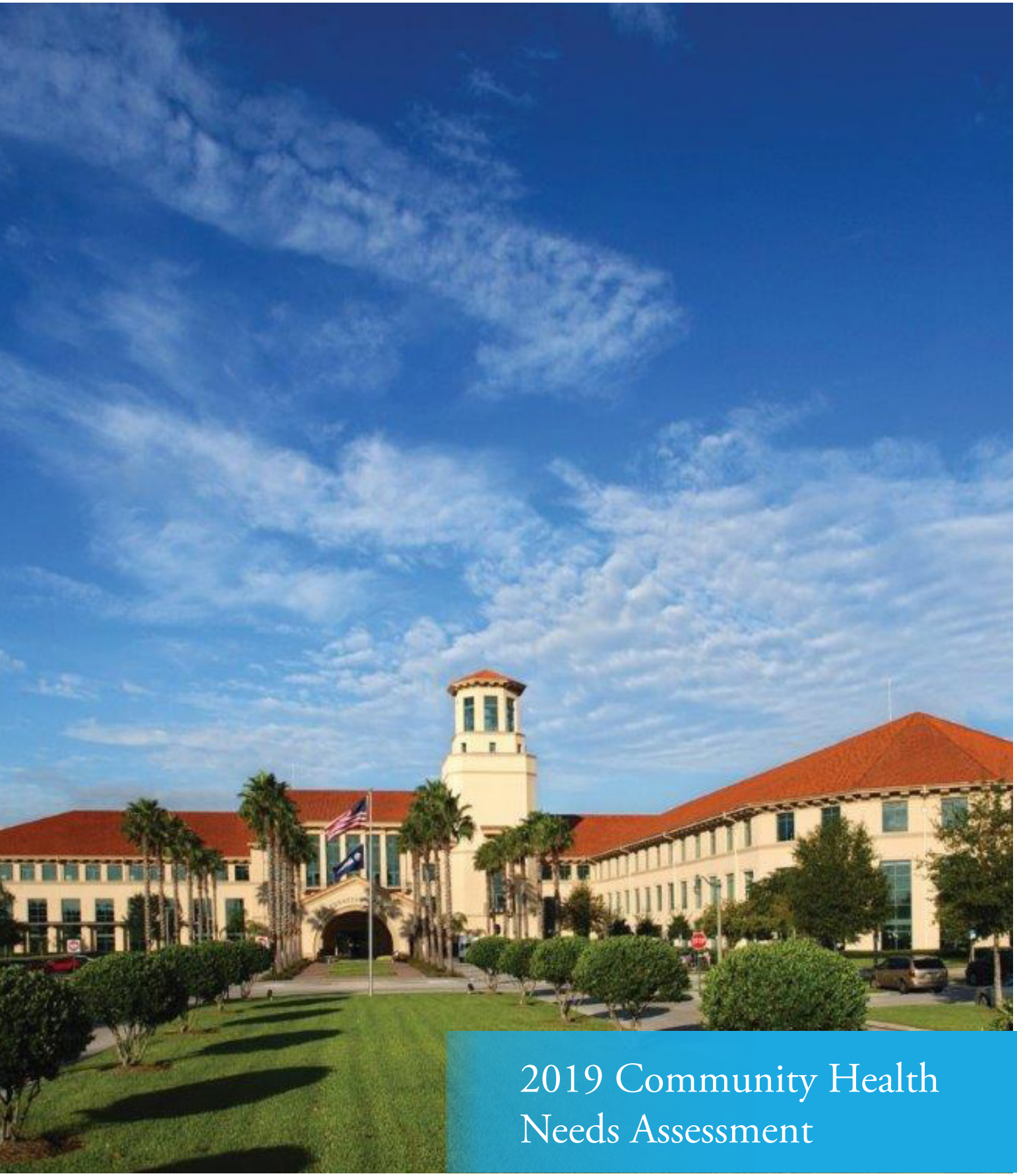
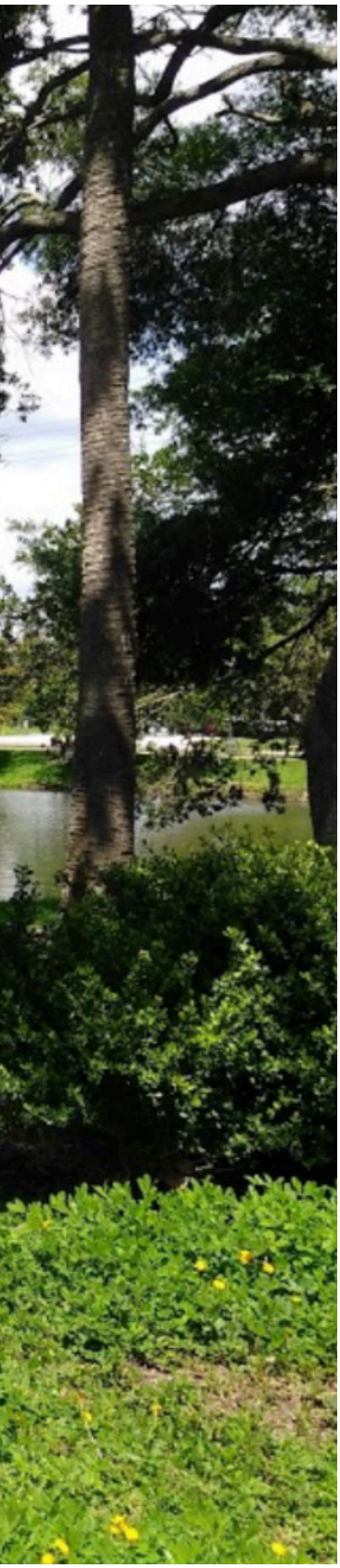


2019 Community Health Needs Assessment

AdventHealth
Celebration

Table of Contents

This report was prepared by AdventHealth Central Florida Division-South Region's Community Health team.
Special thanks to Strategy Solutions, Inc. for their support and contribution in the process.
Questions or comments can be directed to FH.Community.Health@AdventHealth.com



CHAPTER ONE

Introduction

Kissimmee Lakefront Park
Kissimmee, FL

Osceola County

MESSAGE FROM THE LEADER

AdventHealth Central Florida Division

80,000 Minds

One Purpose

No matter what brings you in, no matter which of our providers, facilities or medical services you need, we're all connected by more than just our name.

We're connected by our commitment to your whole-person health.

At AdventHealth, we have a sacred mission of Extending the Healing Ministry of Christ. That mission extends far beyond our walls and into the communities we serve. Our commitment is to address the needs of our community with a wholistic focus. That wellness isn't just about the physical, but also includes mental, spiritual, environmental and social health. We want to help our neighbors get well and stay well.

As a not-for-profit health care system, we are proud to support and partner with other organizations that share our vision of a healthier, more whole Central Florida.

We have once again worked with Orlando Health, Aspire Health Partners and the Departments of Health to produce this Community Health Needs Assessment (CHNA). Our partnership has expanded to include the local Federally Qualified Health Centers (FQHCs), which will further help us identify where we can have the most impact on the health of Central Florida.

We're committed to helping address Central Florida's greatest health challenges. From expanding mental health services to fighting food insecurity to reducing chronic diseases, we're working to bring change and empower our neighbors to live their healthiest lives.

Daryl Tol

President & CEO
AdventHealth Central Florida Division

AdventHealth

AdventHealth - Central Florida Division Executive Building

Introduction To The Community Health Needs Assessment

Thank you for being part of our community.

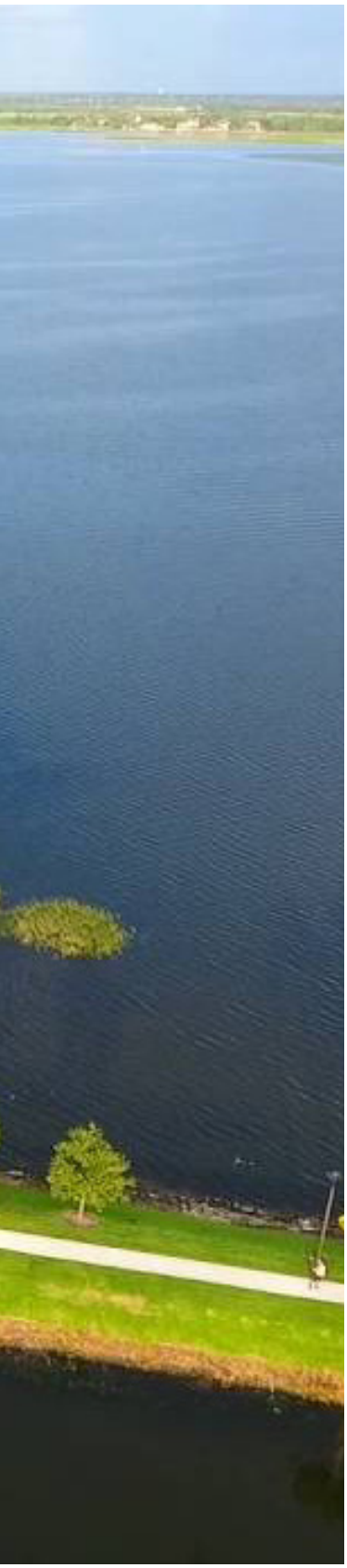
AdventHealth Celebration is proud to present our 2019 Community Health Needs Assessment (CHNA). AdventHealth Celebration is part of the AdventHealth Central Florida Division South Region. This report summarizes a comprehensive review and analysis of public health, socioeconomic and other demographic data from our immediate service area within Osceola County, Florida. It also includes input gathered directly from local residents and stakeholders. All data was reviewed and analyzed to determine the top health issues facing our immediate and surrounding communities.

To conduct this CHNA, AdventHealth Celebration participated in the Central Florida Community Collaborative (the Collaborative), which included: AdventHealth Central Florida Division, Aspire Health Partners, Orlando Health, the Departments of Health in Lake, Orange, Osceola and Seminole Counties, Community Health Centers, Inc., Orange Blossom Family Health, Osceola Community Health Services and True Health.

This CHNA will assist our hospital, community organizations and social service agencies to identify community health needs and develop strategic interventions to improve the health of the communities we serve.

We offer special thanks to the many community-based organizations and almost 600 citizens and stakeholders that participated in this assessment. We appreciate their time and valuable input throughout the CHNA process.

Thank You!



CHAPTER TWO

Executive Summary

Lake Tohopekaliga
Kissimmee, FL

Osceola County

Formerly known as Florida Hospital Celebration, Adventist Health System/Sunbelt, Inc. dba AdventHealth Celebration will be referred to in this document as AdventHealth Celebration or "the Hospital." AdventHealth Celebration conducted a Community Health Needs Assessment in 2019. The goals of the assessment were to:

- Engage with the community, targeting underrepresented populations, to understand their unique needs
- Connect with public health representatives and community stakeholders serving low-income, minority and other underrepresented 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 2020-2022 Community Health Plan based on AdventHealth Celebration's prioritized issue

Data Sources

To support this assessment, numerous qualitative and quantitative data sources were used to validate findings using the data triangulation method. The data triangulation method looks at primary data (collected through community input) and two types of relevant local secondary data (either hospital utilization records/ patient data or county, region-specific, or state data) looking for common themes and trends across all three sources. The data sources used in this method are outlined in Figure 2.1.

FIGURE 2.1: DATA TRIANGULATION

Source: Strategy Solutions, Inc.

To support the CHNA in Osceola County, the Collaborative collected a total of 289 community surveys, 97 key informant surveys, conducted 20 stakeholder interviews, nine focus groups with 143 participants and nine intercept surveys.

To assist the Collaborative in facilitating this CHNA, Strategy Solutions, Inc. (SSI) was contracted to provide support for the data collection and identification of priorities. SSI is a planning and research firm with the mission to create healthy communities. National best practices were used for the framework of the CHNA

including: the Association for Community Health Improvement (ACHI, a division of the American Hospital Association), the Mobilizing for Action Through Planning and Partnership (MAPP) developed by the National Association for City and County Health Officials (NACCHO), Healthy People 2020 (HP2020) and the Robert Wood Johnson Foundation's County Health Rankings and Roadmaps. Data were compiled from the most up-to-date resources. This was augmented with primary research conducted with community residents, providers and stakeholders. Hospital utilization data for the uninsured patient population was also utilized in this CHNA.

Zip code level demographic and socio-economic data for the service area was collected from the U.S. Census Bureau (obtained through Environics Analytics and IBM Market Expert), the American Community Survey and the Bureau of Labor Statistics.

Key Findings

After reviewing the primary and secondary data in this CHNA, the following key findings were identified for Osceola County and its residents. The goal of the key findings is to deliver a comprehensive overview of the data, which highlights the strengths and areas of improvement for the community. The key findings are broken down by themes seen in primary data collection, as well as by strengths and weaknesses identified through secondary data.

COMMUNITY THEMES AS IDENTIFIED BY PRIMARY DATA

The themes were compiled using data from the community surveys, stakeholder interviews, focus groups, key informant surveys and intercept surveys conducted for this CHNA as areas of need or community issues:

- Access to affordable health care services
  - Inappropriate use of emergency department
  - More services for LGBTQ community and immigrants
  - Lack of insurance
- Need for and access to mental health services
- Living in poverty or receiving low wages
  - Homelessness and need for affordable housing
  - Lack of family support
  - Lack of employment opportunities/lack of jobs
- Food insecurity including access to quality, nutritious foods
- Prevalence of substance use
- Lack of transportation
- Inactivity
  - More and better bike- and pedestrian-friendly infrastructure
- Chronic conditions
  - Prediabetes/diabetes
  - Obesity
  - Heart disease
  - Cardiovascular disease
  - Hypertension
- Sexually transmitted infections
- Human immunodeficiency virus (HIV)

COMMUNITY STRENGTHS

The community strengths assessment includes indicators that improved by 10 percent change in value or more since the 2016 CHNA or from 2013 to 2015 if the data was not included in the last CHNA:

- Demographics
  - Population growth increased
- Economic conditions
  - Persons living below poverty level decreased
  - Unemployment rate decreased
- School and student characteristics
  - Homeless students decreased
  - Youth arrests for all offenses, ages 10-17, decreased

COMMUNITY STRENGTHS (continued)

- Communicable diseases
  - Childhood immunizations for 2 year olds increased
  - New acquired immunodeficiency syndrome (AIDS) cases reported decreased
- Preventative care
  - Women aged 18 and older who received Pap test in past year increased
  - Adults aged 50 and older who received a blood stool test in past year increased
- Chronic conditions
  - Diabetes hospitalizations for children, ages 5-11, decreased
  - Preventable hospitalizations for adults under age 65 from congestive heart failure decreased
  - Adults who currently have asthma decreased
  - Asthma hospitalizations for children ages 1-4, decreased
  - Asthma hospitalizations for children ages 5-11 decreased
- Injury
  - Motor vehicle crash deaths decreased
- Birth characteristics
  - Infant deaths per 1,000 live births decreased
  - Births to women with self-pay for delivery payment source decreased
  - Births to mothers with less than high school education decreased
  - Repeat births to mothers ages 15-19 decreased
  - Low birthweight births (<2500 g) decreased
- Behavioral risk factors
  - Adults who are current smokers decreased
  - Both middle and high school students smoking cigarettes in the past 30 days decreased
  - Both middle and high school students binge drinking decreased
  - Heroin use in middle school students decreased
  - Rate of controlled prescriptions of opioids decreased
- Injury related to behavioral risk factors
  - Alcohol-related motor vehicle crashes decreased
  - Drug-related motor vehicle crashes decreased
  - Alcohol-related injuries decreased
  - Drug and alcohol-related injuries decreased
- Health care access
  - Adults with any type of health care insurance increased
  - Adults with any type of health care insurance for age groups 18-44 and 45-64 years old increased
  - Adults with any type of health care insurance coverage, by education, less than high school increased
  - Adults with any type of health care insurance coverage, by education, high school diploma/GED, increased
  - Adults with any type of health care insurance coverage, by annual income of less than $25K, increased

