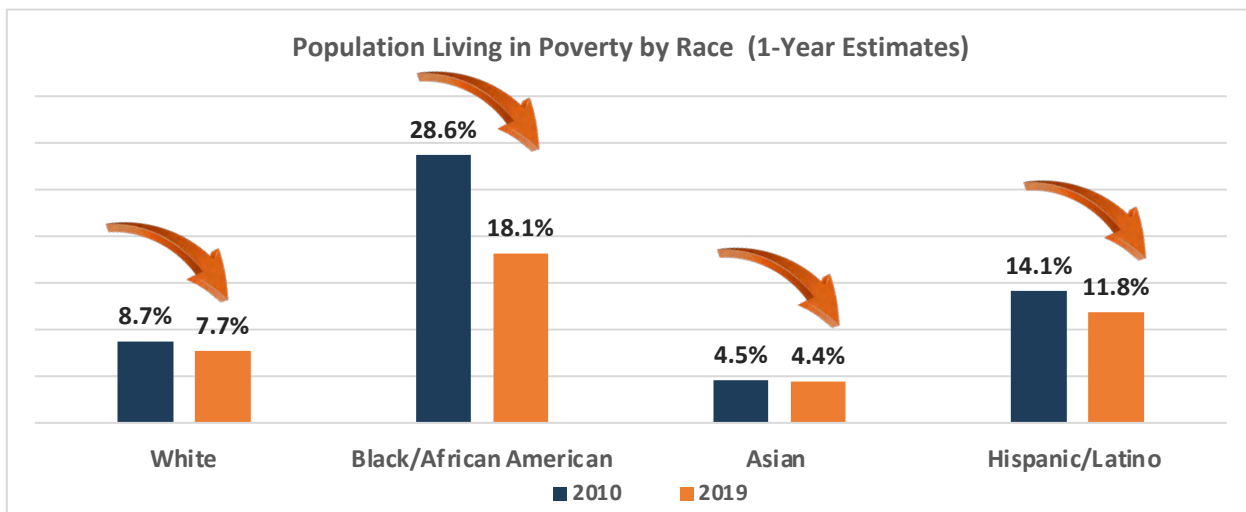
Exhibit 269: Population Living in Poverty

	Total	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	12.8%	10.6%	22.1%	10.6%	17.8%	18.3%	9.3%
Florida	13.3%	11.5%	20.7%	11.9%	15.6%	16.4%	9.7%
Seminole County	9.8%	8.1%	16.5%	8.9%	14.1%	12.5%	7.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

- The percentage of people in Seminole County (2016-2020) who identify as Black/African American, Other/Multiple Races and Hispanic/Latino had higher rates of living below the federal poverty level (16.5%, 14.1%, 12.5% respectively) than people who identify as White (8.1%) and Non-Hispanic/Latino (7.4%).

- Similar rates are seen in minority populations under 18 years old that live below the federal poverty level—27.0% Black/African American, 18.9% of another race and 17.8% Hispanic/Latino, higher than Seminole County's average (13.7%).[183]

There are large disparities in the percentage of people living poverty based on race and ethnicity; however, poverty levels for all groups declined from 2010 to 2019.

Exhibit 270: Trend in the Percentage of People Living in Poverty

Population Living in Poverty by Race (1-Year Estimates)

	2010	2019
White	8.7%	7.7%
Black/African American	28.6%	18.1%
Asian	4.5%	4.4%
Hispanic/Latino	14.1%	11.8%

- Poverty levels in Seminole County among Blacks/African Americans are roughly 2.5 times higher than Whites.

- Fewer than one in 20 Asians (4.4%) lives in poverty.

[183]Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates.

Inadequate health insurance coverage is one of the largest barriers to health care access, and the unequal distribution of coverage contributes to disparities in health. The consequences of not having health insurance are exacerbated within specific ethnicities. For example, research indicates that people who speak another language besides English are less likely to receive recommendations for preventative health screenings and immunizations. This factor, in addition to not a lack of health insurance, only worsens health outcomes over time.[184]

In Seminole County, 90.6% of adult residents had health insurance. Utilization of health care services and numbers of immunizations varied by race and ethnicity.

Exhibit 271: Population with Health Insurance

	Total*	White	Black / African American	Asian	Other/ Multiple Races	Hispanic/ Latino	White, not Hispanic/ Latino
United States	91.3%	92.4%	90.1%	93.6%	84.6%	82.3%	94.1%
Florida	87.3%	88.5%	85.1%	88.6%	82.2%	81.4%	90.7%
Seminole County	90.6%	91.6%	89.3%	91.8%	84.7%	85.6%	92.6%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
*Civilian noninstitutionalized population

[184]Healthy People 2030, Access to Primary Care.

Sanford Mural | Artist: Mark Seppala | Seminole County

Exhibit 272: Utilization of Health Care Services by Adults

2019	Seminole County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
Adults who could not see a doctor at least once in the past year due to cost	13.3%	9.8%	16.5%	24.0%
Adults who have a personal doctor	70.7%	77.6%	61.3%	57.8%
Adults who said their overall health was good to excellent	83.1%	84.7%	80.8%	75.7%
Had a medical checkup in the past year	76.1%	76.6%	80.5%	75.1%
Visited a dentist or a dental clinic in the past year (2016)	72.2%	75.4%	68.3%	64.9%
Immunizations				
Received a flu shot in the past year	36.6%	40.7%	20.1%	34.6%
Have ever received a pneumonia vaccination	29.7%	33.3%	22.0%	22.5%

- Seminole County residents who could not see a doctor in the past year due to cost was lowest in non-Hispanic/Latino White residents (9.8%) and highest in Hispanic/Latino residents (24.0%).
- Only 57.8% of Hispanic/Latino residents had a personal doctor while 77.6% of non-Hispanic/Latino White residents had a personal doctor.
- Approximately 80.5% of non-Hispanic/Latino Black/African American residents had a medical checkup in the past year, higher than the Seminole County average (76.1%).
- Under 50% of Seminole County residents received immunizations for the flu and pneumonia. Immunizations for the flu in the past year were lowest in non-Hispanic/Latino Black/African American residents (20.1%). Only 22.0% of non-Hispanic/Latino Black/African American residents have ever received a pneumonia vaccine.

Healthy Behaviors

Not everyone has the means and opportunity to make healthy decisions. Policies and programs put in place have marginalized some population groups and communities, keeping them from the support and resources necessary to thrive. Many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with a higher risk of cardiovascular disease, type 2 diabetes and obesity. Tobacco use is associated with heart disease, cancer and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers and cirrhosis.[185]

Exhibit 273: Adult Health Behaviors

	Seminole County			White			Black/African American		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	15.2%	11.2%	-26.3%	15.4%	12.6%	-18.2%	6.6%	12.4%	87.9%
Engage in Heavy or Binge Drinking	20.1%	17.4%	-13.4%	21.3%	18.6%	-12.7%	13.7%	18.0%	31.4%
Obese	27.9%	22.7%	-18.6%	27.9%	24.3%	-12.9%	25.9%	26.9%	3.9%
Overweight	34.8%	37.6%	8.0%	32.8%	37.7%	14.9%	29.2%	45.8%	56.8%
Sedentary	22.8%	22.6%	-0.9%	20.7%	20.8%	0.5%	22.8%	26.4%	15.8%
Inactive or Insufficiently Active	47.6%	ND	ND	43.1%	ND	ND	56.1%	ND	ND
Meet Aerobic Recommendations	53.5%	ND	ND	57.7%	ND	ND	50.6%	ND	ND
Meet Muscle Strengthening Recommendations	41.4%	37.3%	-9.9%	38.2%	39.4%	3.1%	53.6%	39.5%	-26.3%
	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Current Smokers	ND	ND	ND	21.8%	5.7%	-73.9%	ND	ND	ND
Engage in Heavy or Binge Drinking	ND	ND	ND	16.4%	14.0%	-14.6%	ND	ND	ND
Obese	ND	ND	ND	32.1%	12.0%	-62.6%	ND	ND	ND
Overweight	ND	ND	ND	43.1%	37.4%	-13.2%	ND	ND	ND
Sedentary	ND	ND	ND	30.8%	27.6%	-10.4%	ND	ND	ND

[185]County Health Roadmaps & Rankings, Health Behaviors.

	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2016	2019	% Change	2016	2019	% Change	2016	2019	% Change
Inactive or Insufficiently Active	ND	ND	ND	58.7%	ND	ND	ND	ND	ND
Meet Aerobic Recommendations	ND	ND	ND	41.3%	ND	ND	ND	ND	ND
Meet Muscle Strengthening Recommendations	ND	ND	ND	48.0%	34.6%	-27.9%	ND	ND	ND

Source: Florida Behavioral Risk Factor Surveillance System

In Seminole County 114.1 per 100,000 people under 65 had preventable hospitalizations from nutritional deficiencies. The nutritional deficiency death rate in Seminole County was 4.6 per 100,000 but is highest in those who identify as non-Hispanic/Latino (5.1).

Exhibit 274: Nutritionally Deficient Population

Per 100,000	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Preventable Hospitalizations Under 65 from Nutritional Deficiencies	114.1	ND	ND	ND	ND	ND
Nutritional Deficiency Death Rate	4.6	4.7	4.0	4.4	0.0	5.1

Source: Florida Department of Health. Bureau of Vital Statistics, 2019

Chronic Diseases

Research indicates that racial and ethnic minorities experience higher rates of diabetes, obesity, stroke, heart disease and cancer than the White population. In America, the risk of being diagnosed is 77% higher for Black/African American residents and 66% higher among Hispanic/ Latino residents, compared to the White population. Additionally, those identifying as Asian American, Native Hawaiian and Pacific Islander are at twice the risk of developing diabetes than the population overall.[186] The following section highlights inequities and disparities within Seminole County that ultimately impact the health of individuals, families and the overall community.

The leading cause of hospitalization per 100,000 in Seminole County was congestive heart failure. The leading cause of death per 100,000 in Seminole County was coronary heart disease. Variations in hospitalization and death rates are seen among race and ethnicity.

Exhibit 275: Adult Chronic Disease Profile

	Seminole County	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Other Race	Non-Hispanic/ Latino	Hispanic/ Latino
Ever Been Told They Had Diabetes	9.5%	10.6%	12.4%	ND	4.7%	ND
Ever Been Told They Had a Stroke	2.3%	5.8%	4.0%	ND	4.0%	ND

Source: Florida Behavioral Risk Factor Surveillance System, 2019

[186]Health Affairs. The United States Can Reduce Socioeconomic Disparities by Focusing on Chronic Diseases, 2017.

Exhibit 276: Chronic Disease Hospitalizations & Death Rates

Per 100,000	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Hospitalization Rates						
Coronary Heart Disease	225.9	192.2	278.6	603.3	207.8	224.7
Congestive Heart Failure	1233.5	1025.5	2252.6	2590.5	1004.2	1264.0
Stroke	217.3	179.2	369.4	490.9	169.2	221.9
Death Rates						
Congestive Heart Failure	18.0	17.5	21.6	17.7	15.2	18.5
Stroke	59.0	58.7	61.0	ND	55.8	59.0
Coronary Heart Disease	73.3	73.0	82.9	ND	54.8	76.2
Chronic Liver Disease & Cirrhosis	10.7	11.7	6.7	ND	7.0	11.3
Nephritis, Nephrotic Sydrome & Nephrosis	9.5	7.7	21.9	ND	9.0	9.7

Source: Florida Agency for Health Care Administration, 2018-2020

- Seminole County death rates were highest in Black/African American residents who died from congestive heart failure, stroke and coronary heart disease (21.6, 61.0, 82.9 respectively).
- More than twice as high as Seminole County (9.5 per 100,000), the nephritis, nephrotic syndrome and nephrosis death rate for those who identify as Black/African American was 21.9 per 100,000.
- Those who identify as White and non-Hispanic/Latino had higher death rates of chronic liver disease and cirrhosis (11.7 and 11.3 respectively).

Although cancer incidence and mortality overall are declining in the United States, certain groups continue to be at increased risk of developing or dying from particular cancers. Due to social, environmental and economic disadvantages, racial and ethnic groups bear a disproportionate burden of cancer compared with other groups. Cancer disparities can also be seen when outcomes are improving overall but the improvements are not seen in some groups relative to other groups.[187]

Exhibit 277: Cancer Incidence

Per 100,000	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Total Incidence Rate	424.5	428.2	370.3	388.0	324.8	458.1
Cervical Cancer	8.7	9.1	9.1	5.8	9.5	8.3
Prostate Cancer	90.5	80.5	125.8	80.3	74.8	95.4
Breast Cancer	117.4	117.1	97.5	125.8	85.6	127.5
Colorectal Cancer	39.5	39.7	33.0	40.5	36.1	40.8
Lung Cancer	49.6	52.2	41.7	33.0	26.8	33.9

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

Exhibit 278: Cancer Cases at Advanced Stage When Diagnosed

Seminole County	White	Black/ African American	Other Race	Hispanic/Latino	Non-Hispanic/ Latino
48.3%	48.3%	51.8%	ND	50.3%	48.1%

Source: University of Miami Medical School. Florida Cancer Data System, 2016-2018

[187]National Cancer Institute, Cancer Disparities.

Exhibit 279: Deaths Caused by Cancer

Per 100,000	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Overall Cancer Death Rate	141.9	142.6	148.9	ND	102.8	148.7
Cervical Cancer	2.4	1.1	3.5	ND	0.3	1.5
Prostate Cancer	16.7	6.2	12.1	ND	4.1	7.3
Breast Cancer	10.8	10.5	16.0	ND	6.6	11.6
Colorectal Cancer	13.0	12.7	15.7	ND	11.4	13.3
Lung Cancer	33.1	34.0	28.3	ND	17.8	35.7

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Those who identify as White and non-Hispanic/Latino had higher rates of lung cancer death (34.0, 35.7 respectively), higher than the Seminole County average (33.1).
- Approximately 48% to 51% of all races and ethnicities received a diagnosis of their cancer at an advanced stage. The population that identifies as other race and non-Hispanic/ Latino had the highest rates of breast cancer (125.8, 127.5 respectively), higher than the average in Seminole County (117.4). Breast cancer mortality was highest in Black/African American residents (16.0) and non-Hispanic/Latino residents (11.6), higher than the average in Seminole County (10.8).

Emergency room visits due to diabetes were over two times higher in those who identify as Black/African American (408.4) and of other race (338.7) than in Seminole County as a whole (147.8).

Exhibit 280: **Diabetes Emergency Room Visits**

Per 100,000	Seminole County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Emergency Room Visits Due to Diabetes	147.8	95.4	408.4	338.7	175.6	142.3
Preventable Hospitalizations Under 65 from Diabetes	121.4	ND	ND	ND	ND	ND
Hospitalizations from or with Diabetes	2,247.1	1,784.8	4,143.2	5,602.4	2,340.5	2,209.3

Source: Florida Agency for Health Care Administration, 2018-2020

- In Seminole County, preventable hospitalizations of diabetes in those under 65 years were 121.4 per 100,000.
- In Seminole County, the rate of hospitalizations from or with diabetes was 2,247.1 per 100,000 but for Black/African American residents (4,143.2) and other race (5,602.4) it was notably higher.

Exhibit 281: Prevalence of Respiratory Disease

Per 100,000	Seminole County			White			Black/African American		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	394.3	248.4	-37.0%	233.9	155.6	-33.5%	967.5	570.7	-41.0%
Asthma Hospitalizations	54.8	38.3	-30.1%	38.7	26.6	-31.3%	86.8	78.0	-10.1%
Hospitalizations from CLRD (Including Asthma)	209.4	145.2	-30.7%	178.9	124.9	-30.2%	283.2	204.6	-27.8%
CLRD Death Rate	30.8	25.6	-16.9%	32.5	27.1	-16.6%	20.7	21.6	4.3%

Exhibit 282: Prevalence of Respiratory Diseases (continued)

Per 100,000	Other Race			Hispanic/Latino			Non-Hispanic/Latino		
	2019	2020	% Change	2019	2020	% Change	2019	2020	% Change
Emergency Room Visits Due to Asthma	800.4	523.4	-34.6%	505.8	302.7	-40.2%	358.4	229.6	-35.9%
Asthma Hospitalizations	163.6	98.9	-39.5%	74.9	45.1	-39.8%	49.7	37.8	-23.9%
Hospitalizations from CLRD (Including Asthma)	396.8	269.1	-32.2%	189.8	109.1	-42.5%	210.5	152.2	-27.7%
CLRD Death Rate	19.3	15.3	-20.7%	25.9	13.9	-46.3%	31.3	27.1	-13.4%

Source: Florida Agency for Health Care Administration

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Non-fatal unintentional injury hospitalizations in Seminole County had rates of 552.7 per 100,000 in 2019 and 553.1 per 100,000 in 2020. Hospitalizations for non-fatal unintentional falls decreased from 2019 to 2020 but remained the highest unintentional injury (298.9, 289.1 per 100,000 respectively). Rates of unintentional injuries and unintentional death by race and ethnicity presented disparities in Seminole County.

Exhibit 283: Unintentional Injuries, 2019

Per 100,000	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Unintentional Injury Hospitalizations	552.7	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	51.4	56.0	33.4	24.1	38.6	54.6
Unintentional Poisoning Death Rate	15.2	17.1	13.1	2.8	6.2	17.9
Drug Poisoning Death Rate	15.0	16.8	13.1	2.8	7.0	17.4
Hospitalizations for Non-Fatal Unintentional Falls	298.9	286.3	162.4	638.8	205.2	302.2
Unintentional Falls Death Rate	18.0	19.7	2.6	ND	20.1	17.8
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	54.2	41.0	56.1	109.1	34.4	49.8
Motor Vehicle Crash Death Rate	11.9	12.5	12.0	ND	6.6	12.8
Hospitalizations for Non-Fatal Traumatic Brain Injuries	72.8	63.2	58.9	132.7	41.4	71.8
Traumatic Brain Injury Death Rate	17.4	18.4	13.1	ND	14.5	18.3
Hospitalizations for Non-Fatal Firearm Injuries	5.9	1.5	21.7	ND	ND	5.3
Firearms-Related Death Rate	9.9	9.6	11.1	7.7	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	4.7	ND	16.1	ND	ND	4.0
Unintentional Death Rate Due to Fire	0.5	0.6	0.0	ND	0.0	ND
Unintentional Drownings Death Rate	1.7	1.9	0.0	ND	2.1	ND

Source: Florida Agency for Health Care Administration, 2019

- Shown in Exhibit 283, unintentional injury death rate, unintentional poisoning and traumatic brain injury death rate were highest in those who identify as White and non-Hispanic/Latino.

- Residents who identify as other race had the highest rates of hospitalizations for non-fatal unintentional falls, non-fatal motor vehicle traffic-related injuries and nonfatal traumatic brain injuries (638.8, 109.1, and 132.7, respectively)—much higher than the Seminole County average (298.9, 54.2, 72.8, respectively).

- Those who identify as Black/African American had the highest rate of hospitalizations for non-fatal firearm injuries (21.7), firearms-related death rate (11.1) and hospitalizations for non-fatal unintentional firearm injuries (16.1) – higher than the Seminole County average (5.9, 9.9, 4.7, respectively).

- Those who identify as Hispanic/Latino had the highest death rates due to unintentional falls.

Exhibit 284: Unintentional Injuries, 2020

Per 100,000	Seminole County	White	Black/African American	Other Race	Hispanic/Latino	Non-Hispanic/Latino
Unintentional Injury Hospitalizations	553.1	ND	ND	ND	ND	ND
Unintentional Injury Death Rate	59.9	65.2	44.9	ND	36.4	66.0
Unintentional Poisoning Death Rate	27.0	30.1	20.9	ND	14.6	31.0
Drug Poisoning Death Rate	27.6	30.5	20.9	12.0	13.9	31.9
Hospitalizations for Non-Fatal Unintentional Falls	289.1	285.6	139.9	507.2	185.0	301.8
Unintentional Falls Death Rate	16.5	18.3	3.5	ND	10.0	17.4
Hospitalizations for Non-Fatal Motor Vehicle Traffic-Related Injuries	52.9	39.1	59.0	103.4	34.7	48.7
Motor Vehicle Crash Death Rate	9.7	9.2	16.1	ND	5.8	10.9
Hospitalizations for Non-Fatal Traumatic Brain Injuries	82.0	75.0	54.2	116.7	38.0	84.0
Traumatic Brain Injury Death Rate	16.2	17.1	10.6	ND	6.0	18.6
Hospitalizations for Non-Fatal Firearm Injuries	4.9	ND	20.8	ND	ND	4.2
Firearms-Related Death Rate	10.4	10.0	14.4	2.5	ND	ND
Hospitalizations for Non-Fatal Unintentional Firearm Injuries	2.2	ND	8.2	ND	ND	1.6
Unintentional Death Rate Due to Fire	0.0	0.0	0.0	ND	0.0	0.0
Unintentional Drownings Death Rate	1.9	2.3	0.0	ND	1.8	1.9

Source: Florida Agency for Health Care Administration, 2020

- Unintentional injury death rate, unintentional poisoning and drug poisoning death rate were highest in those who identify as White and non-Hispanic/Latino. Traumatic brain injury death rate was highest in those who identify as non-Hispanic/Latino (18.6). Residents who identify as White had the highest death rate due to unintentional falls (18.3) and unintentional drownings (2.3). Motor vehicle crash death rate, hospitalizations for non-fatal firearm injuries, firearm-related death rate and hospitalizations for non-fatal unintentional firearm injuries were highest in residents who identify as Black/African American.

- Residents who identify as other race had the highest rates of hospitalizations for non-fatal unintentional falls (507.2), hospitalizations for non-fatal motor vehicle traffic-related injuries (103.4) and hospitalizations for non-fatal traumatic brain injuries (116.7) — much higher than the Seminole County average (289.1, 52.9, 82.0, respectively).

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Black/African American and Hispanic/Latino communities are disproportionately affected by HIV compared to other racial and ethnic groups. In 2019, the Black/African American community represented 13% of the United States population, but 40% of people with HIV. Hispanic/Latino residents represented 18.5% of the population, but 25% of people with HIV.[188]

The data below shows HIV and AIDS diagnoses and death in residents of Seminole County. When looking at rates by race and ethnicity, disparities are seen in those who identify as non-Hispanic/Latino Black/African American.

Exhibit 285: HIV & AIDS Diagnoses

Rates Per 100,000	Seminole County	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino
Adults Less Than 65 Who Have Ever Been Tested for HIV (2019)	49.8%	45.2%	59.5%	59.8%	ND
Population with HIV (2020)	288.5	170.0	933.9	317.6	280.3
2017-2019					
HIV Diagnoses	16.4	8.9	51.7	21.6	14.9
AIDS Diagnoses	7.0	3.1	30.0	7.4	6.9

Source: Florida Department of Health, Bureau of Communicable Diseases

- The population with HIV in Seminole County was 288.5 per 100,000, but by race and ethnicity, those who identify as non-Hispanic/Latino Black/African American had rates over three times higher than in Seminole County (933.9, 288.5, respectively).
- Those who identify as non-Hispanic/Latino Black/African American had the highest HIV and AIDS diagnoses (51.7 and 30.0 per 100,000), approximately three to four times higher than Seminole County (16.4 and 7.0 per 100,000).

Exhibit 286: HIV & AIDS Death Rate

	Seminole County	White	Black/African American	Hispanic/Latino	Non-Hispanic/Latino
Per 100,000	1.9	1.2	8.0	0.9	2.1

Source: Florida Department of Health. Bureau of Communicable Diseases, 2018-2020

- HIV and AIDS death rate among those who identify as Black/African American was nearly four times that of the second highest group (non-Hispanic/Latino) (8.0 and 2.1, respectively).

[188]HIV.gov, Impact on Racial and Ethnic Minorities.

Homicide & Suicide

In Seminole County, 2020 homicides rates were 4.0 per 100,000 while suicide rates were 11.4 per 100,000. Both measures are higher than in the previous year, though figures decreased within the Hispanic/Latino community.

Exhibit 287: Homicide & Suicide Deaths by Race

Per 100,000	Seminole County		White		Black/African American	
	2019	**2020**	**2019**	**2020**	**2019**	**2020**
Homicide	3.3	4.0	2.0	1.9	12.3	16.9
Suicide	10.4	11.4	11.9	12.7	1.2	1.2

Source: Florida Department of Health. Bureau of Vital Statistics

Exhibit 288: Homicide & Suicide Deaths by Ethnicity

Per 100,000	Hispanic/Latino		Non-Hispanic/Latino	
	2019	**2020**	**2019**	**2020**
Homicide	4.2	3.8	3.0	4.1
Suicide	8.3	4.5	10.8	13.0

Source: Florida Department of Health. Bureau of Vital Statistics

- Homicide rates in 2020 were highest in those who identify as Black/African American (16.9), more than four times higher than the Seminole County average (4.0).
- Suicide rates in Seminole County in 2020 were highest in those who identify as White at 12.7 per 100,000.

Maternal Health

Historically, maternal mortality in the United States has been a key indicator of the overall health of a population. Maternal mortality reflects the whole health system and illustrates the socio-cultural, political and economic philosophy of society. Over the past two decades, the United States maternal mortality rate has not improved while maternal mortality rates have decreased for other regions of the world. Significant racial and ethnic disparities persist in both the rate of women in the United States who die due to complications of pregnancy or delivery and the rate that women experience negative health consequences due to unexpected pregnancy or childbirth outcomes.[189]

Severe Maternal Morbidity is the presence of a complication during a hospital delivery. Complications during pregnancy or delivery can lead to negative outcomes for the woman and the infant. Monitoring the trend and disparities in severe maternal morbidity allows public health and medical professionals to take steps to improve the health of women and children.

Exhibit 289: **Maternal Fatalities**[190]

Per 100,000 Live Births	Seminole County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Maternal Mortality per 100,000 live births	21.8	20.2	44.9	ND	58.1	9.7
Severe Maternal Morbidity per 1,000 delivery hospitalizations	13.2	10.2	18.0	17.8	12.8	13.4

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- In Seminole County, the maternal mortality rate was 21.8 per 100,000 births while severe maternal morbidity was 13.2 per 1,000 delivery hospitalizations.
- Maternal mortality was highest in women who identify as Black/African American and Hispanic/Latino (44.9, 58.1, respectively), much higher than in Seminole County (21.8). Women who identify as Black/African American and other race had the highest rates of severe maternal morbidity (18.0, 17.8, respectively).

[189]United States Commission on Civil Rights 2021 Statutory Enforcement Report, Racial Disparities in Maternal Health.
[190]Maternal Deaths, Rate Per 100,000 Live Births. Severe Maternal Morbidity, Rate Per 1,000 Delivery Hospitalizations

Exhibit 290: Prenatal Care

	Seminole County	White	Black/African American	Other Race	Hispanic/ Latino	Non- Hispanic/ Latino
Births to Mothers with First-Trimester Prenatal Care	80.1%	81.9%	71.7%	ND	77.7%	80.9%
Births to Mothers with No Prenatal Care	1.5%	1.2%	3.2%	ND	1.3%	1.6%

Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- More than three-quarters of pregnant mothers received first-trimester prenatal care (80.1%).
- A very small percentage of mothers received no prenatal care (1.5%).
- Women with the lowest percentage of receiving first-trimester prenatal care were women who identify as Black/African American (71.7%).
- Women who identify as Black/African American made up the highest percentage of women who received no prenatal care (3.2%).

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In Seminole County, mothers between the ages of 15 and 19 who were not married make up the largest percentage of women giving birth in that age group (93.1%).

Exhibit 291: Maternal Characteristics

	Seminole County	White	Black/African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Repeat Births to Mothers Ages 15-19	10.7%	10.4%	13.4%	ND	10.4%	10.9%
Births to Unwed Mothers Ages 15-19	93.1%	90.0%	98.3%	ND	95.1%	91.8%
Births to Unwed Mothers Ages 15-44	36.9%	32.9%	67.1%	ND	46.8%	33.6%
Births to Mothers Who Are Underweight at the Time Pregnancy Occurred[191]	3.4%	3.3%	2.3%	ND	3.2%	3.4%
Births to Mothers Who Are Overweight at the Time Pregnancy Occurred[192]	25.9%	26.5%	24.4%	ND	30.5%	24.4%
Births to Mothers Who Are Obese at Time Pregnancy Occurred[193]	26.2%	25.0%	39.3%	ND	28.9%	25.1%
Births with Inter-Pregnancy Interval[194]	34.0%	34.6%	36.4%	ND	30.8%	35.0%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Approximately 26.2% of all mothers were obese at the time pregnancy occurred.
- Those who identify as Black/African American are more likely to be unwed mothers than other races in Seminole County.
- Approximately 13.4% of Black/African American teen mothers between the ages of 15 and 19 had given birth to multiple children, 98.3% of Black/African American teen mothers ages 15 to 19 were not married and 67.1% of Black/African American mothers aged 15 to 44 were not married.

[191]BMI <18.5
[192]BMI 25.0-29.9
[193]BMI >= 30
[194]< 18 Months.

In Seminole County, the three-year cumulative sum, 2018 to 2020, indicates that just over 9% of infants were born preterm, 7.5% of infants were born at low birth weight, 1.4% of infants were born at very low birth weight and 86.3% of infants of very low birth weight were born in subspeciality perinatal centers. County-wide rates of fetal deaths were 6.7 per 1,000 deliveries, infant deaths were 6.3 per 1,000 deliveries and sudden unexpected infant deaths were one per 1,000 deliveries.

Exhibit 292: Infant Characteristics

	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Preterm Births[195]	9.4%	8.4%	14.2%	ND	8.4%	9.8%
Very Low Birth Weight Infants Born in Subspecialty Perinatal Centers	86.3%	88.0%	85.2%	ND	90.9%	85.3%
Low Birth Weight[196]	7.5%	5.9%	13.3%	ND	6.2%	7.9%
Very Low Birth Weight[197]	1.4%	1.1%	2.7%	ND	1.3%	1.4%

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

Exhibit 293: Fetal & Infant Fatalities

Per 1,000 Deliveries	Seminole County	White	Black/ African American	Other Race	Hispanic/ Latino	Non-Hispanic/ Latino
Fetal Deaths	6.7	5.6	11.1	ND	5.5	6.7
Infant Deaths (0-364 days)	6.3	4.1	15.7	ND	4.9	6.3
Sudden Unexpected Infant Deaths	1.0	0.6	3.1	ND	0.9	1.1

Source: Florida Department of Health. Bureau of Vital Statistics, 2018-2020

- Women who identify as Black/African American had the highest percentage of preterm births (14.2%), births to infants of low birth rate (13.3%) and infants of very low birth weight (2.7%) – higher than Seminole County (9.4%, 7.5%, 1.4%, respectively).
- Women who identify as Black/African American had higher rates of fetal death, infant deaths and sudden unexpected infant deaths (11.1, 15.7, 3.1, respectively) than Seminole County (6.7, 6.3, 1.0, respectively).

[195]< 37 Weeks of Gestation.
[196]<2500 Grams.
[197]< 1500 Grams.

Community Survey Highlights

The community survey conducted for the CFC included over 4,000 total responses. As shown below, there were 639 responses from Seminole County residents.

Exhibit 294: Survey Responses by County

In which county do you live?				
County	Responses	Total Percent	Net Percent	Cumulative Percent
Lake	266	6.2	7.2	7.2
Orange	822	19.3	22.2	29.4
Osceola	1,729	40.5	46.7	76.2
Seminole	639	15.0	17.3	93.4
Other	243	5.7	6.6	100.0
Total	**3,699**	**86.7**	**100.0**	
No Response	565	13.3		
Total	**4,264**	**100.0**		

As a result of the survey, the highest priority needs included the following:

1. Affordable, quality housing
2. Mental health care services for seniors
3. Suicide prevention
4. Recruitment and retention of culturally diverse and informed providers who demographically reflect the community
5. Dental care for children, especially those from low income or other priority communities
6. Community services to reduce illegal drug use and abuse or misuse of prescription medications
7. Access to free or low-cost health care services for all residents
8. Access to primary care services
9. Support for family members of a person being treated for substance use disorder
10. Mental health outpatient services capacity
11. Mental health crisis services and community awareness of available resources
12. Childcare services, especially for children with special needs
13. Youth mental health services
14. Suicide prevention initiatives in middle and high schools
15. Mental health and substance use disorder transition care for inmates being released from jail

Prioritization Process Summary

As noted above, the secondary data analysis, qualitative research and community survey generated a list of approximately 50 granular needs. The needs were then prioritized by a group of Seminole County leaders using the Modified Delphi method (i.e., a three-stage mixed qualitative and quantitative) process. The results of the prioritization process yielded a rank-ordered set of prioritized needs falling into five specific categories. The top 15 granular needs were then folded under the five specific categories. Please see the results below.

Top Five Needs

- Increase system capacity
- Enhance Mental Health (including substance use disorder) outreach and treatment
- Streamline access to care
- Refine primary care and specialized medical care (e.g., chronic conditions) services
- Address housing and other social determinants

Top 15 Granular Issues

1. Support for additional affordable, quality housing — affects recruitment and retention of culturally diverse and informed providers, as well as access to free or low-cost health care for families
2. Information sharing among providers
3. Mental health outpatient services capacity
4. Mental health crisis services and community awareness of available resources
5. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients
6. Mental health stigma reduction
7. Mental health inpatient bed capacity
8. Co-located case managers and behavioral health providers at community-based primary care sites
9. Behavioral health outpatient services for children
10. Integrated community collaborations (e.g., schools, Criminal Justice System, health care providers and Public Health Departments) to share information and ultimately identify and more efficiently serve high-need community members
11. Access to free or low-cost health care services for all residents
12. Access to healthy food
13. Youth mental health services
14. Suicide prevention.
15. Mental health and substance use disorder transition care for inmates being released from jail.

Top 15 Granular Issues within the Five Top Needs

Increase system capacity

3. Mental health outpatient services capacity

7. Mental health inpatient bed capacity

Enhance Mental Health (including substance use disorder) outreach and treatment

4. Mental health crisis services and community awareness of available resources

9. Behavioral health outpatient services for children

13. Youth mental health services

14. Suicide prevention

15. Mental health and substance use disorder transition care for inmates being released from jail

Streamline access to care

11. Access to free or low-cost health care services for all residents

Refine primary care and specialized medical care (e.g., chronic conditions) services

2. Information sharing among providers

5. Case managers, Community Health Workers and similarly credentialed professionals to guide high-need patients

6. Mental health stigma reduction

8. Co-located case managers and behavioral health providers at community-based primary care sites

10. Integrated community collaborations (e.g., schools, Criminal Justice System, health care providers and Public Health Departments) to share information and ultimately identify and more efficiently serve high-need community members

Address housing and other social determinants

1. Support for additional affordable, quality housing — affects recruitment and retention of culturally diverse and informed providers, as well as access to free or low-cost health care for families

12. Access to healthy food

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Chapter 4

Appendices

Appendix 1: Supplementary Data Tables

Language

Those for whom English is not the primary language range from 15% in Lake County to over 50% in Osceola County, with more than one in five residents of Osceola County describing themselves as speaking English "less than very well."

Exhibit 295: **Spoken Languages Other Than English**

Population 5 & Over	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
English only	78.0%	69.7%	84.4%	62.1%	47.1%	74.2%
Language other than English	22.0%	30.3%	15.6%	37.9%	52.9%	25.8%
Speak English less than "very well"	8.2%	12.0%	6.1%	14.1%	22.5%	6.7%
Spanish	13.5%	22.5%	11.1%	27.2%	46.8%	17.8%
Speak English less than "very well"	5.2%	9.4%	4.5%	10.7%	21.0%	4.7%
Other Indo-European languages	3.7%	5.5%	3.0%	6.9%	4.3%	5.1%
Speak English less than "very well"	1.1%	1.7%	1.0%	1.9%	0.7%	0.9%
Asian and Pacific Islander languages	3.6%	1.6%	1.1%	2.7%	1.1%	2.3%
Speak English less than "very well"	1.6%	0.7%	0.6%	1.3%	0.4%	1.0%
Other languages	1.2%	0.7%	0.4%	1.0%	0.7%	0.6%
Speak English less than "very well"	0.3%	0.2%	0.0%	0.2%	0.4%	0.1%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Education

High school graduation rates in the service area are generally similar to statewide averages, though Seminole County has a higher rate at 95.9% (compared to the Florida rate of 91.7%).

Exhibit 296: High School Graduation Rate[198]

Florida	Lake County	Orange County	Osceola County	Seminole County
91.7%	92.1%	91.8%	89.9%	95.9%

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics & Performance Management School-aged Child & Adolescent Profile, 2019

Housing

With the exception of telephone service, the Central Florida Collaborative counties have slightly lower rates of housing units lacking fundamental utilities than state and national averages. Residents in the service area are less likely to be in a household without a vehicle than state and national averages.