COMMUNITY OPPORTUNITIES FOR IMPROVEMENT

Findings for opportunities for improvement includes indicators that have worsened by 10 percent or more of value since the 2016 CHNA or from 2013 to 2015 if the data was not included in the last CHNA:

- Economic conditions
  - Students receiving free and reduced lunch increased
- School and student characteristics
  - Student absenteeism increased
  - High school gang activity increased
- Communicable diseases
  - Pneumonia vaccination percentage of adults aged 65 and older decreased
  - New human immunodeficiency virus (HIV) cases reported increased
- Preventative care
  - Men aged 50 and older who received prostate-specific antigen (PSA) test in past two years decreased
  - Adults who have ever been told they had a stroke increased
  - Colorectal cancer incidence increased
  - Female breast cancer incidence increased

COMMUNITY OPPORTUNITIES FOR IMPROVEMENT (continued)

- Chronic conditions
  - Asthma hospitalizations for children ages 12-18 increased
- Injury
  - Both unintentional poisonings and drownings increased
- Quality of life/mental health
  - Percentage of children ages 5-11 experiencing sexual violence increased
  - Both suicide rates of children ages 12-18 and ages 22 and older increased
- Behavioral risk factors
  - Adult current smokers who quit smoking at least once in past year decreased
  - Binge drinking among adults increased
  - Fentanyl-related deaths increased
- Injury related to behavioral risk factors
  - Drug-related injuries increased
  - Drug and alcohol-related motor vehicle crashes increased
  - Firearm discharge injuries increased
- Health care access
  - Adults who could not see doctor in the past year due to cost decreased

Community Health Needs Assessment Committees

In order to ensure broad community input throughout the CHNA process, representatives from AdventHealth participated in regional and local CHNACs to help guide and inform the prioritization process. Participation in the regional CHNAC took place through our membership in the Central Florida Community Collaborative. The local CHNAC was comprised of representatives from all AdventHealth hospitals in the Central Florida Division-South Region (CFD-South): AdventHealth Altamonte; AdventHealth Apopka; AdventHealth Celebration; AdventHealth East Orlando; AdventHealth Kissimmee; AdventHealth Orlando; and AdventHealth Winter Park; as well as from AdventHealth Corporate Services. Both CHNACs included representatives from departments of health and local community organizations. Additional information is provided below.

The regional CHNAC (the Collaborative)

The Central Florida Community Collaborative Steering Committee, comprised of representation from all member organizations—AdventHealth CFD-South; Aspire Health Partners; Orlando Health; Departments of Health in Lake, Orange, Osceola and Seminole Counties; Community Health Centers; Orange Blossom Family Health; Osceola Health Services and True Health (see Chapter 4 for a description of the Collaborative), served as the regional CHNAC for Lake, Orange, Osceola and Seminole counties (four-county region). The Steering Committee met 22 times throughout 2018 and 2019, either in person or via bi-weekly conference calls, and included representation from the hospital systems, public health experts and the broad community. This included intentional representation from organizations that serve minorities, low-income and underrepresented populations. The Collaborative participants reviewed the primary and secondary data to identify a list of priorities. (see Chapter 10)

The local CHNAC

Representatives from Central Florida Division-South Region and Corporate Services participated in a meeting, which included individuals from community organizations serving underrepresented, low income and minority populations; all AdventHealth hospitals in the CFD-South Region, as well as public health experts. The 120 participants reviewed the primary and secondary data, as well as the Collaborative's CHNAC priorities, to help define the needs to be addressed by CFD-South.

Prioritization Criteria

Specific criteria were used to aid in the prioritization process to identify and select the top needs that would be addressed. Members of the local CHNAC were asked to rank the criteria on a scale of 1 to 10 for each of the needs that had been identified during the data reviews and discussions. OptionFinder, an electronic polling platform that enables operators to build lists that can be voted on anonymously by audience participants, was used to rate all of the criteria. The criteria used is outlined below:

1. Accountable organization: The extent to which the organization is positioned in the community to lead the planning or deployment of programming to address the need.
2. Magnitude of the problem: The degree to which the need leads to death, disability or impaired quality of life and/or could be an epidemic based on the rate or percentage of the population that is impacted by the issue.
3. Impact on health outcomes: The extent to which the issue impacts health outcomes and/or is the driver of other conditions.
4. Capacity/resources: The extent to which CFD-South has the systems and resources in place or available to implement evidence-based solutions.

These criteria were used to generate an aggregated number for each identified need, in order to develop a ranking to determine potential impact in addressing the needs.

AdventHealth CFD-South Prioritization Process

On April 2, 2019 the Collaborative met to review and discuss the primary and secondary data. Priorities were determined utilizing the above-mentioned criteria and voted on with OptionFinder. The list of the Collaborative priorities can be found in Chapter 10.

On April 3, 2019 AdventHealth CFD-South's local CHNAC met to review and discuss the primary and secondary data, as well as the priorities identified by the Collaborative. The local CHNAC then ranked the identified needs to select a priority. The meeting was attended by 120 representatives from AdventHealth, local departments of health and community organizations.

The following outlines the steps taken by the local CHNAC to identify the health priorities of the community.

Step 1: Data Review

Meeting attendees reviewed the primary and secondary data, as well as any trends that had been identified in the data. The data was looked at on a county specific level to ensure it was relevant for all campuses.

Step 2: Campus Specific Breakouts

AdventHealth representatives from each hospital campus engaged in a campus specific breakout session for further discussion. When a campus had a shared service area or leadership structure, breakout sessions were combined to ensure a unified strategic vision. Community and public health representation attended the breakout sessions that aligned with the community they serve from a geographic perspective. For example, public health representation for the Altamonte Springs campus was from the Department of Health in Seminole County, which is in the Hospital's service area. Here, campus breakouts selected the top identified top health priorities for their campus' primary service areas.

During the breakout sessions, attendees discussed the data and the unique needs of their campus and the communities they serve to create a list of 10-12 potential priorities. Through data review and discussion, each individual completed a grid with the identified needs they viewed as top priorities, which was then returned to CFD-South community health staff. The CFD-South community health staff entered the identified needs from the breakout sessions into the OptionFinder system. These identified needs were used to create a master list; any need that appeared on a grid submitted from more than one breakout session is designated by a "D" on the CFD-South aggregated needs table in Chapter 10.

Step 3: CFD-South Prioritization Exercise

At the conclusion of the breakout sessions, the local CHNAC reconvened to vote on the overarching CFD-South priority. Using the OptionFinder system and criteria previously described, the group ranked the identified needs from the master list that had been created with input from the breakout sessions. Top ranked health priorities were used to identify an overarching priority for CFD-South: "Increasing Access for Vulnerable Populations."

The decision to have one overarching priority was done with the community and AdventHealth team members in mind. The singular priority encompasses the intentionality and focus of the work CFD-South will target in the coming years, while providing something that is clear to articulate. This aids in communicating the intention to the community and strengthens the ability of team members to remember, understand and rally behind the priority.

Step 4: Identifying Campus Specific Needs

Following the April 3, 2019 meeting, CFD-South community health staff reviewed the grids collected from all participants in each breakout session. CFD-South community health staff created aggregate lists of needs for each campus breakout group.

Step 5: Selecting Priority Targeted Areas

After reviewing the aggregate campus specific needs, common trends were identified that were compiled into targeted areas of focus as follows. These targeted areas of focus represent a further refinement of the overarching priority of "Increasing Access for Vulnerable Populations."

- Care coordination
- Mental and behavioral health
- Community development
- Food security

The targeted areas were selected due to the overlap between the needs identified at each campus and the ability to address multiple issues under the focus area.

Step 6: Finalizing the CFD-South Priority and Campus Alignments

The CFD-South priority— "Increasing Access for Vulnerable Populations"—will be addressed through regional initiatives encompassing all of CFD-South campuses. Additionally, campus-specific programming will be designed to address the four targeted areas. Each campus' unique initiatives will be reflective of the needs of their own communities. This will help to align and streamline resources across all seven campuses. For example, under the targeted areas of focus community development, one campus identified a need for youth development or mentorship programs, while another campus saw a need for programs addressing affordable housing.

Leadership from each of the campus breakout sessions met with CFD-South community health staff to approve the priority, Increasing Access for Vulnerable Populations and to ensure the targeted areas were reflective of the needs of their communities and discussions. A complete list of identified needs and their subsequent ranking for both CFD-South and the Hospital are available in Chapter 10.

Community Asset Inventory

As part of the IRS regulatory requirement, AdventHealth Central Florida Division South Region (CFD-South) completed a Community Asset Inventory (CAI). Traditionally, the CAI is used as a resource when selecting a priority to:

- Identify existing resources
- Limit duplication of services

CFD-South saw this as an opportunity to create a resource that went beyond the abovementioned goals. Our CAI provided the necessary information to understand the resources available for potential priorities and was also used to:

- Identify gaps in resources by services provided or location
- Identify potential opportunities for alignment
- Provide a publicly available resource guide that would be accessible to and for underrepresented populations to utilize when needed
- Provide an internal resource that can be used by care management teams to refer patients to appropriate services that are geographically convenient

The information included in this inventory was compiled from publicly available resources. The organizations included offer free and reduced cost services or target underrepresented populations. Organizations were contacted during the process to ensure that they had the bandwidth to provide services for new clients/patients. At the time of this publication, all organizations listed had the bandwidth and resources necessary to serve additional community members. Several organizations included in the inventory have multiple locations; each location may provide different services.

The Community Asset Inventory for CFD-South is available here:
https://www.adventhealth.com/community-benefit/central-florida/community-health

Approvals

On December 19, 2019 the AdventHealth Orlando Board of Directors, the governing body for all of AdventHealth Orlando's seven hospital campuses, approved the Community Health Needs Assessment findings, priority and final report. A link to the 2019 Community Health Needs Assessment was posted on the Hospital's website prior to December 31, 2019.

Next Steps

The local CHNAC will work with AdventHealth Celebration to develop a measurable implementation strategy to address the priority issue. The 2020-2022 Community Health Plan will be completed and posted on the Hospital's website prior to May 15, 2020.

CHAPTER THREE

AdventHealth Celebration and the Surrounding Community

Lake Tohopekaliga
Kissimmee, FL

Osceola County

TRANSITION TO ADVENTHEALTH

In January of 2019, every wholly-owned entity across our organization adopted the AdventHealth system brand. Our identity has been unified to represent the full continuum of care our system offers. Throughout this report, we will refer to our facility as AdventHealth Celebration. Any reference to our 2016 Community Health Needs Assessment in this document will utilize our new name for consistency.

AdventHealth Celebration is part of the larger AdventHealth system, with more than 80,000 skilled and compassionate caregivers nationwide. AdventHealth is a connected system of care for every stage of life and health with a sacred mission of Extending the Healing Ministry of Christ.

ABOUT ADVENTHEALTH CELEBRATION

AdventHealth Celebration in Celebration, Florida, a 237-bed acute-care facility in Osceola County, became a part of the AdventHealth system, as one of AdventHealth Orlando's the seven satellite facilities in 1997.

AdventHealth Celebration Snapshot

National Research Corporation Consumer Choice Award

Annual number of admissions	15,542
Annual number of outpatient visits	100,588
Annual number of emergency cases	84,750
Annual number of surgeries	10,175
Number of licensed beds	237
Number of critical care beds	40
Number of staff physicians*	2,454
Number of employees	1,658

*Total AdventHealth staff physicians in Florida

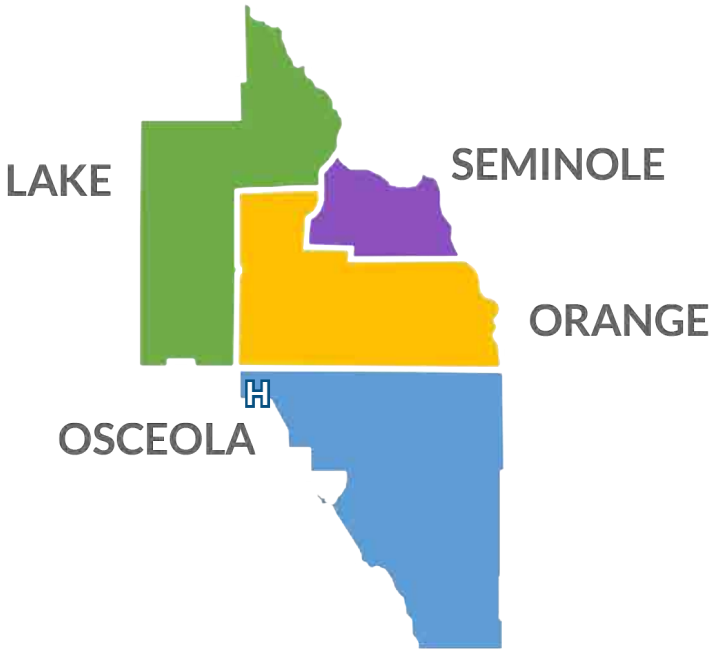
Hospital Services: 24-Hour Emergency Department; 24-Hour Critical Care Coverage; Level II Neonatal Intensive Care Unit; Global Robotics Institute; Center for Advanced Diagnostics with Seaside Imaging; Women's Center; Women's Imaging; Head & Neck Surgery Program; Comprehensive Breast Health Center; Primary 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; Behavior 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; Nutritional; Outpatient Surgery; Retail Pharmacy; Inpatient & Outpatient Rehabilitation; Spiritual; Education Center; Centralized and Integrated Scheduling; Patient Tracking; Wireless Networks; Document Imaging and Telemedicine.

Defining the Community

In compliance with the IRS guidelines at the time of data collection for this assessment, AdventHealth Celebration defined its community as Osceola County, the Hospital's primary service area. This is the geography from which 75-80 percent of its patients, on an inpatient or outpatient basis, reside.

The Collaborative's overall service area includes four counties in Central Florida: Lake, Orange, Osceola and Seminole. This document will refer to this combined service area as the four-county region. Figure 3.1 outlines the primary service area for this CHNA for the Hospital and the Central Florida Collaborative overall.

FIGURE 3.1: ADVENTHEALTH CELEBRATION'S PRIMARY SERVICE AREA



Source: Central Florida Community Collaborative

Community Description and Demographics

In order to understand the community and the challenges faced, AdventHealth Celebration looked at both demographic information for the primary service area population, as well as available data on social determinants of health. According to the Centers for Disease Control and Prevention (CDC), social determinants of health include conditions in the places where people live, learn, work and play, which affect a wide range of health risks and outcomes.

Residents of the AdventHealth Celebration primary service area are described by the demographic data illustrated in Figure 3.2. It is important to note that race/ethnicity equals more than 100 percent because those that identify as Hispanic or Latino ethnicity may also identify with a race group, such as White or Black/African American. Occupations (white collar, blue collar, and service and farming) are assigned by the US Census Bureau based on the Standard Occupational Classification (SOC) system used in census reporting. White collar occupations are professional and technical in nature such as engineers, scientists, health diagnosing occupations, librarians, planners and lawyers. Blue collar occupations include precision production and repair occupations such as mechanics and repairers, construction trades, metalworking, woodworking and extractive, as well as testers and plant and system operators. Service and farming occupations cover protective services occupations including firefighting, police and corrections as well as food service occupations such as servers, cooks and bartenders. This occupation category also includes health care services occupations such as dental assistants and nurse aids, cleaning and building service occupations, as well as personal service occupations such as hairdressers, daycare workers and transportation attendants.

FIGURE 3.2: OSCEOLA COUNTY DEMOGRAPHICS

GENDER

Male	Female
49.1%	50.9%

ETHNICITY

White, Non-Hispanic	67.8%
Black/African American	12.1%
Asian	2.7%
Hispanic or Latino	55.1%
Other	16.8%

MARITAL STATUS

Total, Never Married	34.4%
Married	41.6%
Separated	7.4%
Widowed	4.8%
Divorced	11.8%

AGE

0-20	27.2%
21-34	18.8%
35-64	27.6%
65+	15.4%

HOUSEHOLD INCOME

Under $25,000	19.3%
$25,000 to Under $50,000	26.4%
$50,000 to Under $100,000	34.0%
$100,000 or More	20.3%
Average Household Income	$70,043

EDUCATION

High School or Less	45.5%
Some College/Associate Degree	34.5%
Bachelors Degree	14.3%
Advanced Degree	5.7%

EMPLOYMENT

White Collar	53.0%
Blue Collar	21.6%
Service and Farming	25.4%

POPULATION

2019 Osceola County Population	368,559
2024 Osceola County Population	404,326
Percent Change: 2019 to 2024	9.7%

*Race/Ethnicity percentages add up to more than 100 percent because Hispanic or Latino individuals can also be White, Black or some other race.

Source: Strategy Solutions, Inc.

As seen in Figure 3.2, over the next 5-year period, Osceola County is expected to grow by almost 10 percent, from an estimated 368,559 in 2019 to an estimated 404,326 in 2024. The county has slightly more females (50.9 percent) than males (49.1 percent). In Osceola County, 41.6 percent of the population is married. The population is also predominantly White (67.8 percent) and over half (55.1 percent) identify as Hispanic.

The percentage of residents living in the county with an education beyond high school is 54.5 percent. The average household income is $70,043. Nearly one-fifth (19.3 percent) of families had incomes under $25,000; an additional 26.4 percent of households had incomes between $25,000 and $50,000.

Health is influenced by conditions where we live and the ability and means to access healthy food, good schools, affordable housing and jobs. Unfortunately, significant gaps in life expectancy persist across many cities, towns, zip codes and neighborhoods in the United States.

For the AdventHealth Celebration primary service area, Table 3.1 lists the poverty percentage and unemployment rates by zip code. In Osceola County, there are three zip codes (34741, 34743, 34758) with poverty above 20 percent. The Kissimmee zip code (34741) has the highest unemployment rate of 23.79 percent.

TABLE 3.1: OSCEOLA COUNTY POVERTY AND UNEMPLOYMENT DEMOGRAPHICS

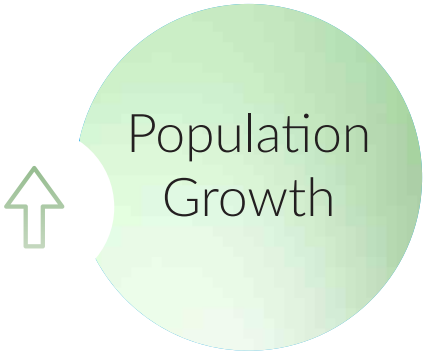
City	Zip Code	Poverty Range	Unemployment Rate
Kissimmee	34741	>20%	23.79%
Kissimmee	34743	>20%	23.33%
Kissimmee	34758	>20%	21.54%
St. Cloud	34769	15.01% - 20.00%	18.71%
Kissimmee	34744	15.01%-20.00%	16.76%
St. Cloud	34772	10.01%-15.00%	11.04%
Kissimmee	34746	10.01%-15.00%	14.19%
Kissimmee	34747	10.01%-15.00%	10.20%

Sources: Poverty Rate as of 11/15/18: 2012-2016
American Community Survey Unemployment Rate as of 11/15/18: U.S. Census Bureau, Census 2010

Demographics at a Glance

Figure 3.3 identifies individual demographic indicators and how they are changing. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 3.3: DEMOGRAPHIC INDICATORS



Source: US Census Bureau

Demographics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icon illustrates an observed trend from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

POPULATION GROWTH (2000-2018)

According to the U.S. Census Bureau, the population increased in Osceola County from 2010 (269,841) to 2018 (367,990). (See Chart 3.1)

POPULATION BY AGE (2019 ESTIMATED)

When looking at population by age, residents between the ages of 0-14 are the largest age group in the state (17.5 percent) and in Osceola County (19.7 percent). The next largest age groups in Osceola County are ages 25-34 and ages 35-44 both at 14 percent. (See Chart 3.2)

OSCEOLA COUNTY POPULATION GROWTH BY AGE (2010-2040 ESTIMATED)

In the year 2040, when looking at population growth by age, residents ages 0-19 are expected to make up the largest segment of the population. The year 2020 is expected to be the first year that there will be more residents ages 20-39 than ages 0-19. Across the county, each age group is expected to continue to increase based on the projections from the 2010 to 2040 calculations. (See Chart 3.3)

POPULATION BY GENDER (2019 ESTIMATED)

In Osceola County, the gender distribution is nearly equal, with slightly more women (50.9 percent) than men (49.1 percent). The county's distribution closely mirrors the state's distribution (51.2 percent female, 48.8 percent male). (See Chart 3.4)

POPULATION BY RACE (2017)

When looking at population by race in 2017, Osceola County (79.5 percent) and the state (77.4 percent) were predominantly White. The second largest population by race was Black in Osceola County (13.7 percent) and the state (16.9 percent). (See Chart 3.5)

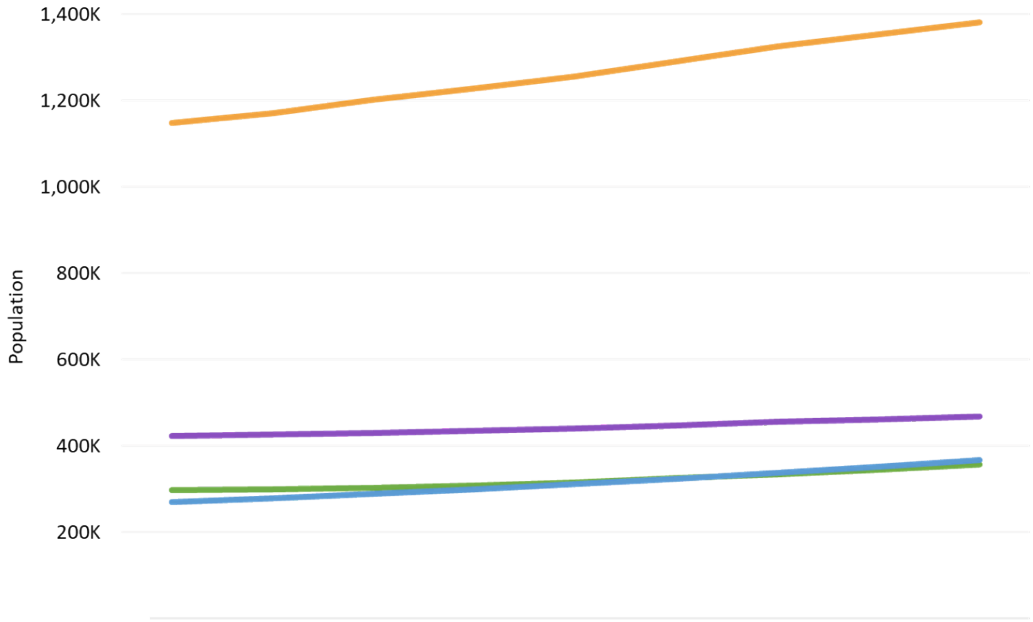
POPULATION BY ETHNICITY (2017)

In 2017, more than one quarter (25.6 percent) of state residents were Hispanic or Latino. In Osceola County the Hispanic or Latino population percentage was more than double than that of the county (53.7 percent). (See Chart 3.6)

LANGUAGE OTHER THAN ENGLISH SPOKEN AT HOME (2017)

Osceola County (49.6 percent) had a higher percentage of residents speaking a language other than English at home compared to the state (28.7 percent). (See Chart 3.7)

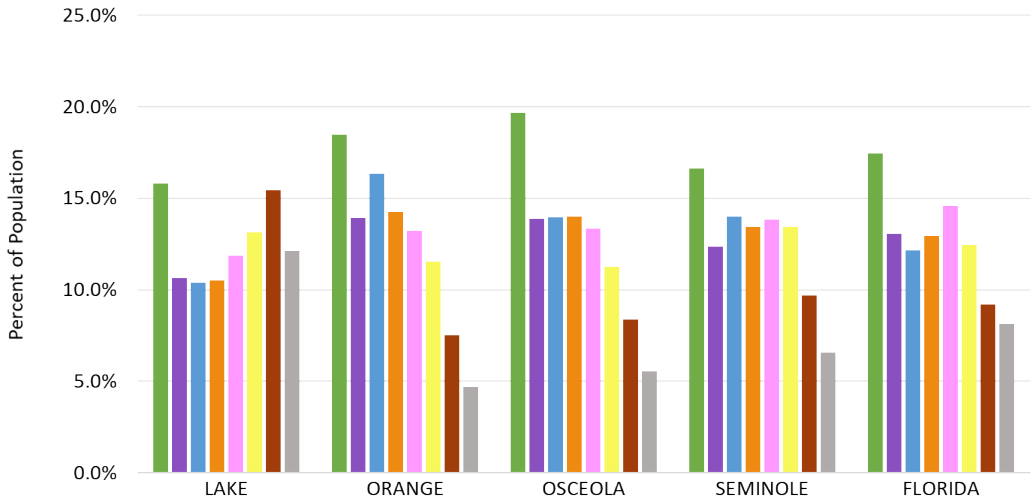
CHART 3.1: POPULATION GROWTH (2000–2018)



	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lake	297,708	300,488	303,738	308,002	315,388	325,091	334,748	345,087	356,495
Orange	1,148,593	1,170,526	1,202,594	1,227,642	1,256,908	1,290,639	1,324,843	1,352,933	1,380,645
Osceola	269,841	278,637	288,908	299,304	311,137	323,578	337,730	352,661	367,990
Seminole	423,057	426,307	430,539	435,531	441,453	448,246	455,665	462,236	467,832

Source: U.S. Census Bureau, American Fact Finder

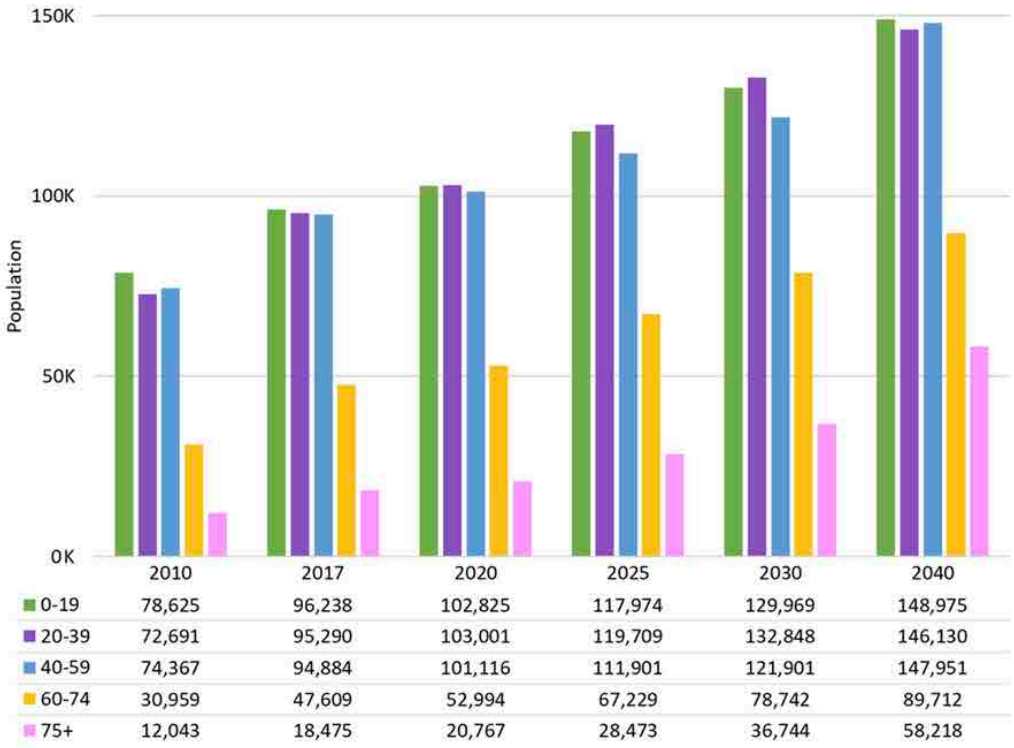
CHART 3.2: POPULATION BY AGE (2019 ESTIMATED)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Age 0-14	15.8%	18.5%	19.7%	16.6%	17.5%
Age 15-24	10.7%	13.9%	13.9%	12.4%	13.1%
Age 25 - 34	10.4%	16.4%	14.0%	14.0%	12.2%
Age 35 - 44	10.5%	14.2%	14.0%	13.5%	12.9%
Age 45 - 54	11.9%	13.2%	13.3%	13.9%	14.6%
Age 55 - 64	13.1%	11.6%	11.3%	13.5%	12.4%
Age 65 - 74	15.5%	7.5%	8.4%	9.7%	9.2%
75+ Years	12.1%	4.7%	5.5%	6.6%	8.2%