Exhibit 297: Housing Units Lacking Fundamental Utilities

Occupied Housing Units	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
No complete plumbing facilities	0.4%	0.3%	0.2%	0.2%	0.1%	0.2%
No complete kitchen facilities	0.8%	0.7%	0.5%	0.5%	0.4%	0.5%
No telephone service available	1.9%	2.2%	1.9%	2.0%	2.7%	2.7%
No vehicles available	8.6%	6.3%	4.9%	5.7%	5.2%	4.0%

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

[198]Florida's high school graduation rate is the percentage of students who graduated within four years of their initial enrollment in ninth grade, not counting deceased students or students who transferred out to attend another public school outside the system, a private school, a home education program or an adult education program. Incoming transfer students are included in the appropriate cohort (the group whose progress is tracked) based on their grade level and year of entry.

Employment & Income

Unemployment rates trended downward from 2017 to 2019, only to skyrocket at the start of the pandemic. Throughout Florida, and across the service area, rates have again settled closer to where they were at the start of 2017. Osceola County was the hardest hit by the surge in unemployment and has been the slowest to recover.

Exhibit 298: Trend of Unemployment Rates

Month	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
1/1/2017	4.7	4.7	5.1	4.5	5.1	4.4
2/1/2017	4.6	4.5	4.6	4.0	4.6	4.0
3/1/2017	4.4	4.4	4.3	3.7	4.3	3.7
4/1/2017	4.5	4.3	4.0	3.5	4.1	3.5
5/1/2017	4.4	4.3	4.1	3.6	4.2	3.6
6/1/2017	4.3	4.2	4.3	4.0	4.6	3.9
7/1/2017	4.3	4.2	4.4	4.1	4.7	4.0
8/1/2017	4.4	4.2	4.5	4.1	4.7	4.0
9/1/2017	4.2	4.1	4.0	3.7	4.3	3.6
10/1/2017	4.1	4.1	3.9	3.5	4.1	3.5
11/1/2017	4.2	4.0	4.0	3.6	4.2	3.5
12/1/2017	4.1	4.0	3.7	3.4	3.9	3.4
1/1/2018	4.0	3.9	4.2	3.8	4.3	3.7
2/1/2018	4.1	3.9	3.8	3.5	4.0	3.5
3/1/2018	4.0	3.8	3.6	3.3	3.7	3.3
4/1/2018	4.0	3.7	3.4	3.1	3.5	3.1
5/1/2018	3.8	3.6	3.4	3.0	3.5	3.1
6/1/2018	4.0	3.6	3.9	3.6	4.0	3.5
7/1/2018	3.8	3.5	3.8	3.5	4.0	3.5
8/1/2018	3.8	3.5	3.8	3.4	3.9	3.4
9/1/2018	3.7	3.5	3.4	3.1	3.5	3.1
10/1/2018	3.8	3.5	3.4	3.1	3.5	3.1
11/1/2018	3.8	3.5	3.4	3.0	3.4	3.0
12/1/2018	3.9	3.5	3.5	3.1	3.5	3.1
1/1/2019	4.0	3.5	4.0	3.6	4.0	3.6
2/1/2019	3.8	3.4	3.4	3.1	3.4	3.1
3/1/2019	3.8	3.4	3.3	3.0	3.3	3.0
4/1/2019	3.7	3.3	3.0	2.7	3.0	2.7
5/1/2019	3.7	3.3	3.1	2.9	3.2	2.9
6/1/2019	3.6	3.2	3.6	3.2	3.6	3.2
7/1/2019	3.6	3.3	3.7	3.4	3.8	3.4
8/1/2019	3.7	3.3	3.6	3.4	3.8	3.3

Month	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
9/1/2019	3.5	3.2	3.2	3.0	3.4	3.0
10/1/2019	3.6	3.2	3.2	3.0	3.4	3.0
11/1/2019	3.6	3.2	3.2	2.9	3.3	2.9
12/1/2019	3.6	3.2	3.1	2.8	3.2	2.8
1/1/2020	3.5	3.3	3.7	3.3	3.8	3.4
2/1/2020	3.5	3.3	3.3	3.0	3.3	3.0
3/1/2020	4.4	4.9	5.4	5.0	5.6	4.9
4/1/2020	14.8	14.0	15.3	18.3	22.5	13.6
5/1/2020	13.3	14.2	19.8	23.4	30.6	14.5
6/1/2020	11.1	11.6	15.7	19.4	25.2	11.6
7/1/2020	10.2	11.5	12.8	16.5	20.3	10.8
8/1/2020	8.4	7.9	8.7	11.3	14.2	7.3
9/1/2020	7.8	7.2	7.3	9.2	11.5	6.1
10/1/2020	6.9	5.8	5.8	7.2	8.8	4.9
11/1/2020	6.7	5.4	5.0	6.0	7.4	4.3
12/1/2020	6.7	5.1	4.1	4.6	5.6	3.4
1/1/2021	6.3	4.8	5.3	6.9	8.4	4.7
2/1/2021	6.2	4.7	4.9	5.3	6.1	4.4
3/1/2021	6.0	4.7	5.3	5.5	6.4	4.6
4/1/2021	6.1	4.8	5.3	5.7	6.7	4.7
5/1/2021	5.8	4.9	5.1	5.5	6.6	4.5
6/1/2021	5.9	5.0	5.9	6.1	7.2	5.1
7/1/2021	5.4	5.1	5.2	5.3	6.3	4.5

Source: U.S. Bureau of Labor Statistics, Unemployment Rate, retrieved from FRED, Federal Reserve Bank of St. Louis

Nearly four out of every five Floridians drive alone to work, and those rates are consistent in the service area. Carpooling is the second most common commuting transportation, with the highest rates in Osceola County and the lowest in Seminole County. Public transit and walking are the means of commuting by fewer than two percent of the service area working population.

Exhibit 299: Population Commuting to Work

Population 16 & Over	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Population	156,941,346	9,857,575	152,370	720,725	177,343	240,442
Driving alone to work	75.9%	78.1%	78.8%	76.1%	78.1%	80.0%
Carpooled	8.9%	9.1%	10.0%	11.5%	12.3%	7.8%
Public transportation *(excluding taxicab)*	5.0%	1.6%	0.3%	2.0%	0.7%	0.9%
Walked	2.6%	1.6%	1.3%	1.6%	0.9%	1.2%
Taxicab, motorcycle or other means	1.4%	2.0%	2.5%	1.7%	1.2%	1.2%

Source: U.S. Census Bureau, American Community Survey. 1-Year Estimates Subject Tables 2019

Population Living With a Disability

Reported rates of early childhood disabilities in Seminole County are double that of Florida averages (1.5% compared to 0.7%), all attributable to hearing difficulties. Lake County has the lowest reported rates of childhood disabilities (0.2%).

Exhibit 300: Under 5 Living with a Disability by Type

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Total Population, Under 5	0.7%	0.7%	0.2%	0.8%	1.1%	1.5%
Hearing Difficulty	0.5%	0.6%	0.2%	0.7%	1.1%	1.5%
Vision Difficulty	0.4%	0.3%	0.0%	0.8%	0.0%	0.0%
Cognitive Difficulty	ND	ND	ND	ND	ND	ND
Ambulatory Difficulty	ND	ND	ND	ND	ND	ND
Self-Care Difficulty	ND	ND	ND	ND	ND	ND
Independent Living Difficulty	ND	ND	ND	ND	ND	ND

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

Exhibit 301: Ages Five to 17 Living with a Disability by Type

	United States	Florida	Lake County	Orange County	Osceola County	Seminole County
Population 5 to 17	5.6%	6.0%	6.4%	6.9%	8.9%	5.1%
Hearing Difficulty	0.6%	0.6%	1.9%	0.6%	0.7%	0.3%
Vision Difficulty	0.9%	0.8%	0.8%	0.7%	2.3%	1.2%
Cognitive Difficulty	ND	ND	ND	ND	ND	ND
Ambulatory Difficulty	ND	ND	ND	ND	ND	ND
Self-Care Difficulty	ND	ND	ND	ND	ND	ND
Independent Living Difficulty	ND	ND	ND	ND	ND	ND

Source: United States Census Bureau. American Community Survey 5-Year Estimates, 2015-2019

- For children between the ages of five and 17, Osceola County rates are notably higher than the other service area counties (and state and national averages), with the largest proportion of disabilities falling under the category of vision impairments.

Morbidity & Mortality

Cancer

From 2013 to 2019, there has been an upwards trend of cancer prevalence in the 45-64 age bracket for all counties except Seminole. Rates for adults under 45 years of age have decreased and the trends have varied for the 65 and older age group.

Exhibit 302: Adult Cancer Prevalence by Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2013	2.6%	5.9%	18.8%	2.9%	6.0%	22.2%	2.1%	3.0%	17.9%	2.5%	4.8%	16.0%	2.9%	5.1%	19.2%
2016	2.0%	6.8%	17.6%	2.8%	6.4%	14.0%	1.4%	3.5%	12.8%	1.2%	3.5%	15.2%	0.8%	6.0%	17.3%
2019	1.5%	7.7%	18.5%	1.1%	7.1%	17.1%	1.5%	8.1%	18.6%	0.8%	6.4%	13.8%	1.1%	5.1%	17.8%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 303: Adult Cancer Prevalence by Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2013	6.7%	8.4%	8.1%	11.9%	4.4%	4.8%	4.6%	6.2%	3.9%	9.0%
2016	6.8%	8.1%	6.7%	9.0%	3.4%	4.2%	3.2%	6.2%	5.0%	7.8%
2019	7.6%	8.4%	7.3%	9.4%	6.1%	6.3%	3.0%	7.5%	4.7%	6.8%

Source: Florida Behavioral Risk Factor Surveillance System

- In Orange County, cancer incidence rates among 45–64-year-olds increased by five percentage points from 2013 to 2019.
- Lake, Osceola and Seminole counties cancer prevalence among seniors (age 65+) decreased from 2013 to 2019.
- Cancer rates are higher among women than men in Florida on average, and the service area counties reflect an even larger discrepancy. However, the gap has been closing from 2013 to 2019.
- Notable differences in prevalence rates can still be observed, most notably in Osceola County, where women are more than twice as likely as men to have cancer.

Those in the lowest income bracket have the highest prevalence of cancer in each of the four service area counties. Trends over time have been variable. Non-Hispanic/Latino White residents report a higher prevalence of cancer than non-Hispanic/Latino Black/African American and Hispanic/Latino residents in each of the years highlighted below. Cancer rates for non-Hispanic/Latino Black/African American residents more than doubled from 2002 to 2010 in each of the counties for which data is presented, while the statewide rate decreased over that same time period.

Exhibit 304: Adult Cancer Prevalence by Income

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2013	7.0%	8.2%	7.4%	16.2%	11.5%	3.8%	3.5%	5.0%	5.1%	5.0%	10.0%	3.4%	7.9%	6.9%	5.4%
2016	8.3%	7.2%	6.5%	7.5%	10.6%	7.6%	3.1%	5.1%	4.5%	6.0%	4.3%	2.1%	2.2%	10.4%	4.9%
2019	8.9%	8.9%	7.3%	9.8%	6.0%	9.4%	8.7%	5.4%	5.8%	7.6%	5.9%	3.4%	7.7%	4.1%	5.4%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 305: Adult Cancer Prevalence by Race & Ethnicity

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino
2002	10.0%	4.3%	4.2%	11.0%	ND	7.8%	7.1%	2.7%	3.0%	8.1%	2.7%	3.9%	8.0%	2.2%	6.3%
2007	9.5%	4.7%	4.6%	9.7%	ND	3.5%	5.8%	1.8%	2.6%	10.2%	ND	2.0%	8.9%	1.4%	0.2%
2010	10.8%	3.8%	4.7%	10.6%	1.0%	3.1%	8.0%	7.2%	4.7%	9.4%	6.9%	3.0%	7.1%	7.2%	3.9%

Source: Florida Behavioral Risk Factor Surveillance System

Types of Cancer

While breast cancer rates have been relatively steady in Lake and Orange counties, the rates in Osceola and Seminole counties have had a notable increase from 2008 – 2018 (similar to, though more pronounced than, the statewide rising trend).

Exhibit 306: Breast Cancer Incidence

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2008	116.9	126.8	120.3	107.5	113.2
2009	116.1	114.3	119.6	103.6	112.7
2010	112.4	119.9	109.1	118.8	107.7
2011	114.3	132.1	122.3	126.7	109.9
2012	116.6	134.5	119.3	95.0	110.3
2013	117.5	125.8	114.4	121.9	110.4
2014	118.0	122.4	118.1	122.1	104.5
2015	118.3	124.9	108.0	139.0	109.5
2016	121.8	135.8	116.0	130.5	114.2
2017	118.4	142.5	117.1	121.2	121.3
2018	123.4	123.8	119.1	141.1	126.8

Source: University of Miami Medical School, Florida Cancer Data System

Exhibit 307: Lung Cancer Incidence

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2008	67.0	81.7	70.2	58.3	58.7
2009	65.5	77.7	65.4	53.5	56.1
2010	63.4	83.3	61.5	49.4	47.6
2011	61.6	77.1	53.8	55.9	50.4
2012	62.8	83.4	59.7	63.6	46.7
2013	60.7	83.0	55.6	58.4	45.7
2014	59.5	72.9	51.1	54.5	49.9
2015	57.0	59.9	54.0	58.1	55.8
2016	57.5	63.6	51.2	59.1	48.2
2017	56.4	69.0	49.3	45.6	47.5
2018	55.9	67.1	48.5	54.6	45.1

Source: University of Miami Medical School, Florida Cancer Data System

- In the corresponding timeframe (2008-2018), lung cancer rates have decreased across the board. The lowest rates are in Seminole and Orange counties.

The incidence of skin cancer has increased substantially from 2008-2018 statewide and in Lake County, while a more marginal increase can be observed in Osceola and Seminole counties. While the numbers fluctuate annually, the 2018 Orange County rates are lower than all of those in the 10 previous years.

Exhibit 308: Skin Cancer (Melanoma) Incidence

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2008	17.8	19.9	16.5	15.2	18.5
2009	17.0	21.0	14.2	15.5	16.9
2010	21.5	25.8	17.8	18.1	21.9
2011	21.2	24.2	19.9	18.8	20.8
2012	23.1	29.4	20.5	18.1	18.8
2013	24.1	34.4	20.3	17.6	21.3
2014	25.0	32.9	15.7	20.6	15.9
2015	24.8	19.9	16.3	19.4	19.0
2016	25.5	31.7	16.9	21.6	20.0
2018	25.3	27.9	13.6	17.1	21.7

Source: University of Miami Medical School, Florida Cancer Data System

Exhibit 309: Colorectal Cancer Incidence

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
2008	51.3	77.9	38.2	44.0	33.7
2009	48.4	68.9	36.3	26.8	36.9
2010	50.7	73.7	37.4	38.5	34.1
2011	48.4	76.6	39.9	36.1	39.9
2012	49.4	65.3	40.3	48.3	34.9
2013	49.2	68.4	34.4	42.6	32.6
2014	48.8	63.8	38.0	48.7	37.6
2015	49.8	64.1	35.3	46.6	36.2
2016	48.2	68.3	39.8	41.8	36.5
2018	48.6	66.3	39.0	51.1	38.0

Source: University of Miami Medical School, Florida Cancer Data System

- Colorectal cancer rates remain notably higher in Lake County than the statewide average and have decreased somewhat over time. Rates in the other counties have risen slowly, while statewide, rates have been slowly declining.

Diabetes

Diabetes rates appear to be notably higher in Osceola County than the statewide average. While rates seem to be lower in 2019 for 45–64-year-olds in most of the counties, the 65+ age group shows higher rates. Consistent with statewide averages, men are more likely than women to receive a diabetes diagnosis.

Exhibit 310: Adults Ever Told they Have Diabetes by Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2002	2.8%	10.5%	16.5%	2.4%	8.3%	17.8%	4.1%	8.2%	20.6%	1.4%	8.1%	18.4%	2.0%	3.4%	20.5%
2007	2.4%	10.9%	18.5%	4.1%	11.1%	23.9%	3.1%	11.4%	20.2%	2.8%	11.9%	30.0%	0.5%	10.9%	22.1%
2010	3.6%	11.6%	19.2%	3.8%	15.5%	20.0%	6.0%	10.2%	20.2%	3.7%	10.5%	24.9%	6.3%	15.2%	23.7%
2013	2.6%	13.5%	23.5%	3.4%	14.8%	28.4%	3.5%	15.0%	25.6%	2.4%	19.7%	38.7%	2.7%	9.6%	24.9%
2016	3.4%	13.4%	23.5%	1.3%	18.5%	16.2%	2.3%	15.7%	21.0%	4.3%	18.2%	33.0%	5.0%	14.2%	20.2%
2019	2.3%	14.1%	23.5%	4.1%	13.6%	20.5%	2.7%	11.9%	28.1%	5.1%	18.9%	40.6%	1.1%	8.1%	31.0%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 311: Adults Ever Told they Have Diabetes by Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2002	8.9%	7.7%	7.1%	11.6%	5.3%	9.2%	6.8%	5.6%	5.3%	4.7%
2007	9.4%	8.1%	15.9%	10.1%	7.0%	8.9%	9.9%	9.9%	8.1%	7.0%
2010	11.7%	9.2%	16.6%	10.4%	10.6%	9.1%	10.3%	9.6%	16.8%	10.4%
2013	12.3%	10.1%	16.2%	14.4%	11.5%	9.1%	17.6%	10.9%	8.3%	9.6%
2016	12.5%	11.0%	14.5%	10.8%	9.7%	9.8%	13.8%	15.6%	9.0%	14.4%
2019	12.7%	10.7%	13.7%	11.6%	9.8%	9.2%	16.1%	15.8%	10.3%	8.8%

Source: Florida Behavioral Risk Factor Surveillance System

Diabetes is more likely to afflict those in lower income brackets, with those whose incomes are below $25,000 per year having the highest incidence. Reported rates from year to year have varied. There have been wide fluctuations in reported diabetes diagnoses from 2002 to 2019 in the service area counties. The incidence rate in each of the populations measured (non-Hispanic/Latino White, non-Hispanic/Latino Black/African American and Hispanic/Latino) has generally increased over time.

Exhibit 312: Adults Ever Told they Have Diabetes by Income

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2002	11.5%	7.5%	4.9%	16.2%	10.9%	1.3%	9.8%	8.0%	3.7%	8.8%	3.1%	1.2%	7.1%	8.2%	2.0%
2007	13.3%	8.5%	5.9%	19.0%	9.8%	13.8%	11.8%	8.1%	6.3%	11.5%	11.0%	7.2%	12.2%	10.2%	4.7%
2010	14.8%	11.2%	7.3%	15.9%	18.7%	9.5%	16.6%	11.9%	5.7%	17.6%	8.5%	6.7%	28.9%	14.7%	9.8%
2013	14.8%	11.9%	7.5%	21.7%	16.3%	11.8%	13.4%	8.8%	5.2%	21.5%	12.0%	7.2%	10.1%	9.2%	4.7%
2016	16.6%	11.9%	8.0%	21.3%	15.0%	7.4%	13.2%	8.4%	7.2%	24.0%	8.8%	8.5%	17.5%	10.0%	6.6%
2019	16.1%	12.7%	7.9%	19.9%	14.9%	10.0%	13.8%	6.8%	5.5%	23.0%	14.9%	7.4%	15.9%	7.7%	6.5%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 313: Adults Ever Told they Have Diabetes by Race & Ethnicity

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino
2002	8.0%	10.6%	7.1%	10.1%	ND	3.4%	6.5%	17.1%	2.8%	7.6%	ND	2.3%	6.2%	3.6%	ND
2007	9.0%	12.4%	6.6%	13.2%	ND	9.7%	8.0%	13.4%	6.0%	8.4%	22.8%	8.2%	6.7%	12.5%	10.4%
2010	10.1%	13.1%	9.6%	12.5%	ND	ND	7.8%	21.5%	6.9%	7.8%	30.1%	11.6%	11.8%	ND	19.5%
2013	11.4%	12.3%	10.8%	16.2%	ND	18.0%	10.6%	6.4%	15.0%	10.7%	8.5%	18.4%	10.7%	10.4%	4.1%
2016	11.5%	14.5%	10.9%	11.1%	18.5%	14.5%	8.8%	10.9%	10.6%	17.0%	3.6%	14.7%	10.7%	9.4%	18.6%
2019	11.5%	16.0%	10.6%	13.7%	8.2%	8.7%	8.8%	7.4%	12.1%	14.4%	13.9%	18.3%	10.6%	12.4%	4.7%

Source: Florida Behavioral Risk Factor Surveillance System

Heart Disease[199]

Not surprisingly, the percentage of adults who have ever been told they have heart disease increases with age. Rates are slightly lower in Orange County and Seminole County than statewide averages. Lake County rates for seniors have decreased from 19.4% in 2013 to 9.8% in 2019. Men tend to report higher rates of ever having been told they have heart disease, though the 2019 figures for Osceola County show an exception to that norm, where Osceola County women report nearly double the rate for women statewide and notably higher than Osceola County men.

Exhibit 314: **Adults Ever Told they Have Heart Disease by Age**

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2013	0.9%	5.1%	12.3%	2.5%	5.7%	19.4%	1.2%	3.7%	11.0%	0.9%	7.0%	11.4%	0.4%	2.1%	12.0%
2016	1.0%	4.7%	11.1%	2.6%	3.3%	11.5%	1.3%	3.0%	9.4%	0.4%	2.8%	10.2%	0.9%	5.1%	9.9%
2019	0.4%	4.4%	11.0%	0.1%	7.0%	9.8%	0.3%	4.1%	9.9%	4.2%	7.0%	10.6%	0.3%	2.7%	9.1%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 315: **Adults Ever Told they Have Heart Disease by Gender**

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2013	6.3%	3.8%	12.6%	5.6%	4.1%	2.6%	7.0%	2.2%	3.6%	2.4%
2016	5.7%	3.9%	5.7%	6.1%	2.8%	3.3%	3.5%	2.9%	4.0%	4.8%
2019	5.8%	3.6%	6.0%	5.0%	4.2%	1.8%	5.2%	7.5%	3.6%	2.2%

Source: Florida Behavioral Risk Factor Surveillance System

[199]Respondents were asked if they had ever been told they had angina or coronary heart disease. Angina is defined as a type of chest pain caused by reduced blood flow to the heart and is a symptom of coronary artery disease.

In 2019, every county and the state as a whole show that those in the lowest income bracket have the highest rates of having ever been told they have heart disease. While statewide rates are showing some lowering trends, data from the service area counties is more variable.

Exhibit 316: Adults Ever Told they Have Heart Disease by Income

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2013	6.8%	4.9%	3.8%	10.6%	12.3%	8.7%	7.0%	1.5%	0.7%	9.2%	3.8%	0.8%	4.4%	1.0%	3.0%
2016	6.9%	4.8%	3.3%	7.9%	5.4%	6.9%	3.9%	4.9%	1.2%	4.7%	4.2%	1.5%	4.4%	2.4%	2.4%
2019	6.2%	4.5%	3.5%	7.6%	4.2%	3.7%	5.6%	1.4%	2.0%	8.2%	2.9%	4.2%	5.6%	1.2%	2.5%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 317: Adults Ever Told they Have Heart Disease by Race & Ethnicity

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino
2013	6.5%	4.2%	2.5%	10.5%	ND	5.3%	4.0%	2.2%	3.8%	4.7%	3.2%	5.0%	3.7%	2.9%	ND
2016	5.9%	3.2%	2.8%	6.7%	3.7%	2.0%	2.9%	4.2%	2.9%	4.0%	0.7%	3.2%	4.3%	1.7%	6.7%
2019	5.9%	3.9%	1.8%	6.8%	2.6%	2.6%	2.6%	4.8%	3.6%	6.7%	19.1%	4.1%	3.0%	3.8%	2.9%

Source: Florida Behavioral Risk Factor Surveillance System

- While overall trends have been downward in terms of heart disease across each of the categories of race and ethnicity measured, rates in Osceola County for non-Hispanic/Latino Black/African American residents were exceptionally high in 2019.
- In most of the counties, rates seem to be declining for non-Hispanic/Latino White and Hispanic/Latino residents but increasing for those identifying as non-Hispanic/Latino Black/African American.

Hypertension

Rates of hypertension among younger adults (age 18-44) is higher in the service area than the state on average. Osceola has the highest rates in the service area in each age category. The most recent survey results show declines in some areas and age groupings and increases in others.

Exhibit 318: Adults Who Have Ever Been Told They Have Hypertension By Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2002	11.8%	33.3%	53.1%	12.7%	23.1%	46.5%	10.8%	30.1%	53.4%	13.5%	33.9%	51.2%	7.0%	29.2%	45.0%
2007	11.6%	33.9%	53.5%	17.3%	34.7%	57.3%	8.2%	42.9%	55.2%	11.3%	32.1%	46.8%	11.7%	37.8%	62.2%
2010	13.2%	36.8%	61.7%	22.5%	43.6%	64.4%	18.4%	39.7%	62.7%	17.0%	42.0%	60.6%	16.1%	40.4%	60.1%
2013	13.8%	41.1%	62.8%	18.0%	37.5%	63.0%	14.5%	39.9%	65.7%	17.5%	36.6%	67.5%	23.6%	37.0%	54.8%
2019	12.4%	39.3%	58.7%	16.2%	39.3%	58.1%	16.7%	38.1%	57.0%	17.8%	45.9%	71.8%	14.1%	40.1%	64.4%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 319: Adults Who Have Ever Been Told They Have Hypertension By Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2002	28.8%	26.7%	26.9%	28.2%	23.8%	20.3%	30.5%	22.2%	20.4%	18.7%
2007	28.8%	27.6%	40.3%	32.3%	23.9%	27.3%	21.7%	25.1%	31.6%	26.0%
2010	36.5%	32.2%	52.1%	36.8%	37.2%	30.7%	39.6%	30.3%	42.4%	29.5%
2013	37.2%	32.1%	45.2%	33.5%	31.5%	28.4%	36.9%	27.3%	38.9%	29.0%
2019	36.2%	31.0%	38.3%	37.0%	29.2%	31.0%	38.7%	36.3%	38.1%	28.7%

Source: Florida Behavioral Risk Factor Surveillance System

- With the exception of Orange County, reported hypertension rates are lower for women than men in Florida and the service area, and rates have been generally increasing over time (2002-2019). The disparity is most marked in Seminole County. Rates for women are highest in Lake and Osceola counties.

In Florida generally, and similarly reflected in the service area counties, people in lower income categories are more likely to have ever been told they have hypertension. With some exceptions, rates are generally increasing over time. Hispanic/Latino community members report lower levels of ever having been told they have hypertension than those identifying as non-Hispanic/Latino.

Exhibit 320: **Adults Who Have Ever Been Told They Have Hypertension By Income**

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2002	34.0%	26.1%	21.5%	36.3%	26.2%	20.6%	22.7%	23.2%	17.2%	28.8%	27.3%	19.4%	32.1%	16.8%	14.4%
2007	35.3%	29.2%	23.2%	41.8%	36.7%	33.3%	21.7%	31.1%	24.4%	25.9%	20.3%	24.4%	33.6%	37.7%	22.0%
2010	42.5%	36.4%	28.0%	54.9%	52.9%	33.5%	45.6%	36.4%	30.0%	43.5%	40.0%	27.0%	45.1%	44.2%	29.2%
2013	37.5%	36.9%	30.7%	36.7%	50.0%	33.3%	35.9%	22.9%	26.0%	39.3%	34.1%	22.6%	41.2%	34.2%	29.4%
2019	37.9%	33.1%	30.3%	40.9%	38.3%	32.5%	34.2%	29.4%	27.0%	46.1%	35.2%	26.7%	45.1%	29.7%	30.8%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 321: **Adults Who Have Ever Been Told They Have Hypertension By Race & Ethnicity**

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
2002	28.7%	32.2%	21.1%	26.3%	ND	20.5%	20.0%	40.1%	15.6%	26.7%	ND	24.7%	20.0%	ND	14.0%
2007	30.4%	32.5%	19.1%	36.6%	ND	21.8%	25.3%	37.5%	17.6%	25.2%	30.7%	17.8%	28.5%	45.7%	22.8%
2010	35.4%	41.7%	24.8%	44.7%	ND	ND	34.9%	45.5%	23.9%	34.5%	42.8%	33.1%	39.9%	ND	24.3%
2013	38.4%	33.7%	28.3%	42.5%	ND	27.7%	31.8%	26.5%	30.2%	33.4%	15.8%	35.5%	31.6%	52.0%	35.5%
2019	37.9%	35.9%	23.5%	40.8%	26.9%	26.3%	32.2%	33.7%	27.7%	41.5%	45.3%	33.8%	36.6%	39.2%	23.8%

Source: Florida Behavioral Risk Factor Surveillance System

Adults with hypertension in Orange County are less likely to take blood pressure medication than the Florida average by over 10 percentage points. The other counties track more closely to state averages. Reported high cholesterol rates are five percentage points higher in Osceola County than the Florida average. Statewide use of high blood pressure medicine fluctuated less than two percent from 2017-2019.

Exhibit 322: Adults With Hypertension Who Take Blood Pressure Medication

Florida	Lake County	Orange County	Osceola County	Seminole County
77.8%	77.7%	67.3%	75.2%	77.2%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Exhibit 323: Adults Who Have Ever Been Told They Had High Cholesterol

Florida	Lake County	Orange County	Osceola County	Seminole County
29.6%	30.8%	30.2%	35.0%	27.9%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Exhibit 324: Adults With Hypertension Who Currently Take High Blood Pressure Medicine

Florida	Percent of the Florida Population
2017	77.5%
2018	79.1%
2019	77.8%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Other Diseases & Sexual Health

Orange County reports notably higher rates of hepatitis than the surrounding counties – seven times higher for chronic hepatitis C.

Exhibit 325: Confirmed Hepatitis Cases[200]

2019	Lake County	Orange County	Osceola County	Seminole County
Hepatitis A	0.9%	2.6%	0.9%	0.4%
Hepatitis B, Acute	1.6%	6.9%	1.2%	0.8%
Hepatitis B, Chronic	1.3%	7.5%	1.2%	1.7%
Hepatitis C, Acute	1.8%	8.3%	1.5%	1.4%
Hepatitis C, Chronic (Including Perinatal)	1.3%	9.1%	1.1%	1.3%

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management, Reportable Diseases Frequency Report, 2019

Exhibit 326: Sexually Transmitted Disease Cases

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Gonorrhea	172.5	108.9	226.8	120.0	131.1
Chlamydia	493.8	337.5	704.1	488.6	403.1
Syphilis	55.2	22.9	82.7	46.8	30.5

Source: Florida Department of Health Bureau of Communicable Diseases, 2018-2020

Exhibit 327: Reported Cases of HIV & AIDS

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
HIV	20.0	10.5	31.1	22.6	14.1
AIDS	8.4	4.5	12.0	8.3	5.9

Source: Florida Department of Health Bureau of Communicable Diseases, 2018-2020

- Reported rates of sexually transmitted diseases in Orange County are quite higher than state averages in each category of disease. Chlamydia is the most prevalent sexually transmitted disease of those listed in the table above, followed by gonorrhea and lastly, syphilis.
- Orange County reports 50% higher rates of HIV and AIDS than state averages. Lake County rates are the lowest (nearly half of the state rate). Seminole County also has lower-than-average rates, while Osceola County tracks most closely to state averages.

[200]Data collection period: 12/1/2020 – 12/1/2021

Adult Preventative Health

While Osceola County reports lower-than-average rates for women aged 40+ receiving a mammogram, the county has rates of pap tests for women 18+ exceeding the state average. Rates of pap tests in Lake and Seminole counties are lower than the Florida average (40.9% and 45.5%, compared to the statewide 48.4%). Preventive screenings including sigmoidoscopy, colonoscopy and stool blood samples were lower in Orange County than state averages.

Exhibit 328: Past Year Preventative Screenings for Women

2016	Florida	Lake County	Orange County	Osceola County	Seminole County
Ages 40+ who received a mammogram	60.8%	60.4%	59.4%	51.4%	57.8%
Aged 18+ who received pap test	48.4%	40.9%	51.3%	51.5%	45.5%

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention and Florida Department of Health Division of Community Health Promotion, 2016

Exhibit 329: Preventive Screenings, Adults 50 & Older

2016	Florida	Lake County	Orange County	Osceola County	Seminole County
Received a sigmoidoscopy or colonoscopy in the past five years	53.9%	51.5%	49.6%	54.0%	55.9%
Received a stool blood test in past year	16.0%	15.0%	9.9%	21.5%	13.4%

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention and Florida Department of Health Division of Community Health Promotion, 2016

Dental Care

Statewide, men in Florida and in Lake, Orange and Osceola counties were less likely to have visited a dentist in the past year in 2016 compared to 2010. The trend was opposite in Seminole County, where dental care rose over the same time span to a level 15% above the average for Florida men. Generally, women's likelihood of having visited a dentist is higher than that of men, though not in every case. Lake County shows a reduction in visits for women from 2010 to 2016, and Osceola County shows a notable increase. Rates were steadier in Orange and Seminole counties for women.

Exhibit 330: Adults Who Visited Dentist Past Year by Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2010	64.0%	65.3%	61.7%	68.8%	63.2%	64.5%	60.1%	55.8%	64.2%	68.6%
2016	60.4%	65.5%	50.7%	62.9%	59.7%	65.7%	52.0%	64.4%	76.0%	68.6%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

Exhibit 331: Adults Who Visited Dentist Past Year by Race & Ethnicity

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino	Non-Hispanic/Latino White	Non-Hispanic/Latino Black/African American	Hispanic/Latino
2010	68.2%	55.2%	58.1%	68.3%	ND	ND	67.1%	64.0%	47.9%	61.1%	53.3%	51.7%	71.0%	ND	62.9%
2016	65.9%	57.5%	58.7%	60.0%	24.9%	58.2%	67.5%	63.6%	55.5%	56.5%	46.0%	61.3%	75.4%	68.3%	64.9%

Source: Florida Behavioral Risk Factor Surveillance System, 2019

- The likelihood of having visited a dentist in the past year is highest in each geography for non-Hispanic/Latino White residents. Non-Hispanic/Latino Black/African American r residents of Lake County and Osceola County have the lowest 2016 likelihood of having visited a dentist (24.9% and 46.0%, compared with the state average for non-Hispanic/Latino Black/African American residents of Florida generally at 57.5%, compared to the non-Hispanic/Latino rate for White Floridians, 65.9%). Hispanic/Latino rates of dental visit likelihood rose from 2010 to 2016 in Orange, Osceola and Seminole counties.

Mental Health

From 2007 to 2019, the percentage of adults reporting poor mental health has generally been increasing in Florida and across the service area. Those over 45 years of age in Seminole County have lower than average prevalence (that is, better mental health self-reports) in the last two reporting years (2016 and 2019). In Lake and Seminole counties, adults under 45 have the highest reports of poor mental health, and in Orange and Osceola counties, the rates are more similar for those in the 18-44 and 45-65 groupings (similar to state averages). Seniors are generally less likely to report poor mental health than adults under 65.

Exhibit 332: Adults Who Had Poor Mental Health 14 + of Past 30 Days by Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2007	11.1%	10.8%	5.5%	11.8%	10.3%	4.0%	6.2%	9.9%	2.9%	12.1%	13.3%	7.1%	8.3%	9.1%	7.9%
2010	12.7%	13.5%	7.4%	9.3%	12.7%	4.7%	11.3%	14.0%	6.7%	11.6%	14.0%	4.4%	11.1%	11.4%	9.7%
2013	12.6%	16.0%	8.4%	7.1%	16.2%	8.0%	10.1%	12.3%	9.7%	13.7%	12.3%	5.2%	10.6%	13.4%	10.3%
2016	12.5%	13.0%	7.3%	15.1%	14.0%	8.9%	12.0%	12.2%	12.2%	18.2%	17.5%	10.8%	8.8%	7.2%	4.3%
2019	15.6%	15.0%	9.7%	16.7%	12.8%	8.2%	14.6%	14.9%	8.5%	10.2%	12.7%	10.8%	14.7%	9.1%	5.0%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 333: Adults Who Had Poor Mental Health 14 + of Past 30 Days by Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2007	8.1%	11.3%	6.9%	10.2%	4.2%	9.5%	10.2%	13.3%	6.4%	10.5%
2010	10.8%	12.8%	6.7%	10.5%	9.7%	13.7%	8.3%	14.4%	10.0%	11.8%
2013	10.9%	14.4%	10.6%	10.1%	7.7%	13.4%	7.2%	16.1%	9.6%	13.3%
2016	9.5%	13.2%	7.3%	17.1%	8.6%	15.5%	15.7%	17.3%	5.1%	9.3%
2019	11.4%	16.1%	11.6%	13.4%	10.3%	16.7%	11.8%	10.2%	11.2%	10.8%

Source: Florida Behavioral Risk Factor Surveillance System

- With few exceptions (including 2019 data for both Osceola and Seminole counties), women typically are more likely than men to report poor mental health in Florida and throughout the service area.