Source: Claritas- Pop-Facts Premier 2019, Environics Analytics

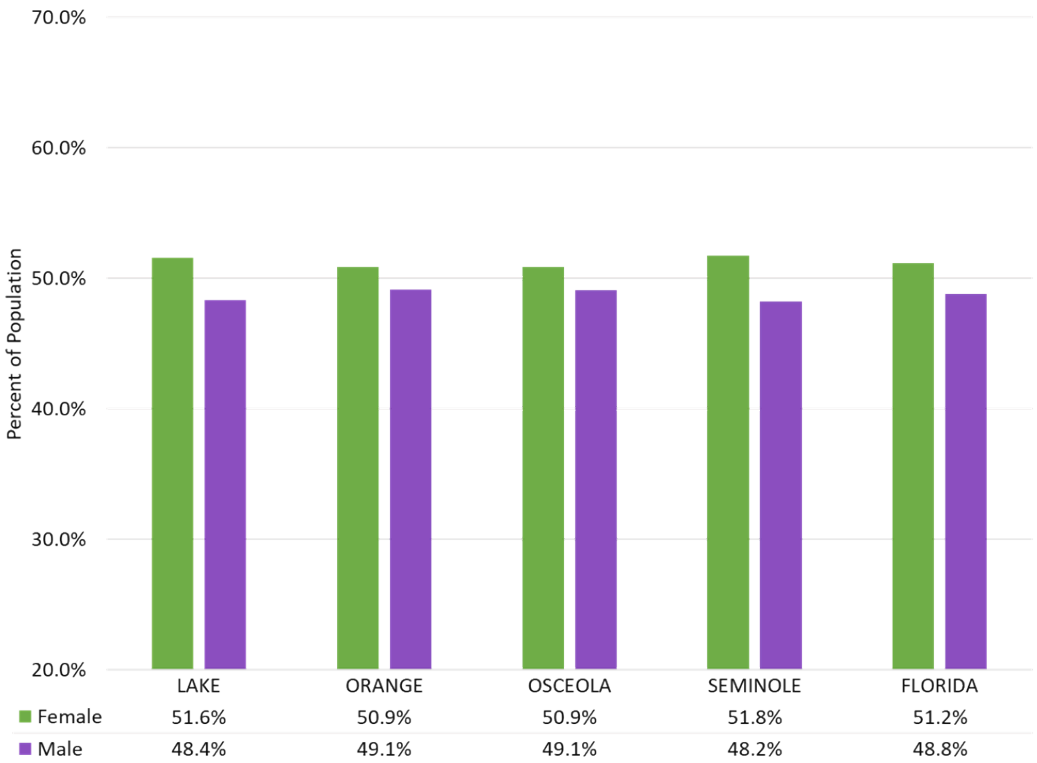
CHART 3.3: OSCEOLA COUNTY POPULATION GROWTH BY AGE (2010-2040 ESTIMATED)



	2010	2017	2020	2025	2030	2040
0-19	78,625	96,238	102,825	117,974	129,969	148,975
20-39	72,691	95,290	103,001	119,709	132,848	146,130
40-59	74,367	94,884	101,116	111,901	121,901	147,951
60-74	30,959	47,609	52,994	67,229	78,742	89,712
75+	12,043	18,475	20,767	28,473	36,744	58,218

Source: Florida Bureau of Economic and Business Research

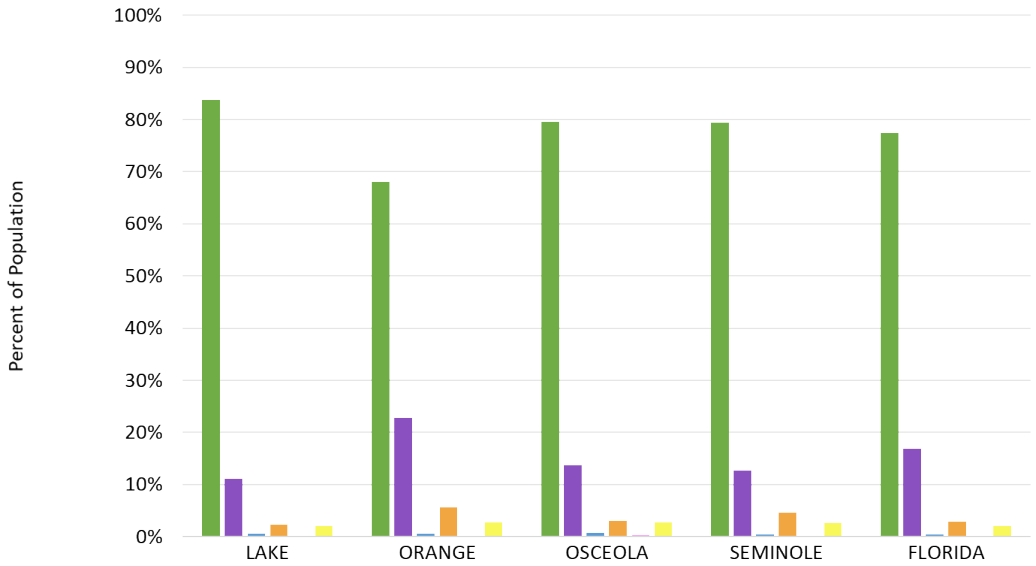
CHART 3.4: POPULATION BY GENDER (2019 ESTIMATED)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Female	51.6%	50.9%	50.9%	51.8%	51.2%
Male	48.4%	49.1%	49.1%	48.2%	48.8%

Source: Claritas- Pop-Facts Premier 2019, Environics Analytics

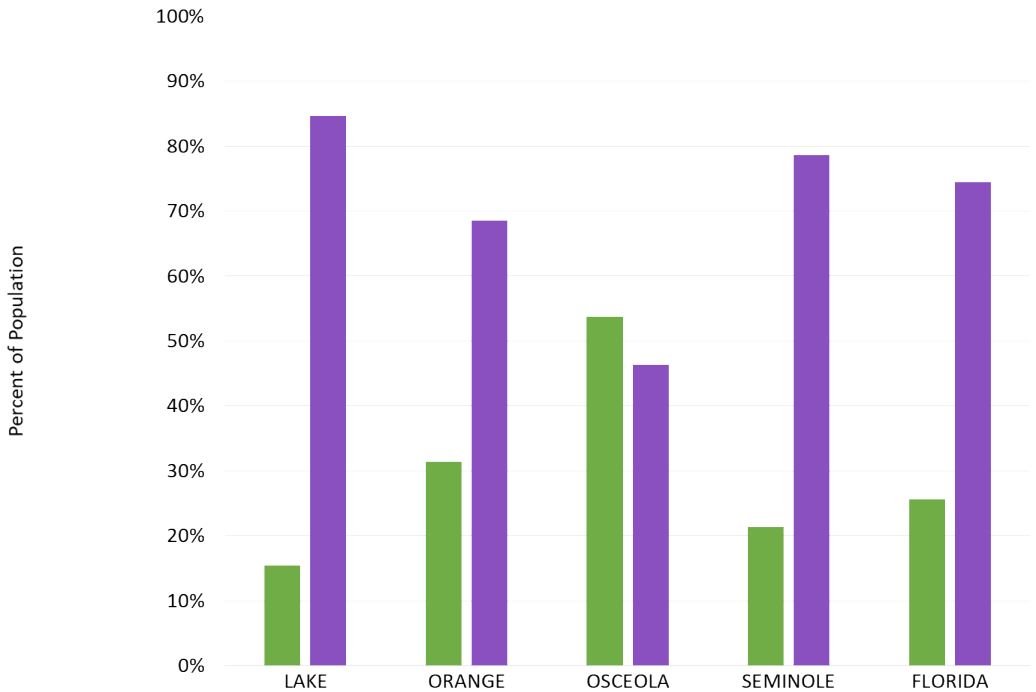
CHART 3.5: POPULATION BY RACE (2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
White	83.7%	68.1%	79.5%	79.4%	77.4%
Black	11.1%	22.8%	13.7%	12.7%	16.9%
American Indian	0.6%	0.6%	0.8%	0.4%	0.5%
Asian	2.3%	5.7%	3.0%	4.7%	2.9%
Native Hawaiian	0.2%	0.2%	0.3%	0.1%	0.1%
2+ Races	2.0%	2.7%	2.7%	2.6%	2.1%

Source: Census Quick Facts

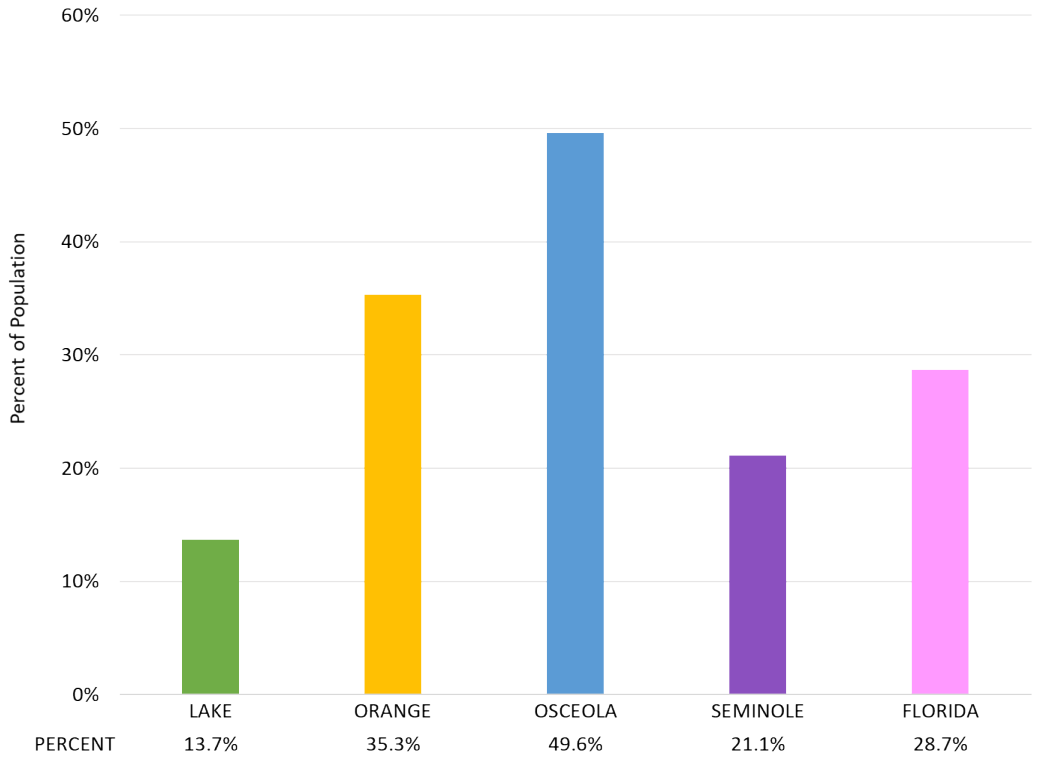
CHART 3.6: POPULATION BY ETHNICITY (2017)



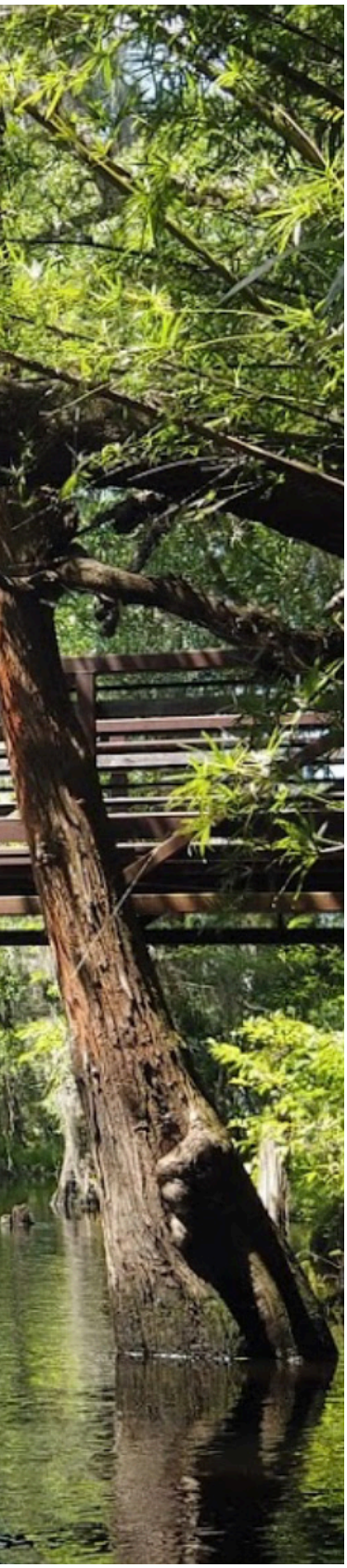
	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
HISPANIC OR LATINO	15.4%	31.4%	53.7%	21.4%	25.6%
NON-HISPANIC	84.6%	68.6%	46.3%	78.6%	74.4%

Source: Census Quick Facts

CHART 3.7: LANGUAGE OTHER THAN ENGLISH SPOKEN AT HOME (2017)



Source: Census Quick Facts



CHAPTER FOUR

Methodology

Shingle Creek Regional Park
Kissimmee, FL

Osceola County

The Origins of the CHNA

The Affordable Care Act, passed in 2010, established a regulatory requirement that all not-for-profit hospitals conduct a Community Health Needs Assessment (CHNA) at least every three years. This work provides a detailed look into the health needs of the communities served by these hospitals.

About the Central Florida Community Collaborative

In addition to not-for-profit hospitals, county health departments in Florida are also required to conduct a CHNA or a Community Health Assessment (CHA) to determine public health priorities. Due to the overlap in requirements for not-for-profit hospitals and the Departments of Health, as well as the positive synergies for our community, in 2012 the Central Florida Community Collaborative (the Collaborative) was created. The partners included AdventHealth (formerly Florida Hospital), Aspire Heath Partners, Orlando Health and the Florida Department of Health in Orange County. This collaborative worked together to complete a single, comprehensive CHNA.

This collaboration continued for the 2016 CHNA, and the Collaborative was expanded to include the Florida Departments of Health that serve the population of the individual counties of Lake, Osceola and Seminole. For the 2019 CHNA, the Collaborative expanded once again to include four local Federally Qualified Health Centers (FQHC): Community Health Centers, Inc., Orange Blossom Family Health, Osceola Community Health Services and True Health to better understand the needs of the community. The leadership from the partner organizations form the Steering Committee for this study.

In 2017, 12.9 percent of the state's population lacked health insurance, putting Florida well above the national average of 8.8 percent. As public health servants and not-for-profit community healthcare providers, the Collaborative sees the struggles of the uninsured and underinsured populations in our communities and are committed to continuing to serve these populations, propelled and guided by this CHNA.

The members of the Collaborative are interested in community comments and feedback on this report, as well as the individual member hospital and health department reports that were developed using the data collected through the CHNA process. The Collaborative report, as well as each of the individual hospital and health department reports, can be found on each member's website. Each member organization's website offers the opportunity to provide written comments on their individual CHNA report as well as on the collaborative regional report.

The Central Florida Community Collaborative Member Organizations

Hospital community benefit activities promote health and well-being by collaboratively addressing community health needs. In Central Florida, there is a well-established tradition of healthcare organizations, providers, community partners and individuals committed to working together to meet our local health needs. The four-county region is home to several respected hospitals that are ranked in the nation's top 100, a Level One Trauma Center, the busiest heart transplant program in the Southeast, nine designated teaching hospitals and the University of Central Florida College of Medicine.

The Collaborative's membership includes:

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 and AdventHealth Winter Park. The AdventHealth system is comprised of more than 80,000 skilled and compassionate caregivers nationwide, in physician practices, hospitals, outpatient clinics, skilled nursing facilities, home health agencies and hospice centers providing individualized, wholistic care.

Aspire Health Partners

Committed to providing individuals and families of Central Florida with compassionate, comprehensive and cost-effective behavioral health care services that lead to successful living and healthy, responsible lifestyles.