Across Florida and in each of the service area counties, those in the lowest income bracket (under $25,000) are most likely to report poor mental health, followed by those whose incomes are $25,000-$49,0000. Self-reports of poor mental health are dramatically lower for those with incomes $50,000+ compared to the lowest income bracket, with one notable exception in Seminole County.

Exhibit 334: **Adults Who Had Poor Mental Health 14 + of Past 30 Days by Income**

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2007	16.1%	11.3%	5.7%	6.7%	13.6%	6.6%	7.7%	10.1%	5.5%	12.6%	11.6%	9.1%	13.3%	11.2%	16.1%
2010	22.7%	11.2%	6.1%	16.4%	10.8%	3.6%	21.3%	14.7%	7.0%	19.1%	11.3%	6.7%	19.7%	12.3%	22.7%
2013	20.1%	13.0%	6.7%	14.8%	10.5%	5.6%	15.3%	7.2%	4.8%	20.6%	12.0%	1.8%	26.7%	10.2%	20.1%
2016	17.8%	11.9%	7.6%	21.8%	13.2%	7.1%	14.8%	13.8%	8.8%	23.2%	19.3%	2.7%	17.1%	7.3%	17.8%
2019	20.9%	13.4%	9.3%	21.3%	12.9%	9.7%	20.7%	14.6%	7.9%	14.2%	8.9%	6.7%	16.7%	14.3%	20.9%

Source: Florida Behavioral Risk Factor Surveillance System

Substance Use

While those aged 65 and older have the lowest rates for heavy or binge drinking, the difference in the 18-44 and 45-65-year-old groups has more variability and spread. Statewide trends show an increase over time, especially for adults under 65 years old, while county-level data is far less linear.

In every geography, men are more likely than women to engage in heavy or binge drinking. In some cases, the gap is wider than in others. Women in Osceola County have the lowest rates of heavy or binge drinking in the service area, while Orange County men have averages well over 20% for each of the past three surveys. Those with incomes of $50,000+ generally report the highest likelihood of engaging in heavy or binge drinking, and that likelihood declines with an increase in poverty. This observation is consistent statewide and in each of the four Central Florida Collaborative counties.

Exhibit 335: Adults Who Engage In Heavy or Binge Drinking by Age

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +	18 - 44	45 - 64	65 +
2002	21.9%	13.9%	8.8%	20.0%	14.3%	7.7%	24.1%	14.1%	1.8%	16.6%	11.3%	2.3%	26.3%	15.4%	13.1%
2007	21.6%	14.6%	7.7%	18.4%	16.1%	8.7%	24.1%	11.8%	4.9%	17.3%	14.1%	6.1%	24.2%	21.0%	7.2%
2010	20.9%	14.4%	6.8%	18.3%	27.9%	3.1%	18.2%	13.4%	6.0%	15.3%	8.9%	2.6%	19.2%	15.0%	8.8%
2013	24.2%	16.9%	7.2%	18.2%	18.6%	6.0%	22.9%	18.7%	11.1%	14.9%	13.0%	9.8%	14.5%	16.1%	5.0%
2016	23.1%	17.2%	8.7%	24.9%	16.2%	7.9%	25.3%	15.8%	8.3%	21.2%	14.2%	8.5%	27.3%	16.2%	13.5%
2019	24.5%	17.9%	9.1%	22.9%	19.7%	6.2%	24.7%	14.6%	3.0%	12.8%	10.6%	6.1%	19.7%	18.8%	7.4%

Exhibit 336: Adults Who Engage In Heavy or Binge Drinking by Gender

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2002	22.9%	10.8%	21.0%	7.6%	24.2%	13.5%	20.3%	6.3%	27.3%	15.3%
2007	20.3%	12.4%	18.4%	10.8%	21.5%	13.6%	20.6%	8.6%	28.8%	12.7%
2010	19.8%	10.5%	20.1%	12.0%	18.5%	10.0%	12.1%	9.0%	17.0%	13.9%
2013	23.4%	12.2%	16.9%	12.4%	27.4%	12.3%	17.4%	9.6%	19.5%	7.7%
2016	21.7%	13.7%	16.5%	15.1%	24.5%	14.5%	20.5%	11.8%	20.9%	19.3%
2019	21.2%	15.1%	20.1%	12.1%	23.8%	13.0%	14.8%	6.9%	19.7%	15.3%

Source: Florida Behavioral Risk Factor Surveillance System

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Exhibit 337: Adults Who Engage In Heavy or Binge Drinking by Income

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +	< $25,000	$25,000 - $49,000	$50,000 +
2002	15.5%	15.6%	20.4%	17.5%	15.9%	11.5%	21.2%	19.4%	18.7%	10.9%	14.2%	18.8%	17.8%	26.0%	18.3%
2007	14.2%	14.7%	19.9%	9.9%	22.2%	13.5%	17.9%	16.6%	21.1%	7.1%	16.9%	18.0%	14.7%	17.8%	26.1%
2010	12.1%	13.4%	18.6%	5.5%	11.3%	24.9%	11.5%	10.1%	18.6%	2.8%	9.6%	16.0%	14.3%	13.7%	17.5%
2013	16.3%	17.9%	20.3%	10.7%	20.7%	13.5%	20.5%	21.2%	19.5%	11.8%	18.2%	15.5%	9.5%	12.2%	13.6%
2016	15.1%	17.7%	23.1%	13.9%	20.6%	15.6%	15.5%	20.3%	26.4%	9.0%	13.9%	27.8%	14.0%	18.1%	28.2%
2019	15.7%	18.1%	22.4%	16.7%	10.0%	17.8%	15.1%	18.9%	23.1%	6.3%	11.8%	17.5%	15.3%	12.9%	22.8%

Source: Florida Behavioral Risk Factor Surveillance System

Exhibit 338: Adults Who Engage In Heavy or Binge Drinking by Race & Ethnicity

	Florida			Lake County			Orange County			Osceola County			Seminole County		
	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino	Non-Hispanic/ Latino White	Non-Hispanic/ Latino Black/ African American	Hispanic/ Latino
2002	18.0%	9.1%	15.9%	13.5%	ND	ND	19.5%	8.0%	24.5%	15.5%	ND	8.4%	22.3%	ND	9.8%
2007	17.9%	10.9%	14.3%	15.1%	ND	14.9%	18.7%	5.2%	25.7%	15.6%	4.3%	16.5%	22.0%	20.0%	17.8%
2010	16.4%	8.2%	15.3%	17.1%	ND	ND	15.9%	9.0%	12.8%	11.4%	8.6%	6.1%	17.7%	ND	12.5%
2013	17.6%	14.0%	19.6%	14.1%	ND	ND	20.9%	11.6%	20.0%	15.9%	6.1%	13.0%	14.4%	3.8%	18.8%
2016	19.6%	12.3%	16.1%	15.2%	20.5%	14.9%	25.8%	12.9%	16.6%	15.5%	ND	14.6%	21.3%	13.7%	16.4%
2019	19.8%	14.3%	17.1%	15.7%	18.5%	15.6%	19.5%	13.0%	22.0%	16.3%	4.5%	9.4%	18.6%	18.0%	14.0%

Source: Florida Behavioral Risk Factor Surveillance System

- Statewide, with relative consistency over time, non-Hispanic/Latino White residents are most likely to engage in heavy or binge drinking, followed by Hispanic/Latino residents, with non-Hispanic/Latino Black/African American residents indicating the lowest numbers. The county level data is far more variable, both in terms of who is doing the most heavy or binge drinking in each county and how those percentages change and compare over time.

The rate of alcohol-related driving deaths is higher in Lake, Orange and Osceola counties than Florida averages by a wide margin. In contrast, Seminole County rates are less than 25% of the state averages.

Exhibit 339: Alcohol-Impaired Driving Deaths

	Florida	Lake County	Orange County	Osceola County	Seminole County
Per 100,000	1.8	3.1	3.1	3.0	0.4

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control & Prevention and Florida Department of Health Division of Community Health Promotion, 2019

Exhibit 340: Alcohol-Suspected Motor Vehicle Crashes

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Traffic Crashes	25.0	20.6	25.0	17.1	19.4
Crash Injuries	14.9	11.5	14.6	9.9	9.6
Traffic Crash Fatalities	2.0	3.1	2.6	3.4	0.9

Source: Florida Department of Highway Safety and Motor Vehicles 2017-2019

Exhibit 341: Alcohol & Substance-Related Motor Vehicle Crashes

Per 100,000	Florida	Lake County	Orange County	Osceola County	Seminole County
Drug Confirmed Motor Vehicle Traffic Crashes	3.4	4.8	2.7	2.7	2.3
Alcohol Confirmed Motor Vehicle Traffic Crashes	21.0	22.3	22.9	19.8	19.0
Drug & Alcohol Confirmed Motor Vehicle Traffic Crashes	2.0	2.8	2.1	0.8	0.6

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2019

Exhibit 342: Substance Use-Related Arrests[201]

	Florida		Lake County		Orange County		Osceola County		Seminole County	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Total Arrests	110,152	68,564	1,830	1,458	6,867	4,477	1,864	840	1,868	729
Adult Arrests	106,271	67,025	1,764	1,429	6,718	4,432	1,835	828	1,757	710
Juvenile Arrests	3,881	1,539	66	29	149	45	29	12	111	29

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Substance Use Dashboard

- While Orange County's rates for alcohol-suspected motor vehicle crashes and crash injuries track closely with the state average, the other counties in the service area have fewer crashes than the state average.

[201]Annual Adult Drug Arrests of persons 18 & Older attributed to possession or sale of illegal drugs. Annual Drug arrests attributed to possession or sale of illegal drugs.

Lake County reports the highest prescribing rates for opioids by a wide margin. Stimulant prescribing rates are lowest in Osceola County and highest in Seminole County. While poison information network calls related to opioids fell by nearly half from 2019 to 2020 for the state of Florida on average, call frequency decreased by a much smaller margin in the service area counties.

Exhibit 343: Controlled Substance Prescribing Rates[202]

Per 1,000	Lake County	Orange County	Osceola County	Seminole County
Opioids	728.8	446.2	488.6	505.8
Stimulants	99.6	104.5	57.8	124.1

Source: Florida Department of Health Bureau of Community Health Assessment Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2019

Exhibit 344: Number of Poison Information Network Calls Related to Opioids

Count	Florida	Lake County	Orange County	Osceola County	Seminole County
2019	4,294	66	127	46	39
2020	2,362	62	114	38	37

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2020

Exhibit 345: Naloxone Use

2020	Florida	Lake County	Orange County	Osceola County	Seminole County
Naloxone Administered	33,199	763	2,562	467	446
By EMS	25,416	571	2,228	384	355
Prior to EMS	5,542	183	334	82	91
Naloxone Administration Not Applicable/ Not Recorded	2,241	9	0	1	0

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2020

[202]Florida Patients Aged 18 & Older.

Prescriptions dispensed per patient are lower than the Florida average in Osceola and Seminole counties. Throughout the service area, the rate of prescriptions dispensed per provider is lower than the state average by an order of magnitude. The availability of adult substance abuse beds varies among the four counties, ranging from zero in Seminole County to 16 in Orange County in 2020.

Exhibit 346: Prescribing Measures

2020	Florida	Lake County	Orange County	Osceola County	Seminole County
Number of Prescriptions Dispensed	9,235,635	179,515	301,544	395,681	107,855
Number of Unique Patients	2,757,242	55,175	85,967	150,529	42,107
Number of Unique Prescribers	98,985	6,977	7,832	10,896	5,500
Prescriptions Dispensed per Patient	3.3	3.3	3.5	2.6	2.6
Prescriptions Dispensed per Prescriber	93.3	25.7	38.5	36.3	19.6

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2020

Exhibit 347: Adult Substance Abuse Beds[203]

Florida	Lake County	Orange County	Osceola County	Seminole County
366	5	16	14	0

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2020

Exhibit 348: Substance Abuse Program Enrollees[204]

2018	Florida	Lake County	Orange County	Osceola County	Seminole County
Adults	104,906	1,309	7,525	1,029	392
Children	27,007	516	4,112	135	49

Source: Florida Department of Health Bureau of Community Health Assessment. Division of Public Health Statistics and Performance Management Substance Use Dashboard, 2018

- The proportion of children to adults enrolled in substance abuse treatment is approximately 1:4 statewide. The proportion of children enrolled is notably higher than the Florida ratio in Lake and Orange counties, and lower in Osceola and Seminole counties.

[203]The number of beds indicates the number of adults (age 18 and over) who may receive substance abuse treatment on an in-patient basis.
[204]This is a count of individuals ages 18 and older who are enrolled in substance abuse treatment services provided through a Department of Children and Family Services funded program.

Appendix 2: Health Equity Background Information

Terms and Phrases to Know

Acronyms

CHA: Community Health Assessment (term used primarily by departments of health)
CHNA: Community Health Needs Assessment
CHNAC: Community Health Needs Assessment Committee

Public Health Terms to Know

community survey: A method of collecting data from a filtered target audience to help you understand an issue particular to them.

equity champion: A community leader who is identified to help bridge the gap with a certain demographic and provide expertise on how to make the community health needs assessment process equitable for all.

focus group: A demographically diverse group of people assembled to participate in a guided discussion to provide ongoing feedback on a certain topic.

key informant: A person with whom researchers have an interview about a particular organization, social program, problem or interest group.

morbidity: Rate of a disease or diseases.

mortality: Rate of death.

prevalence: The number of cases of a disease, infected people or people with some other attribute present during a particular interval of time. It often is expressed as a rate.

prevention: Actions taken to reduce susceptibility or exposure to health problems (primary prevention), detect and treat disease in early stages (secondary prevention) or alleviate the effects of disease and injury (tertiary prevention).

primary data: Data that has been generated by the researcher themself, surveys, interviews, experiments, specially designed for understanding and solving the research problem at hand.

primary medical care: Clinical preventive services, first contact treatment services and ongoing care for commonly encountered medical conditions.

rate: A measure of the intensity of the occurrence of an event. For example, the mortality rate equals the number who die in one year divided by the number at risk of dying. Rates usually are expressed using a standard denominator such 1,000 or 100,000 people.

risk factor: Personal qualities or societal conditions that lead to the increased probability of a problem or problems developing.

secondary data: Data that has been already collected by and readily available from other sources.

stakeholder: Any person, community, company or group who is impacted (both negatively or positively) by an issue and how it is handled.
stakeholder interview: Purpose of these interviews is to obtain project-relevant information and elicit stakeholder reactions and suggestions.

steering committee: A committee that decides on the priorities or order of business of an organization and manages the general course of its operations.
years of potential life lost: A measure of the effects of disease or injury in a population that calculates years of life lost before a specific age (often ages 64 or 75). This approach places additional value on deaths that occur at earlier ages.

Health Equity Glossary

ableism: Discrimination in favor of able-bodied people.

ally: Someone who is not a member of an underrepresented group but who takes action to support that group.

BIPOC: Acronym for Black/African American, Indigenous People and People of Color; the term is used to acknowledge that Indigenous and Black/African American people have been most impacted by whiteness, both historically and in the present day.

built environment: The human-made space in which people live and work daily. Built environment can include access to healthy foods, community gardens, mental and physical health services, walkability and bike-ability (such as bike paths or bike lanes).

cisgender: When the gender a person feels they are, matches the sex their parents were told at birth. Individuals whose biological sex, gender expression and gender identity neatly align and experience a level of congruence as they encounter the world around them.

class: Relative social status based on income, wealth, race, power, position, occupation and education.

classism: Unfair treatment of people because of their social or economic class.

climate justice: The acknowledgement that communities of color, low-income neighborhoods and Indigenous communities are disproportionately impacted by the climate crisis because of systemic racism and class discrimination both here and abroad.

colorism: Prejudice or discrimination against individuals with a dark skin tone, typically among people of the same ethnic or racial group.

community: Group of people with diverse characteristics who are linked by social ties, common perspectives and who may be engaged in joint action in geographical locations or settings. This is but one definition. Community can be defined in multiple ways depending on the people asked and what groups have in common.

community engagement: A two-way exchange of information, ideas and resources that offers opportunities for communities to exercise power in decision-making. It considers the diversity of communities, including culture and race, and creates an inclusive and accessible process.

culture: The customs, arts, social institutions and achievements of a particular nation, people or other social group.

discrimination: The unjust or prejudicial treatment of different categories of people, especially on the grounds of ethnicity, age, sex or disability.

diversity: The practice or quality of including or involving people from a range of different social and ethnic backgrounds and of different genders, sexual orientations, etc.

equity: Fairness or justice in the way people are treated.

equality: The quality or state of being equal: the quality or state of having the same rights, social status, etc.

ethnicity: The quality or fact of belonging to a population group or subgroup made up of people who share a common cultural background or descent.

food apartheid: A system of segregation that divides those with access to an abundance of nutritious food and those who have been denied that access due to systemic injustice.

food desert: A geographic area in which it is difficult to buy affordable or good-quality fresh food. food insecurity: Limited or uncertain access to adequate food because of lack of money and other resources.

food swamp: A geographic area where unhealthy foods are more readily available than healthy foods.

gentrification: Influx of new residents to an area, usually middle class or wealthier, that causes an increase in rent and housing costs and displaces the original or long-time residents of that area. Gentrification can have adverse effects on health for those being displaced.

health disparities: Differences between the health of one population and another in measures of who gets disease, who has disease, who dies from disease and other adverse health conditions that exist among specific population groups in the U.S.

health equity: Means everyone has a fair and just opportunity to be as healthy as possible. The Collaborative, using an adapted definition from the Centers for Disease Control and Prevention defines health equity as no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances".

health inequities: Differences in health status and mortality rates across population groups that are systemic, avoidable, unfair and unjust. These differences are rooted social and economic injustice, and are attributable to social, economic and environmental conditions in which people live, work and play.

health justice: When all people possess the economic, social and political power and resources to make decisions about their bodies and health -- regardless of identities and experiences.

health literacy: The degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions. It is dependent on individual and systemic factors: communication skills of lay persons and professionals.

homophobia: Dislike, fear, prejudice or hatred of gay and lesbian people.

housing insecurity: Circumstance in which you have no residence or have an unexpected cost/catastrophic event that results in not having enough money for rent/housing.

implicit bias: Learned stereotypes and prejudices that operate automatically, and unconsciously, when interacting with others. Also referred to as unconscious bias. When a person's actions or decisions are at odds with their intentions this is implicit bias.

inclusion: A value and practice of authentically bringing traditionally excluded individuals and/or groups into processes, activities and decision/policy making in a way that shares power.

internalized racism: The set of private beliefs, prejudices and ideas that individuals have about the superiority of White people and the inferiority of people of color. Among people of color, it manifests as internalized racial oppression. Among White people, it manifests as internalized racial superiority.

interpersonal racism: The expression of racism between individuals. These are interactions occurring between individuals that often take place in the form of harassing, racial slurs or telling of racial jokes.

intersectionality: The interconnected nature of social categorizations such as race, class and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage.

institutional racism: Discriminatory treatment, unfair policies and practices and inequitable opportunities and impacts within organizations and institutions, based on race that routinely produce racially inequitable outcomes for people of color and advantages for white people. Individuals within institutions take on the power of the institution when they reinforce racial inequities.

Islamophobia: Fear and hatred of the Muslim community.

Latinx: A person of Latin American origin or descent (used as a gender-neutral or nonbinary alternative to Latino or Latina).

LGBTQ+: An acronym that stands for Lesbian, Gay, Bisexual, Trans, Queer and other identities in the queer community. This is an umbrella term that covers all identities within the community. marginalized communities: A group that's confined to a lower status society. Such a group is denied involvement in mainstream economic, political, cultural and social activities.

misogyny: Hatred of women.

isolation: Isolation is a key determinant of health. It is different from loneliness, though they are often discussed together. In this report, isolation means either geographic, physical and/or social isolation. It pertains to social contacts or network that can include family and friends, but also the broader environment through social activities. Isolation also means being geographically isolated (where you live is a long way from other people, services).

macroaggressions: Large-scale or overt aggression toward those of a different race, culture, gender, etc.

microaggressions: A comment or action that subtly and often unconsciously or unintentionally expresses a prejudiced attitude toward a member of a marginalized group (such as a racial minority).

non-binary: Gender identity and/or gender expression falling outside the categories of man and woman.

nutrition security: Nutrition security is achieved when secure access to an appropriately nutritious diet is coupled with a sanitary environment, adequate health services and care, to ensure a healthy and active life for all household members.

oppression: Occurs whenever one person exercises authority or power in an unfair, abusive, cruel or needlessly controlling way.

patriarchy: A system of society or government in which men hold the power and women are largely excluded from it.

prejudice: An unfavorable opinion or feeling formed beforehand or without knowledge, thought or reason.

privilege: Advantages and immunities enjoyed by one, usually powerful group or class, especially to the disadvantage of others.

qualitative data: Non-numerical data based on traits or characteristics (for example, types of chronic health conditions someone may have).

quantitative data: Numerical data calculated and collected through established methods (for example, number of times a year someone visits the doctor or hospital, etc.).

race: Any one of the groups that humans are often divided into based on physical traits regarded as common among people of shared ancestry.

racial discrimination: Unfair treatment because of an individual's actual or perceived racial or ethnic background.

racial justice: The creation and proactive reinforcement of policies, practices, attitudes and actions that produce equitable power, access, opportunities, treatment and outcomes for all people, regardless of race.

racism: A system of advantage based on a socially constructed concept of race. Racism operates on three levels: internalized racism, institutional racism, interpersonal racism.

sexism: Prejudice, stereotyping or discrimination, typically against women, on the basis of sex.

stereotype: A standardized mental picture that is held in common about members of a group that represents an oversimplified opinion, attitude or unexamined judgment, without regard to individual difference.

structural racism: Cultural values in a society are so ingrained in daily life that they are seen as "the way things are."

systemic racism: Perpetuated discrimination within a system that was founded on racist principles or practices.

tokenism: The practice of making only a symbolic effort to be inclusive to members of marginalized groups, especially by making use of a small number of people to represent the entirety of that group and to give the appearance of racial or sexual inclusion.

transgender: Denoting or relating to a person whose sense of personal identity and gender does not correspond with their birth sex.

trauma: A deeply distressing or disturbing experience.

White privilege: Inherent advantages possessed by a white person on the basis of their race in a society characterized by racial inequality and injustice.

White supremacy: The belief that white people constitute a superior race and should therefore dominate society, typically to the exclusion or detriment of other racial and ethnic groups

xenophobia: Dislike of or prejudice against people from other countries.

Glossary of Terms and Flags

LGBT (LESBIAN, GAY, BISEXUAL, TRANSGENDER)	AGENDER	BISEXUAL

TRANSGENDER	GENDERFLUID	PANSEXUAL

INTERSEX	PANGENDER	ASEXUAL
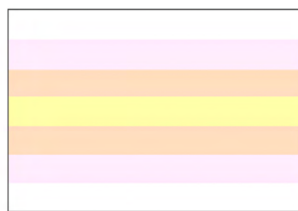
GENDERQUEER	LESBIAN	POLYSEXUAL

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Appendix 3: Table of Exhibits

Appendix 4: CHNA Service Coverage Area and CFC Partners' Profiles

The following section provides additional descriptions of the Central Florida Collaborative partner organizations.

AdventHealth Central Florida Division

AdventHealth Central Florida Division is represented in the Collaborative by AdventHealth Altamonte Springs, AdventHealth Apopka, AdventHealth Celebration, AdventHealth East Orlando, AdventHealth Kissimmee, AdventHealth Orlando, AdventHealth Waterman, AdventHealth Winter Garden and AdventHealth Winter Park. The AdventHealth system in Central Florida is comprised of 37,000 skilled and compassionate caregivers working in physician practices, hospitals, outpatient clinics, skilled nursing facilities, home health agencies and hospice centers to provide individualized, wholistic care.

AdventHealth

AdventHealth operates more than 50 hospitals and hundreds of care centers in nearly a dozen states, making it one of the largest faith-based health-care systems in the United States. Eight AdventHealth hospital facilities participated in this assessment, including AdventHealth Orlando, a major tertiary referral hospital for Central Florida and much of the southeast, the Caribbean and South America. These eight facilities have service areas encompassing parts of each county in the Central Florida region with a total of 2,953 beds, including acute care, pediatric care, organ transplant, NICU levels II and III, comprehensive rehabilitation, adult psychiatric care and much more. While these AdventHealth facilities are located in Lake, Orange, Osceola and Seminole counties, their primary service areas extend into Brevard, Polk and Volusia. Below is a description of the services provided at AdventHealth Orlando and each of AdventHealth's hospital campuses included in this assessment.

AdventHealth Altamonte Springs

AdventHealth Altamonte Springs, a 393-bed acute-care community hospital in Seminole County, was established in 1973 as AdventHealth Orlando's first satellite campus and continues to be the leading health care provider in Seminole County. Hospital services include: 24-hour emergency department, audiology, The Baby PlaceSM, The Breast Imaging Center of Excellence, breast surgery, AdventHealth Cancer Institute, cancer care, AdventHealth Cardiovascular Institute, cardiology, Center for Spine Health, critical care, diabetes, diagnostic imaging (including CT, MRI, ultrasound, nuclear cardiology), digestive health, Eden Spa (image recovery

services for oncology patients), general surgery, gynecology, Heartburn and Acid Reflux Center, infusion services, interventional cardiology, interventional radiology, minimally invasive and robotic surgery, obstetrics, orthopedics, pain medicine, radiation therapy, rehabilitation and sports medicine, respiratory care and women's services.

AdventHealth Apopka

AdventHealth Apopka is a 120-bed acute-care community hospital in Orange County. AdventHealth Apopka has offered a wide range of health care services since its inception in 1975. Hospital services include: 24-hour emergency department, cardiology, cath lab, chapel and meditation garden, critical care, CT, diagnostic imaging, DEXA, endoscopy, general surgery, laboratory services, mammography, medical care, MRI, nuclear cardiology, outpatient services, outpatient surgery, pediatric-friendly rooms, pulmonary services, radiology, rehabilitation and sports medicine, respiratory care, sleep medicine, ultrasound and urology services.

AdventHealth Celebration

AdventHealth Celebration, a 237-bed acute-care community hospital located in Osceola County opened in 1997. It is a is a leader in innovation and offers cutting edge services in digestive health, cancer, robotic surgery, neonatology, neuroscience, women's and men's health and imaging diagnostics. Additional hospital services include: 24-hour emergency department, 24-hour critical care coverage, level II neonatal intensive care unit, global robotics institute, Center for Advanced Diagnostics with Seaside Imaging, women's center, women's imaging, head and neck surgery program, comprehensive breast health center, primary stroke center designation, level I cardiovascular services designation, fitness center, sports medicine center, joint replacement center, spine center, Nicholson Center For Surgical Advancement, bariatric (weight loss) surgery, obesity medicine, endocrinology, reproductive endocrinology, neurosurgery, neurotology, diagnostic and interventional cardiology, transition clinic, health assessments, occupational medicine, oral surgery, primary care, behavioral health, cardiology, obstetrics/gynecology, gynecologic oncology, general surgery, thoracic surgery, ENT, neurology, oncology, gastroenterology, advanced gastroenterology (ERCP and EUS), ophthalmology, podiatry, orthopedics, pain medicine, plastic surgery, spine surgery, vascular surgery, robotic surgery, urology, urologic oncology, sleep disorders, diabetes, respiratory, diagnostic imaging, laboratory, observation medicine, nutrition, outpatient surgery, retail pharmacy, inpatient and outpatient rehabilitation, spiritual care, education center, centralized and integrated scheduling, patient tracking, wireless networks, document imaging and telemedicine.

AdventHealth East Orlando

AdventHealth East Orlando, a 295-bed acute-care community hospital located in east Orange County, became part of the AdventHealth system in 1990. It includes residency programs in family medicine, podiatry and emergency medicine, as well as a dedicated Children's Emergency Center and a hospital-based Center for Medical Simulation and Education. Additional hospital services include: 24-hour emergency department with a dedicated pediatric unit, audiology, AdventHealth Cancer Institute, cardiology, chest pain observation unit, critical care, diabetes, digestive health, endoscopy, home health, medical imaging, oncology unit, orthopedics, outpatient services, pain medicine, pediatric/adolescent and adult rehabilitation, primary stroke center, radiation therapy, seizure monitoring, sleep disorders center, surgery center and women's health pavilion.

AdventHealth Kissimmee

AdventHealth Kissimmee, a 162-bed acute-care community hospital located in north Osceola County, became part of the AdventHealth system in 1993. Additional hospital services include: 24-hour emergency department, 24-hour critical care coverage, DNV-accredited primary stroke center, dedicated outpatient endoscopy center, comprehensive health care services: cancer treatment including radiation therapy and chemotherapy, cardiac diagnostics (including diagnostic catheterizations), cardiology, diabetes, gastroenterology, inpatient and outpatient rehabilitation, minimally invasive surgery, neurology, interventional radiology, imaging (digital mammography, MRI, CT, PET, nuclear medicine, ultrasound, 4-D ultrasound, diagnostic x-ray), inpatient and outpatient surgery services including breast surgery, colorectal surgery, gastrointestinal surgery, general surgery, gynecologic surgery, hand surgery, ENT surgery and ophthalmology, oral surgery, orthopedics (sports med/joint), podiatry, urology and pulmonology.

AdventHealth Orlando

AdventHealth Orlando, a 1,400-bed acute-care medical center that serves as AdventHealth's main campus in Central Florida, was founded in 1908. It is one of the largest and most comprehensive medical centers in the Southeast and includes AdventHealth for Children, one of the premier children's health systems in the nation. Hospital services include: 24-hour emergency department, advanced diagnostic imaging center (CT, MRI, PET, meg), audiology, brain surgery, cardiovascular institute, behavioral health, critical care, diabetes institute, digestive health, family practice residency, AdventHealth for Children, cancer institute, center for interventional endoscopy, epilepsy, fracture care center, Gamma Knife® center, general medical/surgical, gynecology, high-risk perinatal care/fetal diagnostic center, home care, hyperbaric medicine and wound care, interventional neuroradiology, kidney stone center, level III neonatal intensive care, maternal fetal Medicare, neuroscience institute, nutritional

counseling, obstetrics, occupational health, open heart surgery, organ transplantation (bone marrow, kidney, liver, pediatric liver, pancreas, heart, lung), orthopedic institute, outpatient services, pain medicine, pediatric hematology/oncology, psychiatry, radiation therapy, radiology, rehabilitation and sports medicine, respiratory care, sleep disorders/diagnosis and treatment, spine surgery, surgical oncology, urology and women's services.

AdventHealth Waterman

AdventHealth Waterman is a 300 bed acute-care community hospital located in Central Florida, was established in 1938 and has been the cornerstone of health care excellence in Lake County. A Grade-A Safety hospital since 2013, hospital services include: 24-hour emergency department and pediatric emergency services, award winning and comprehensive heart program, including open heart and thoracic surgery, comprehensive Cancer Institute, including leading cancer treatment technologies, certified Joint Replacement Center, Community Primary Health Clinic, critical care services, award winning advanced diagnostic imaging services, including 3D mammography, computerized tomography (CT), magnetic resonance imaging (MRI), ultrasound and nuclear medicine), digestive health care, home care services, inpatient and outpatient rehabilitation services, laboratory services, sports medicine, surgical services including minimally invasive and robotic assisted surgeries, urology, 24-bed Women and Children's Center, wound and hyperbaric medicine and spiritual care.

AdventHealth Winter Park

AdventHealth Winter Park, a 373-bed acute-care community hospital serving northeastern Orange and southeastern Seminole counties, became part of the AdventHealth system in 2000. The facility began caring for patients in February 1955 when it first opened its doors as Winter Park Memorial Hospital. Hospital services include: 24-hour emergency department, The Baby Place (comprehensive maternity care), breast care, cancer care, cardiology, critical care, diagnostic imaging, digestive health, ENT services, educational classes and support groups, endoscopy, family medicine residency program, geriatric medicine, gynecology, laboratory, neonatal intensive care (NICU), orthopedics, primary stroke center, rehabilitation & sports medicine, radiation therapy, sleep disorders center and AdventHealth for Women - Winter Park. Inpatient and outpatient surgery services include colorectal surgery, gastrointestinal and general surgery, gynecology, hand surgery, ENT, ophthalmology, oral surgery, orthopedics (sports med/joint), podiatry and urology

Aspire Health Partners

Aspire Health Partners (Aspire) through its comprehensive continuum of integrated services is committed to Save Lives, Transform Communities and Change the World. Aspire is one of the largest behavioral health not-for-profit companies in the Southeast providing a full continuum of prevention, intervention, community based, treatment and acute care services for children, adolescents and adults with, or at-risk of developing: mental health, substance use and co-occurring disorders; HIV/ AIDS and Hepatitis Spectrum disease; and/or homelessness. Aspire is also a Certified Community Behavioral Health Clinic which allows for the integration of primary care services within the continuum. Some of the service components offered by Aspire, in addition to our psychiatric hospital include: community and school-based prevention and intervention services; outpatient and residential treatment for mental health (to include specialty populations such as pregnant, post-partum women and infants and veterans), substance use and co-occurring disorders; detoxification and crisis stabilization, inpatient psychiatric care, supportive housing and homeless support. Aspire is the designated public receiving facility for involuntary mental health commitments in Orange and Seminole counties and operates the only Addictions Receiving Facility for involuntary substance use commitments in Central Florida. Aspire's capacity includes 90 psychiatric acute care hospital beds, 87 crisis stabilization beds for adults, 40 adult detoxification beds, 278 mental health/substance abuse residential treatment beds for adults, 36 substance abuse residential beds for adolescents and 196 supportive housing beds. With a team of over 1,400 professionals, more than 50 program sites, serving six Central Florida counties (Orange, Osceola, Seminole, Lake, Hillsborough and Brevard), Aspire is able to provide a comprehensive, cost effective, seamless continuum of behavioral healthcare. In 2021, Aspire provided direct prevention, intervention, treatment and HIV/AIDS services to more than 35,000 individuals. Aspire's programs are licensed by the Florida Department of Children and Families (DCF), the Florida Agency for Health Care Administration (AHCA) and are nationally accredited through the Commission on Accreditation of Rehabilitative Facilities (CARF).

Community Health Centers, Inc.

Community Health Centers, Inc. (CHC) is a private, non-profit, Federally Qualified Health Center (FQHC) that provides health care services to insured, uninsured, underinsured and underserved children and adults within Central Florida.

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Florida Department of Health

For over 125 years, the Florida Department of Health has been serving all residents in the four-county region through their ICARE vision: Innovation, Collaboration, Accountability, Responsiveness and Excellence and the mission, to protect, promote & improve the health of all people in Florida through integrated state, county, & community efforts.

Orange Blossom Family Health

Orange Blossom Family Health (OBFH) is a Federally Qualified Health Center (FQHC) and non-profit organization committed to providing the health care needs to the residents of our community in an atmosphere of dignity and respect. Over our 29 years of service to our community, we have grown to address multiple areas in health care to close gaps in care. To better serve our community, Orange Blossom Family Health offers primary medical care via five locations in Orange and Osceola counties.

Our programs include primary medical care; oral health services; behavioral health and substance use counseling; on-site pharmacy services; a residential TB shelter; mobile medical and dental services; an aggressive street outreach program - our HOPE Team; and permanent supportive housing.

We are committed and obligated to provide the highest quality of care to all community residents we serve. We treat all patients with a truly caring attitude and are aware of the changing needs of the community and strive to be responsive to those needs. We embrace human differences as bonds, not barriers, and believe that quality health care should be universally accessible.

Orlando Health

ORLANDO HEALTH®

The Orlando Health health care system is one of Florida's most comprehensive private, not-for-profit health care organizations with a community-based network of physician practices, hospitals and outpatient care centers throughout Central Florida. As a statutory teaching hospital system, Orlando Health offers the region's only Level One Trauma Center; the area's first heart program; specialty hospitals dedicated to children, women, and babies; a major cancer institute; and long-standing community hospitals.