Orlando Health

Based in Orlando, FL, Orlando Health is a $3.8 billion not-for-profit healthcare organization and a community-based network of hospitals, physician practices and outpatient care centers across Central Florida. The organization is home to the area's only Level One Trauma Centers for adults and pediatrics, and is a statutory teaching hospital system that offers both specialty and community hospitals.

Florida Department of Health in Lake, Orange, Osceola and Seminole Counties

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.

Community Health Centers, Inc.

A FQHC, Community Health Centers, is a private, not-for-profit organization that provides healthcare services to insured, uninsured, underinsured and underserved children and adults within Central Florida.

Orange Blossom Family Health

A FQHC, Orange Blossom Family Health, provides quality health care services that improve the lives of the homeless and medically indigent people of our community.

Osceola Community Health Services

A FQHC, Osceola Community Health Services, offers affordable health services for the entire family including family medicine, pediatrics, maternity care, women's health, dental, optometry, pharmacy and men's health.

True Health

A FQHC, True Health is a private, not-for-profit 501 (c)(3) that has been serving low-income, uninsured, underinsured and underserved population in Central Florida since 1977, operating eight service delivery locations within Orange and Osceola counties.

A top priority of the Collaborative was to ensure that the 2019 CHNA be as conclusive and inclusive as possible. The group spent several months determining the most important indicators to assess through the input of community and key informant survey instruments, the focus groups and stakeholder interviews and identifying secondary data to include from county, state and federal agencies. A concerted effort was made to reach out to all members of the Central Florida region and obtain perspectives across age, race and ethnicity, gender, profession, household income, education level and geographic location. In this CHNA process, the Collaborative built upon existing partnerships with health care providers, county and state agencies, nonprofits, media, faith-based groups and business and civic organizations.

The Collaborative reviewed all the data and prioritized the health priorities according to intensity of the need, current initiatives around the issue and the potential for future collaboration. The Collaborative review and process was the same as the method used for local CHNAC, which is outlined in Chapters 2 and 10. The only difference in the data reviewed is the data presentation for the Collaborative included all the data for the four counties, while the local CHNAC data presentation only included data for Orange, Osceola and Seminole Counties.

The Local Community Health Needs Assessment Committee (CHNAC)

The Community Health Needs Assessment Committee for AdventHealth Celebration's breakout session includes representation from community organizations and AdventHealth CFD-South.

Table 4.1 includes community representatives from the AdventHealth Celebration service area that attended the local CHNAC, a description of their organizations' services and notes what populations they serve. These representatives provided leadership and insight throughout the CHNAC process.

TABLE 4.1: CHNAC COMMUNITY REPRESENTATIVES

Name	Title	Organization	Description of Services	Low Income	Minority	Other Underrepresented Populations
Gloria Niec	Executive Director	Celebration Foundation	Community Education, Music, Food Donations, Women Empowerment Programs	X	X	X
Belinda Kirkegard	Economic Development Director	City of Kissimmee	Economic Development, Fire and Police Department, Parks & Recreation, Human & Social Services	X	X	X
Mary Downey	Chief Executive Officer	Hope Community Center	Education, Immigration Services, Youth and Family Services, Community Programs	X	X	X
Sue Ring	Associate Director	Community Vision	Leadership Development Program, Career Training, Resource Connection, Clinical Care, Community Programming	X	X	X
Donna Sines	Executive Director	Community Vision	Leadership Development Program, Career Training, Resource Connection, Clinical Care, Community Programming	X	X	X

TABLE 4.1: CHNAC COMMUNITY REPRESENTATIVES (Continued)

Name	Title	Organization	Description of Services	Low Income	Minority	Other Underrepresented Populations
Warren Hougland	Community Services Director	Osceola Council on Aging	Primary Care, Employment Support Services, Emergency Utility Assistance, Rent/Mortgage Assistance, Nutrition/Food Assistance	X	X	X
Belinda Johnson-Cornett	Chief Executive Officer	Osceola Community Health Services	Primary Medical Care, Dental, Pediatric Care, Family Planning, Women's Health, Pharmacy, Prenatal Care, Men's Health, Behavioral Health	X	X	X
Michael Harris	Clinical Director of Substance Use Services	Park Place Behavioral Health	Mental Health Counseling, Substance Use	X	X	X
Kelly Trace	Chief Strategist	REACH Marketing	Social Media Marketing, Branding, Website Redesign, Campaign-Specific Projects, Blogging			X
Darlene Vega	Healthy Pantry Network Coordinator	Second Harvest	Food Distribution, Mobile Food Delivery, Kids' Programs, Disaster Relief, Culinary Training, Nutrition Education, Advocacy	X	X	X
Valarie Moore	Operations and Management Consultant Manager	Osceola Department of Health	Clinical and Nutritional Services, Wellness and Prevention, Community Health Planning, Environmental Health, Emergency Response, Infectious Disease Services	X	X	X

Table 4.2 includes AdventHealth CFD-South employees who actively participated and provided leadership and insight during the AdventHealth Celebration breakout session.

TABLE 4.2: LOCAL CHNAC ADVENTHEALTH CELEBRATION REPRESENTATIVES

Name	Title
Doug Harcombe	Chief Executive Officer
Sheila Rankin	Chief Executive Officer
Dennis DeLeon	Chief Medical Officer
James Ball	Chief Medical Officer
Isaac Sendros	Chief Operating Officer
Linda Cason	Chief Nursing Officer
Clifton Scott	Senior Director Ancillary
Jonathan Armstrong	Director of Finance
Jordan Williams	Director of Business Development
Joan Cornejo	Chaplain I
Juleun Johnson	Director of Mission Ministry
Vicky Santamaria	Community Relations and Corporate Partnerships Manager
Robert Geissler	Director of Emergency Services
Stephanie Lind	Executive Director of Population Health
Juliana Acosta	Program Director
Jasmine Jones	Operations Manager
Stephanie Arguello	Community Benefit Manager

Public Health Representation

Public Health played an extensive role in the regional CHNAC, their contributions to discussions ensured that the Public Health perspective was included in all decision making and priority selection processes. The public health representatives involved in the regional CHNAC (the Collaborative) are outlined in Table 4.3.

TABLE 4.3: PUBLIC HEALTH REPRESENTATION

Name	Title	Department
Page Barningham, MPA, CCHW, R.S.	Operations & Management Consultant II	Lake County Health Department
Jason Martinez	Government Analyst II	QA/QI Management Osceola County Health Department
Udgit Mehta, MBA, FCCM	Administrative Service Director II	Seminole County Health Department
Ellis Perez, MPH	Government Analyst II and Population Health & Quality Improvement Data Manager	Office of Performance and Quality Improvement - Orange County Health Department
Donna Walsh, MPA, BSN, RN	Health Officer	Seminole County Health Department

Primary and Secondary Data Sources

Primary and secondary data was collected for the CHNA to be representative of the entire four-county service area of the Collaborative. When available, county specific data was used. Each hospital and county provided and used data that was specific to their primary service area for their individual CHNAs.

Primary Data

The primary data collection for this study included five different qualitative methods: a community survey, stakeholder interviews, focus groups, a key informant survey and an intercept survey. These are outlined in Figure 4.1.

FIGURE 4.1: 2019 CHNA PRIMARY DATA COLLECTION METHODS

Source: Strategy Solutions, Inc.

Community Survey

The purpose of conducting a community survey is to:

- Learn about community needs through data collection from a subset of the population
- Receive detailed information from a larger and more representative group of people
- Ensure that actions taken are in line with needs that are expressed by the community
- Foster community support for actions that will be undertaken

The audience for the community survey included:

- General community, concentrating on the underrepresented populations
- A subset of the population that was representative of the population demographics or geographic location

The platform of the community survey included:

- Online surveys available via SurveyMonkey and accessed through a link or QR Code
- Paper surveys were placed strategically throughout the four counties so those not able to access the online survey could complete it; staff from AdventHealth collected the paper surveys and inputted into SurveyMonkey
- Paper surveys were made available in the following languages:
  - English
  - Latin American Spanish
  - Brazilian Portuguese
  - Haitian Creole

The community survey was launched on January 7, 2019 and available for data collection until March 4, 2019. A total of 2,708 surveys were completed for the four-county region overall; 289 were completed by Osceola County residents.

An incentive was included to encourage community residents to complete the survey. All employees of the Collaborative member organizations were ineligible to participate in the incentive drawing and all incentive logistics were handled by SSI.

Table 4.4 below shows the breakdown of the community survey respondent totals by county and language. Note that the AdventHealth Celebration service area is Osceola County.

TABLE 4.4: CENTRAL FLORIDA COMMUNITY SURVEY RESPONDENTS BY COUNTY AND LANGUAGE

	English	Latin American Spanish	Brazilian Portuguese	Haitian Creole	Total
Lake County	653	3	0	0	656
Orange County	1120	89	7	24	1240
Osceola County	**250**	**36**	**3**	**0**	**289**
Seminole County	516	7	0	0	523
	2539	135	10	24	2708

Source: Strategy Solutions, Inc.

Stakeholder Interviews

The purpose of conducting stakeholder interviews is to:

- Explore complex issues and allow for follow-up questions to probe for understanding
- Access and understand the needs of underrepresented populations
- Give respondents the opportunity to clarify questions and concepts
- Provide a uniform approach to gathering information along with immediate results

The audience for the stakeholder interview collection tool was:

- Community members who represent the underserved population through programs and services offered

Interviews were conducted between January 1, 2019 and May 7, 2019 by Strategy Solutions, Inc. staff. Table 4.5 lists the interviews conducted relevant to Osceola County. A total of 20 stakeholders participated from Osceola County.

TABLE 4.5: OSCEOLA COUNTY STAKEHOLDERS

Interview Date	Stakeholder Name	Organization
01/07/19	Debbie Quick	Central Florida YMCA
01/08/19	Katherine Schroeder	Aspire Health Partners
01/08/19	Ken Peach	Health Council of East Central Florida
01/10/19	Elizabeth Whitton	MetroPlan Orlando
01/11/19	Karen Broussard	Second Harvest Food Bank of Central Florida
01/11/19	Shelley Lauten	Central Florida Commission of Homelessness
01/15/19	Bill D'Aiuto	Florida Department of Children and Families
01/17/19	Sue Ring	Community Vision
01/22/19	Jill Krohn	Florida Department of Children and Families
01/24/19	Bret Smith	Florida Department of Health in Osceola County
01/25/19	Belinda Johnson-Cornett	Osceola Community Health Center
01/28/19	Jason Martinez	Florida Department of Health in Osceola County
01/29/19	Chris Falkowski	The Transition House
02/06/19	Candy Crawford	Mental Health Association of Central Florida
02/28/19	Jean Zambrano	Shepherd's Hope
03/19/19	Michael Harris	Park Place Behavioral Health
05/06/19	David Drape	Florida Department of Children and Families
05/06/19	Sue Aboul-Hosn	Florida Department of Children and Families
05/07/19	Lance Morgan	Florida Department of Children and Families
05/07/19	Fawn Moore	Florida Department of Children and Families

Source: Strategy Solutions, Inc.

Focus Groups

The purpose of conducting focus groups is to gather community input on:

- Health status
- Health needs
- Community issues
- Access to services
- Potential solutions

The target audience for the focus groups included:

- Underrepresented populations
- People representing underrepresented populations
- People representing specific areas of interest, such as mental health, food insecurity, individuals experiencing homelessness, etc.

The platform used for conducting focus groups included:

- SSI staff conducted focus groups both in person and virtually:
  - In person used a combination of open discussion, list generation and OptionFinder with anonymous voting

Focus groups were conducted between October 11, 2018 and April 4, 2019. A total of nine focus groups were conducted with the nine below having representation from Osceola County.

TABLE 4.6: FOCUS GROUPS WITH REPRESENTATION FROM OSCEOLA COUNTY

Focus Group Name	Counties	Date Conducted	# Of Participants
Health and Hunger Task Force- Food Security	4 County Representation	10/12/18	15
Osceola Council on Aging- Health Care Access, Food Security, Assistance	Osceola	12/12/18	22
Mental and Behavioral Health	4 County Representation	12/13/18	23
Homelessness	4 County Representation	12/13/18	20
Emergency Personnel	4 County Representation	12/13/18	19
Senior Care	4 County Representation	12/13/18	13
Advent Care Center- Health Care Access, Food Security, Assistance	4 County Representation	12/14/18	16
Aspire Health Partners- Mental and Behavioral Health	Orange, Osceola and Seminole	02/08/19	9
Osceola Community Health Center	Osceola	04/04/19	6
Total Focus Group Participants			143*

*may not represent total number of non-duplicated individuals
Source: Strategy Solutions, Inc.

Intercept Survey

The purpose of conducting an intercept survey is to:

- Gather on-site feedback from an identified population
- Understand from the identified populations what their community health needs, barriers to care and needed services are

The audience for an intercept survey was:

- Individuals representing the underrepresented populations

The platform used to conduct intercept surveys was in-person, one-on-one conversations.

To support this CHNA in Osceola County, a total of nine intercept surveys were conducted with individuals at Orange Blossom Family Health, a Federally Qualified Health Center, during the weeks of October 8, 2018 and December 10, 2018. For the intercept surveys completed by the consultant team, the collection tool was available in English, Latin American Spanish, Brazilian Portuguese and Haitian Creole. AdventHealth supplied interpreters to assist with talking to community members. Table 4.7 outlines the number of intercept surveys collected overall and by county. In Osceola County, two of the intercept surveys were completed in Spanish.

TABLE 4.7: INTERCEPT SURVEY BREAKDOWN BY COUNTY

Total Intercept Surveys	Lake County	Orange County	Osceola County	Seminole County
135	26	86	9	14

Source: Strategy Solutions, Inc.

Key Informant Survey

The purpose of conducting a key informant survey is to:

- Obtain vital information about the community
- Gather information for a CHNA and utilize the findings for effective prevention planning
- Assess if the needs in the community have changed over time
- Collect input from individuals who are knowledgeable about specific needs or issues, including underrepresented populations

The audience for the key informant survey collection tool was:

- Individuals who represented a particular population and/or sectors in the community that were not able to be included in the stakeholder interviews or focus groups.

The key informant survey was conducted as an on-line survey through SurveyMonkey from December 17, 2018 through January 11, 2019.

Table 4.8 lists the totals for the key informant survey participation by county, with 97 surveys identified as relevant to Osceola County. Please note that the total surveys completed does not equal the sum of the breakdown by county number as respondents were able to select multiple counties that their organization or agency serves. The AdventHealth Celebration service area includes Osceola County.

TABLE 4.8: KEY INFORMANT SURVEY BREAKDOWN BY COUNTY*

Lake County	Orange County	Osceola County	Seminole County	Total
75	111	97	83	172

*Total surveys completed adds up does not equal the sum of the breakdown by county number as respondents were able to select multiple counties that their organization or agency serves.
Source: Strategy Solutions, Inc.

Secondary Data

Figure 4.2 illustrates the sources used to capture the qualitative and quantitative secondary data that inform the AdventHealth Celebration's 2019 Community Health Needs Assessment report.

FIGURE 4.2: 2019 CHNA SECONDARY DATA

Source: Strategy Solutions, Inc.