With 3,200 beds, facilities include: Orlando Health Arnold Palmer Hospital for Children, Orlando Health Cancer Institute, Orlando Health Dr. P. Phillips Hospital, Orlando Health – Health Central Hospital, Orlando Health Horizon West Hospital, Orlando Health Orlando Regional Medical Center, Orlando Health South Lake Hospital, Orlando Health South Seminole Hospital, Orlando Health St. Cloud Hospital and Orlando Health Winnie Palmer Hospital for Women & Babies. Areas of expertise include orthopedics, heart and vascular, cancer care, neurosciences, surgery, pediatric orthopedics and sports medicine, neonatology, women's health and trauma.

Orlando Health Arnold Palmer Hospital for Children

Orlando Health Arnold Palmer Hospital for Children is a pediatric teaching hospital and the first facility in Central Florida to provide emergency care for pediatric patients. With 156 beds, Orlando Health Arnold Palmer offers numerous pediatric specialties, including cardiology and cardiac surgery, emergency and trauma care, endocrinology and diabetes, gastroenterology, nephrology, neuroscience, oncology and hematology, orthopedics, rheumatology, pulmonology, and sleep medicine. Orlando Health Arnold Palmer has received national recognition for its programs in orthopedics, pulmonology and cardiology and heart surgery. The hospital offers the most comprehensive heart care in Central Florida for infants, children, and teens with heart disease. Orlando Health Arnold Palmer also has the only Level One Pediatric Trauma Center in the region. The primary service area of Orlando Health Arnold Palmer extends throughout the Central Florida region and into Polk County, southern Brevard County and Volusia County (Deltona).

Orlando Health Dr. P. Phillips Hospital

Orlando Health Dr. P. Phillips Hospital is a 285-bed, full-service medical and surgical facility that provides emergency services, diagnostic imaging, rehabilitation, and surgical services, including vascular, neurosurgery, oncology, orthopedics and the DaVinci robotic surgical system. The hospital also includes cardiovascular care as a fully accredited chest pain center and a designated primary stroke center. Cancer treatments, home healthcare and wound care

therapies also are provided at Orlando Health Dr. P. Phillips. The primary service area is the southwestern portion of Orange County, including the municipalities of Windermere, Winter Garden, Oakland, Ocoee, Belle Isle, Orlando and the community areas of Bay Hill, Dr. Phillips, Hunters Creek, Southchase and Bay Lake. The service area also encompasses the communities of Celebration and Poinciana in Osceola County.

Orlando Health - Health Central Hospital

Orlando Health – Health Central Hospital, located in West Orange County, is a 216-bed, full-service medical and surgical facility that provides emergency services, cardiac care, women's health, neurology, neurosurgery, orthopedic and spine care, endocrinology, oncology, wound care, mammography, and general surgery. Orlando Health – Health Central also offers a primary stroke center. The primary service area is western Orange County, including Winter Garden, Ocoee, Windermere, Pine Hills, South Apopka, and west Orlando.

Orlando Health Horizon West Hospital

Orlando Health Horizon West is a 60-bed acute care hospital located in Winter Garden, Florida just west of Orlando, Florida. Horizon West is a full-service community hospital with a 23-bed emergency department, medical offices, and an outpatient rehabilitation suite. Orlando Health Horizon West provides comprehensive health services, personalized care and state-of-the-art imaging and treatments to West Orange County, Florida and the Horizon West community.

Orlando Health Orlando Regional Medical Center

Orlando Health Orlando Regional Medical Center (ORMC), located in Orlando, is Orlando Health's flagship medical center with 898 acute care and comprehensive rehabilitation beds. Orlando Health ORMC specializes in trauma, cardiovascular services, orthopedics, neurosciences, gastroenterology, and internal medicine, as well as minimally invasive bariatric surgery. Orlando Health ORMC is home to Central Florida's only Level One Trauma Center and burn unit. The hospital offers other specialty centers, including memory disorders, epilepsy, and the Orlando Health rehabilitation institute. Orlando Health ORMC also is one of the state's six major teaching hospitals. Orlando Health ORMC's primary service area extends from Orange County into Lake, Seminole, and Osceola counties. All jurisdictions in Seminole, except for Geneva, are considered in the primary service area. The cities of Kissimmee and St. Cloud (in Osceola), and Clermont and Minneola (in Lake) are included in the service area.

Orlando Health Cancer Institute is a statewide cancer treatment and research program specializing in cancer detection and treatment. It is home to the Marjorie and Leonard Williams Center for Proton Therapy, Central Florida's first — and only the nation's 23rd proton therapy center. The Orlando Health Cancer Institute also provides service to the community as through

its Bone Marrow Transplant and Cellular Therapy Program and the Cancer Genetics and High-Risk Care Center. The Cancer Institute's specific services include genetic counseling, integrative medicine, nutrition services, counseling, and rehabilitation. Although it serves all of Central Florida, the cancer center's primary service area is the entirety of Orange County.

Orlando Health South Lake Hospital

Orlando Heath South Lake Hospital, located in Clermont, Florida is a full-service medical and surgical facility with 147 inpatient beds, along with 30 short-term rehabilitation beds. The hospital serves south Lake County and provides a variety of medical services, including cardiac care, diagnostic imaging services, obstetrics, orthopedics, robotic surgery, and urology. It is situated on a 180-acre health, education and wellness campus that also includes the Center for Women's Health, the National Training Center, the SkyTop View Rehabilitation Center, and other outpatient services. The primary service area is southern Lake County, including Clermont, Minneola, Groveland, Mascotte and Montverde.

Orlando Health South Seminole Hospital

Orlando Health South Seminole Hospital, located in Longwood, is a full-service medical and surgical facility with 206 beds, including an 80-bed psychiatric unit. Services offered through the hospital include endoscopy, women's health, behavioral health, diagnostic and interventional radiology, nuclear medicine, wound care and hyperbaric medicine, and therapies (physical, occupational and speech). The facility is home to one of Orlando Health's three Air Care Team helicopter bases. Orlando Health South Seminole's primary service area covers the majority of Seminole County, including all municipalities except for Geneva, which is located in eastern Seminole County. The service area extends into southwestern Volusia County to include the city of Deltona.

Orlando Health St. Cloud Hospital

Orlando Health St. Cloud Hospital, located in St. Cloud, is an acute care hospital with 84 beds. Services offered include emergency, cardiology, critical care, infectious disease, orthopedics, radiology, surgical care, outpatient rehabilitation, and a Wound Healing and Hyperbaric Center. The primary service area is Osceola County.

Orlando Health Winnie Palmer Hospital for Women and Babies

Orlando Health Winnie Palmer Hospital for Women and Babies is dedicated to the health of women and babies in the Central Florida region. With 350 beds, the teaching hospital is one of the largest birthing hospitals in the nation. Orlando Health Winnie Palmer's Level III neonatal intensive care unit (NICU) is one of the largest NICUs in the world and has one of the highest survival rates in the country for low birth-weight babies. Specialized programs and services that

Orlando Health Winnie Palmer offers to mothers and babies include those for high-risk births, neonatal, obstetrics and gynecology, breastfeeding, childbirth and parenting classes, and surgical and specialized care. Winnie Palmer Hospital also includes the Hughes Fetal Diagnostic Center, which offers ultrasounds, targeted sonograms, diabetic and nutrition counseling, genetic counseling, and fetal echocardiograms. The extent of the primary service area of this facility extends to all jurisdictions in Orange, Seminole, except for Geneva, as well as the cities of Kissimmee and St. Cloud (Osceola County) and Clermont and Minneola (Lake County).

Osceola Community Health Services

Osceola Community Health Services is a Federally Qualified Health Center (FQHC) serving families with a Primary Care Medical Team Model that focuses on patients' total health. Our high-quality, accessible, affordable and integrated health care includes family medicine, pediatrics, maternity care, women's health, dental, behavioral health, men's health, HIV care, labs and pharmacy services. Our ten clinics, mobile medical/dental units, referral management, as well as our telehealth capabilities give us the flexibility to serve patients with a more holistic approach.

True Health

True Health is a private, non-profit 501(c)(3) federally qualified health center (FQHC) that has served low-income, uninsured, underinsured and underserved populations in Central Florida since 1977 and operates eight locations within Orange and Seminole counties.

CFC Partners Licensed Bed Count

Below is a list of licensed beds and the county or counties each licensed hospital serves.

Hospital/Clinic	Licensed Beds	County Service Area(s)
AdventHealth Altamonte Springs	393	Lake, Orange, Seminole
AdventHealth Apopka	120	Lake, Orange, Seminole
AdventHealth Celebration	237	Orange, Osceola
AdventHealth East Orlando	295	Orange, Osceola, Seminole
AdventHealth Kissimmee	162	Orange, Osceola
AdventHealth Orlando	1,400	Lake, Orange, Osceola, Seminole
AdventHealth Waterman	300	Lake, Orange
AdventHealth Winter Garden	80	Lake, Orange, Seminole
AdventHealth Winter Park	373	Orange, Seminole
Aspire Health Partners – CSU Kassab (located in Orange County but serves all Central Florida)	57	Orange
Aspire Health Partners – CSU Sanford (located in Seminole County but serves all Central Florida)	30	Seminole
Aspire Health Partners – Inpatient Detoxification (located in Orange County but serves all Central Florida)	40	Orange
Aspire Health Partners – Princeton Hospital (located in Orange County but serves all of Central Florida)	90	Orange
Orlando Health Arnold Palmer Hospital for Children	156	Lake, Orange, Osceola, Seminole
Orlando Health Dr. P. Phillips Hospital	285	Orange, Osceola
Orlando Health - Health Central Hospital	216	Orange
Orlando Health Horizon West Hospital	60	Orange
Orlando Health Orlando Regional Medical Center	898	Lake, Orange, Osceola, Seminole
Orlando Health St. Cloud Hospital	84	Osceola
Orlando Health South Lake Hospital	177	Lake
Orlando Health South Seminole Hospital	206	Seminole
Orlando Health Winnie Palmer Hospital for Women and Babies	350	Lake, Orange, Osceola, Seminole

Appendix 5: Service Use Heat Maps

The following appendix includes heat maps that reflect the concentration of patients for CFC facilities. Maps typically include a "wider-view" heat map of the area and (highlighted to the right), a more granular, zoomed in map of hot spots. Maps also include a table showing the most common diagnoses and other information. Different CFC partners requested information to be shown in tabular form below each map; in many cases the types of data varied individual CFC partners' preferences.[205]

Maps were generated using the following general methodology.

- De-identified patient data were converted to longitude and latitude coordinates.
- Longitude and latitude coordinates were used to create initial heat maps using ArcGIS mapping software.
- Resulting maps were edited, resized, and customized to improve readability and usefulness.
- Tables which included lists of the most common diagnoses (and other information, in some cases) were added to each map.
- Data suppression occurs typically when insufficient numbers of cases to protect and assure confidentiality.

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[205]Note that for Orlando Health maps, diagnoses in the table of the most common diagnoses were required to have a minimum of five observations. Therefore, there are a few cases in which this threshold was not met, so the number of diagnoses is listed as "NA."

AdventHealth Altamonte Springs, Inpatient
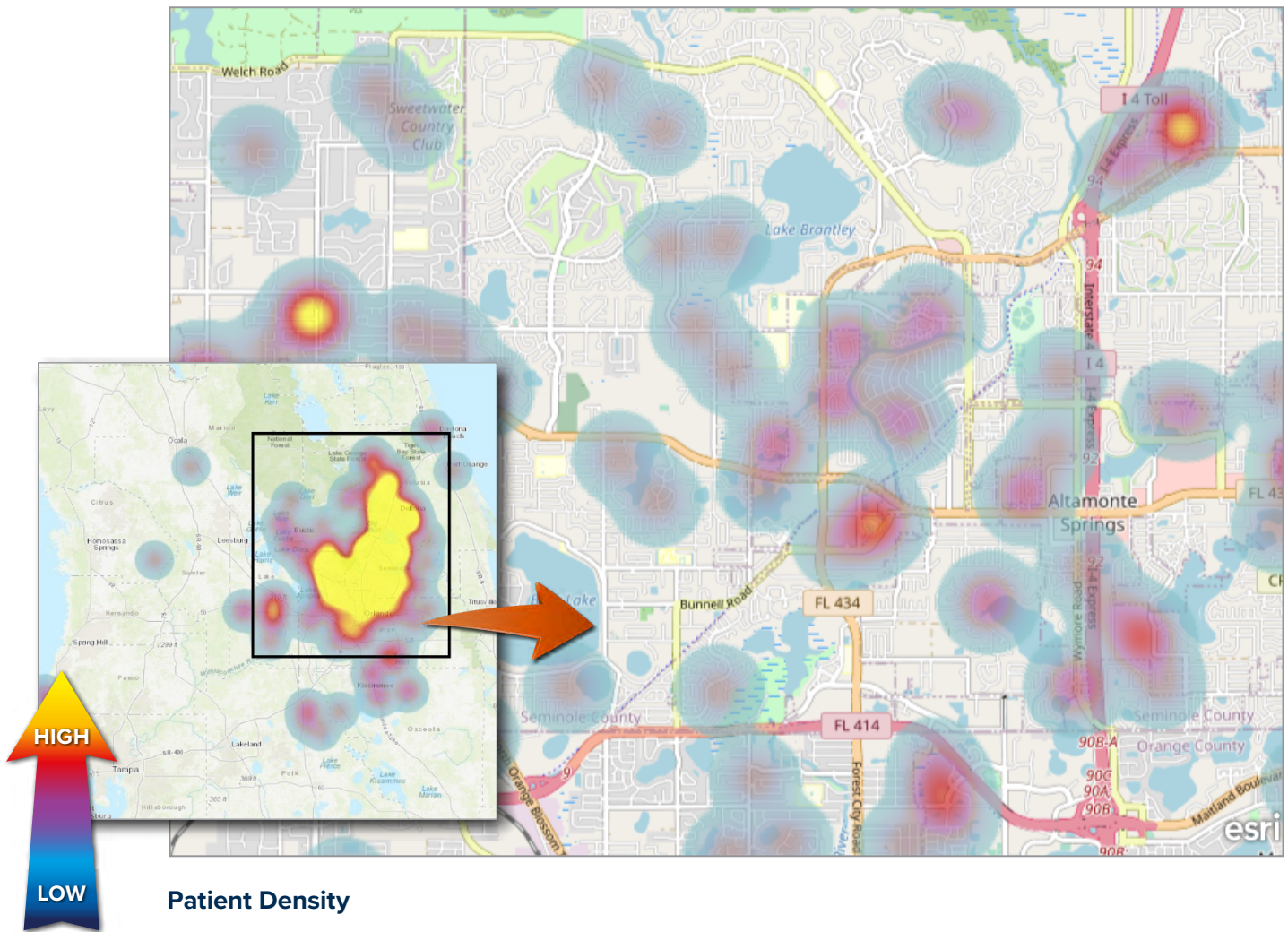
HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Single liveborn infant, delivered vaginally	199	$1,252,144	Encounter for antineoplastic chemotherapy	19	$2,440,467
2	Single liveborn infant, delivered by cesarean	73	$660,708	Single liveborn infant, delivered vaginally	199	$1,252,144
3	Encounter for antineoplastic chemotherapy	19	$2,440,467	Single liveborn infant, delivered by cesarean	73	$660,708
4	Maternal care for low transverse scar from previous cesarean delivery	9	$343,592	Encounter for attention to colostomy	5	$502,036
5	Post-term pregnancy	8	$237,239	Malignant neoplasm of prostate	4	$449,798
Total uninsured inpatient visits (ALL visits – not just top 5)		475	$14,679,269			

AdventHealth Altamonte Springs, Outpatient

HIGH

LOW

Patient Density

456

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for general adult medical examination without abnormal findings	123	$52,589	Calculus of kidney	61	$1,424,206
2	Illness, unspecified	105	$112,425	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent	24	$1,137,197
3	Encounter for preprocedural laboratory examination	88	$63,995	Bilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent	16	$1,011,986
4	Essential (primary) hypertension	87	$58,977	Traction detachment of retina, left eye	15	$521,305
5	Atherosclerotic heart disease of native coronary artery without angina pectoris	81	$126,483	Calculus of gallbladder with chronic cholecystitis without obstruction	19	$515,256
Total uninsured outpatient visits (ALL visits – not just top 5)		**4,379**	**$25,485,083**			

AdventHealth Apopka, Inpatient

Patient Density

HIGH

LOW

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Data suppressed for privacy			Data suppressed for privacy		
2	Data suppressed for privacy			Data suppressed for privacy		
3	Data suppressed for privacy			Data suppressed for privacy		
4	Data suppressed for privacy			Data suppressed for privacy		
5	Data suppressed for privacy			Data suppressed for privacy		
Total uninsured inpatient visits (ALL visits – not just top 5)		**16**	**$1,162,790**			

AdventHealth Apopka, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for screening mammogram for malignant neoplasm of breast	361	$297,626	Encounter for screening mammogram for malignant neoplasm of breast	361	$297,626
2	Essential (primary) hypertension	63	$13,296	Calculus of kidney	36	$240,000
3	Anemia, unspecified	53	$6,137	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent	8	$205,799
4	Type 2 diabetes mellitus without complications	46	$9,709	Encounter for screening for malignant neoplasm of colon	12	$139,504
5	Illness, unspecified	39	$5,986	Radiculopathy, lumbar region	2	$137,021
Total uninsured outpatient visits (ALL visits – not just top 5)		2,560	$5,373,653			

AdventHealth Celebration, Inpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Single liveborn infant, delivered vaginally	265	$1,709,618	Malignant neoplasm of prostate	41	$4,076,996
2	Single liveborn infant, delivered by cesarean	144	$1,125,702	Morbid (severe) obesity due to excess calories	39	$3,309,890
3	Malignant neoplasm of prostate	41	$4,076,996	Non-ST elevation (NSTEMI) myocardial infarction	10	$1,907,663
4	Morbid (severe) obesity due to excess calories	39	$3,309,890	Single liveborn infant, delivered vaginally	265	$1,709,618
5	Maternal care for low transverse scar from previous cesarean delivery	33	$1,161,518	Maternal care for low transverse scar from previous cesarean delivery	33	$1,161,518
Total uninsured inpatient visits (ALL visits – not just top 5)		**830**	**$30,574,506**			

AdventHealth Celebration, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for screening mammogram for malignant neoplasm of breast	679	$541,424	Calculus of ureter	24	$780,783
2	Neonatal jaundice, unspecified	170	$6,661	Encounter for screening mammogram for malignant neoplasm of breast	679	$541,424
3	Encounter for other preprocedural examination	97	$35,771	Calculus of kidney	27	$346,107
4	Encounter for general adult medical exam without abnormal findings	91	$29,531	Supraventricular tachycardia	1	$229,460
5	Low back pain	70	$81,999	Malignant neoplasm of unspecified site of left female breast	7	$200,769
Total uninsured outpatient visits (ALL visits – not just top 5)		**4,507**	**$13,723,475**			

AdventHealth East Orlando, Inpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Data suppressed for privacy			Data suppressed for privacy		
2	Data suppressed for privacy			Data suppressed for privacy		
3	Data suppressed for privacy			Data suppressed for privacy		
4	Data suppressed for privacy			Data suppressed for privacy		
5	Data suppressed for privacy			Data suppressed for privacy		
Total uninsured inpatient visits (ALL visits – not just top 5)		**60**	**$3,670,937**			

AdventHealth East Orlando, Outpatient

Patient Density

HIGH

LOW

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for screening mammogram for malignant neoplasm of breast	526	$419,521	Calculus of kidney	47	$684,182
2	Essential (primary) hypertension	181	$63,401	Calculus of ureter	21	$562,942
3	Type 2 diabetes mellitus without complications	169	$65,693	Organic azoospermia	34	$557,719
4	Atherosclerotic heart disease of native coronary artery without angina pectoris	148	$243,570	Encounter for screening mammogram for malignant neoplasm of breast	526	$419,521
5	Encounter for general adult medical examination without abnormal findings	124	$36,236	Bilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent	5	$318,194
Total uninsured outpatient visits (ALL visits – not just top 5)		**5,373**	**$12,979,314**			

AdventHealth Hope Healing, Outpatient

Patient Density

HIGH

LOW

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Data suppressed for privacy			Data suppressed for privacy		
2	Data suppressed for privacy			Data suppressed for privacy		
3	Data suppressed for privacy			Data suppressed for privacy		
4	Data suppressed for privacy			Data suppressed for privacy		
5	Data suppressed for privacy			Data suppressed for privacy		
Total uninsured inpatient visits (ALL visits – not just top 5)		**33**	**$160,979**			

AdventHealth Kissimmee, Inpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Data suppressed for privacy			Data suppressed for privacy		
2	Data suppressed for privacy			Data suppressed for privacy		
3	Data suppressed for privacy			Data suppressed for privacy		
4	Data suppressed for privacy			Data suppressed for privacy		
5	Data suppressed for privacy			Data suppressed for privacy		
Total uninsured inpatient visits (ALL visits – not just top 5)		**12**	**$1,034,587**			

AdventHealth Kissimmee, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for screening mammogram for malignant neoplasm of breast	661	$494,857	Encounter for screening mammogram for malignant neoplasm of breast	661	$494,857
2	Type 2 diabetes mellitus without complications	122	$30,318	Calculus of kidney	32	$349,208
3	Unspecified atrial fibrillation	98	$13,294	Anorectal fistula	6	$265,886
4	Type 2 diabetes mellitus with hyperglycemia	90	$8,996	Malignant neoplasm of rectum	41	$199,274
5	Essential (primary) hypertension	77	$28,537	Encounter for screening for malignant neoplasm of colon	20	$189,320
Total uninsured outpatient visits (ALL visits – not just top 5)		**3,858**	**$7,721,960**			

AdventHealth Orlando, Inpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Single liveborn infant, delivered vaginally	550	$6,359,730	Sepsis, unspecified organism	37	$10,136,498
2	Single liveborn infant, delivered by cesarean	283	$7,848,118	Single liveborn infant, delivered by cesarean	283	$7,848,118
3	Maternal care for low transverse scar from previous cesarean delivery	125	$4,677,052	Single liveborn infant, delivered vaginally	550	$6,359,730
4	Post-term pregnancy	48	$1,315,765	Other specified sepsis	5	$5,216,697
5	Sepsis, unspecified organism	37	$10,136,498	Maternal care for low transverse scar from previous cesarean delivery	125	$4,677,052
Total uninsured inpatient visits (ALL visits – not just top 5)		**2,336**	**$146,963,421**			

AdventHealth Orlando, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for general adult medical examination without abnormal findings	880	$264,149	Encounter for cosmetic surgery	101	$3,745,671
2	Essential (primary) hypertension	454	$240,146	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent	32	$1,211,526
3	Hypothyroidism, unspecified	363	$84,251	Hypertrophy of breast	36	$1,182,700
4	Type 2 diabetes mellitus without complications	350	$106,422	Other intraarticular fracture of lower end of left radius, initial encounter for closed fracture	28	$1,050,551
5	Hyperlipidemia, unspecified	255	$106,604	Secondary malignant neoplasm of brain	11	$885,689
Total uninsured outpatient visits (ALL visits – not just top 5)		**17,733**	**$70,218,931**			

AdventHealth Waterman, Inpatient

Patient Density
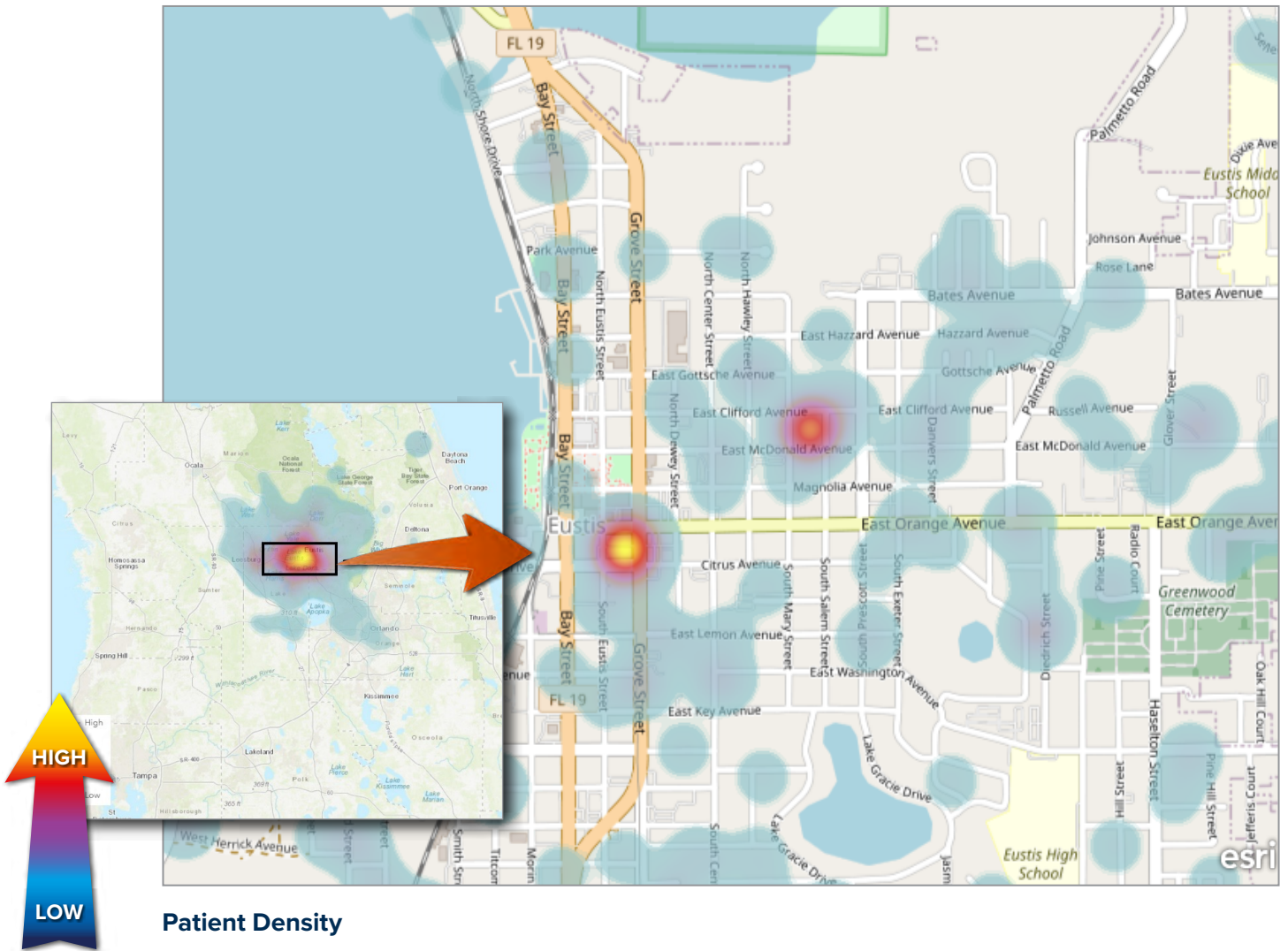
Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Sepsis, unspecified organism	223	$10,558,815	Sepsis, unspecified organism	223	$10,558,815
2	COVID-19	99	$5,239,806	COVID-19	99	$5,239,806
3	Single liveborn infant, delivered vaginally	59	$228,454	Other specified sepsis	50	$5,001,132
4	Other specified sepsis	50	$5,001,132	Non-ST elevation (NSTEMI) myocardial infarction	33	$3,558,800
5	Cellulitis of left lower limb	37	$798,628	Hypertensive heart disease with heart failure	26	$2,200,474
Total uninsured inpatient visits (ALL visits – not just top 5)		2,518	$104,393,021			

AdventHealth Waterman, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Essential (primary) hypertension	1,279	$1,770,273	Essential (primary) hypertension	1,279	$1,770,273
2	Hyperlipidemia, unspecified	538	$723,082	Hyperlipidemia, unspecified	538	$723,082
3	Encounter for general adult medical examination without abnormal findings	380	$387,890	Encounter for general adult medical examination without abnormal findings	380	$387,890
4	Encounter for immunization	224	$13,529	Type 2 diabetes mellitus without complications	210	$254,249
5	Type 2 diabetes mellitus without complications	210	$254,249	Dilated cardiomyopathy	1	$209,763
Total uninsured outpatient visits (ALL visits – not just top 5)		**4,998**	**$9,704,372**			

AdventHealth Winter Garden, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Data suppressed for privacy			Data suppressed for privacy		
2	Data suppressed for privacy			Data suppressed for privacy		
3	Data suppressed for privacy			Data suppressed for privacy		
4	Data suppressed for privacy			Data suppressed for privacy		
5	Data suppressed for privacy			Data suppressed for privacy		
Total uninsured outpatient visits (ALL visits – not just top 5)		**61**	**$693,833**			

AdventHealth Winter Park, Inpatient

Patient Density

HIGH

LOW

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Single liveborn infant, delivered vaginally	304	$2,155,780	Single liveborn infant, delivered vaginally	304	$2,155,780
2	Single liveborn infant, delivered by cesarean	144	$963,152	Maternal care for low transverse scar from previous cesarean delivery	28	$971,958
3	Maternal care for low transverse scar from previous cesarean delivery	28	$971,958	Single liveborn infant, delivered by cesarean	144	$963,152
4	Encounter for antineoplastic chemotherapy	13	$366,801	Post-term pregnancy	13	$381,098
5	Post-term pregnancy	13	$381,098	Malignant neoplasm of sigmoid colon	3	$369,277
Total uninsured inpatient visits (ALL visits – not just top 5)		**708**	**$14,416,117**			

AdventHealth Winter Park, Outpatient

HIGH

LOW

Patient Density

Rank	Top 5 Count	Count	Costs	Top 5 Costs	Count	Costs
1	Encounter for screening mammogram for malignant neoplasm of breast	1,057	$881,705	Encounter for screening mammogram for malignant neoplasm of breast	1,057	$881,705
2	Neonatal jaundice, unspecified	123	$2,861	Malignant neoplasm of unspecified site of left female breast	8	$419,065
3	Unspecified abdominal pain	57	$232,754	Encounter for screening for malignant neoplasm of colon	34	$307,273
4	Mastodynia	48	$106,818	Calculus of kidney	30	$290,961
5	Other abnormal and inconclusive findings on diagnostic imaging of breast	44	$106,347	Calculus of ureter	9	$259,512
Total uninsured outpatient visits (ALL visits – not just top 5)		**3,934**	**$14,641,256**			

Aspire Health Partners

The following heat map illustrates the locations of this facility's patients.

HIGH

LOW

Patient Density
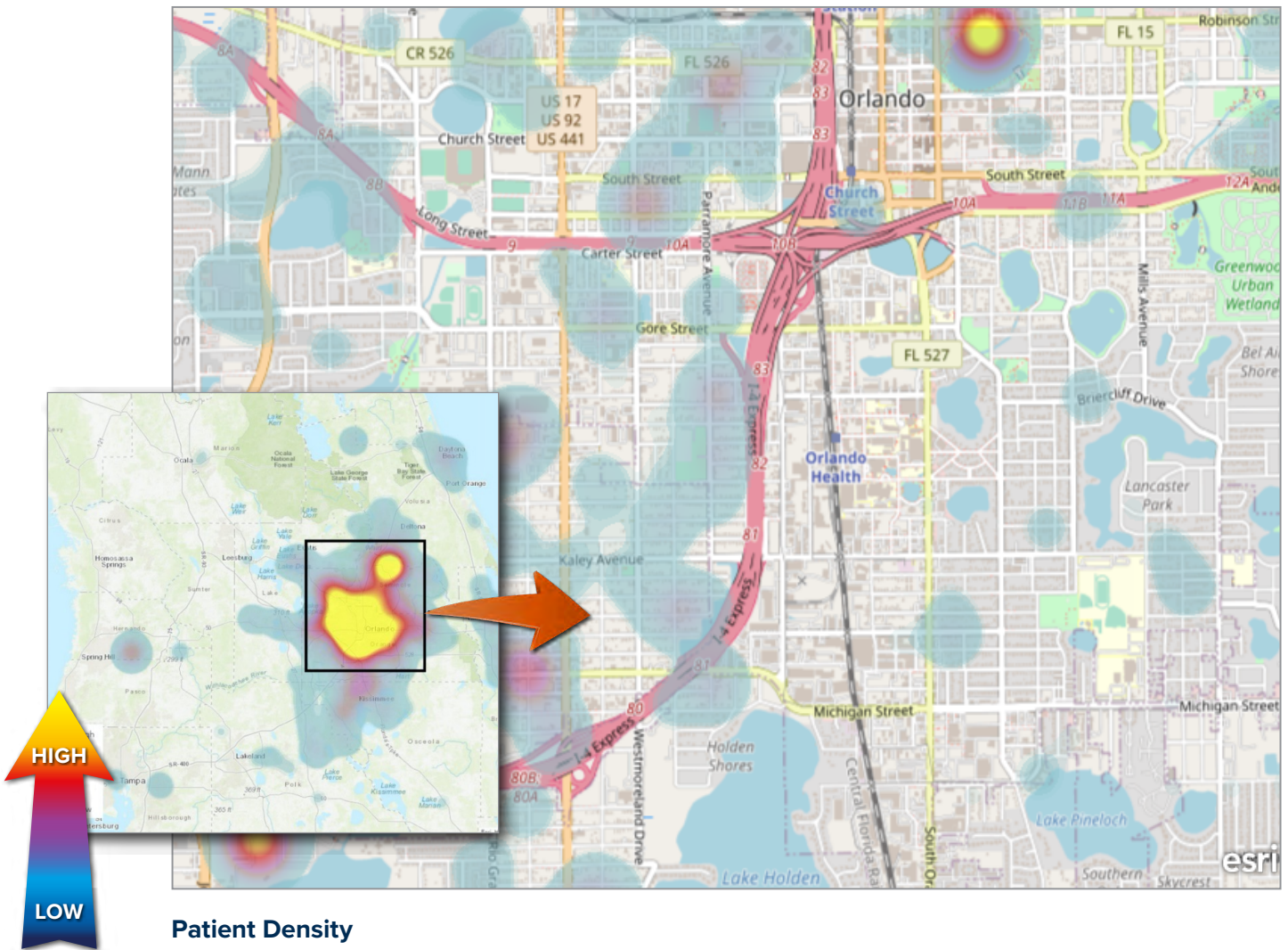
Five most common diagnoses
Opioid dependence, uncomplicated
Alcohol dependence, uncomplicated
Major depressive disorder, single episode, unspecified
Schizoaffective disorder, bipolar type
Schizophrenia, unspecified

Community Health Centers, Inc.

The following heat map illustrates the locations of this facility's patients.