The secondary quantitative data collection process included:

- Demographic and socio-economic data obtained from the United States Census Bureau with data obtained through Claritas-Pop-Facts Premier, 2018, Environics Analytics and the U.S. Census Bureau, American Fact Finder
- Economic data obtained from the United States Census Bureau
- Disease incidence and prevalence data obtained from FLHealthCHARTS, Florida Department of Health
- Centers for Disease Control and Prevention
- Behavioral Risk Factor Surveillance Survey (BRFSS) data collected by the Centers for Disease Control and Prevention
- American Community Survey
- Healthy People 2020 goals from HealthyPeople.gov
- Florida Department of Education
- County Health Rankings & Roadmaps
- United States Department of Agriculture
- ESRI (an international supplier of geographic information system software, web GIS and geodatabase management applications)
- Selected emergency department and inpatient utilization data from the Hospital were also utilized to produce the hot spot maps and analysis

The data presented are the most recent published by the source at the time of the data collection.

Healthy People 2020 is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts to improve the health of all citizens. This framework reflects the idea that setting objectives and providing science-based benchmarks to track and monitor progress can motivate and focus action. Its comprehensive set of objectives and targets is used to measure progress for health issues in specific populations and serves as a model for measurement at the state and local levels.

Data Limitations

There are limitations to the primary and secondary data collected to conduct this assessment. Researchers were limited to the collection of the most recent available data sources of which many are two (2) or more years old. FLHealthCHARTS periodically updates data compiled and reported on through their website as new data is available and/or methods of reporting indicators change. The data in this report from FLHealthCHARTS is the data publicly available on their website at the time it was pulled between January and May 2019. FLHealthCHARTS may have updated or modified data on their website after data was pulled for inclusion in this report. Additionally, all primary data is qualitative and does not necessarily reflect a representative sample of the service area since it was collected through convenience sampling.

General Findings

The information sections of this report, where the primary and secondary data findings are available, are structured to provide insight into the Social Determinants of Health (SDOH) and how they impact the residents of the four-county region or Osceola County. Each section outlined in Chapters 6 and 7 follow the same structure with three distinct sections for each major topic:

1. What the community is saying: includes the primary data collected through the focus groups, community surveys, intercept surveys, key informant surveys and stakeholder interviews from the four-county region.
2. At a glance: includes a graphic summary of the indicators in this section with a color-coded snapshot. Red means that the indicator has worsened and green means that there had been an improvement since the 2016 CHNA in Osceola County.
3. Summary of indicators: includes a narrative description of the secondary data indicators included in the section specific to Osceola County.

The charts within the report are designed to provide longitudinal data, when available, to highlight the trends and changes that have occurred over time in the data. Some of the charts, especially those that highlight disparities among different racial and ethnic groups, contain “line breaks” where the data is not available for that population for one or more years. An asterisk (*) on a chart indicates the rate for one specific year.

A full report of all of the indicators reviewed can be found in the Central Florida Community Benefit Collaborative Community Health Needs Assessment at:
www.adventhealth.com/community-health-needs-assessments.

CHAPTER FIVE

Top Community Health Needs

Brinson Park
Kissimmee, FL

Osceola County

Top Community Health Needs

Below are the top issues and priorities as identified by primary data collection for Osceola County.

Osceola County Community Survey Top 10 issues affecting respondents and their families:

1. Hypertension/high blood pressure
2. Obesity and overweight
3. High cholesterol
4. Diabetes
5. Employment opportunities/lack of jobs
6. Affordable and adequate housing
7. Influenza and pneumonia
8. Asthma/COPD-related issues
9. Access to dental care
10. Diabetes

Osceola County Top 10 priorities impacting community members from Stakeholder Interviews:

1. Access to health care, including for the under/uninsured
2. Mental/behavioral health
3. Opioid/substance use
4. Chronic disease
5. Lack of affordable housing
6. Transportation
7. Money and funding
8. Food disparity
9. Fatality injury prevention
10. Services for seniors

Osceola County Top 10 issues impacting community members from Key Informant Surveys:

1. Living with a disability
2. Housing security (affordable housing)
3. STIs and HIV
4. Mental health/illness
5. Lack of Medicaid expansion
6. Transportation
7. Poverty/low wages
8. Homelessness
9. Human trafficking
10. Food security (accessibility to nutritious food)

Osceola County Focus Groups Top 10 needs/issues impacting the community:

1. Lack of providers/services
2. Food/nutrition
3. Transportation
4. Mental health
5. Substance use
6. Housing
7. Access
8. Senior services
9. Language/culture
10. Education

Top Community Health Needs (Continued)

Primary and secondary data were reviewed and analyzed by SSI. The needs that rose to the top either through incidence rate in secondary or frequency through primary or a correlation of both are included in Table 5.1. All data and indicators were presented at the April 3rd meeting for review.

Table 5.1: TOP COMMUNITY HEALTH NEEDS FOR OSCEOLA COUNTY

Identified Need	Secondary Data	Community Survey	Stakeholder Interviews	Focus Groups	Intercept Surveys	Key Informant Surveys
ACCESS TO CARE						
Services for Underserved Population			X		X	
Cost of Care/Insurance/Medications	X		X		X	
Insurance Coverage	X					
General Wellness (Screenings, Vaccinations, Prevention)	X	X			X	
Lack Awareness of Available Resources and How to Navigate			X			
Health Education and Literacy			X		X	
Inappropriate Use of ED			X			
Transportation			X		X	
BEHAVIORAL RISK FACTORS						
Access to Mental Health Care		X		X		
Mental Health	X					
Risky Sexual Behaviors		X				
Lack of Substance Abuse Providers				X		
Sedentary Adults	X					
Substance Abuse (Drugs, Alcohol, Tobacco, Vaping/E-Cigarettes)		X		X		
Drug Arrests	X					
Drug-Related Deaths	X					
BIRTH CHARACTERISTICS						
Births to Teen Mothers		X				
Mothers Obese at Time of Pregnancy	X					
Medicaid Births	X					
Births to Unwed Mothers	X					
Mothers Not Receiving Prenatal Care First 3 Months/Difficulty Accessing Prenatal Care	X	X				

Source: Strategy Solutions, Inc.

Table 5.1: TOP COMMUNITY HEALTH NEEDS FOR OSCEOLA COUNTY, CONTINUED

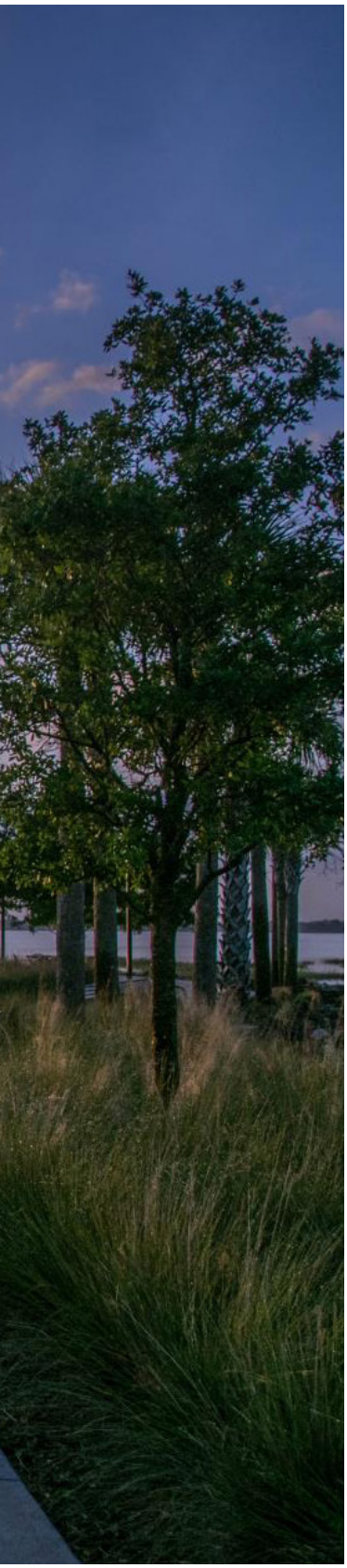
Identified Need	Secondary Data	Community Survey	Stakeholder Interviews	Focus Groups	Intercept Surveys	Key Informant Surveys
BUILT ENVIRONMENT						
Access to Affordable Foods/Food Insecurity		X	X		X	
Connectivity to Public Utilities/Infrastructure		X				
Air/Water Quality		X	X			
Opportunities for Recreation		X				
Safe Sidewalks			X			
Access to Recreation/Exercise					X	
CHRONIC DISEASE						
Asthma and Asthma Hospitalizations	X	X				
Cancer	X	X				
Cardiovascular Disease (Heart Disease)	X	X				
Chronic Disease			X			
Stroke	X	X				
Diabetes	X	X	X			
Hypertension			X			
Obesity	X		X			
Childhood Obesity		X				
COMMUNICABLE DISEASE						
Childhood Immunizations	X	X				
Influenza and Pneumonia		X				
Influenza and Pneumonia Vaccinations	X	X				
HIV/AIDS	X		X			
Hepatitis C			X			
ECONOMIC CONDITIONS						
Employment/Livable Wages		X				
Affordable/Adequate/Stable Housing		X	X	X	X	
Access to Emergency Shelters		X		X		
Homelessness		X				
Poverty	X	X	X		X	
Students Receiving Free and Reduced Lunch	X					

Source: Strategy Solutions, Inc.

Table 5.1: TOP COMMUNITY HEALTH NEEDS FOR OSCEOLA COUNTY, CONTINUED

Identified Need	Secondary Data	Community Survey	Stakeholder Interviews	Focus Groups	Intercept Surveys	Key Informant Surveys
HEALTH CARE PROVIDERS AND FACILITIES						
Availability of Primary Care Physicians (Accessible Hours and Wait Times)			X	X		X
Dental Care			X			X
Specialists			X	X		
Urgent/Mobile Care			X			
INJURY						
Drowning	X					
Motor Vehicle Crash Deaths		X				
Unintentional Poisonings	X					
Violence		X				
Domestic Violence	X	X				
QUALITY OF LIFE/MENTAL HEALTH						
Lack of Services and Providers		X	X	X	X	
Depression	X					
Mental Health (In General)			X	X		
Substance Use			X	X		
Suicide	X					
SCHOOL AND STUDENT DEMOGRAPHICS						
Child Abuse (Includes Physical, Sexual, Emotional)	X	X				
Gun Violence		X				
Delinquency/Youth Arrests	X	X				
Student Absenteeism	X					
Crime/Safety		X			X	

Source: Strategy Solutions, Inc.



CHAPTER SIX

Community Profile of Osceola County

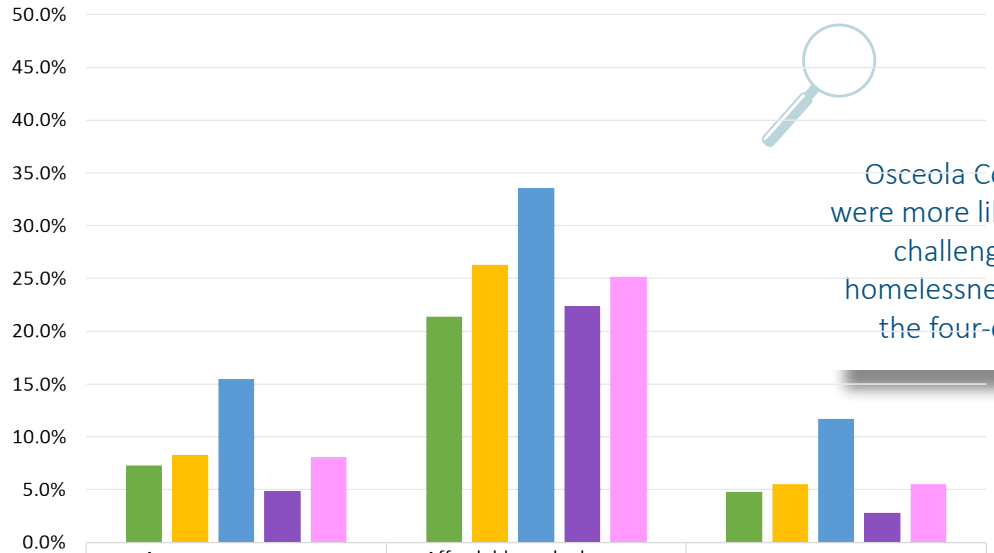
Kissimmee Lakefront Park
Kissimmee, FL

Osceola County

Economic Conditions: What the Community is Saying

Figure 6.1 illustrates the experiences of Osceola County community survey respondents related to housing. Of the Osceola County community survey respondents, 15.5 percent indicated that they or a family member had accessed an emergency shelter in the area in the past year. A little more than one-third of the respondents (33.6 percent) indicated that they or a family member experienced difficulty with affordable and adequate housing in the past year. More than 10 percent (11.7 percent) of community survey respondents from Osceola County indicated that they or a family member experienced homelessness within the past year.

FIGURE 6.1: HOUSING NEEDS, COMMUNITY SURVEY 2019



Osceola County residents were more likely to experience challenges related to homelessness than others in the four-county region.

	Access to emergency shelter in the area	Affordable and adequate housing	Homelessness
LAKE	7.3%	21.4%	4.8%
ORANGE	8.3%	26.3%	5.5%
OSCEOLA	15.5%	33.6%	11.7%
SEMINOLE	4.9%	22.4%	2.8%
OVERALL	8.1%	25.2%	5.5%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 6.2 outlines some of the impacts of economic conditions identified by community survey respondents.