HIGH

LOW

Patient Density
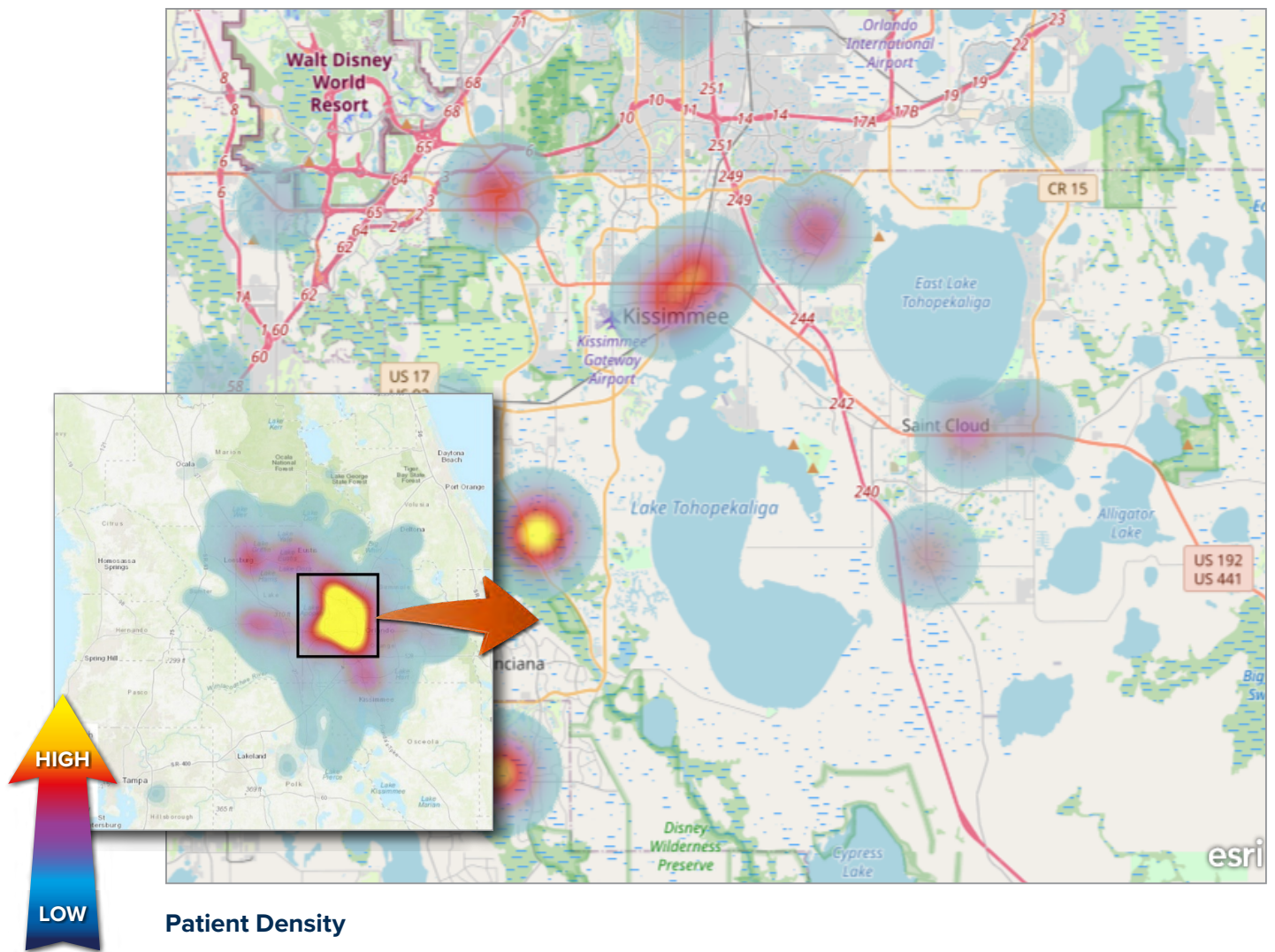
Five most common diagnoses
Inoculations and Vaccinations
Essential (Primary) Hypertension
Type 2 diabetes mellitus Without complications
Encounter for dental examination and cleaning with abnormal findings
Encounter for routine child health examination with abnormal findings

Orlando Health Arnold Palmer Hospital for Children, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by total inpatient encounters) listed below. The inpatient visit patient locations were clustered in two area – the general, Orlando area near the hospital and a smaller one near Daytona Beach. Diagnoses were moderately acute and diverse. Nearly half of patients were Hispanic (40%).

HIGH

LOW

Patient Density
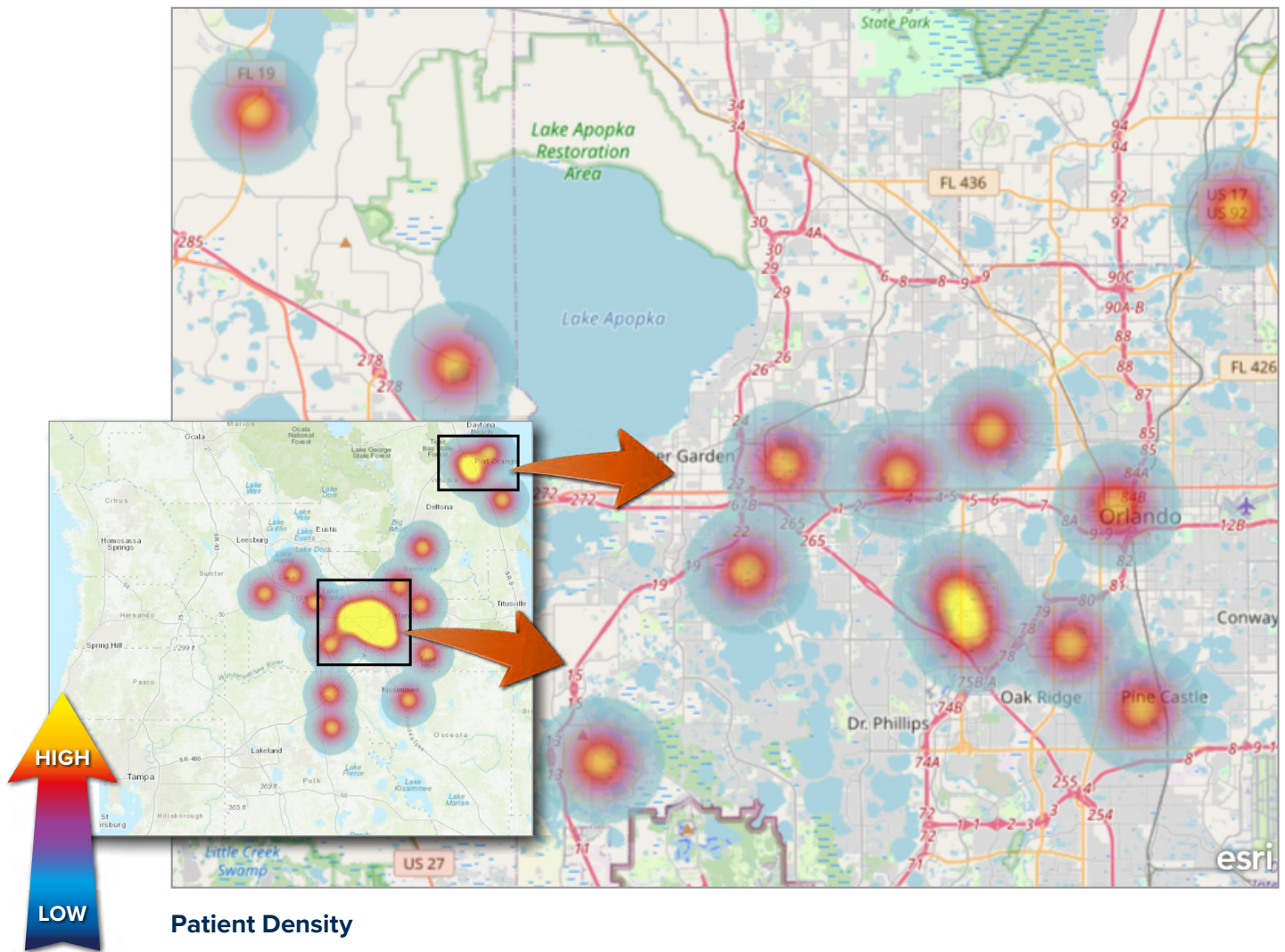
Measure	Value
Number of self-pay, uninsured patient visits	225
Number of self-pay, uninsured patient visits in hot spots	30
Total cost of self-pay, uninsured patient visits	$8,880,820
Total cost of self-pay, uninsured patient visits in hot spots	$1,447,792
Percent of self-pay, uninsured patient visits in the hotspot	13.3%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Unspecified convulsions	6	$114,176	Other specified congenital deformities of hip	3	$392,330
2	Neonatal jaundice, unspecified	6	$35,905	Suppressed	1	$377,913
3	Unspecified asthma with status asthmaticus	6	$264,068	Unspecified asthma with status asthmaticus	6	$264,068
4	Acute bronchiolitis due to respiratory syncytial virus	6	$160,011	Suppressed	1	$220,348
5	Type 1 diabetes mellitus with ketoacidosis without coma	6	$162,549	Suppressed	1	$193,133
Total uninsured patient visits (ALL visits – not just top 5)		225	$8,880,820			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Dehydration	11	$593,072	Dehydration	11	$593,072
2	Hypo-osmolality and hyponatremia	7	$226,623	Suppressed	2	$374,776
3	Other long term (current) drug therapy	5	$236,770	Suppressed	1	$334,448
4	Preterm newborn, gestational age 35 completed weeks	5	$98,460	Other long term (current) drug therapy	5	$236,770
5	Suppressed	4	$203,934	Hypo-osmolality and hyponatremia	7	$226,623

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	0	0.0%	HISPANIC OR LATINO	90	40.0%	Under 5	66	29.3%
ASIAN	4	1.8%	NONHISPANIC/LATINO	120	53.3%	5 to 17	120	53.3%
BLACK OR AFRICAN AM	33	14.7%	UNKNOWN OR NOT GIVEN	15	6.7%	17 to 24	36	16.0%
CAUCASIAN	69	30.7%				25 to 34	2	0.9%
EAST INDIAN	2	0.9%				35 to 44	0	0.0%
HISPANIC	1	0.4%				45 to 54	0	0.0%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	0	0.0%
ORIENTAL	0	0.0%				65 to 74	0	0.0%
OTHER	101	44.9%				75 and older	1	0.4%
UNKNOWN	15	6.7%				Unknown	0	0.0%
Total	225	100.0%		225	100.0%		225	100.0%

Orlando Health Arnold Palmer Hospital for Children, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. Patient home locations were highly concentrated within a five to seven mile radius of the hospital. Fever and viral infections were the most common primary diagnoses. Patients were highly diverse with 44% being Hispanic and more than 25% indicating that they were African American.

Patient Density
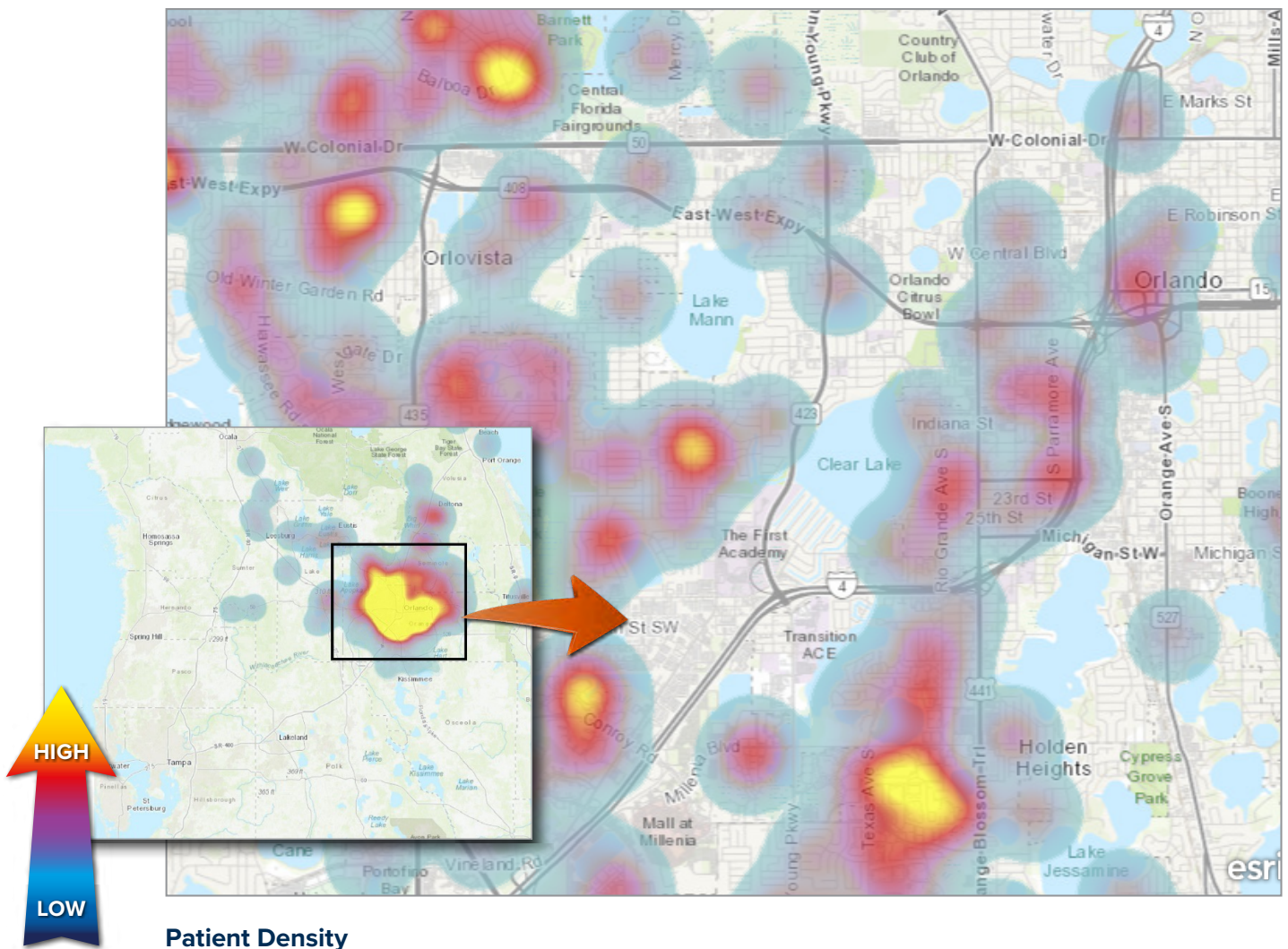
Measure	Value
Number of self-pay, uninsured patient visits	4,915
Number of self-pay, uninsured patient visits in hot spots	932
Total cost of self-pay, uninsured patient visits	$16,552,707
Total cost of self-pay, uninsured patient visits in hot spots	$2,009,166
Percent of self-pay, uninsured patient visits in the hotspot	19.0%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

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Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Fever, unspecified	331	$673,799	Fever, unspecified	331	$673,799
2	Viral infection, unspecified	177	$320,359	Unspecified acute appendicitis	8	$376,483
3	Acute upper respiratory infection, unspecified	171	$320,596	Acute upper respiratory infection, unspecified	171	$320,596
4	Vomiting, unspecified	136	$317,929	Viral infection, unspecified	177	$320,359
5	Cough	117	$198,539	Vomiting, unspecified	136	$317,929
Total uninsured patient visits (ALL visits – not just top 5)		**4,915**	**$16,552,707**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Fever, unspecified	104	$266,871	Unspecified asthma, uncomplicated	42	$285,369
2	Cough	65	$146,347	Fever, unspecified	104	$266,871
3	Vomiting, unspecified	61	$220,084	Unspecified fall, initial encounter	44	$241,945
4	Diarrhea, unspecified	52	$102,414	Vomiting, unspecified	61	$220,084
5	Constipation, unspecified	46	$185,409	Constipation, unspecified	46	$185,409

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	1	0.0%	HISPANIC OR LATINO	2,160	43.9%	Under 5	1,285	26.1%
ASIAN	80	1.6%	NONHISPANIC/LATINO	2,662	54.2%	5 to 17	3,051	62.1%
BLACK OR AFRICAN AM	1,251	25.5%	UNKNOWN OR NOT GIVEN	93	1.9%	17 to 24	500	10.2%
CAUCASIAN	1,146	23.3%				25 to 34	35	0.7%
EAST INDIAN	63	1.3%				35 to 44	17	0.3%
HISPANIC	20	0.4%				45 to 54	5	0.1%
NAT HAWAIIAN_OTH PAC	1	0.0%				55 to 64	7	0.1%
ORIENTAL	13	0.3%				65 to 74	3	0.1%
OTHER	2,253	45.8%				75 and older	6	0.1%
UNKNOWN	87	1.8%				Unknown	6	0.1%
Total	**4,915**	**100.0%**		**4,915**	**100.0%**		**4,915**	**100.0%**

Orlando Health Dr. P. Phillips Hospital, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. Even though most patients' were concentrated in the hospital area, the granular map shows four particular neighborhoods that represent particularly high patient concentrations. Sepsis and chest pain were the most common diagnoses.

HIGH

LOW
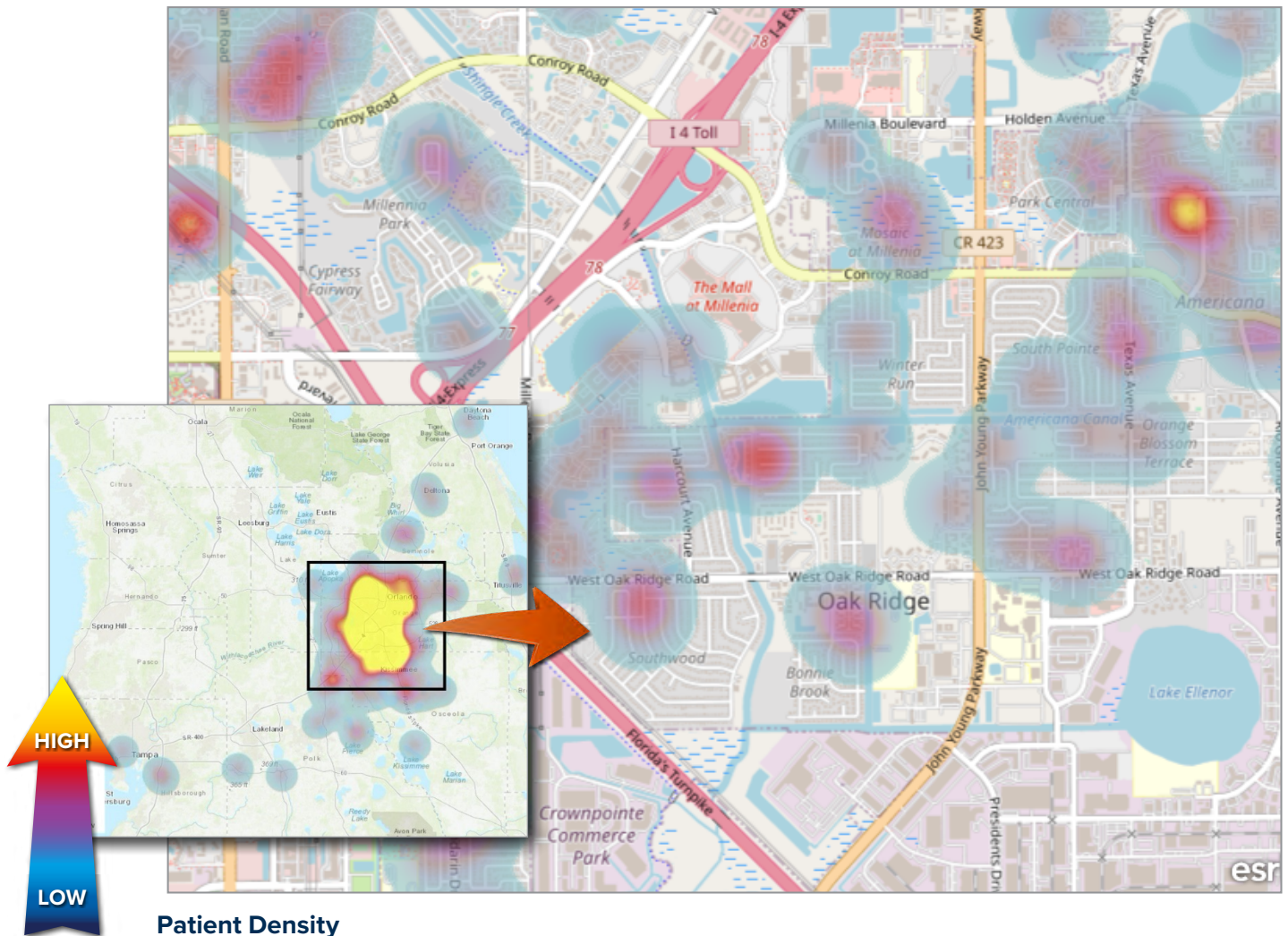
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	3,414
Number of self-pay, uninsured patient visits in hot spots	553
Total cost of self-pay, uninsured patient visits	$217,015,131
Total cost of self-pay, uninsured patient visits in hot spots	$41,895,497
Percent of self-pay, uninsured patient visits in the hotspot	16.2%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Sepsis, unspecified organism	243	$20,935,361	Sepsis, unspecified organism	243	$20,935,361
2	Other chest pain	108	$4,508,237	Non-ST elevation (NSTEMI) myocardial infarction	44	$6,839,549
3	Hydronephrosis with renal and ureteral calculous obstruction	86	$3,858,127	Other specified sepsis	45	$5,255,360
4	Acute kidney failure, unspecified	62	$2,342,046	Other chest pain	108	$4,508,237
5	Noninfective gastroenteritis and colitis, unspecified	54	$2,801,510	Hypertensive heart disease with heart failure	46	$4,356,990
Total uninsured patient visits (ALL visits – not just top 5)		**3,414**	**$217,015,131**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Acute kidney failure, unspecified	200	$9,512,441	Acute respiratory failure with hypoxia	94	$12,696,798
2	Hypo-osmolality and hyponatremia	179	$8,947,375	Acute kidney failure, unspecified	200	$9,512,441
3	Acute respiratory failure with hypoxia	94	$12,696,798	Hypo-osmolality and hyponatremia	179	$8,947,375
4	Acidosis	89	$3,958,522	Body mass index (BMI) 40.0-44.9, adult	68	$4,043,454
5	Urinary tract infection, site not specified	70	$3,110,925	Acidosis	89	$3,958,522

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	1	0.0%	HISPANIC OR LATINO	1,350	39.5%	Under 5	0	0.0%
ASIAN	23	0.7%	NONHISPANIC/LATINO	2,038	59.7%	5 to 17	0	0.0%
BLACK OR AFRICAN AM	848	24.8%	UNKNOWN OR NOT GIVEN	26	0.8%	17 to 24	92	2.7%
CAUCASIAN	932	27.3%				25 to 34	661	19.4%
EAST INDIAN	27	0.8%				35 to 44	763	22.3%
HISPANIC	11	0.3%				45 to 54	862	25.2%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	654	19.2%
ORIENTAL	2	0.1%				65 to 74	229	6.7%
OTHER	1,552	45.5%				75 and older	151	4.4%
UNKNOWN	18	0.5%				Unknown	2	0.1%
Total	**3,414**	**100.0%**		**3,414**	**100.0%**		**3,414**	**100.0%**

Orlando Health Dr. P. Phillips Hospital, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. Outpatient visits were also concentrated in the near-hospital vicinity; chest pain, urinary tract infections, and headaches were the most common diagnoses.

HIGH

LOW
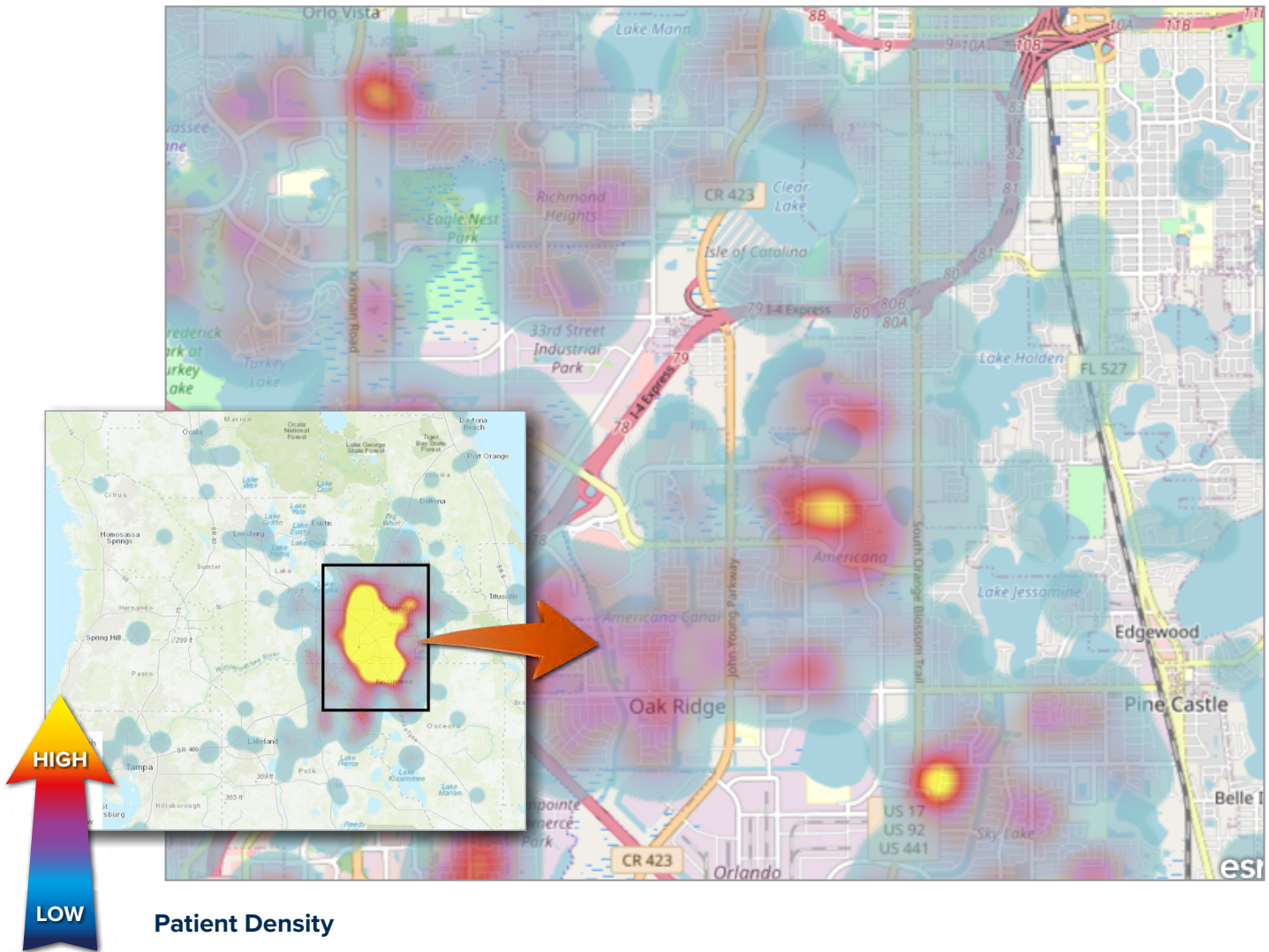
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	33,213
Number of self-pay, uninsured patient visits in hot spots	3,904
Total cost of self-pay, uninsured patient visits	$209,986,909
Total cost of self-pay, uninsured patient visits in hot spots	$43,144,499
Percent of self-pay, uninsured patient visits in the hotspot	11.8%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

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Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Other chest pain	1,325	$20,662,958	Other chest pain	1,325	$20,662,958
2	Urinary tract infection, site not specified	694	$4,489,125	Chest pain, unspecified	628	$7,382,888
3	Headache	655	$4,654,029	Unspecified abdominal pain	530	$5,833,894
4	Chest pain, unspecified	628	$7,382,888	Headache	655	$4,654,029
5	Acute pharyngitis, unspecified	602	$1,737,992	Syncope and collapse	381	$4,610,731
Total uninsured patient visits (ALL visits – not just top 5)		**33,213**	**$209,986,909**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	1,241	$9,815,252	Essential (primary) hypertension	1,241	$9,815,252
2	Tobacco use	778	$3,505,032	Nausea with vomiting, unspecified	367	$3,686,980
3	Nausea with vomiting, unspecified	367	$3,686,980	Tobacco use	778	$3,505,032
4	Urinary tract infection, site not specified	340	$2,656,728	Urinary tract infection, site not specified	340	$2,656,728
5	Diarrhea, unspecified	297	$2,057,882	Palpitations	198	$2,483,379

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	10	0.0%	HISPANIC OR LATINO	13,342	40.2%	Under 5	307	0.9%
ASIAN	273	0.8%	NONHISPANIC/LATINO	19,004	57.2%	5 to 17	1,285	3.9%
BLACK OR AFRICAN AM	8,897	26.8%	UNKNOWN OR NOT GIVEN	867	2.6%	17 to 24	3,120	9.4%
CAUCASIAN	7,374	22.2%				25 to 34	9,840	29.6%
EAST INDIAN	193	0.6%				35 to 44	7,456	22.4%
HISPANIC	115	0.3%				45 to 54	5,796	17.5%
NAT HAWAIIAN_OTH PAC	3	0.0%				55 to 64	3,563	10.7%
ORIENTAL	6	0.0%				65 to 74	1,346	4.1%
OTHER	15,754	47.4%				75 and older	491	1.5%
UNKNOWN	588	1.8%				Unknown	9	0.0%
Total	**33,213**	**100.0%**		**33,213**	**100.0%**		**33,213**	**100.0%**

Orlando Health – Health Central Hospital, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. Patients mostly live in a five-mile radius of the, yet they were particularly clustered in the regions north of the hospital. Acute conditions such as hypertension, kidney failure, and chest pain were the most common diagnoses.
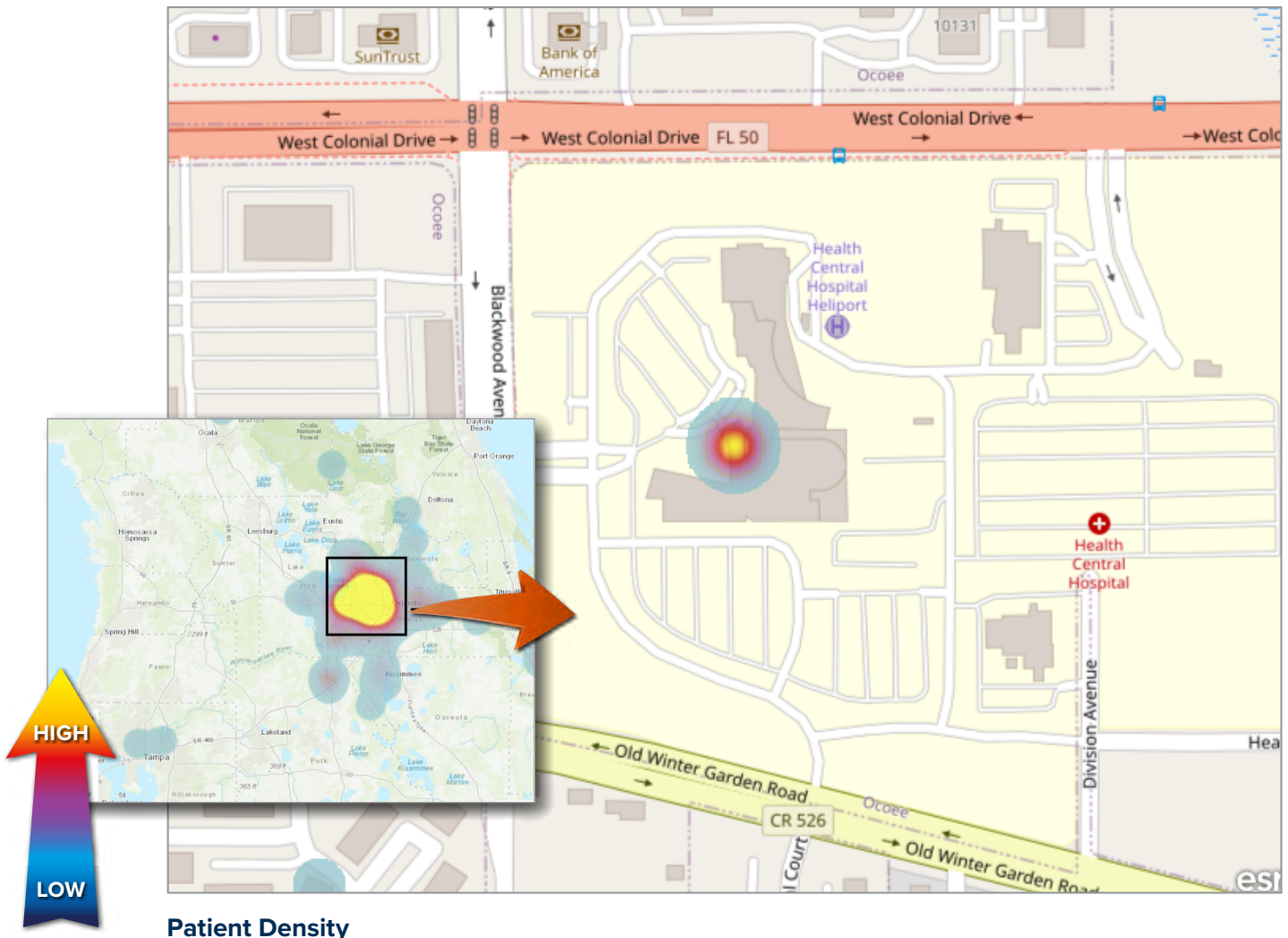
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	3,684
Number of self-pay, uninsured patient visits in hot spots	520
Total cost of self-pay, uninsured patient visits	$175,812,622
Total cost of self-pay, uninsured patient visits in hot spots	$24,552,429
Percent of self-pay, uninsured patient visits in the hotspot	14.1%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

500

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	241	$9,662,822	Essential (primary) hypertension	241	$9,662,822
2	Acute kidney failure, unspecified	107	$5,018,207	Acute kidney failure, unspecified	107	$5,018,207
3	Other chest pain	67	$2,376,987	Atherosclerotic heart disease of native coronary artery without angina pectoris	48	$3,993,231
4	Nicotine dependence, cigarettes, uncomplicated	55	$2,239,080	Acute respiratory failure with hypoxia	40	$3,241,438
5	Hypokalemia	50	$1,316,991	Other viral pneumonia	48	$2,636,731
Total uninsured patient visits (ALL visits – not just top 5)		**3,684**	**$175,812,622**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	270	$10,921,678	Essential (primary) hypertension	270	$10,921,678
2	Acute kidney failure, unspecified	98	$4,357,317	Acute kidney failure, unspecified	98	$4,357,317
3	Hypokalemia	92	$3,409,148	Acute respiratory failure with hypoxia	41	$3,682,869
4	Nicotine dependence, cigarettes, uncomplicated	87	$3,381,383	Hypokalemia	92	$3,409,148
5	Hyperlipidemia, unspecified	67	$3,102,219	Nicotine dependence, cigarettes, uncomplicated	87	$3,381,383

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	ND	ND	HISPANIC OR LATINO	ND	ND	Under 5	0	0.0%
ASIAN	ND	ND	NONHISPANIC/LATINO	ND	ND	5 to 17	0	0.0%
BLACK OR AFRICAN AM	ND	ND	UNKNOWN OR NOT GIVEN	ND	ND	17 to 24	114	3.1%
CAUCASIAN	ND	ND				25 to 34	529	14.4%
EAST INDIAN	ND	ND				35 to 44	711	19.3%
HISPANIC	ND	ND				45 to 54	1,088	29.5%
NAT HAWAIIAN_OTH PAC	ND	ND				55 to 64	877	23.8%
ORIENTAL	ND	ND				65 to 74	245	6.7%
OTHER	ND	ND				75 and older	120	3.3%
UNKNOWN	ND	ND				Unknown	0	0.0%
Total	**3,684**	**ND**		**3,684**	**ND**		**3,684**	**100.0%**

Race and ethnicity data was not provided

Please note that data from Orlando Health Horizon West Hospital is not included in this CHNA since it opened 2020, and comparable data was not available.

Orlando Health – Health Central Hospital, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. Outpatient services (as with inpatient services) were highly concentrated near the hospital and the vicinity north of the facility. Diagnoses for the care for hypertension and nicotine-related conditions were the most common. The median age of patients was approximately 36 years.

HIGH

LOW

Patient Density
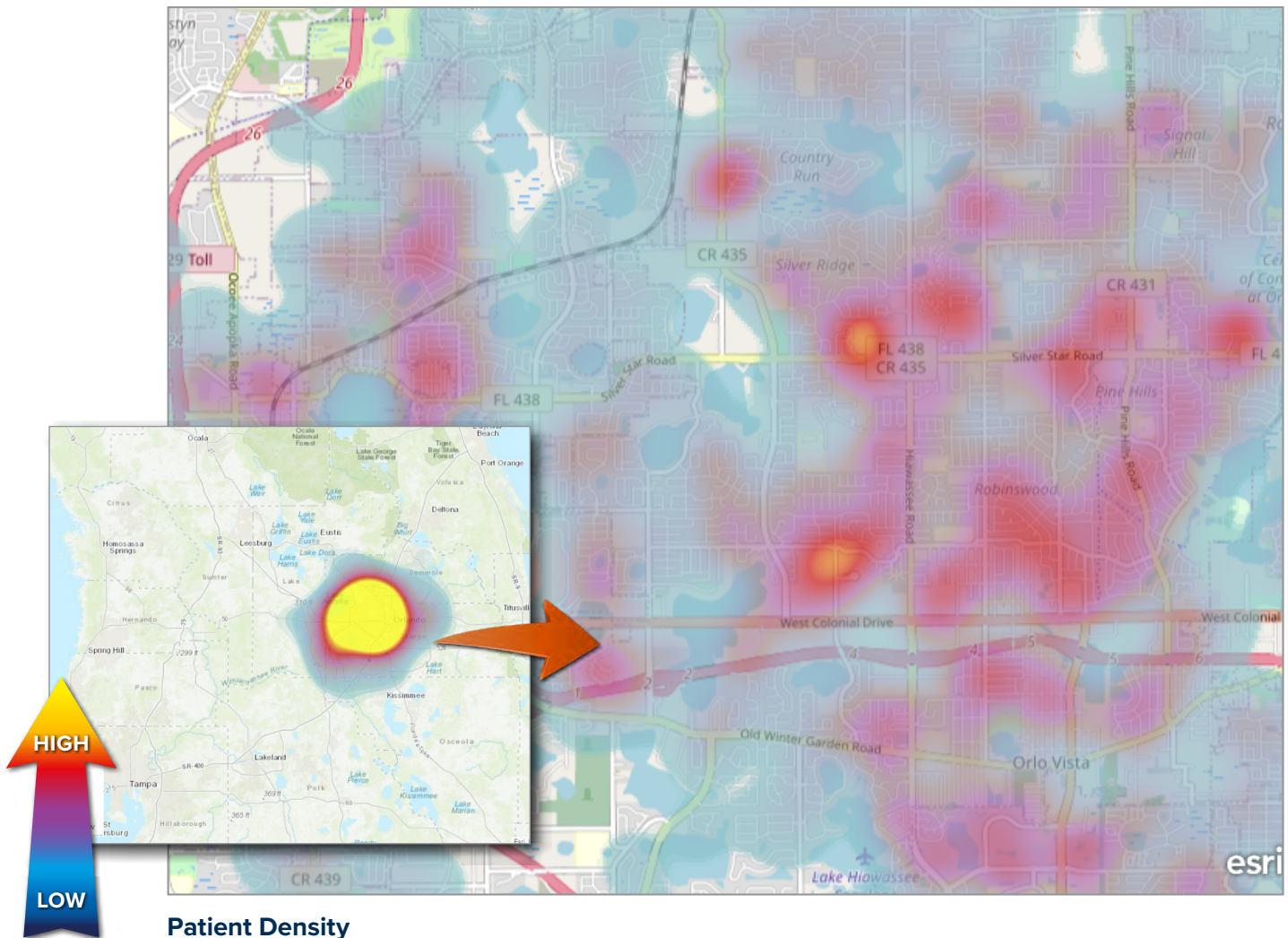
Measure	Value
Number of self-pay, uninsured patient visits	24,312
Number of self-pay, uninsured patient visits in hot spots	2,561
Total cost of self-pay, uninsured patient visits	$157,719,785
Total cost of self-pay, uninsured patient visits in hot spots	$18,163,669
Percent of self-pay, uninsured patient visits in the hotspot	10.5%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

502

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	830	$6,858,377	Essential (primary) hypertension	830	$6,858,377
2	Nicotine dependence, cigarettes, uncomplicated	784	$3,860,649	Nicotine dependence, cigarettes, uncomplicated	784	$3,860,649
3	Fever, unspecified	378	$1,499,041	Nausea with vomiting, unspecified	274	$2,798,229
4	Cough	295	$1,307,181	Unspecified abdominal pain	240	$2,498,724
5	Nausea with vomiting, unspecified	274	$2,798,229	Headache	260	$2,147,690
Total uninsured patient visits (ALL visits – not just top 5)		**24,312**	**$157,719,785**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Nicotine dependence, cigarettes, uncomplicated	859	$5,358,682	Essential (primary) hypertension	672	$6,644,177
2	Essential (primary) hypertension	672	$6,644,177	Nicotine dependence, cigarettes, uncomplicated	859	$5,358,682
3	Cannabis abuse, uncomplicated	386	$2,234,851	Cannabis abuse, uncomplicated	386	$2,234,851
4	Unspecified place or not applicable	337	$1,328,384	Type 2 diabetes mellitus without complications	253	$2,042,791
5	Type 2 diabetes mellitus without complications	253	$2,042,791	Unspecified asthma, uncomplicated	252	$1,604,987

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	ND	ND	HISPANIC OR LATINO	ND	ND	Under 5	193	0.8%
ASIAN	ND	ND	NONHISPANIC/LATINO	ND	ND	5 to 17	1,036	4.3%
BLACK OR AFRICAN AM	ND	ND	UNKNOWN OR NOT GIVEN	ND	ND	17 to 24	2,934	12.1%
CAUCASIAN	ND	ND				25 to 34	7,783	32.0%
EAST INDIAN	ND	ND				35 to 44	5,447	22.4%
HISPANIC	ND	ND				45 to 54	3,819	15.7%
NAT HAWAIIAN_OTH PAC	ND	ND				55 to 64	2,301	9.5%
ORIENTAL	ND	ND				65 to 74	614	2.5%
OTHER	ND	ND				75 and older	183	0.8%
UNKNOWN	ND	ND				Unknown	2	0.0%
Total	**24,312**	**ND**		**24,312**	**ND**		**24,312**	**100.0%**

Race and ethnicity data was not provided

Orlando Health Orlando Regional Medical Center, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. The substantial ORMC inpatient panel represents a large section of the greater Orlando area with several additional, more granular communities highlighted below (right map). Diagnoses for serious acute conditions such as obesity, chest pain, OCPD, sepsis, and hypertension were most common. Approximately 70% of patients were non-Hispanic.

HIGH

LOW

Patient Density
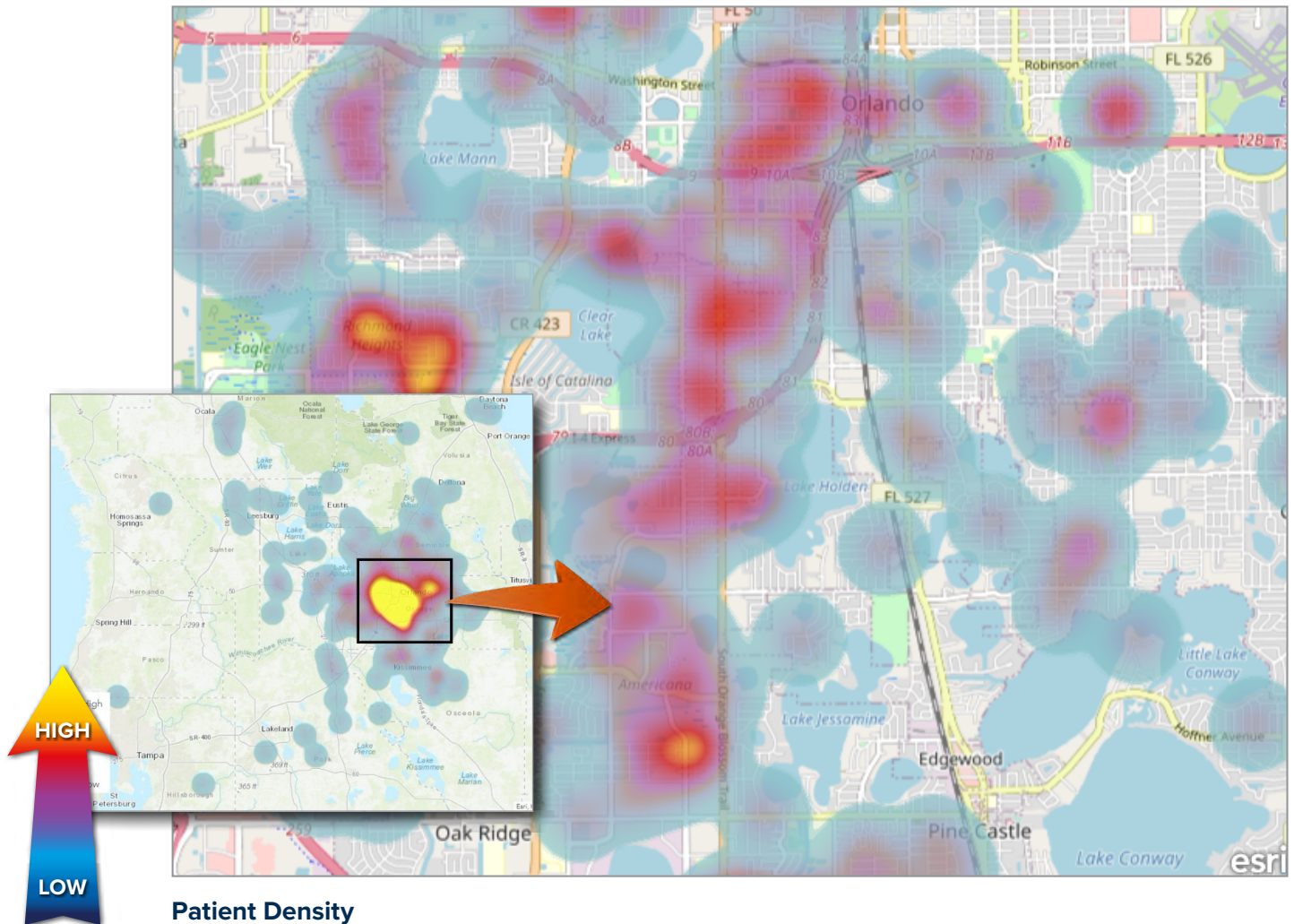
Measure	Value
Number of self-pay, uninsured patient visits	5,933
Number of self-pay, uninsured patient visits in hot spots	608
Total cost of self-pay, uninsured patient visits	$555,196,944
Total cost of self-pay, uninsured patient visits in hot spots	$66,372,725
Percent of self-pay, uninsured patient visits in the hotspot	10.2%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

504

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Sepsis, unspecified organism	231	$25,246,906	Sepsis, unspecified organism	231	$25,246,906
2	Morbid (severe) obesity due to excess calories	132	$16,396,519	Morbid (severe) obesity due to excess calories	132	$16,396,519
3	Other chest pain	106	$6,000,670	Non-ST elevation (NSTEMI) myocardial infarction	62	$11,250,385
4	Hypertensive heart disease with heart failure	74	$7,364,681	Hypertensive heart disease with heart failure	74	$7,364,681
5	Chronic obstructive pulmonary disease with (acute) exacerbation	65	$3,159,152	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	28	$6,114,236
Total uninsured patient visits (ALL visits – not just top 5)		5,933	$555,196,944			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Hypo-osmolality and hyponatremia	225	$15,882,452	Acute respiratory failure with hypoxia	154	$26,014,514
2	Acute kidney failure, unspecified	210	$14,108,243	Acute posthemorrhagic anemia	168	$19,415,857
3	Acute posthemorrhagic anemia	168	$19,415,857	Hypo-osmolality and hyponatremia	225	$15,882,452
4	Acute respiratory failure with hypoxia	154	$26,014,514	Contact with and (suspected) exposure to other viral communicable diseases	131	$14,310,430
5	Contact with and (suspected) exposure to other viral communicable diseases	131	$14,310,430	Acute kidney failure, unspecified	210	$14,108,243

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	0	0.0%	HISPANIC OR LATINO	1,577	26.6%	Under 5	0	0.0%
ASIAN	34	0.6%	NONHISPANIC/LATINO	4,195	70.7%	5 to 17	0	0.0%
BLACK OR AFRICAN AM	1,832	30.9%	UNKNOWN OR NOT GIVEN	161	2.7%	17 to 24	154	2.6%
CAUCASIAN	2,078	35.0%				25 to 34	1,178	19.9%
EAST INDIAN	41	0.7%				35 to 44	1,293	21.8%
HISPANIC	29	0.5%				45 to 54	1,465	24.7%
NAT HAWAIIAN_OTH PAC	3	0.1%				55 to 64	1,345	22.7%
ORIENTAL	3	0.1%				65 to 74	343	5.8%
OTHER	1,778	30.0%				75 and older	139	2.3%
UNKNOWN	135	2.3%				Unknown	16	0.3%
Total	**5,933**	**100.0%**		**5,933**	**100.0%**		**5,933**	**100.0%**

Orlando Health Orlando Regional Medical Center, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. Attracting patients from a wide part of the Orlando area, ORMC served patients with chest, head, and abdominal pain diagnoses most commonly.

Patient Density

HIGH

LOW
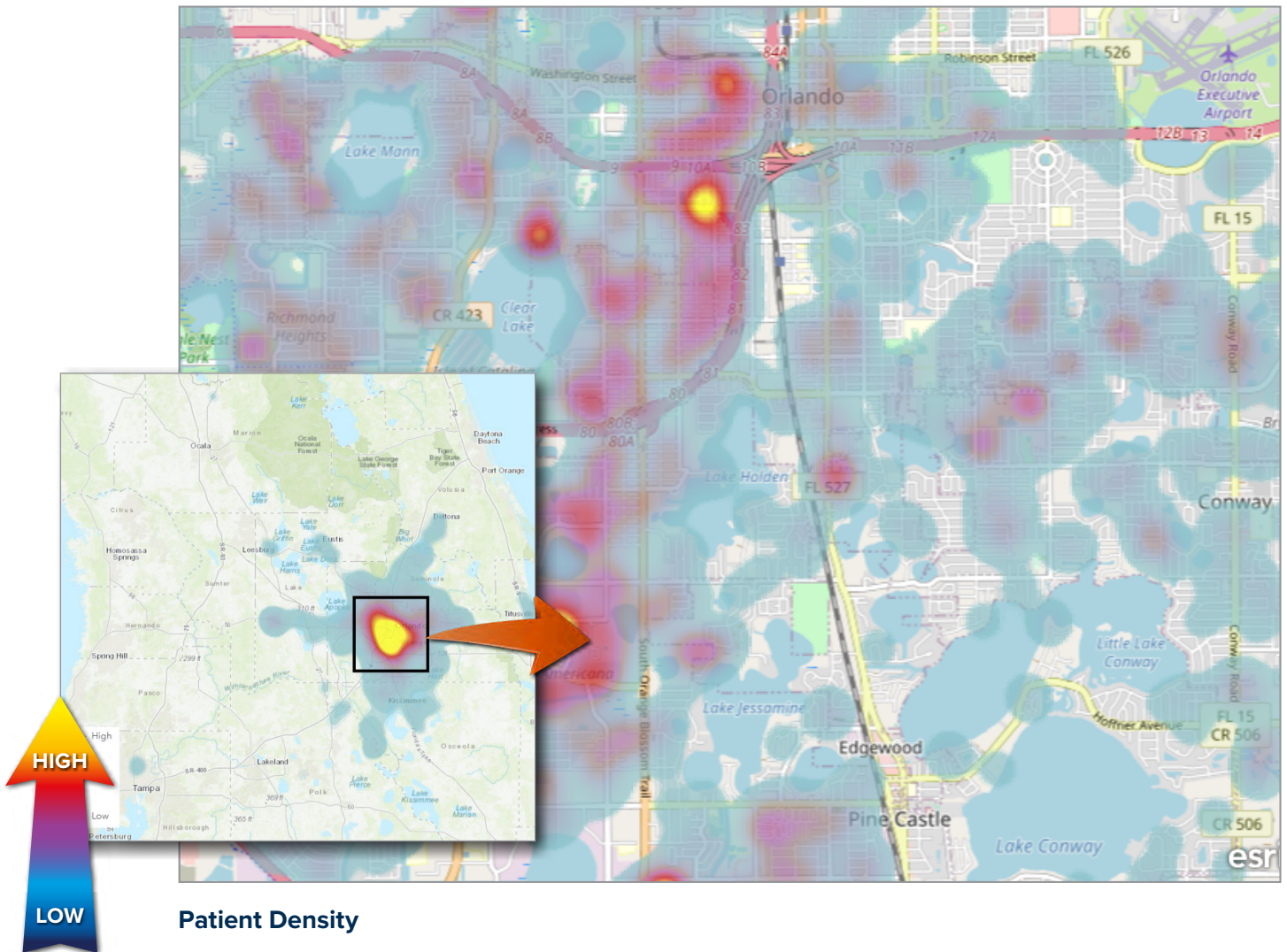
Measure	Value
Number of self-pay, uninsured patient visits	45,300
Number of self-pay, uninsured patient visits in hot spots	5,325
Total cost of self-pay, uninsured patient visits	$307,654,097
Total cost of self-pay, uninsured patient visits in hot spots	$55,433,807
Percent of self-pay, uninsured patient visits in the hotspot	11.8%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

506

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Other chest pain	1,572	$23,632,063	Other chest pain	1,572	$23,632,063
2	Chest pain, unspecified	1,205	$11,936,565	Chest pain, unspecified	1,205	$11,936,565
3	Headache	894	$5,969,059	Unspecified abdominal pain	819	$7,890,336
4	Low back pain	835	$4,177,255	Syncope and collapse	429	$6,005,784
5	Unspecified abdominal pain	819	$7,890,336	Headache	894	$5,969,059
Total uninsured patient visits (ALL visits – not just top 5)		45,300	$307,654,097			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	1,792	$16,001,792	Essential (primary) hypertension	1,792	$16,001,792
2	Tobacco use	1,344	$5,718,124	Tobacco use	1,344	$5,718,124
3	Nicotine dependence, cigarettes, uncomplicated	813	$5,076,508	Nicotine dependence, cigarettes, uncomplicated	813	$5,076,508
4	Other chronic pain	467	$2,561,158	Nausea with vomiting, unspecified	395	$3,763,159
5	Nausea with vomiting, unspecified	395	$3,763,159	Shortness of breath	247	$3,033,130

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	14	0.0%	HISPANIC OR LATINO	11,500	25.4%	Under 5	182	0.4%
ASIAN	234	0.5%	NONHISPANIC/LATINO	31,546	69.6%	5 to 17	316	0.7%
BLACK OR AFRICAN AM	16,618	36.7%	UNKNOWN OR NOT GIVEN	2,254	5.0%	17 to 24	3,164	7.0%
CAUCASIAN	13,138	29.0%				25 to 34	13,085	28.9%
EAST INDIAN	170	0.4%				35 to 44	9,986	22.0%
HISPANIC	291	0.6%				45 to 54	8,338	18.4%
NAT HAWAIIAN_OTH PAC	2	0.0%				55 to 64	6,828	15.1%
ORIENTAL	15	0.0%				65 to 74	2,258	5.0%
OTHER	12,950	28.6%				75 and older	982	2.2%
UNKNOWN	1,868	4.1%				Unknown	161	0.4%
Total	**45,300**	**100.0%**		**45,300**	**100.0%**		**45,300**	**100.0%**

Orlando Health St. Cloud Hospital, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. Patients were largely concentrated in the St. Cloud, near-hospital area. Diagnosis data was not provided, but the median age of inpatient patients was about 50 years old (older than the county median).
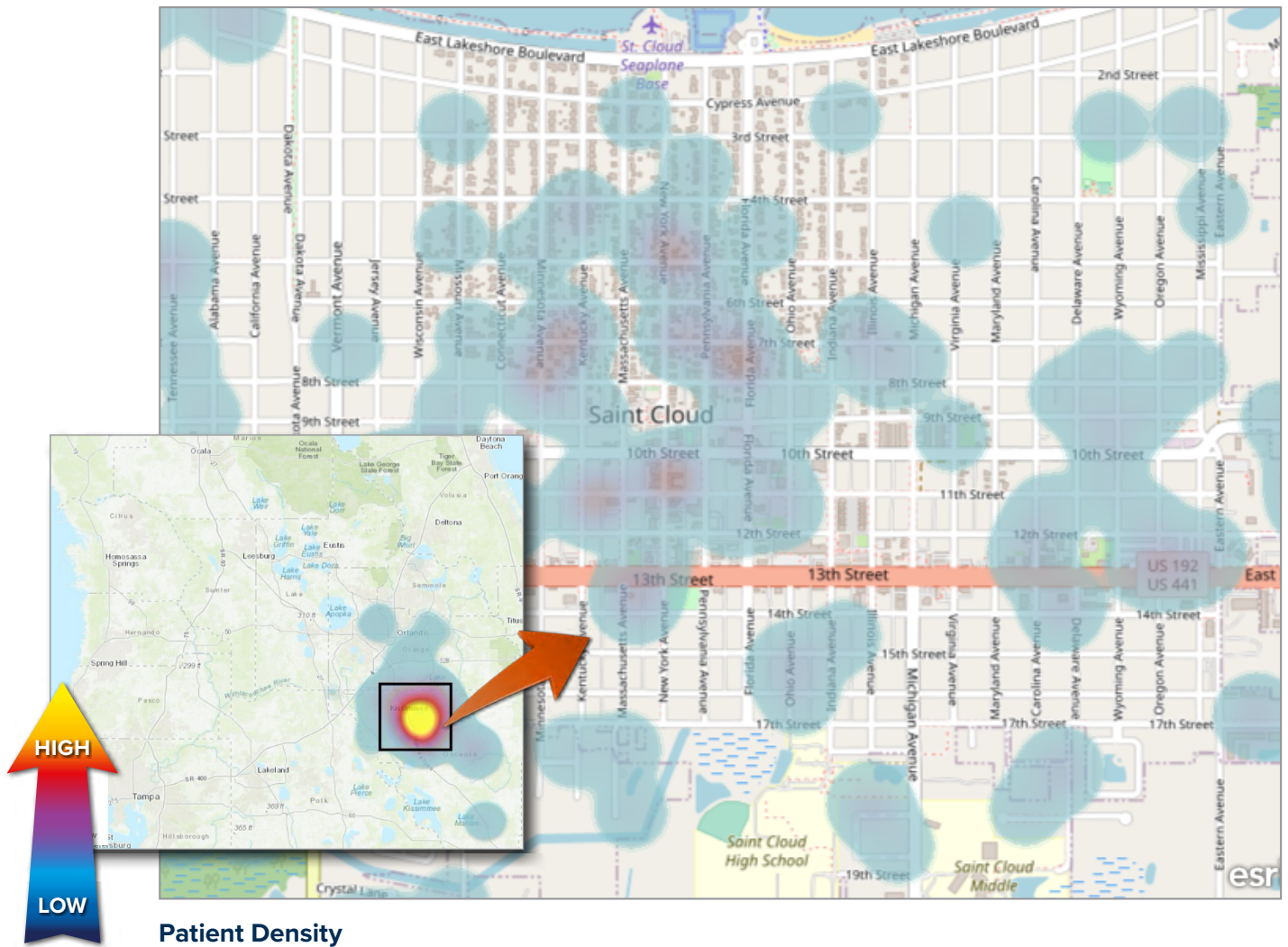
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	875
Number of self-pay, uninsured patient visits in hot spots	802
Total cost of self-pay, uninsured patient visits	$43,302,526
Total cost of self-pay, uninsured patient visits in hot spots	$39,566,182
Percent of self-pay, uninsured patient visits in the hotspot	91.7%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Not reported	754	$36,706,320	Not reported	754	$36,706,320
2	Suppressed	18	$1,000,435	Suppressed	16	$1,035,908
3	Suppressed	16	$1,035,908	Suppressed	18	$1,000,435
4	Suppressed	7	$342,699	Suppressed	6	$436,840
5	Suppressed	7	$386,680	Suppressed	7	$386,680
Total uninsured patient visits (ALL visits – not just top 5)		**875**	**$43,302,526**			
In most cases, primary diagnosis codes were not reported, and secondary diagnosis codes were few.						

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Suppressed	8	$499,972	Suppressed	8	$499,972
2	Suppressed	5	$246,078	Suppressed	4	$372,696
3	Suppressed	4	$190,319	Suppressed	4	$317,579
4	Suppressed	4	$372,696	Suppressed	5	$246,078
5	Suppressed	4	$317,579	Suppressed	4	$190,319
most cases, primary diagnosis codes were not reported, and secondary diagnosis codes were few.						

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	NA	NA	HISPANIC OR LATINO	NA	NA	Under 5	0	0.0%
ASIAN	NA	NA	NONHISPANIC/LATINO	NA	NA	5 to 17	0	0.0%
BLACK OR AFRICAN AM	NA	NA	UNKNOWN OR NOT GIVEN	875	100.0%	17 to 24	20	2.3%
CAUCASIAN	NA	NA				25 to 34	100	11.4%
EAST INDIAN	NA	NA				35 to 44	169	19.3%
HISPANIC	NA	NA				45 to 54	248	28.3%
NAT HAWAIIAN_OTH PAC	NA	NA				55 to 64	234	26.7%
ORIENTAL	NA	NA				65 to 74	64	7.3%
OTHER	NA	NA				75 and older	40	4.6%
UNKNOWN	NA	NA				Unknown	0	0.0%
Total	**875**	**100.0%**		**875**	**100.0%**		**875**	**100.0%**
In most cases, primary diagnosis codes were not reported, and secondary diagnosis codes were few.								

Orlando Health St. Cloud Hospital, Outpatient

Please note that diagnosis data was not available for Orlando Health St. Cloud Hospital, Outpatient service use, so the hot spot map is unavailable. Outpatient service data was not sufficient to provide an analysis; however, the data reflects over 600 outpatient visits.

Measure	Value
Number of self-pay, uninsured patient visits	633
Number of self-pay, uninsured patient visits in hot spots	NA
Total cost of self-pay, uninsured patient visits	$13,345,328
Total cost of self-pay, uninsured patient visits in hot spots	NA
Percent of self-pay, uninsured patient visits in the hotspot	NA
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Not reported	568	$12,021,646	Not reported	568	$12,021,646
2	Suppressed	9	$105,282	Suppressed	9	$291,111
3	Suppressed	9	$291,111	Suppressed	9	$105,282
4	Suppressed	2	$57,053	Suppressed	1	$67,436
5	Suppressed	1	$185	Suppressed	2	$57,053
Total uninsured patient visits (ALL visits – not just top 5)		**633**	**$13,345,328**			
In most cases, primary diagnosis codes were not reported, and secondary diagnosis codes were few.						

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Suppressed	7	$251,168	Suppressed	7	$251,168
2	Suppressed	5	$90,583	Suppressed	5	$90,583
3	Suppressed	3	$51,949	Suppressed	1	$67,436
4	Suppressed	3	$36,886	Suppressed	2	$54,488
5	Suppressed	2	$43,236	Suppressed	3	$51,949
In most cases, primary diagnosis codes were not reported, and secondary diagnosis codes were few.						

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	ND	ND	HISPANIC OR LATINO	ND	ND	Under 5	0	0.0%
ASIAN	ND	ND	NONHISPANIC/LATINO	ND	ND	5 to 17	0	0.0%
BLACK OR AFRICAN AM	ND	ND	UNKNOWN OR NOT GIVEN	ND	ND	17 to 24	23	3.6%
CAUCASIAN	ND	ND				25 to 34	74	11.7%
EAST INDIAN	ND	ND				35 to 44	112	17.7%
HISPANIC	ND	ND				45 to 54	176	27.8%
NAT HAWAIIAN_OTH PAC	ND	ND				55 to 64	163	25.8%
ORIENTAL	ND	ND				65 to 74	57	9.0%
OTHER	ND	ND				75 and older	28	4.4%
UNKNOWN	ND	ND				Unknown	0	0.0%
Total	**633**	**ND**		**633**	**ND**		**633**	**100.0%**
Race and ethnicity data was not provided								

Orlando Health South Lake Hospital, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. Patient origins traverse Lake County with the most common diagnoses being for sepsis, single births, and hydronephrosis. The median age of patients was approximately 50 years old (older than the county median age).

Patient Density
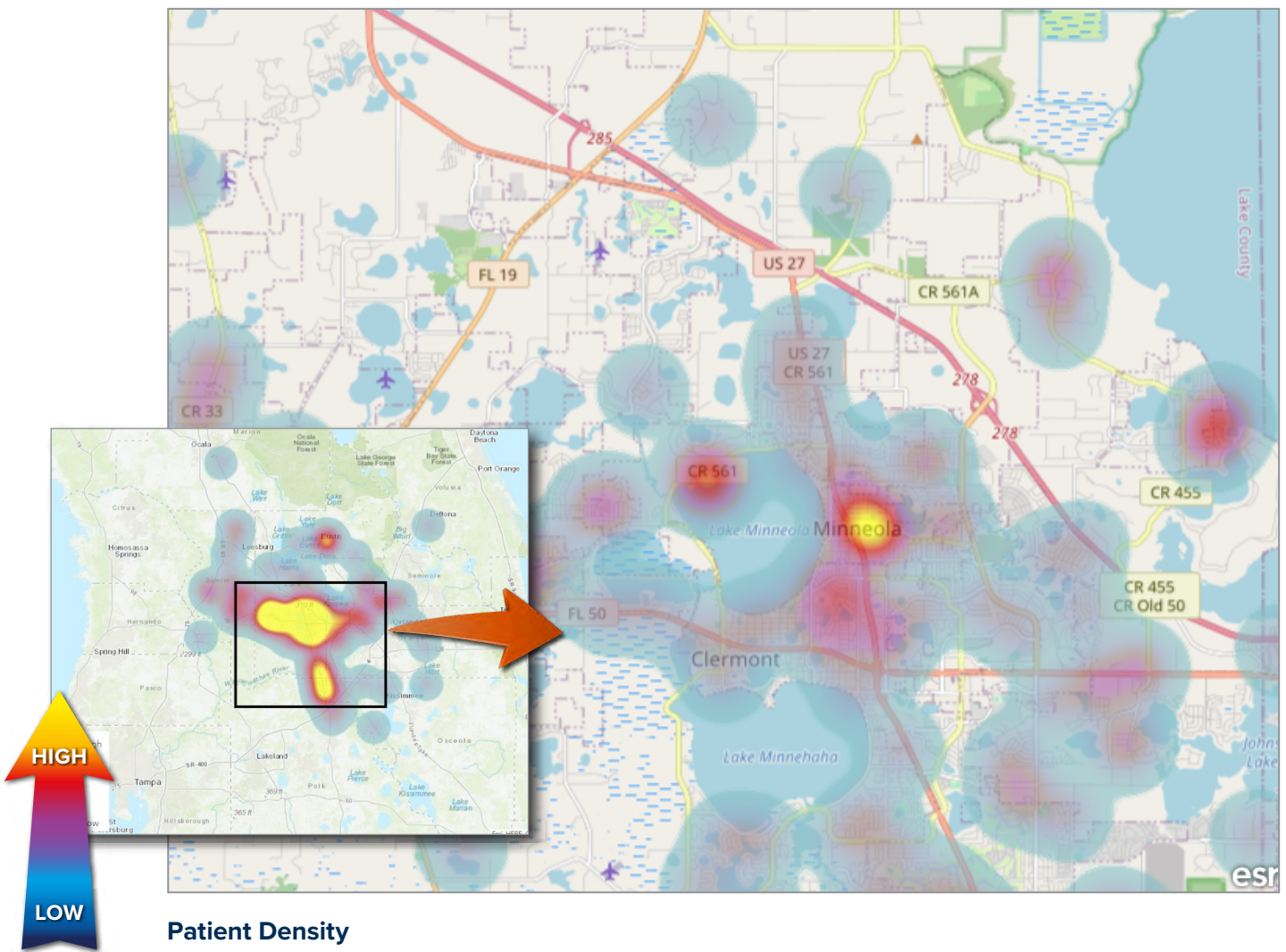
Measure	Value
Number of self-pay, uninsured patient visits	1,749
Number of self-pay, uninsured patient visits in hot spots	280
Total cost of self-pay, uninsured patient visits	$100,888,390
Total cost of self-pay, uninsured patient visits in hot spots	$17,629,983
Percent of self-pay, uninsured patient visits in the hotspot	16.0%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Sepsis, unspecified organism	114	$7,185,580	Sepsis, unspecified organism	114	$7,185,580
2	Single liveborn infant, delivered vaginally	48	$461,644	Non-ST elevation (NSTEMI) myocardial infarction	30	$4,045,658
3	Hydronephrosis with renal and ureteral calculous obstruction	41	$2,098,012	Hypertensive heart disease with heart failure	37	$2,460,853
4	Chronic obstructive pulmonary disease with (acute) exacerbation	40	$1,839,881	Hydronephrosis with renal and ureteral calculous obstruction	41	$2,098,012
5	Hypertensive heart disease with heart failure	37	$2,460,853	Chronic obstructive pulmonary disease with (acute) exacerbation	40	$1,839,881
Total uninsured patient visits (ALL visits – not just top 5)		**1,749**	**$100,888,390**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Acidosis	120	$5,524,549	Acidosis	120	$5,524,549
2	Acute kidney failure, unspecified	97	$4,193,914	Acute kidney failure, unspecified	97	$4,193,914
3	Acute respiratory failure with hypoxia	38	$3,971,584	Acute respiratory failure with hypoxia	38	$3,971,584
4	Nicotine dependence, cigarettes, uncomplicated	35	$1,904,910	Unspecified severe protein-calorie malnutrition	30	$2,135,890
5	Hypo-osmolality and hyponatremia	31	$1,846,337	Pneumonitis due to inhalation of food and vomit	11	$2,075,412

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	0	0.0%	HISPANIC OR LATINO	430	24.6%	Under 5	61	3.5%
ASIAN	14	0.8%	NONHISPANIC/LATINO	1,309	74.8%	5 to 17	0	0.0%
BLACK OR AFRICAN AM	258	14.8%	UNKNOWN OR NOT GIVEN	10	0.6%	17 to 24	34	1.9%
CAUCASIAN	980	56.0%				25 to 34	282	16.1%
EAST INDIAN	27	1.5%				35 to 44	327	18.7%
HISPANIC	7	0.4%				45 to 54	422	24.1%
NAT HAWAIIAN_OTH PAC	1	0.1%				55 to 64	452	25.8%
ORIENTAL	1	0.1%				65 to 74	118	6.7%
OTHER	456	26.1%				75 and older	53	3.0%
UNKNOWN	5	0.3%				Unknown	0	0.0%
Total	**1,749**	**100.0%**		**1,749**	**100.0%**		**1,749**	**100.0%**

Orlando Health South Lake Hospital, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. Outpatient service patients were clustered in two places – traversing Lake County along Route 50 and in southeastern Lake County along Route 27. The most common diagnoses were for chest pain, headaches, urinary tract infections, and upper respiratory infections.