FIGURE 6.2: IMPACTS OF ECONOMIC CONDITIONS, COMMUNITY SURVEY 2019

Food Did Not Last		Utilities Shut Off		Worried About Stable Housing	
Lake	8.3%	Lake	4.9%	Lake	6.3%
Orange	11.2%	Orange	6.3%	Orange	10.4%
Osceola	22.6%	Osceola	9.0%	Osceola	18.1%
Seminole	7.8%	Seminole	6.4%	Seminole	4.5%
Overall	11.1%	Overall	6.3%	Overall	9.1%

Osceola County respondents were more likely to be worried about stable housing than others in the four-county region.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 6.3 outlines the percentages of community survey respondents that are struggling with employment-related needs and issues

FIGURE 6.3: EMPLOYMENT-RELATED NEEDS, COMMUNITY SURVEY 2019

% Affected by Employment-Related Needs	
Lake	11.1%
Orange	8.3%
Osceola	11.2%
Seminole	22.6%
Overall	7.8%

More than 10 percent of Osceola County respondents were affected by employment-related needs.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to economic conditions:

- Lack of money/income
- Homelessness
- Not enough money to purchase food and eat healthier
- Poverty

Barriers to care identified by primary research participants included:

- Jobs that do not have livable wages
- Lack of affordable housing and safe housing
- Transportation

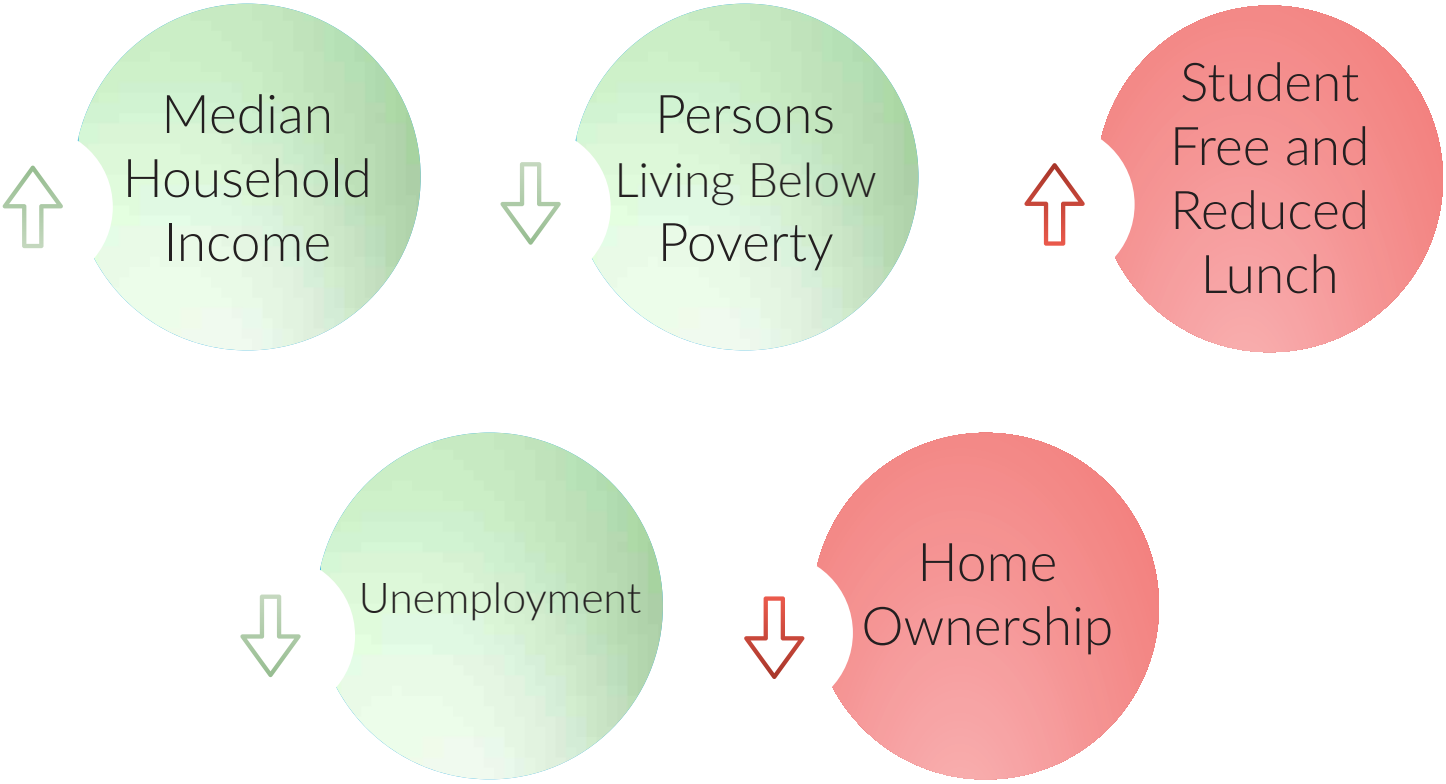
Needed services related to economic conditions that were identified by primary research participants included:

- Increased public transportation (routes and times)
- Affordable quality housing
- Job skills and training
- Help with utility bills
- Support services
- Transitional housing
- Address income inequality

Economic Conditions at a Glance

The key indicators related to economic conditions that have changed since the last CHNA are identified in Figure 6.4. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 6.4: ECONOMIC INDICATORS



Source: Strategy Solutions, Inc.

Economic Conditions: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

MEDIAN HOUSEHOLD INCOME (2000-2017)

Osceola County (from $38,214 in 2000 to $47,343 in 2017) consistently had a lower median household income than the state (from $38,819 in 2000 to $50,883 in 2017). Both values increased from 2000 to 2017. (See Chart 6.1)

PERSONS LIVING BELOW POVERTY LEVEL (2000-2017)

Osceola County's percentage of people living below the poverty line increased from 11.5 percent in 2000 to 14 percent in 2017. In 2017, the county percentage mirrored the state percentage (14 percent). (See Chart 6.2)

STUDENTS RECEIVING FREE & REDUCED LUNCH (2014-2018)

The National School Lunch Program, School Breakfast Program, Special Milk Program, Child and Adult Care Food Program and Summer Food Service Program provide income-eligible students with free and reduced-price meals. According to County Health Rankings and Roadmaps in 2018, Osceola County had 63.3 percent of students receiving free and reduced lunch, while the state had 58.8 percent. (See Chart 6.3)

UNEMPLOYMENT RATE (2008-2018)

The average unemployment rate in Osceola County fluctuated from 2008 to 2018. In 2008, the rate was 6.5 percent, with a peak at 12.5 percent in 2010 followed by a decline to 3.6 percent in 2018. The county's rate has been consistently higher or equal to the state's rate for most of that period. The county and state unemployment rate were the same in 2017 (4.2 percent) and 2018 (3.6 percent). (See Chart 6.4)

HOMEOWNERSHIP RATES (2000-2017)

The Osceola County homeownership rate decreased from 65.7 percent in 2000 to 60.4 percent in 2017. The state rate was 70.1 percent in 2000 and 64.8 percent in 2017. (See Chart 6.5)

COST BURDEN OF HOUSEHOLDS (2016)

According to the Department of Housing and Urban Development (HUD), households who pay more than 30 percent of their income for housing are considered cost burdened. Those who pay more than 50 percent are severely cost burdened. In Osceola County, 24.4 percent were cost burdened and 25.1 percent were severely cost burdened in 2016. In the state, 20.4 percent reported being cost burdened and 21.3 percent severely cost burdened. (See Chart 6.6 and Figure 6.5)

HOMEOWNER COST BURDEN (2016)

Homeowners were less likely to be burdened by the cost of their home than renters. In 2016, 22.4 percent of Osceola County homeowners were cost burdened and 21.1 percent were severely cost burdened. This was higher than the state levels of 18.3 percent cost burdened, and 16.5 percent severely cost burdened. (See Chart 6.7)

GROSS RENT AS A PERCENT OF INCOME- 5-YEAR ESTIMATES (2016)

In 2016, 40.2 percent of residents who rented in Osceola County reported that they were paying less than 30 percent of their income on rent, lower than those across the state (43 percent). Over a third (32.5 percent) of Osceola County residents are paying 50 percent or more of their income on rent, higher than the state (29.2 percent). (See Chart 6.8)

COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS (2016)

Residents who rented in Osceola County were more cost burdened (28 percent) and severely cost burdened (32.5 percent) than those in the state (24.8 percent and 31.3 percent respectively) in 2016. (See Chart 6.9 and Figure 6.6)

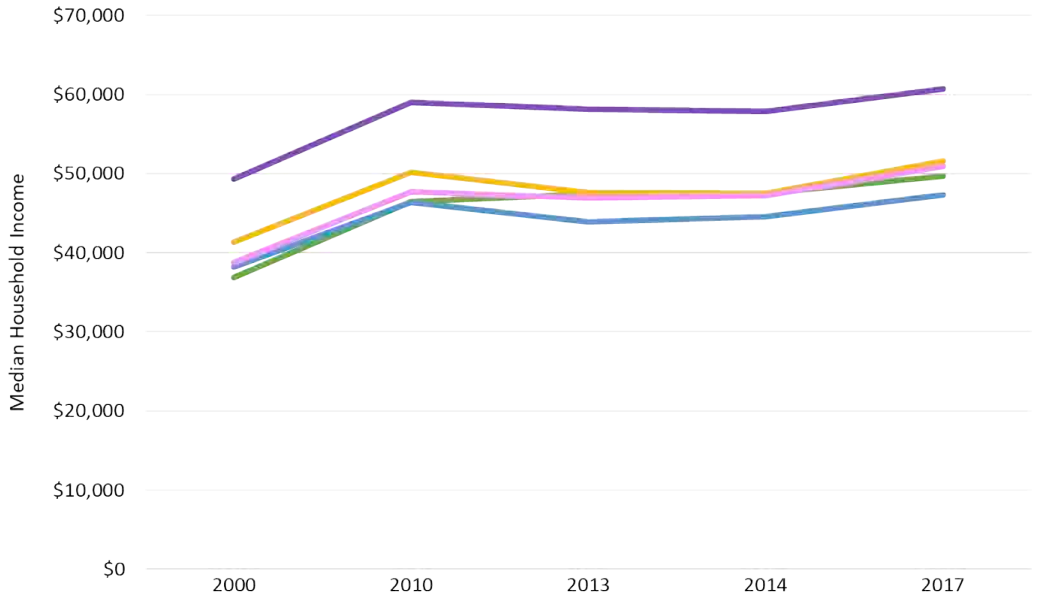
HOMELESS INDIVIDUALS BY COUNTY (2010-2018)

The number of homeless individuals has fluctuated in Osceola County from 2010 to 2018. In 2010, the number was 443, there was a large spike to 833 in 2011 with a gradual decrease to 226 in 2018. (See Table 6.1)

INCOME INEQUALITY (2018)

Income inequality refers to the uneven distribution of income across a population. One measure of income inequality involves generating percentiles for household income. Then, the income (in dollars) at the 20th and 80th percentiles are used to generate a ratio; the higher the ratio, the higher the income inequality. The ratio in Osceola County (4:1) is lower than the state (4:7), indicating a more equal distribution of income. (See Chart 6.10)

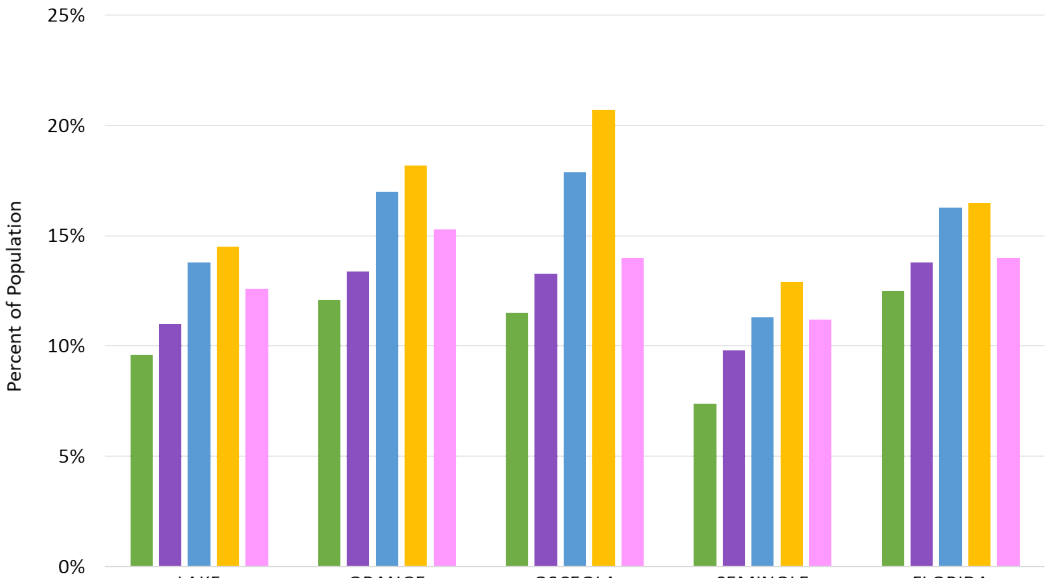
CHART 6.1: MEDIAN HOUSEHOLD INCOME (2000-2017)



	2000	2010	2013	2014	2017
LAKE	$36,903	$46,477	$47,439	$47,465	$49,734
ORANGE	$41,311	$50,138	$47,581	$47,556	$51,586
OSCEOLA	$38,214	$46,328	$43,891	$44,551	$47,343
SEMINOLE	$49,326	$58,971	$58,175	$57,875	$60,739
FLORIDA	$38,819	$47,661	$46,956	$47,212	$50,883

Source: U.S. Census Bureau, American Fact Finder

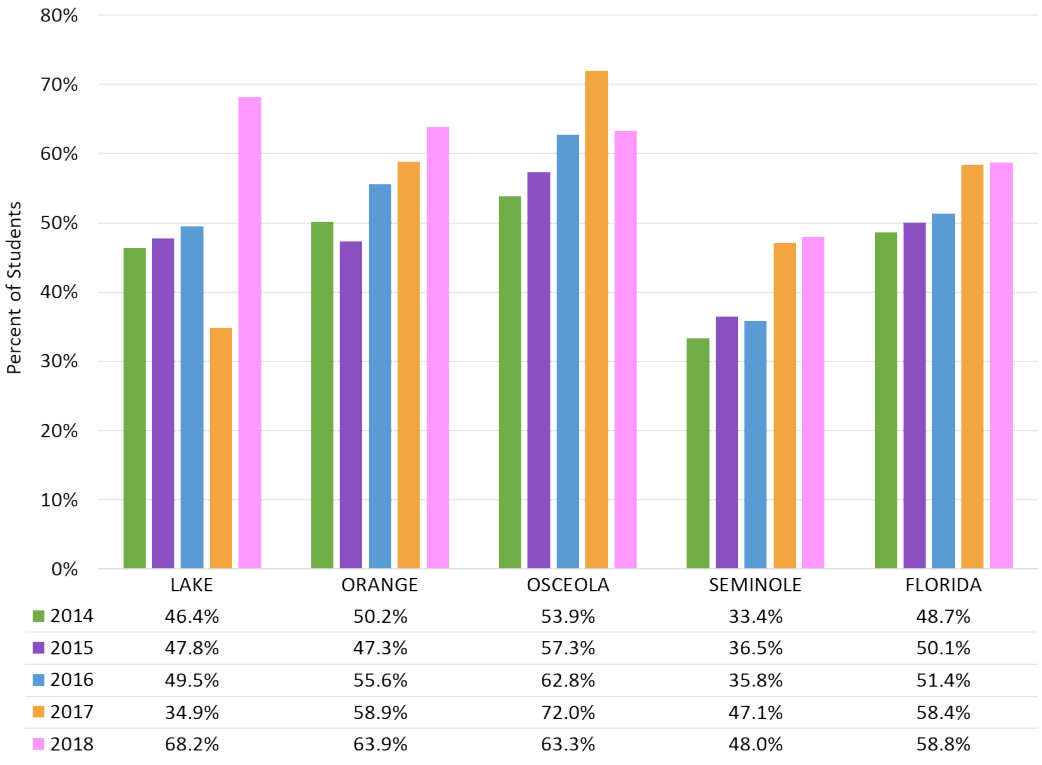
CHART 6.2: PERSONS LIVING BELOW POVERTY LEVEL (2000-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2000	9.6%	12.1%	11.5%	7.4%	12.5%
2010	11.0%	13.4%	13.3%	9.8%	13.8%
2013	13.8%	17.0%	17.9%	11.3%	16.3%
2014	14.5%	18.2%	20.7%	12.9%	16.5%
2017	12.6%	15.3%	14.0%	11.2%	14.0%