Patient Density
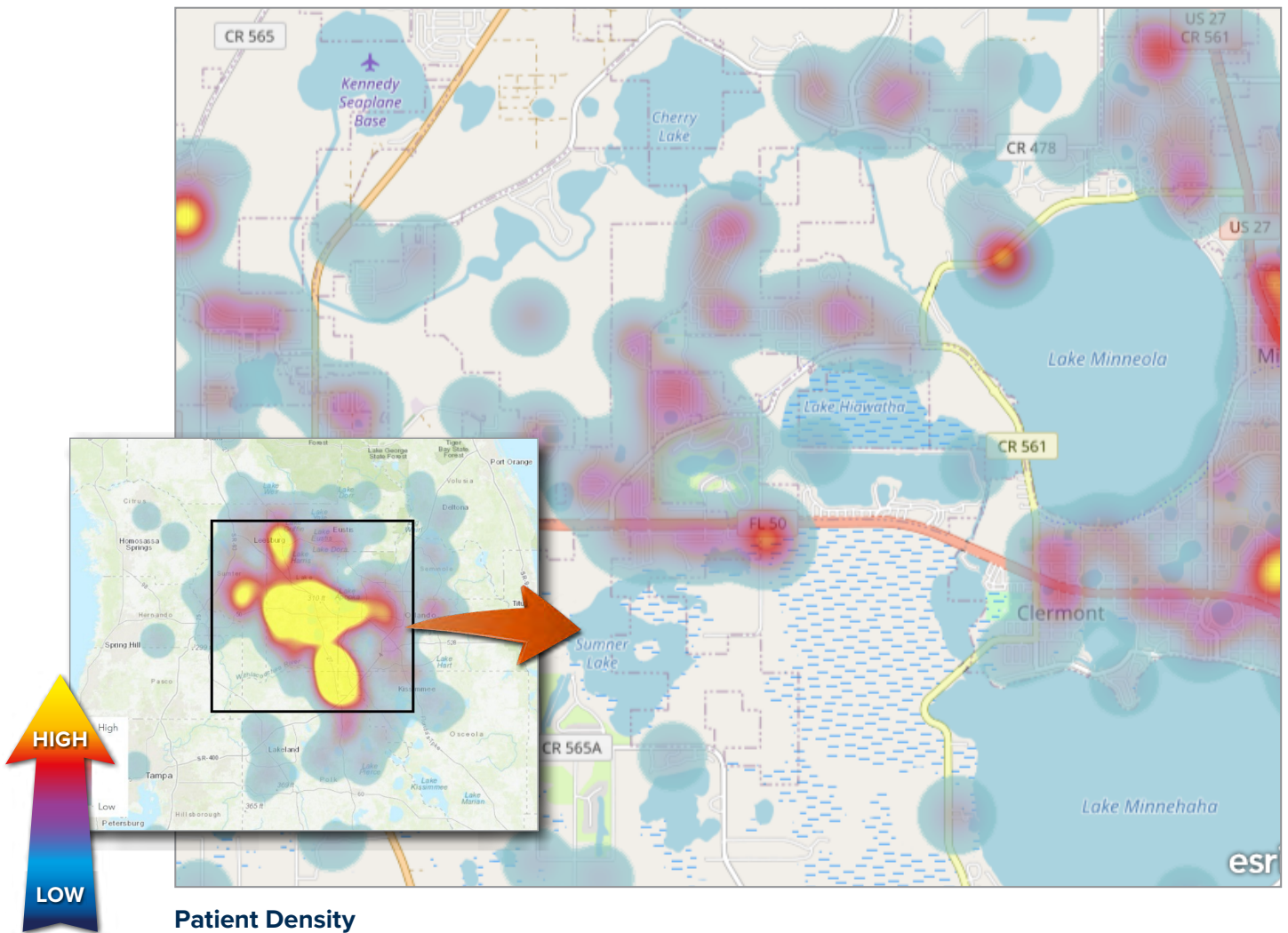
Measure	Value
Number of self-pay, uninsured patient visits	19,091
Number of self-pay, uninsured patient visits in hot spots	2,010
Total cost of self-pay, uninsured patient visits	$122,146,344
Total cost of self-pay, uninsured patient visits in hot spots	$22,332,713
Percent of self-pay, uninsured patient visits in the hotspot	10.5%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Chest pain, unspecified	534	$9,123,581	Chest pain, unspecified	534	$9,123,581
2	Urinary tract infection, site not specified	433	$2,828,228	Other chest pain	353	$4,350,315
3	Other chest pain	353	$4,350,315	Unspecified abdominal pain	306	$3,548,469
4	Headache	350	$2,387,183	Urinary tract infection, site not specified	433	$2,828,228
5	Acute upper respiratory infection, unspecified	340	$1,019,562	Syncope and collapse	193	$2,482,122
Total uninsured patient visits (ALL visits – not just top 5)		**19,091**	**$122,146,344**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	445	$3,676,322	Essential (primary) hypertension	445	$3,676,322
2	Nicotine dependence, cigarettes, uncomplicated	440	$1,852,933	Unspecified abdominal pain	236	$2,774,215
3	Unspecified abdominal pain	236	$2,774,215	Shortness of breath	120	$2,105,199
4	Diarrhea, unspecified	226	$1,633,267	Nicotine dependence, cigarettes, uncomplicated	440	$1,852,933
5	Cough	219	$846,586	Abnormal electrocardiogram [ECG] [EKG]	161	$1,822,308

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	8	0.0%	HISPANIC OR LATINO	5,717	29.9%	Under 5	251	1.3%
ASIAN	71	0.4%	NONHISPANIC/LATINO	13,271	69.5%	5 to 17	1,151	6.0%
BLACK OR AFRICAN AM	3,255	17.0%	UNKNOWN OR NOT GIVEN	103	0.5%	17 to 24	1,904	10.0%
CAUCASIAN	9,259	48.5%				25 to 34	5,496	28.8%
EAST INDIAN	313	1.6%				35 to 44	4,031	21.1%
HISPANIC	133	0.7%				45 to 54	3,249	17.0%
NAT HAWAIIAN_OTH PAC	6	0.0%				55 to 64	2,222	11.6%
ORIENTAL	5	0.0%				65 to 74	619	3.2%
OTHER	5,971	31.3%				75 and older	167	0.9%
UNKNOWN	70	0.4%				Unknown	1	0.0%
Total	**19,091**	**100.0%**		**19,091**	**100.0%**		**19,091**	**100.0%**

Orlando Health South Seminole Hospital, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. With a patient concentration in Longwood, mental health conditions were the most common diagnoses.

HIGH

LOW
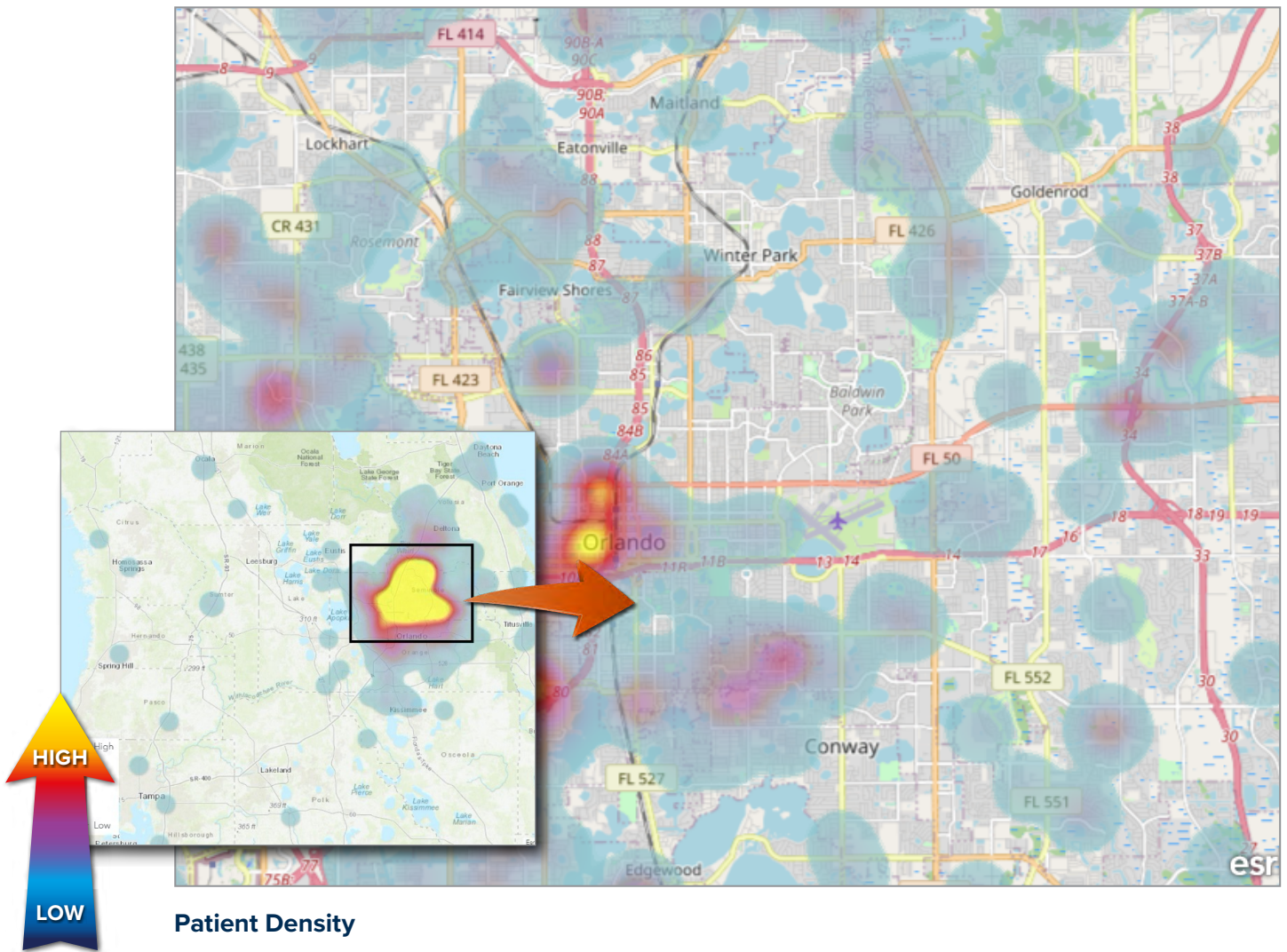
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	4,161
Number of self-pay, uninsured patient visits in hot spots	1,313
Total cost of self-pay, uninsured patient visits	$141,450,244
Total cost of self-pay, uninsured patient visits in hot spots	$32,382,309
Percent of self-pay, uninsured patient visits in the hotspot	31.6%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Major depressive disorder, recurrent severe without psychotic features	521	$12,428,965	Major depressive disorder, recurrent severe without psychotic features	521	$12,428,965
2	Schizoaffective disorder, bipolar type	239	$6,879,752	Schizoaffective disorder, bipolar type	239	$6,879,752
3	Major depressive disorder, single episode, unspecified	188	$3,271,913	Bipolar disorder, unspecified	182	$4,693,558
4	Major depressive disorder, recurrent, moderate	183	$3,889,776	Major depressive disorder, recurrent, severe with psychotic symptoms	160	$4,490,258
5	Bipolar disorder, unspecified	182	$4,693,558	Major depressive disorder, recurrent, moderate	183	$3,889,776
Total uninsured patient visits (ALL visits – not just top 5)		4,161	$141,450,244			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Suicidal ideations	1,542	$38,074,913	Suicidal ideations	1,542	$38,074,913
2	Cannabis abuse, uncomplicated	155	$3,626,237	Hypo-osmolality and hyponatremia	85	$4,164,021
3	Alcohol abuse, uncomplicated	115	$2,289,126	Acute respiratory failure with hypoxia	32	$3,985,542
4	Hypo-osmolality and hyponatremia	85	$4,164,021	Cannabis abuse, uncomplicated	155	$3,626,237
5	Nicotine dependence, cigarettes, uncomplicated	81	$2,016,870	Acute kidney failure, unspecified	59	$2,530,667

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	1	0.0%	HISPANIC OR LATINO	682	16.4%	Under 5	0	0.0%
ASIAN	28	0.7%	NONHISPANIC/LATINO	3,420	82.2%	5 to 17	24	0.6%
BLACK OR AFRICAN AM	1,009	24.2%	UNKNOWN OR NOT GIVEN	59	1.4%	17 to 24	233	5.6%
CAUCASIAN	2,231	53.6%				25 to 34	1,038	24.9%
EAST INDIAN	14	0.3%				35 to 44	1,051	25.3%
HISPANIC	15	0.4%				45 to 54	1,026	24.7%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	680	16.3%
ORIENTAL	1	0.0%				65 to 74	90	2.2%
OTHER	812	19.5%				75 and older	17	0.4%
UNKNOWN	50	1.2%				Unknown	2	0.0%
Total	4,161	100.0%		4,161	100.0%		4,161	100.0%

Orlando Health South Seminole Hospital, Outpatient
The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. The most common outpatient service diagnoses were for chest pain and general medical examinations, as well as substance use issues (i.e., nicotine and alcohol) for secondary diagnoses.

HIGH

LOW

Patient Density
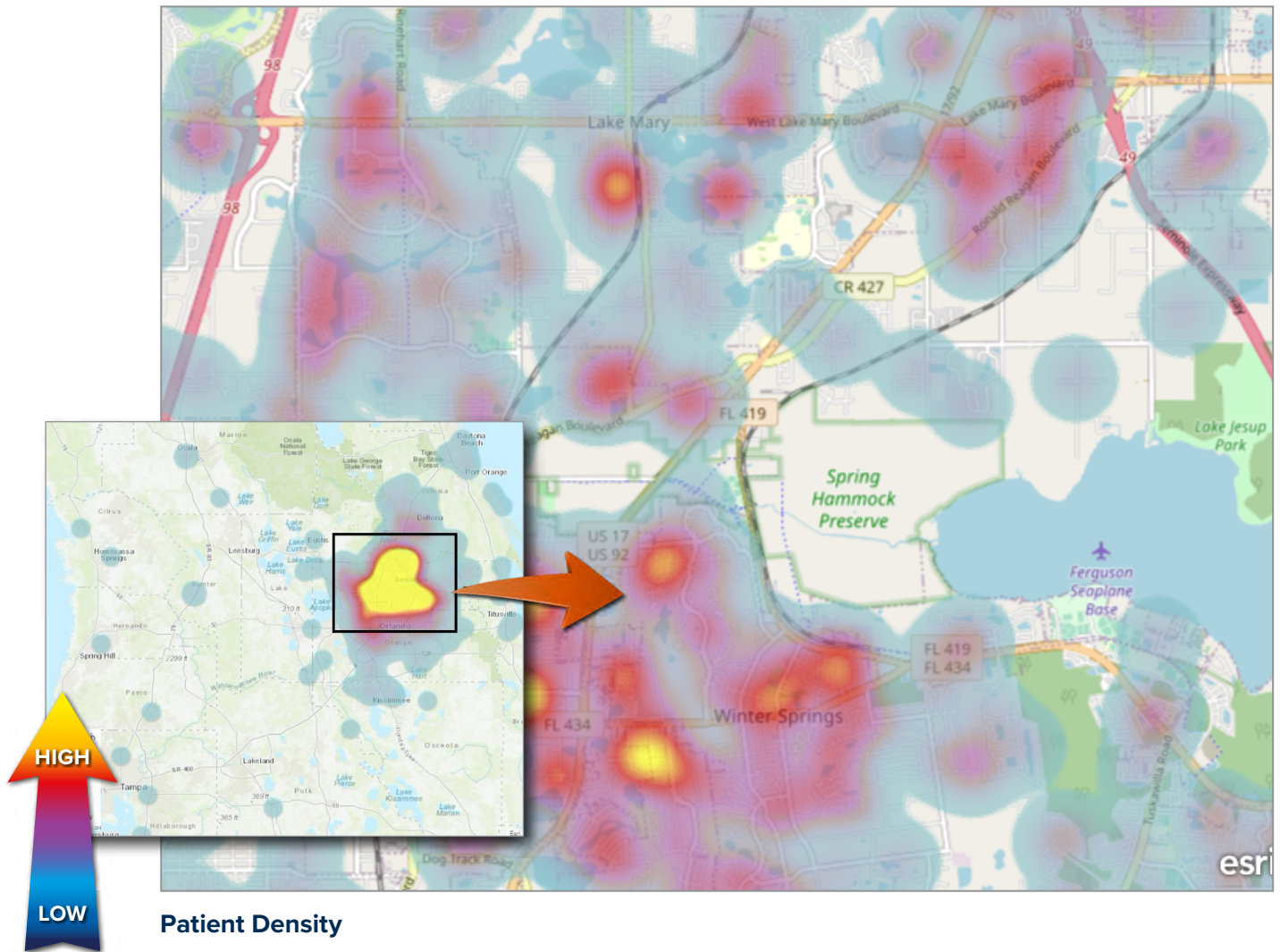
Measure	Value
Number of self-pay, uninsured patient visits	12,302
Number of self-pay, uninsured patient visits in hot spots	1,444
Total cost of self-pay, uninsured patient visits	$69,243,876
Total cost of self-pay, uninsured patient visits in hot spots	$12,376,304
Percent of self-pay, uninsured patient visits in the hotspot	11.7%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Other chest pain	421	$6,264,106	Other chest pain	421	$6,264,106
2	Encounter for general adult medical examination without abnormal findings	368	$60,106	Unspecified abdominal pain	180	$1,827,088
3	Acute upper respiratory infection, unspecified	226	$634,604	Chest pain, unspecified	219	$1,732,794
4	Chest pain, unspecified	219	$1,732,794	Headache	210	$1,517,390
5	Headache	210	$1,517,390	Low back pain	196	$1,034,926
Total uninsured patient visits (ALL visits – not just top 5)		**12,302**	**$69,243,876**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Essential (primary) hypertension	526	$3,174,827	Essential (primary) hypertension	526	$3,174,827
2	Tobacco use	386	$1,683,631	Tobacco use	386	$1,683,631
3	Nicotine dependence, cigarettes, uncomplicated	301	$1,570,656	Nicotine dependence, cigarettes, uncomplicated	301	$1,570,656
4	Other chronic pain	131	$767,946	Long term (current) use of antibiotics	26	$995,013
5	Encounter for screening for cardiovascular disorders	115	$11,500	Nausea with vomiting, unspecified	95	$850,252

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	3	0.0%	HISPANIC OR LATINO	2428	19.7%	Under 5	47	0.4%
ASIAN	67	0.5%	NONHISPANIC/LATINO	9792	79.6%	5 to 17	314	2.6%
BLACK OR AFRICAN AM	2,229	18.1%	UNKNOWN OR NOT GIVEN	82	0.7%	17 to 24	908	7.4%
CAUCASIAN	7,084	57.6%				25 to 34	3,093	25.1%
EAST INDIAN	65	0.5%				35 to 44	2,648	21.5%
HISPANIC	102	0.8%				45 to 54	2,446	19.9%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	1,946	15.8%
ORIENTAL	4	0.0%				65 to 74	745	6.1%
OTHER	2,685	21.8%				75 and older	153	1.2%
UNKNOWN	63	0.5%				Unknown	2	0.0%
Total	**12,302**	**100.0%**		**12,302**	**100.0%**		**12,302**	**100.0%**

Orlando Health Winnie Palmer Hospital for Women and Babies, Inpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by inpatient encounters) listed below. The hospital inpatient services cared for residents throughout the greater Orlando area but had a concentration in the Oak Ridge area. Live births, maternal, and infant care comprised most primary diagnoses.
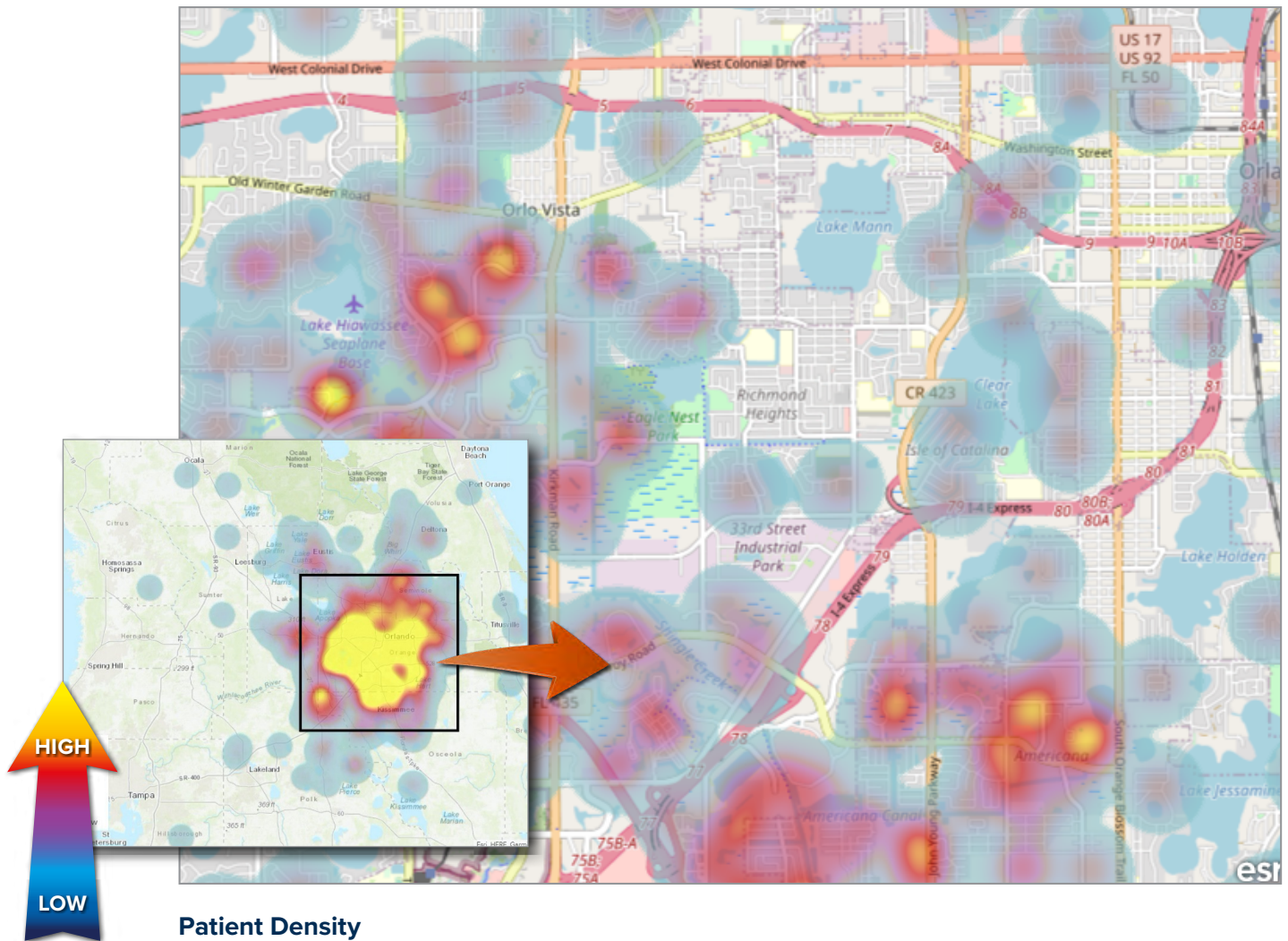
Patient Density

Measure	Value
Number of self-pay, uninsured patient visits	1,815
Number of self-pay, uninsured patient visits in hot spots	1,240
Total cost of self-pay, uninsured patient visits	$50,107,716
Total cost of self-pay, uninsured patient visits in hot spots	$22,923,801
Percent of self-pay, uninsured patient visits in the hotspot	68.3%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Single liveborn infant, delivered vaginally	654	$6,666,832	Single liveborn infant, delivered vaginally	654	$6,666,832
2	Single liveborn infant, delivered by cesarean	387	$6,646,576	Single liveborn infant, delivered by cesarean	387	$6,646,576
3	Maternal care for low transverse scar from previous cesarean delivery	84	$4,552,889	Maternal care for low transverse scar from previous cesarean delivery	84	$4,552,889
4	Post-term pregnancy	80	$3,292,279	Post-term pregnancy	80	$3,292,279
5	Abnormality in fetal heart rate and rhythm complicating labor and delivery	35	$1,765,225	Abnormality in fetal heart rate and rhythm complicating labor and delivery	35	$1,765,225
Total uninsured patient visits (ALL visits – not just top 5)		**1,815**	**$50,107,716**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Single live birth	354	$13,456,436	Single live birth	354	$13,456,436
2	Encounter for immunization	231	$2,200,151	Encounter for immunization	231	$2,200,151
3	Other neonatal hypoglycemia	75	$1,008,125	Acute posthemorrhagic anemia	21	$1,175,333
4	Congenital hydrocele	52	$580,290	Other neonatal hypoglycemia	75	$1,008,125
5	Meconium staining	49	$498,256	Chorioamnionitis, third trimester, not applicable or unspecified	12	$903,807

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	2	0.1%	HISPANIC OR LATINO	777	42.8%	Under 5	1,069	58.9%
ASIAN	81	4.5%	NONHISPANIC/LATINO	1,027	56.6%	5 to 17	3	0.2%
BLACK OR AFRICAN AM	266	14.7%	UNKNOWN OR NOT GIVEN	11	0.6%	17 to 24	59	3.3%
CAUCASIAN	535	29.5%				25 to 34	348	19.2%
EAST INDIAN	11	0.6%				35 to 44	293	16.1%
HISPANIC	0	0.0%				45 to 54	35	1.9%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	6	0.3%
ORIENTAL	31	1.7%				65 to 74	1	0.1%
OTHER	877	48.3%				75 and older	1	0.1%
UNKNOWN	12	0.7%				Unknown	0	0.0%
Total	**1,815**	**100.0%**		**1,815**	**100.0%**		**1,815**	**100.0%**

Orlando Health Winnie Palmer Hospital for Women and Babies, Outpatient

The following heat map illustrates the locations of this facility's patients presenting with at least one of the most common primary diagnoses (as measured by outpatient encounters) listed below. The most common outpatient diagnoses were for threatened abortions and complications during pregnancy (e.g., diseases and conditions complicating pregnancy, false labor, and others).

HIGH

LOW

Patient Density
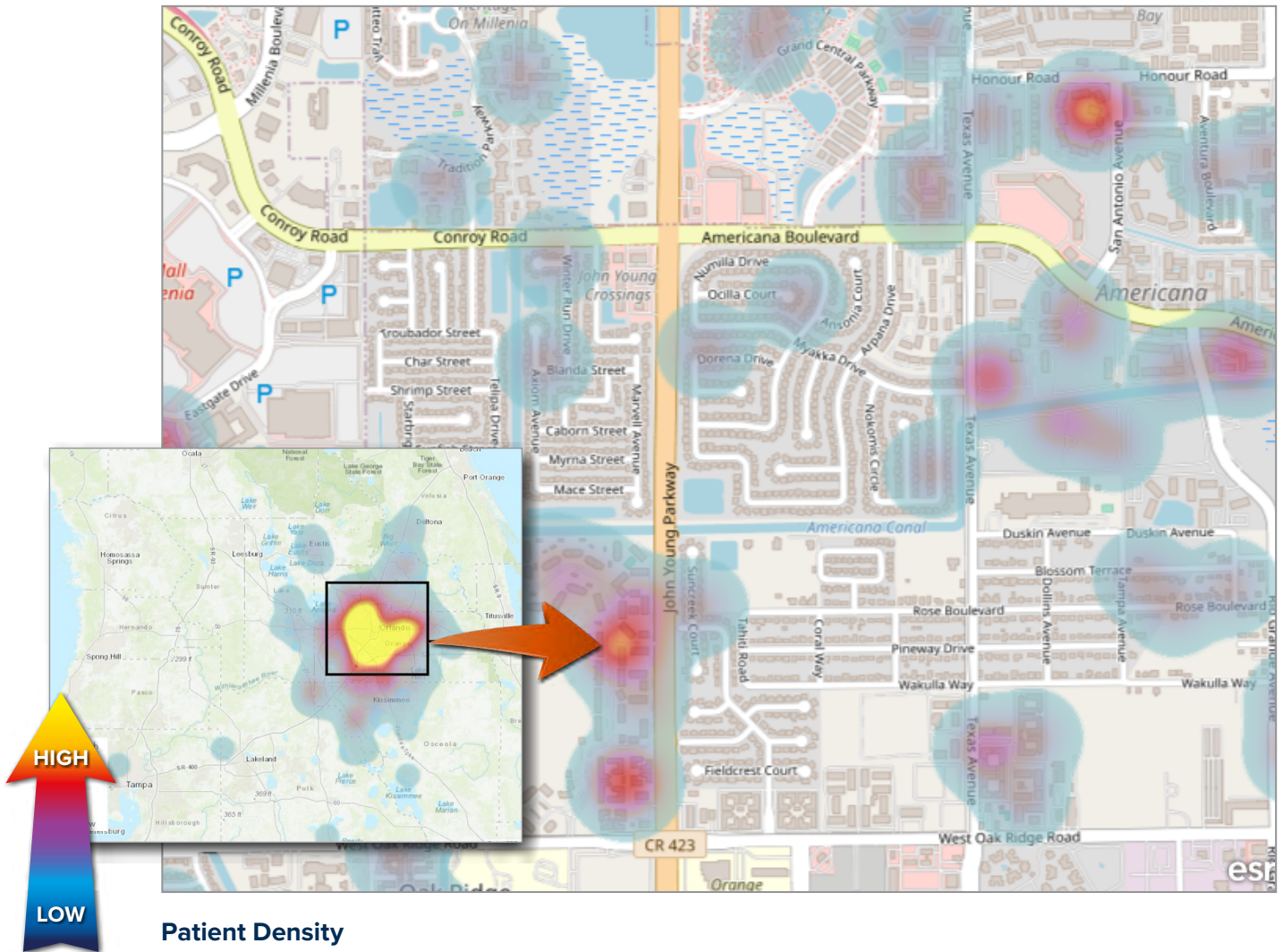
Measure	Value
Number of self-pay, uninsured patient visits	3,251
Number of self-pay, uninsured patient visits in hot spots	700
Total cost of self-pay, uninsured patient visits	$18,955,502
Total cost of self-pay, uninsured patient visits in hot spots	$3,632,098
Percent of self-pay, uninsured patient visits in the hotspot	21.5%
Note: "Hot spots" based on top five diagnoses (based on occurrences)	

Primary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Threatened abortion	225	$1,081,886	Threatened abortion	225	$1,081,886
2	Abnormal uterine and vaginal bleeding, unspecified	145	$831,674	Abnormal uterine and vaginal bleeding, unspecified	145	$831,674
3	Other specified diseases and conditions complicating pregnancy, childbirth and the puerperium	138	$614,758	Missed abortion	86	$622,658
4	False labor at or after 37 completed weeks of gestation	104	$431,442	Other specified diseases and conditions complicating pregnancy, childbirth and the puerperium	138	$614,758
5	Other specified pregnancy related conditions, first trimester	88	$397,015	Incomplete spontaneous abortion without complication	50	$481,122
Total uninsured patient visits (ALL visits – not just top 5)		**3,251**	**$18,955,502**			

Secondary Diagnoses

Rank	Top 5 Based on Number of Encounters	Count	Costs	Top 5 Based on Total Charges	Count	Costs
1	Less than 8 weeks gestation of pregnancy	188	$917,711	Less than 8 weeks gestation of pregnancy	188	$917,711
2	Pelvic and perineal pain	145	$717,381	Pelvic and perineal pain	145	$717,381
3	Weeks of gestation of pregnancy not specified	81	$313,911	Hemoperitoneum	8	$433,257
4	39 weeks gestation of pregnancy	76	$281,415	Leiomyoma of uterus, unspecified	32	$387,665
5	Unspecified abdominal pain	57	$260,051	Weeks of gestation of pregnancy not specified	81	$313,911

Race, Ethnicity, and Age

Race	Encounters	% of Encounters	Ethnicity	Encounters	%	Age	Encounters	%
AM INDIAN-AK NATIVE	9	0.3%	HISPANIC OR LATINO	1,437	44.2%	Under 5	14	0.4%
ASIAN	33	1.0%	NONHISPANIC/LATINO	1,758	54.1%	5 to 17	1	0.0%
BLACK OR AFRICAN AM	1,026	31.6%	UNKNOWN OR NOT GIVEN	56	1.7%	17 to 24	492	15.1%
CAUCASIAN	522	16.1%				25 to 34	1,596	49.1%
EAST INDIAN	11	0.3%				35 to 44	919	28.3%
HISPANIC	16	0.5%				45 to 54	170	5.2%
NAT HAWAIIAN_OTH PAC	0	0.0%				55 to 64	49	1.5%
ORIENTAL	0	0.0%				65 to 74	8	0.2%
OTHER	1,577	48.5%				75 and older	2	0.1%
UNKNOWN	57	1.8%				Unknown	0	0.0%
Total	**3,251**	**100.0%**		**3,251**	**100.0%**		**3,251**	**100.0%**

Osceola Community Health Centers

The following heat map illustrates the locations of this facility's patients.

HIGH

LOW

Patient Density
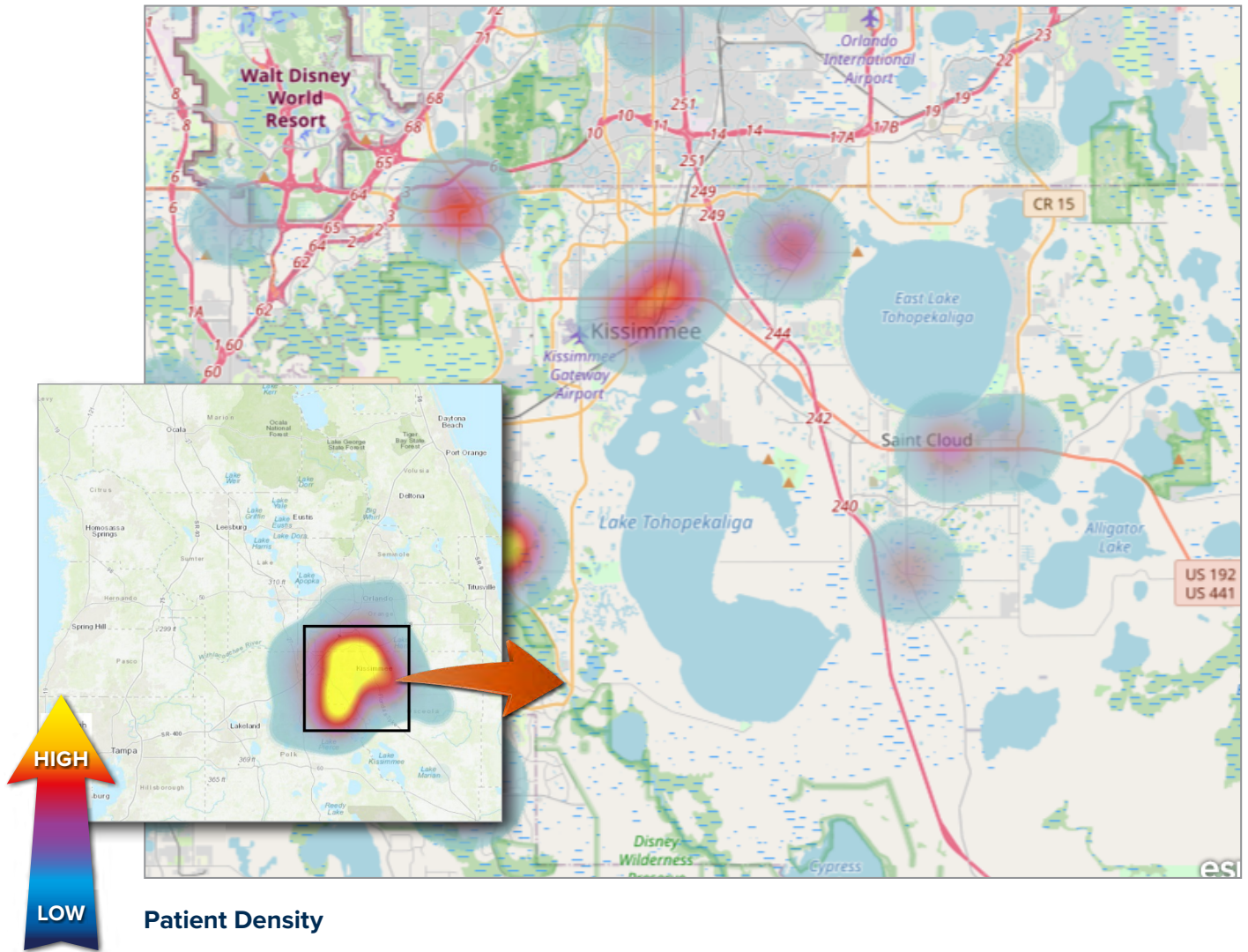
Five most common diagnoses or services
Comprehensive Oral Evaluation, new or established patient
Periodic exam – established patient
Essential (Primary) Hypertension
Major Depressive Disorder (MDD), Recurrent, Moderate
Hepatitis A vaccine

True Health

The following heat map illustrates the locations of this facility's patients. Diagnosis data was not available for True, Outpatient service use, so top diagnosis analysis is unavailable.

Patient Density

HIGH

LOW
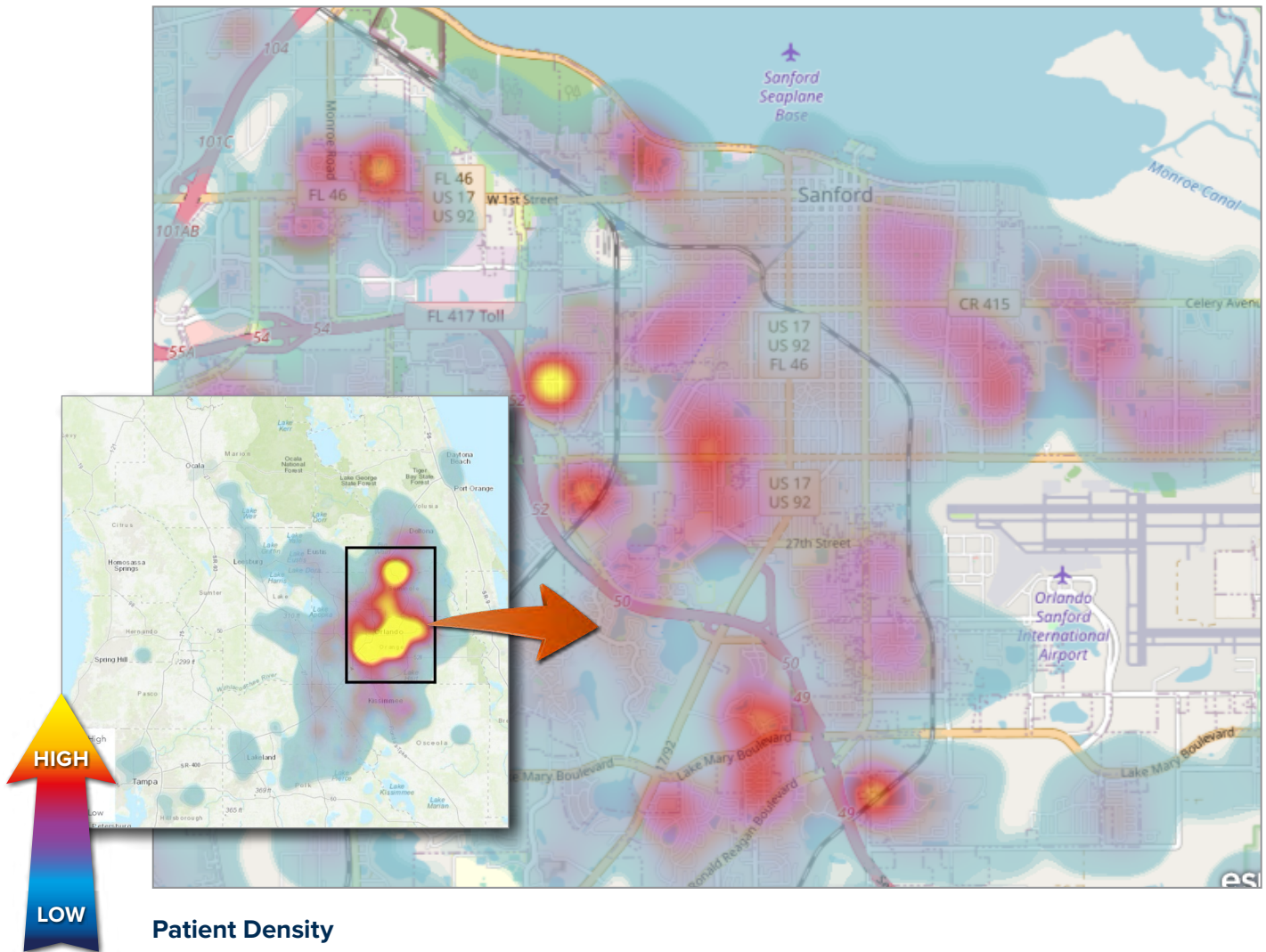
Note: Please note that diagnosis data was not available for Orange Blossom Family Health, Outpatient service use, so the heat mapping and diagnosis analysis is unavailable for this CHNA.

Appendix 6: Progress, Community Input Since the Prior CHNA and Compliance Listing

As part of the IRS regulations regarding compliance with CHNA-related requirements, participating CFC partners have contributed sections describing their organization's activities to address high-priority needs identified in the previous (2019) CHNA. The following materials were supplied by the participants. In some cases, the responses are in narrative form; in others, participants used a response template to convey the information.

AdventHealth

Since the last CHNA in 2019, AdventHealth has worked to address the identified priorities: mental and behavioral health, community development, care coordination and food security.

For mental and behavioral health, several initiatives were supported including a substance use disorder (SUD) Navigator in the emergency department to address the unique needs of individuals with a SUD. Funding also went towards building the Hope and Healing Center, designed to reduce overdoses and deaths in the community by implementing evidence-based prevention and treatment. AdventHealth also provided support to No Limit Unit, which trains barbers to be mental health advocates through the Barber Shop talks.

For community development and care coordination, AdventHealth worked to reduce barriers to seeking care and improve community resources. To address these priorities, AdventHealth worked with local partners to establish computer labs, support programming that addresses ACEs, increase resources and programing for people experiencing homelessness. Programs were also supported that work with aging adults, including individuals with Alzheimer's and dementia, Parkinson's, Autism or other conditions related to aging or developmental delays.

AdventHealth established a primary care clinic, the Community Medicine Clinic (CMC), which sees uninsured patients identified in the emergency department. Patients with chronic diseases are stabilized at the CMC, while a social worker helps identify a permanent primary care physician.

AdventHealth worked to improve access to food and reduce food security by partnering with local partners working to address food deserts. Some of this included partnering and supporting food pantries, Meals on Wheels, mobile farmers markets and locally based farmers. In addition, AdventHealth and Orlando Health sponsored the School District of Osceola County's (SDOC) SMART Bus. The SMART Bus brings food, education, access to Wi-Fi and family support to meet the needs of the 2,500 homeless students enrolled in the SDOC.

Aspire Health Partners

Activities, Actions, Impact Since the Previous Community Health Needs Assessment

1	Prioritized need(s) addressed	Access to Care Substance Abuse Drugs/Alcohol
	Activity or initiative name	Telehealth Expansion
	Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	Aspire will increase and improve access to Substance Abuse treatment using technology via the expansion of telehealth throughout Aspire's continuum of care.
	Measure (e.g., ratio, numerator/denominator, count, percent change)	Year 1 (Baseline): 2,036 services Year 2: 172,725 services Year 3: 139,771 services
	Quantifiable impact or qualitative support	Aspire continues to increase access to care and expand its telehealth capability in response to COVID and consumer demands resulting in a significant increase in telehealth services. Telehealth represents the most significant technological project Aspire has ever undertaken. Moving forward, Aspire will continue its expansion within its continuum and in response to consumer needs.
	Additional rationale and notes	

2	Prioritized need(s) addressed	Access to Care Lack of Providers Substance Abuse Providers and Resources

Activity or initiative name	Provider Development and Retention
Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	In three years, Aspire will increase access to substance abuse treatment through additional training for providers. To meet this need, Aspire will establish career pathways for multi- disciplinary providers.
Measure (e.g., ratio, numerator/denominator, count, percent change)	Year 1 (baseline): 75% Year 2: 83% Year 3: 86%
Quantifiable impact or qualitative support	Aspire has expanded its design and level of professional staff participation in clinical, medical, business and leadership curriculum. Training compliance rates have increased by 11% from the baseline year. Aspire continues to focus on enhancing clinical and medical pathways and professional trainings in rapid response to addressing psychiatric, co-occurring and substance abuse high risk populations.
Additional rationale and notes	

3	Prioritized need(s) addressed	Quality of Life Mental Health Lack of Services and Providers
	Activity or initiative name	Integrated Service Expansion
	Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	Over the next three years, Aspire will increase access to mental health care by increasing service lines that integrate physical and behavioral health to enhance consumer well-being. Aspire will identify partners and services that allow growth and service enhancement for integrated services

Measure (e.g., ratio, numerator/denominator, count, percent change)	Year 1 (baseline): 15, 987 calls Year 2: 78,404 calls Year 3: 97,618 calls
Quantifiable impact or qualitative support	To aid in the response to COVID 19, Aspire created a Call Center. Teams throughout Aspire's intake system worked to design, create and launch a central hotline for all Aspire services. Aspire also launched several tools for the teams answering calls to provide greater reporting, visibility, and efficiency for handling the call volume. The creation of the Call Center has allowed Aspire to increase call response volume by 490% and to become the main referral source for behavioral healthcare services for the Heart of Florida United Way's 211.
Additional rationale and notes	In 2021, Aspire Health Partners was awarded a Certified Community Behavioral Health Clinic Expansion grant to integrate primary and behavioral healthcare services.

Florida Department of Health – Orange County

Activities, Actions, Impact Since the Previous Community Health Needs Assessment

1	Prioritized need(s) addressed	Access to Care
	Activity or initiative name	Reduce readmission rates by providing in home services such as access to food, home care, education and health literacy for selected health conditions
	Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	• Increase the number of Orange County residents that have health insurance coverage by 3%, 1,000 additional people will be covered by insurance each year • Increase the number of Orange County residents that have a medical home by 1%. 1,400 additional people will have access to Medical Homes
	Measure (e.g., ratio, numerator/ denominator, count, percent change)	• Adults over 65 works with the senior services landscape to improve adverse drug events. Create check points along the healthcare pathway to identify potential drug interactions. 100 high risk adults per year will be identified by all community partners combined
	Quantifiable impact or qualitative support	• Monitoring the health of vulnerable women and their babies 300 per year, DOHWIC program • Care-A-Medix service focuses on keeping seniors out of the hospital. (Health Council of East Central Florida) 25 seniors out of hospital per year • AFS and AFH programs help to reduce hospital readmissions for kids with asthma. (FSU) 20 children per year
		Improve screening for targeted groups to reduce cancer rates
		• Referral to clinics 1000 or more people per year by all community partners combined

		• Provide transportation/access to health care facilities 500 or more people per year by all community partners combined • Encourage mammograms for Care-A-Medix clients when visiting their homes for chronic care. 100 per year • Breast cancer screenings 200 or more people per year by all community partners combined. Combine an appropriate target take rate, along with exposures resulting in immunity to approach level required for "herd immunity" • Ensure points of distribution of vaccine in all orange county zip codes by September 2021 • Monthly tracking of positive case rate (exposure to) of COVID-19 in Orange Count • Monthly tracking of number of vaccinations give in Orange County.
	Additional rationale and notes	
2	Prioritized need(s) addressed	Healthy Weight, Nutrition & Physical Activity
	Activity or initiative name	Increase health status of targeted groups by improved access to nutrition and health literacy
	Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	• 1 identify patients with 1. poorly controlled diabetes 500 2. frequent ER visits 3. and food insecurity 1000 or more people per year by all community partners combined

Measure (e.g., ratio, numerator/denominator, count, percent change) Quantifiable impact or qualitative support Additional rationale and notes	• Provide 1000 or more people a voucher for a healthy food box and fresh produce each year. • 500 or more people will be provided training to improve healthy cooking knowledge and skills. • provide an online food distribution platform, featuring boxes of fresh produce and healthy shelf-stable food shipped directly to the front-door of identified populations within days; along with data analytics & impact reports of those served." 30000 meals per year by all community partners combined • Provide 300 patients participating in a pilot program partnership with Grace Medical food boxes every other week for 3 months, and 1 box every month for 9 months (15 total boxes) in addition to nutrition education. • Fund healthy school teams, mini school grants for healthy school teams, fund the upgrade to an LPN or RN in our partner schools that can impact 10,000 students per year • Offer nutrition education to our clients Nutrition Education to adults 1000 adults 2. Walking Classes, Access to care 1500 people • "PSE Support: implementation and maintenance of school gardens and community gardens, promoting healthy choices in pantries, childcare center policies, farm to school and ECE, support facilitation of fresh food access points in community," 1000 or more beneficiaries a year • Nutrition education to adults 1000 per year nutrition education provided by our employees to our clients 200 per year Nutrition education activities and physical education activities. 1500 pregnant women per year – DOH-Orange WIC program

3	Prioritized need(s) addressed	Behavioral Health

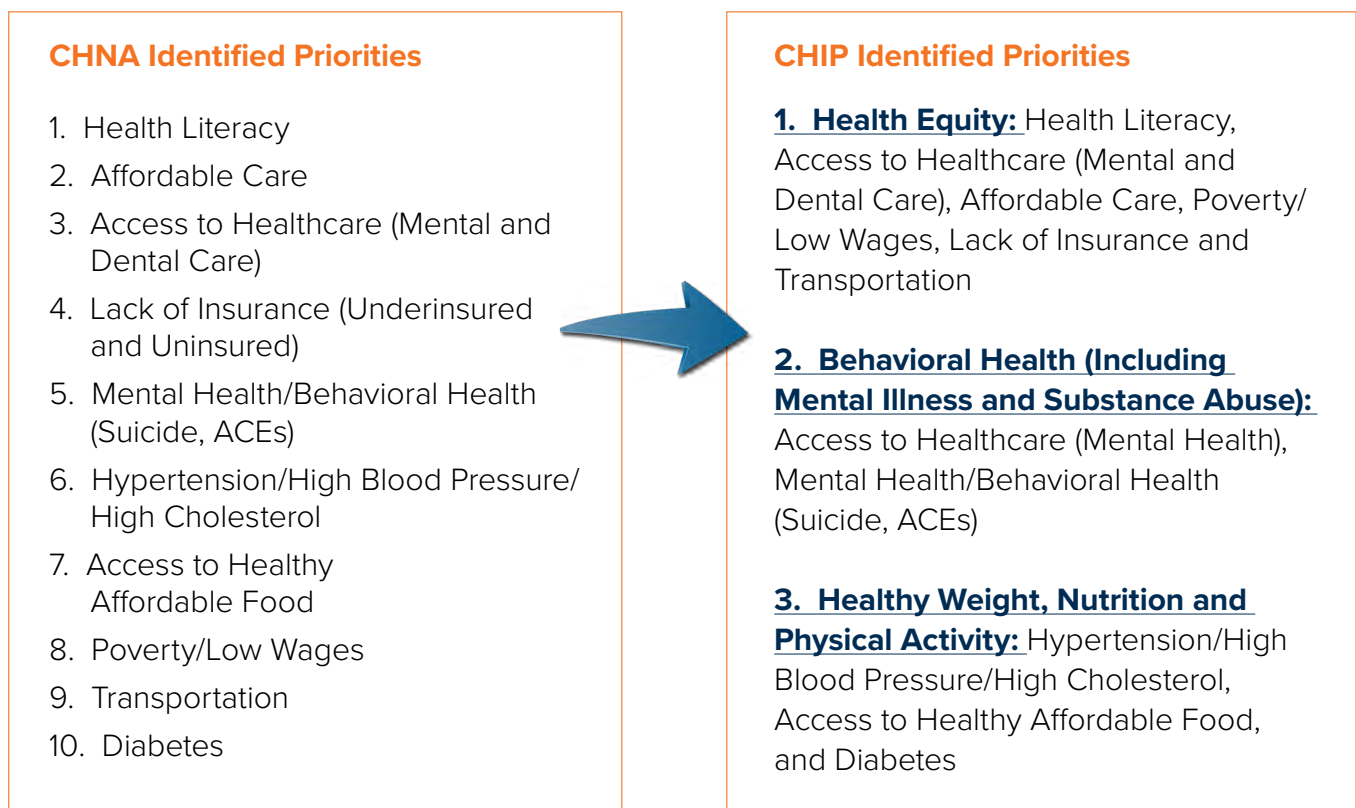|	
Activity or initiative name	Implement evidence- based community interventions to reduce preventable hospitalizations due to mental health disorders
Activity or initiative description (includes notation why/how the activity or initiative addresses the need)	• Provide 400 African Americans with access to mental health counseling • Provide 500 African Americans access to telemedicine services for individuals with mental health concerns • Provide 200 African Americans with access to transportation for mental health services • Facilitate admission into treatment programs for 100 African Americans • Develop a model to identify up to 10,000 high risk individuals based on gender and age to facilitate mental health coordination among 10 partners • Provide Question, Persuade, and Refer (QPR) Suicide Prevention training to 1,000 vulnerable individuals of Orange County • Increase therapy options for adolescents/young adults who have anxiety and depression by 1% each year • Develop a model to identify up to 10,000 high risk individuals based on gender and age to facilitate suicide coordination among 10 partners
Measure (e.g., ratio, numerator/ denominator, count, percent change)	
Quantifiable impact or qualitative support	
Additional rationale and notes	

Florida Department of Health – Seminole County

Seminole County Community Health Improvement Plan Milestones

As a result of the 2019 CHNA, 10 strategic health issues were identified for Seminole County. Health issues were then prioritized by the community health partners related to trending community health outcomes and larger scale emerging health issues, resulting in three priority areas (see diagram below). Three subcommittees were formed to address each strategic priority and action plans were developed to establish accountability towards obtaining measurable health improvements and quality outcomes.

CHNA Identified Priorities

1. Health Literacy
2. Affordable Care
3. Access to Healthcare (Mental and Dental Care)
4. Lack of Insurance (Underinsured and Uninsured)
5. Mental Health/Behavioral Health (Suicide, ACEs)
6. Hypertension/High Blood Pressure/ High Cholesterol
7. Access to Healthy Affordable Food
8. Poverty/Low Wages
9. Transportation
10. Diabetes

CHIP Identified Priorities

1. Health Equity: Health Literacy, Access to Healthcare (Mental and Dental Care), Affordable Care, Poverty/ Low Wages, Lack of Insurance and Transportation

2. Behavioral Health (Including Mental Illness and Substance Abuse): Access to Healthcare (Mental Health), Mental Health/Behavioral Health (Suicide, ACEs)

3. Healthy Weight, Nutrition and Physical Activity: Hypertension/High Blood Pressure/High Cholesterol, Access to Healthy Affordable Food, and Diabetes

Through the dedicated work of community partners, the Healthy Seminole Collaborative was able to achieve great outcomes in the past years despite challenges encountered during the COVID-19 pandemic. One major accomplishment was Seminole County's improvement in the County Health Rankings from the Robert Wood Johnson Foundation. In 2019, Seminole County ranked 4th in both Health Factors and Health Outcomes. In 2022, Seminole County now ranks 3rd in Health Outcomes and 2nd in Health Factors. The rankings look at a variety of measures that affect the future health of

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communities, such as high school graduation rates, access to healthy foods, and smoking, obesity and teen birth rates.

In addition, among the initial 53 objectives and activities established in the Community Health Improvement Plan (CHIP), 82% were either completed or on track and 13 additional objectives and activities were added to continue progress toward improving identified priority areas.

Accomplishments, per identified priority areas, are itemized below.

Priority 1: HEALTH EQUITY

Goal HE 1: Improve access to care for identified Seminole County residents who are less likely to receive quality and affordable services.

Strategy HE 1.1: Provide culturally and linguistically relevant health education and service awareness to Seminole County adults who are at high risk for developing chronic diseases and have limited access to appropriate health information and health services navigation.

Accomplishments

- Increased the Health Equity Advisory Board (HEAB) membership from six members in 2019 to 18 organizations including city and county government leaders, healthcare providers, educational professionals and other community service providers.
- Three priority populations (**Male, Hispanic** and **Black**) were identified to address gender, ethnicity and race disparities respectively.
- Five chronic diseases (**Cardiac, Respiratory, Diabetes, Cancer** and **Infant Mortality,** included as a chronic condition in the community) affecting identified priority populations were selected.
- HEAB members received Cultural Competency training to start a conversation around cultural competency needs at different healthcare and community settings and provide attendees with additional tools, such as cultural competency assessment for further learning and understanding.
- The number of referrals to True Health, a Federally Qualified Health Center (FQHC) in Seminole County increased from 1,590 in 2019 to 2,908 in 2020.
- The HEAB identified platforms such as Aunt Bertha (now findhelp), CareDove and 211, as recommended service inventory platforms to support knowledge and service referral navigation.
- Between April and July 2020, approximately 19,691 COVID-19 tests were administered in Hispanic and Black African American communities. Additionally, at home COVID-19 testing was provided for home-bound Seminole County residents who were unable to travel to testing locations. Additionally, targeted testing events were held at Long Term Care Facilities (LTCF) and retirement communities to ensure availability of COVID-19 testing in the vulnerable elder adult population.

- As of December 27, 2021, 67.2% of the 461,371 total eligible Seminole County population (ages 5+) have received the COVID-19 vaccine.

- During Session 2021, House Bill 183 passed and was signed into law as Chapter 2021-117, establishing section 381.735, Florida Statutes. This new section of statute expands the authority and responsibility of the Office of Minority Health and Health Equity to address health equity and includes a directive that: "One representative from each CHD shall serve as a minority health liaison to assist the office in implementing this new section."

- The Fetal and Infant Mortality Review (FIMR) Board was established and currently has active participation from six community organizations working on at least two proposals to address the root causes of infant (ages 0-1) deaths in Seminole County.

Priority 2: BEHAVIORAL HEALTH – INCLUDES MENTAL ILLNESS AND SUBSTANCE ABUSE

Goal: Promote mental and emotional well-being for all Seminole County residents.

Strategy: Improve community awareness and engagement in mental health and substance abuse services.

Accomplishments

- Identification of the 2019 baseline of 83 opioid related overdose deaths in Seminole County (Source: Seminole County Sheriff's Office Seminole Collaborative Opioid Response Efforts (S.C.O.R.E) team).

- Establishment of the Youth Leadership Council (YLC) to combat opioid use was led by No Limit Health Education organization. The YLC's priority population is high school age students. The YLC is working to create a social media campaign, including a video, planning a virtual conference, and presented on November 9,2021 to the Sheriff's Office on combatting opioid use within the youth population. Volunteers from the Behavioral Health subcommittee serve as the advisory council for the YLC.

- Mobile Crisis Response (MCR) services are now available to Seminole County residents through several community behavioral health providers including Devereux and Aspire. Additionally, individuals in crisis can request assistance through the Heart of Florida United Way 2-1-1 service.

- Embrace Families received a grant for Youth Mental Health First Aid. The free, virtual training is designed to teach adults who regularly interact with young people (ages 12-18) how to better assist individuals struggling with a mental health or addictions challenge or assist a youth in crisis. Attendees will receive a 3-year certification in Youth Mental Health First Aid.

- DOH-Seminole, in partnership with the Seminole County Sheriff's Office (SCSO) and AdventHealth, was awarded a $500,000 Implementing Overdose Prevention Strategies at the Local Level (IOPSLL) National Association of City and County Officials (NACCHO) grant to combat

the overdose epidemic in Seminole County. Over the course of the next eighteen months, DOH-Seminole's Community Integrated Mobile Health Services (CIMHS) team worked in partnership with the SCSO and AdventHealth to provide community paramedicine and substance abuse therapy overlay services to augment SCSO's Seminole Collaborative Opioid Response Effort (SCORE) services.

- DOH-Seminole's Community Integrated Mobile Health Services (CIMHS) added outreach for substance abuse to all outreach events. If a CIMHS team encounters a person with substance use disorder (SUD), they will provide a referral to the IOPSOLL program.

- Yoga 4 Change, Virtual Yoga and Meditation Classes from AdventHealth are offered on Mondays from 10:00-11:00am to make yoga and meditation accessible to individuals in recovery, individuals who are incarcerated, military veterans, and youth.

- True Health, a FQHC, expanded the use of telehealth to include behavioral health services.

Priority 3: HEALTHY WEIGHT, NUTRITION AND PHYSICAL ACTIVITY

Goal: Strengthen the capacity of local agencies and health and human services providers to identify and refer Seminole County residents to services which promote healthy weight, nutrition and physical activities.

Strategy: Improve healthy weight, nutrition and physical activities for Seminole county residents.

Accomplishments

- The Second Harvest Food Bank of Central Florida began partnering with Seminole County Public Schools (SCPS) in December 2020. The Kids Packs program provides nutritious meals to children who do not have access to school cafeterias. Through this partnership, a total of 250 snack packs were delivered to four schools in Seminole County each month.

- Bring Hope Home is Second Harvest Food Bank of Central Florida's newest innovation in response to the high demand for home-delivered food due to the COVID-19 pandemic. The program utilizes external delivery partners as well as volunteer drivers to safely transport perishable and nonperishable food items directly to those in need in a contact-free manner. The target populations for this program are seniors, homebound individuals, individuals with a disability, veterans, and those in the high-risk group for contracting coronavirus.

- The City of Casselberry in partnership with Florida Recreation & Park Association and Walk Florida encouraged residents during the month of March in 2021 to join the Walk Florida Program where a group of participants "walked" the state of Florida (2,000,000 steps) over a period of four weeks. Participants enrolled with the City of Casselberry group received a pedometer and contacted a person from the city to report the steps.

COVID-19 Response

Accomplishments

- The Florida Department of Health in Seminole County COVID-19 Community information line received over 14,000 calls through December 31, 2021.
- Through December 31, 2021, Seminole County provided 823,592 COVID-19 tests through drive-through and community testing events.
- Through December 31, 2021, a total of 695,462 COVID-19 vaccine doses were administered in Seminole County and the Florida Department of Health in Seminole County administered 255,253 of those COVID-19 vaccine doses. For the same time period, 285,429 of Seminole County residents had at least one dose of COVID-19 vaccine.

Orlando Health

Since the 2019 CHNA, Orlando Health has focused on supporting programs addressed our selected priority: access to care which included but not limited to targeted programs supporting the following: mental and behavioral health, maternal and child health, asthma, vision, hearing and dental, childhood obesity, adult obesity, food insecurity, health literacy, injury prevention, cancer prevention and screenings, diabetes management, HIV/AIDS, substance use disorder and chronic disease management.

Through our community grant program, Orlando Health supported programs addressing needs identified through the CHNA. Please find an overview of our accomplishments since the 2019 CHNA.

- To impact chronic diseases, Orlando Health partnered with community organizations like Hebni Nutrition, Hope CommUnity Center, United Cerebral Palsy of Central Florida and Orange Blossom Family Health. The diabetes management programs supported by Orlando Health reached over 202 individuals, resulting in more than 494 clinic visits, with an average of 81% of participants showing improved A1c levels from pre to post tests.
- To improve increased access to care, Orlando Health partnered with community organizations like Orange Blossom Family Health, Grace Medical Home, Dental Care Access Foundation and the Florida Department of Health in Seminole County. Programs to increase access to care impacted more than 4,571 individuals, providing over 2,141 mental or behavioral health sessions, 644 dental treatments and 2,983 referrals for additional care.
- Maternal and infant health programs, which focused on access to care, infant mortality and low birth weight, provided services that resulted in 2,200 visits to expecting mothers. To date, these mothers have given birth to 130 babies. Of those 130 babies, 98 percent were born at a healthy weight, and 100 percent were delivered at or beyond 37 weeks (term). Of the mothers and babies who were supported through services at the

Midwife Bus, there was a zero percent maternal and infant mortality rate within seven days of birth. In addition to working with the Midwife Bus, Orlando Health partnered with Commonsense Childbirth to address maternal and infant health. Orlando Health also established a pilot program at our OBGYN high-risk clinic which identified pregnant women diagnosed with gestational diabetes and/or food insecurity. This pilot program is still ongoing.

Feedback Received Since Previous (2019) CHNA

As part of the IRS regulations regarding compliance with CHNA-related requirements, participating CFC hospitals have not received any feedback since the previous (2019) CHNA. Each participating hospital implemented a process to collect feedback from the community from the previous CHNA(s). For example, Orlando Health has a comment section available on their website where the community can leave feedback regarding the previous CHNA(s). In addition to creating those resources, the qualitative work conducted while generating this CHNA reflected community insight on needs identified in the previous CHNA.

IRS Form 990, Schedule H Compliance Listing

IRS Requirement	See Report Page
A definition of the community served by the hospital facility and a description of how the community was determined	Page 57
A description of the process and methods used to conduct the CHNA, including identification of information gaps that limit the hospital facility's ability to assess the community's health needs	Pages 70-77
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	Pages 48-54 Pages 185-189
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	Pages 48-55; 67-69
A description of the resources potentially available to address the significant health needs identified through the CHNA	Appendix 7 Page 541
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)	Appendix 6 Pages 55; 536
Board approval or equivalent	Pages 48-55; 10/6/2022

Appendix 7: Community Asset Inventory

For an up-to-date list of resources in your community, please visit: Findhelp.org

Basic Needs Assistance

Organization	Contact Information	Services Overview
Arab American Community Center	407-985-4550 aaccflorida.org	Eligibility/Insurance, employment Services, Immigration/Refugee Services, Legal Services, Abuse, Domestic Violence
Catholic Charities of Central Florida	407-658-1818 cflcc.org	Access to Care, Behavioral Health, Emergency Services, Immigration/ Refugee Services, Human Trafficking Services, Elder Services
Center for Multicultural Wellness and Prevention	407-648-9440 cmwp.org	Housing and Homeless Services, HIV/AIDS, Mental Health, Access to Care, Chronic Disease
Christian Service Center of Central Florida	407-425-2523 christianservicecenter.org	Food Assistance, Housing and Homeless Services, Emergency Services
Community Hope Center	321-677-0245 hope192.com	Housing and Homeless Services, Employment Services, Food Assistance, Legal Services
Harvest Time International	407-328-9900 harvesttime.org	Food Assistance, Emergency Services
Heart of Florida United Way	407-835-0900 hfuw.org	Resource Connection
Second Harvest Food Bank of Central Florida	407-295-1066 feedhopenow.org	Food Assistance
The Salvation Army	407-423-8581 salvationarmyorlando.org	Housing and Homeless Services, Emergency Services
The Sharing Center	407-260-9155 thesharingcenter.org	Food Assistance, Housing and Homeless Services
United Against Poverty/ UP Orlando	407-650-0774 communityfoodoutreach.org	Emergency Services, Mental Health, Education, Food Assistance

Florida Department of Health

Organization	Contact Information	Overview
Florida Department of Health in Lake County	352-589-6424 Lake.floridahealth.gov	Cancer, Dental, Women's Health, HIV/AIDS, STI, Primary Care, Immigration/ Refugee Services, Chronic Disease, Child Services
Florida Department of Health in Orange County	407-858-1400 orange.floridahealth.gov	Cancer, Dental, Women's Health, HIV/AIDS, STI, Primary Care, Immigration/ Refugee Services, Chronic Disease, Child Services
Florida Department of Health in Osceola County	407-343-2000 osceola.floridahealth.gov	Women's Health, HIV/AIDS, STI, Primary Care, Immigration/Refugee Services, Chronic Disease
Florida Department of Health in Seminole County	407-665-3000 seminole.floridahealth.gov	Cancer, Dental, Women's Health, HIV/AIDS, STI, Primary Care, Immigration/ Refugee Services, Chronic Disease, Child Services

Federally Qualified Health Center (FQHC)

Organization	Contact Information	Overview
Community Health Centers, Inc.	407-905-8827 chcfl.org	Primary Care, Behavioral Health, Women's Health, Dental, Pediatric Care, Laboratory, Optometry/Vision
Orange Blossom Family Health	(407) 428-5751 obfh.org	Primary Care, Pediatrics, Dental, Behavioral Health
Osceola Community Health Service	407-943-8600 https://www.osceolahealthcare.org	Eligibility/Insurance, Women's Health, Primary Care, Dental
True Health	407-322-8645 mytruehealth.org	Primary Care, Pediatric Care, Women's Health, Eligibility/Insurance, Laboratory, Dental

Children and Youth Organizations

Organization	Contact Information	Overview
Boys and Girls Club of Central Florida	407-841-6855 bgccf.org	Youth Engagement
Boys Town Central Florida	407-588-2170 Boystown.org/locations/central-Florida/programs	Housing and Homeless Services (Youth), Mental Health (Youth)
Central Florida Urban League	407-842-7654 cful.org	Youth Engagement
Children's Home Society of Florida	407-846-5220 chsfl.org/	Child Services, Mental Health
Department of Children and Families	1-800-962-2873 reportabuse.dcf.state.fl.us	Report child abuse, child services
Embrace Families	321-207-8200 embracefamilies.org	Child Services
Give Kids the World	407-396-1114 gktw.org	Children with critical illnesses and their families
Healthy Start Coalition	Lake : healthystartlake.org Orange: healthystartorange.org Osceola: healthystartosceola.org Seminole: healthystartseminole.org	Education and care coordination to pregnant women and families of children under the age of three
Kids House	407-324-3036 kidshouse.org	Abuse (Child), Mental Health (Youth), Child Services
New Hope for Kids	407-331-3059 Newhopeforkids.org	Mental Health, Grief Counseling, Children with critical illnesses
YMCA of Central Florida	407-896-9220 ymcacentralflorida.com	Youth Engagement
Zebra Coalition	407-228-1446 zebrayouth.org	Housing and Homeless Services, Mental Health for youth ages 13-24 LGBTQIA+

Mental & Behavioral Health

Organization	Contact Information	Overview
Aspire Health Partners	407-245-0045 aspirehp.org	Mental Health, Substance Use, HIV/AIDS
Devereux	1-800-338-3738 Ext. 77130 devereux.org	Mental Health, Substance Use, Chronic Disease (Diabetes), Child Services
IMPOWER	407-304-3444 impowerfl.org	Child Services, Mental Health (Youth), Behavioral Health (Youth)
Mental Health Association of Central Florida	407-898-0110 mhacf.org	Substance Use, Mental Health
National Alliance on Mental Illness (NAMI)	407-253-1900 namiflorida.org	Mental and Behavioral Resources
Orlando Behavioral Health	orlandobehavioral.com	Mental Health, Substance Use
Park Place	407-846-0068; 407-846-0023; 321-402-0690 ppbh.org	Mental Health, Substance Use

Life Skills/Job Training

Organization	Contact Information	Overview
Adult Literacy League	407-422-1540 adultliteracyleague.org	Education
Career Source of Central Florida	407-531-1222 careersourcecentralflorida.com	Employment Services
Center for Independent Living	407-623-1070 cilorlando.org	Disabled Adults, Employment Services
Central Florida Employment Council	407-834-4022 cfec.org	Employment Services
Division of Vocational Rehabilitation	407-846-5260; 407-897-2725 rehabworks.org	Employment Services, Disabled Adults
Employ Florida	1-800-438-4128 employflorida.com	Employment Services
Goodwill Industries of Central Florida, Inc.	407-857-0659 goodwillcfl.org	Employment Services, Education

Clinics and Other Healthcare Providers

Organization	Contact Information	Overview
Grace Medical Home	407-936-2785 gracemedicalhome.org	Primary Care, Dental, Mental Health, Laboratory, Chronic Disease, Housing and Homeless Services
Healthcare Access Alliance	407-952-9233 healhaccessall.org	Primary Care, Resource Connection
Hispanic Health Initiatives	386-320-0110 hhi2001.org	Chronic Disease (Diabetes), Food Assistance, Cancer, Primary Care
Hope and Help Center of Central Florida	407-645-2576 hopeandhelp.org	HIV/AIDS, STI, Primary Care
Planned Parenthood	407-246-1788 plannedparenthood.org	Women's Health, HIV/AIDS, STI
Shepherd's Hope	407-876-6701 shepherdshope.org	Primary Care
The Orlando Veterans Affairs Medical Center	407-631-1000 orlando.va.gov	Veteran Services, Employment Services, Primary Care, Mental Health

Housing/Homelessness

Organization	Contact Information	Overview
Central Florida Commission on Homelessness	321-710-4663 www.cfchomelessness.org	Housing and Homeless Services
Coalition for the Homeless of Central Florida	407-652-5300 Centralfloridahomeless.org	Housing and Homeless Services
Covenant House	1-800-441-4478 covenanthousefl.org	Housing and Homeless Services
Dave's House	407-457-1282 daveshouseevents.org	Housing and Homeless Services
Family Promise of Greater Orlando	407-893-4580 familypromiseorlando.org	Housing and Homeless Services
Habitat for Humanity	habitatorlandoosceola.org habitatseminoleapopka.org	Housing and Homeless Services
Homeless Services Network of Central Florida	407-893-0133 hsncfl.org	Housing and Homeless Services
Hope Helps, Inc.	407-366-3422 hopehelps.org	Housing and Homeless Services
IDignity	407-792-1374 idignity.org	Housing and Homeless Services
Orlando Union Rescue Mission	407-423-3596 Ext. 2100/2105 ourm.org	Housing and Homeless Services, Food Assistance
Rescue Outreach Mission of Central Florida	407-321-8224 rescueoutreachcfl.org	Housing and Homeless Services, Food Assistance
Samaritan Resource Center	407-482-0600 samaritanresourcecenter.org	Housing and Homeless Services
Wayne Densch Center	407-599-3900 abilityhousing.org/wayne-densch-center	Housing and Homeless Services, Mental Health, Substance Use

Resources Phone Numbers and Crisis Lines

	Contact Information	Overview
Adverse Childhood Experiences (ACEs)	www.acesconnectioninfo.com	PACEs Connection is a social network that recognizes the impact of a wide variety of adverse childhood experiences (ACEs) in shaping adult behavior and health, and that promotes trauma-informed and resilience-building practices and policies in all families, organizations, systems and communities.
Crisis Text Line	Text HOME to 741741 https://www.crisistextline.org/	Crisis Text Line provides free, 24/7 support via text message. We're here for everything: anxiety, depression, suicide, school.
Findhelp.org	https://www.findhelp.org/	Search and connect to support for financial assistance, food pantries, medical care and other free or reduced-cost help
Lesbian, Gay, Bisexual and Transgender (LGBT) National Help Center	1-888-843-4564 https://www.glbthotline.org/	Serving the lesbian, gay, bisexual, transgender, queer and questioning community by providing free & confidential peer-support and local resources
National Domestic Violence 24 Hr. Hotline	1-800-787-3224	Hotline for domestic violence and abuse
National Drug Abuse	1-800-662-4357 (HELP) https://www.samhsa.gov/	Support, information, advice, & referrals to address substance use and mental health
National Elder Abuse Resources	1-855-500-3537 (ELDR) https://ncea.acl.gov/	The NCEA provides the latest information regarding research, training, best practices, news and resources on elder abuse, neglect and exploitation to professionals and the public.
National Human Trafficking Hotline	1-888-373-7888	Abuse, Domestic Violence, Human Trafficking Services

National Sexual Assault	1-800-656-4673 (HOPE) https://www.rainn.org/	Support, information, advice, & referrals to address sexual assault
National Suicide Prevention Lifeline	1-800-273-8255 https://suicideprevention lifeline.org/	The Lifeline provides 24/7, free and confidential support for people in distress and prevention and crisis resources
United Way 211	Dial 211 https://www.hfuw.org/ gethelp/	Local resources to address financial assistance, health programs, crisis support and more.
Veterans Crisis Line	1-800-273-8255 https://www.veterans crisisline.net/	24/7 confidential crisis support for veterans and their loves ones

COMMUNITY HEALTH NEEDS ASSESSMENT

CENTRAL FLORIDA COLLABORATIVE