Source: U.S. Census Bureau, American Fact Finder

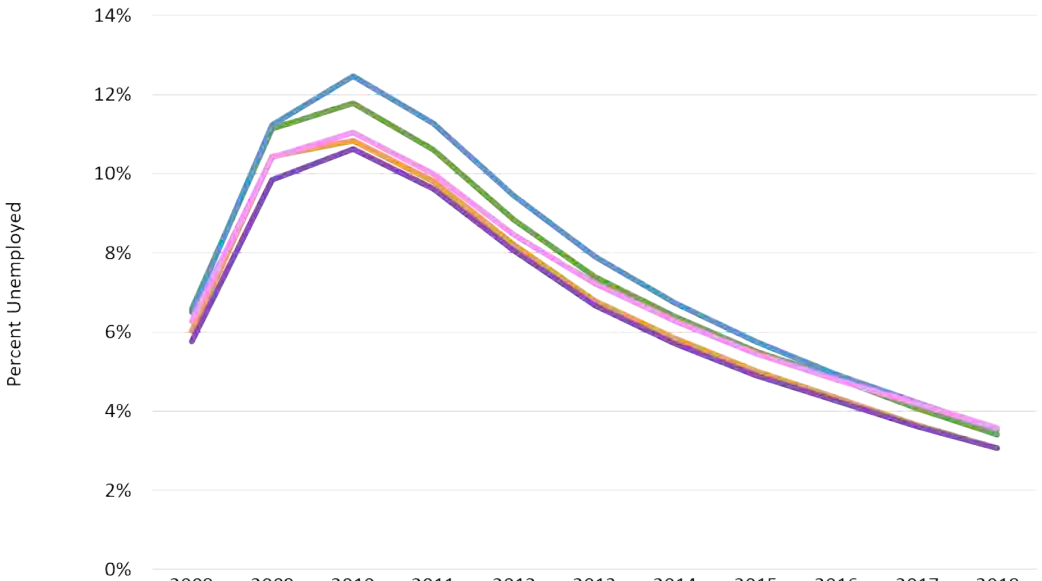
CHART 6.3: STUDENTS RECEIVING FREE & REDUCED LUNCH (2014-2018)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2014	46.4%	50.2%	53.9%	33.4%	48.7%
2015	47.8%	47.3%	57.3%	36.5%	50.1%
2016	49.5%	55.6%	62.8%	35.8%	51.4%
2017	34.9%	58.9%	72.0%	47.1%	58.4%
2018	68.2%	63.9%	63.3%	48.0%	58.8%

Source: County Health Rankings and Roadmaps

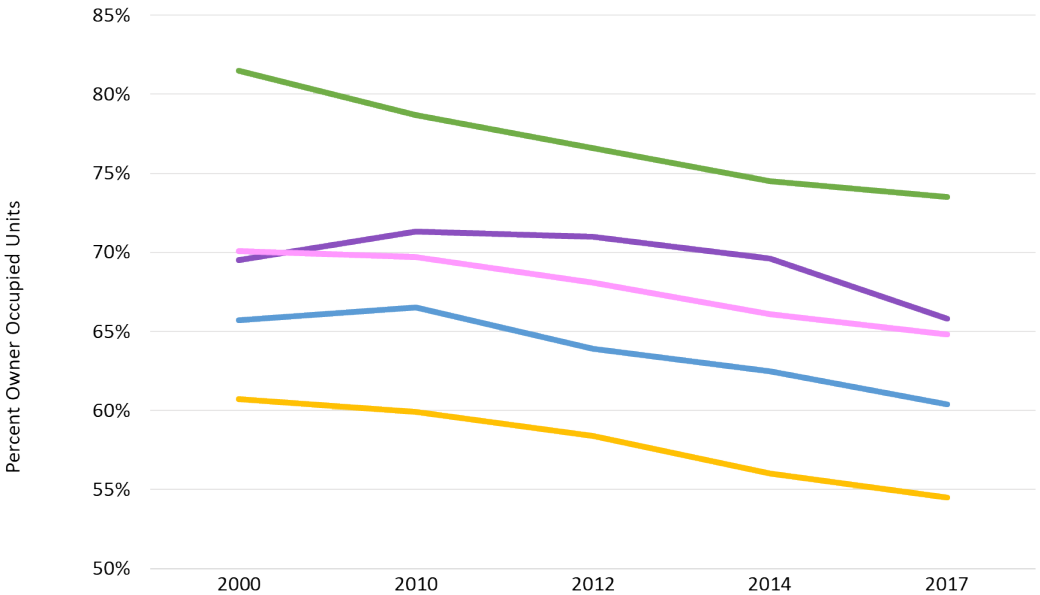
CHART 6.4: UNEMPLOYMENT RATE (2008–2018)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	6.6%	11.1%	11.8%	10.6%	8.8%	7.4%	6.4%	5.5%	4.8%	4.1%	3.4%
ORANGE	6.0%	10.4%	10.8%	9.8%	8.2%	6.8%	5.8%	5.0%	4.3%	3.7%	3.1%
OSCEOLA	6.5%	11.2%	12.5%	11.3%	9.5%	7.9%	6.7%	5.8%	4.9%	4.2%	3.6%
SEMINOLE	5.8%	9.8%	10.6%	9.6%	8.1%	6.7%	5.7%	4.9%	4.3%	3.6%	3.1%
FLORIDA	6.3%	10.4%	11.0%	10.0%	8.5%	7.2%	6.3%	5.5%	4.8%	4.2%	3.6%

Source: US Department of Labor, Bureau of Labor Statistics

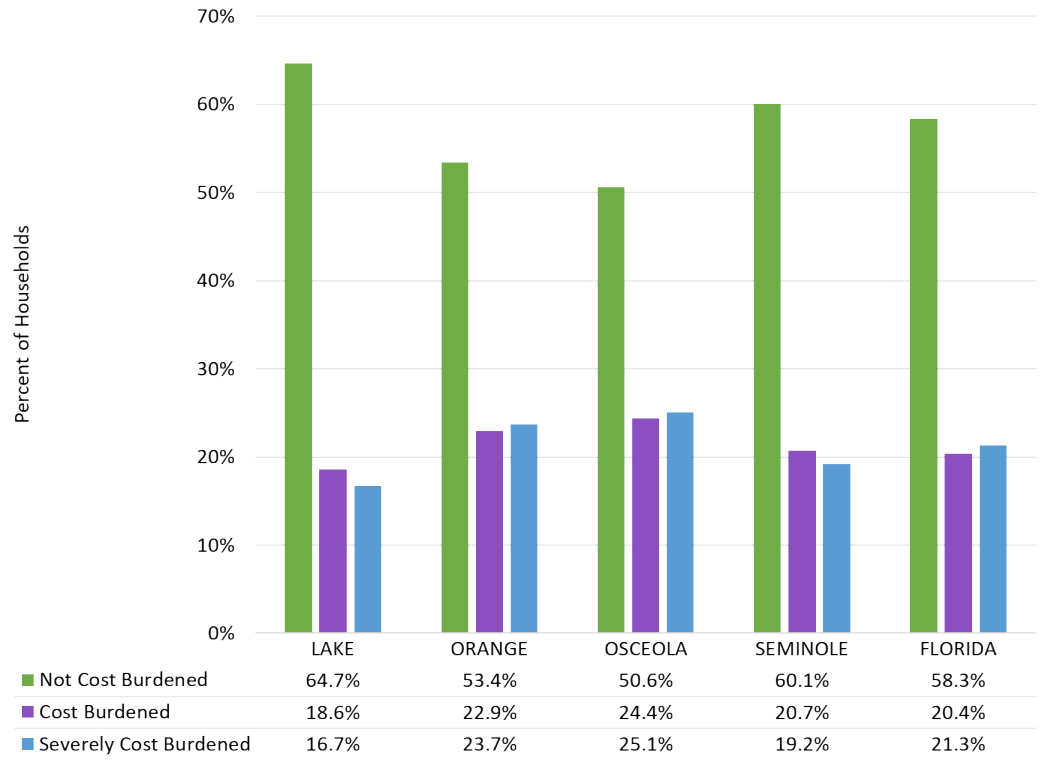
CHART 6.5: HOMEOWNERSHIP RATES (2000–2017)



	2000	2010	2012	2014	2017
LAKE	81.5%	78.7%	76.6%	74.5%	73.5%
ORANGE	60.7%	59.9%	58.4%	56.0%	54.5%
OSCEOLA	65.7%	66.5%	63.9%	62.5%	60.4%
SEMINOLE	69.5%	71.3%	71.0%	69.6%	65.8%
FLORIDA	70.1%	69.7%	68.1%	66.1%	64.8%

Source: Florida Housing Data, Shimberg Center

CHART 6.6: COST BURDEN OF HOUSEHOLDS (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Not Cost Burdened	64.7%	53.4%	50.6%	60.1%	58.3%
Cost Burdened	18.6%	22.9%	24.4%	20.7%	20.4%
Severely Cost Burdened	16.7%	23.7%	25.1%	19.2%	21.3%

Source: Florida Housing Data, Shimberg Center

FIGURE 6.5: HOMEOWNER COST BURDEN MAP (2013-2017)

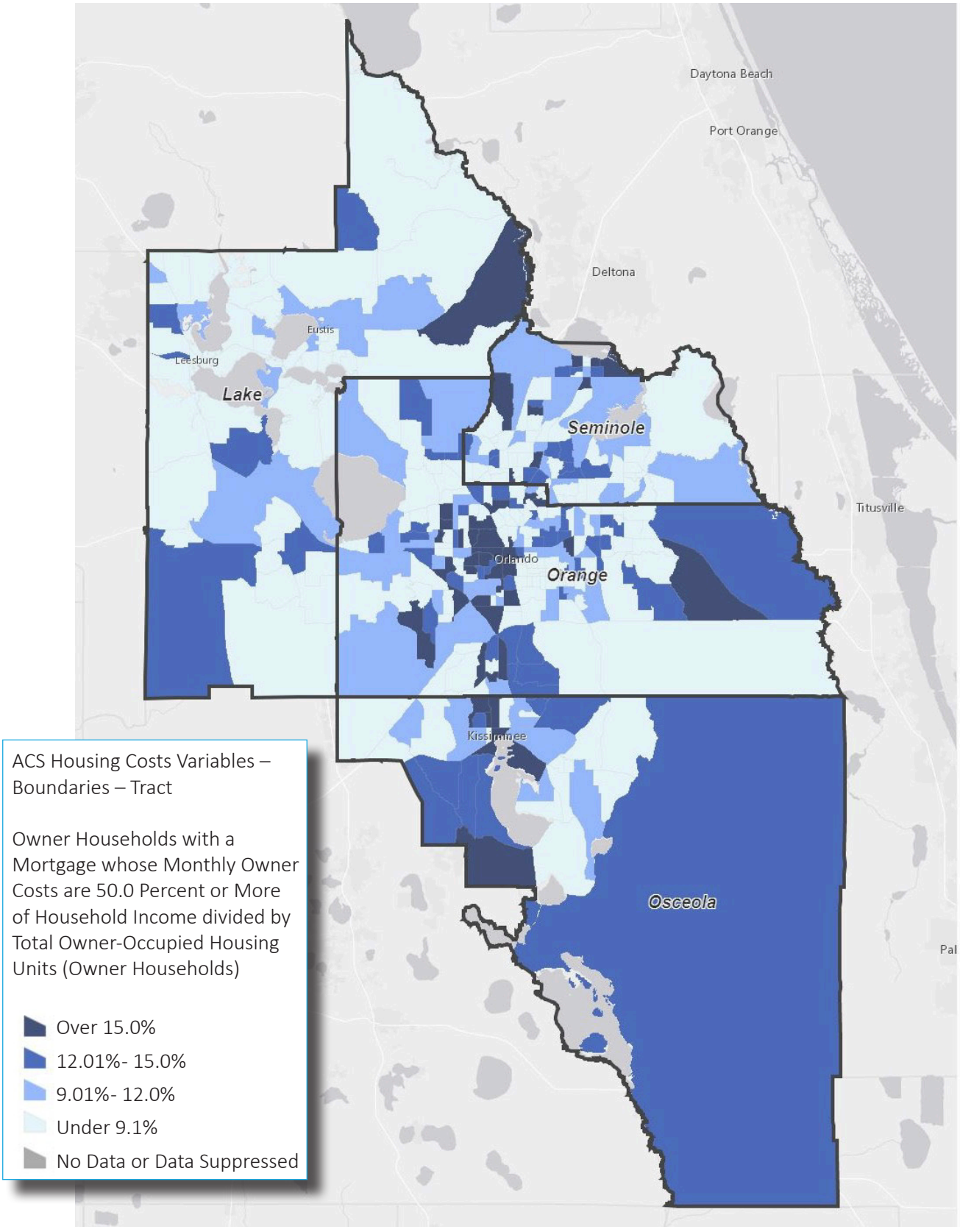
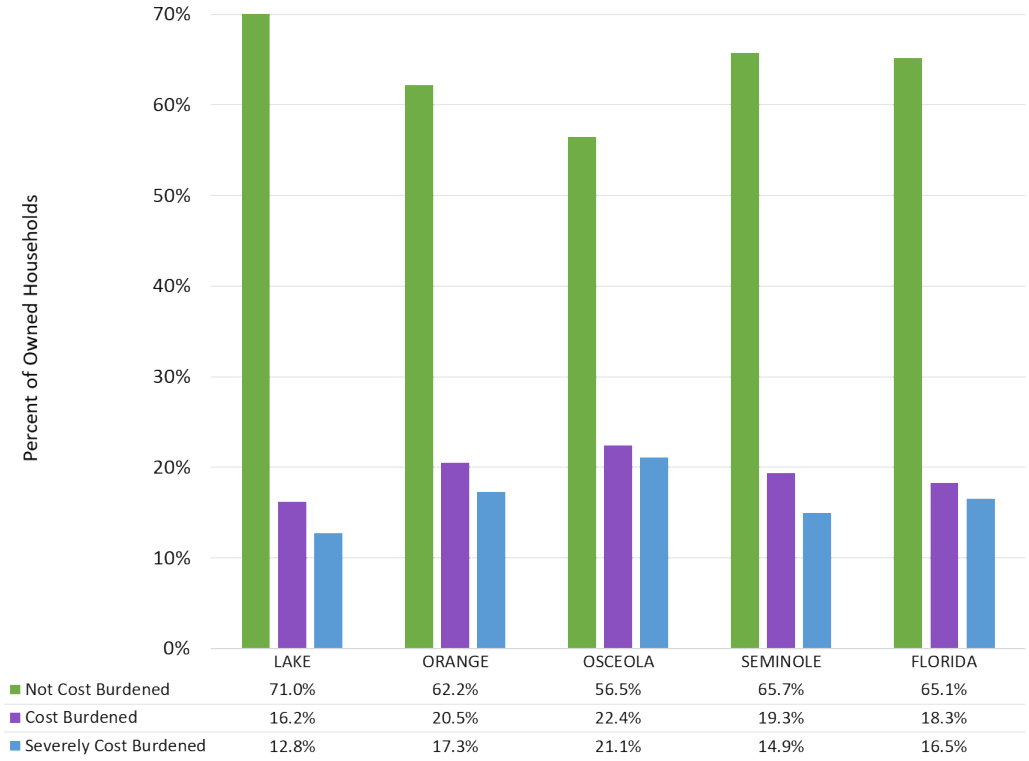


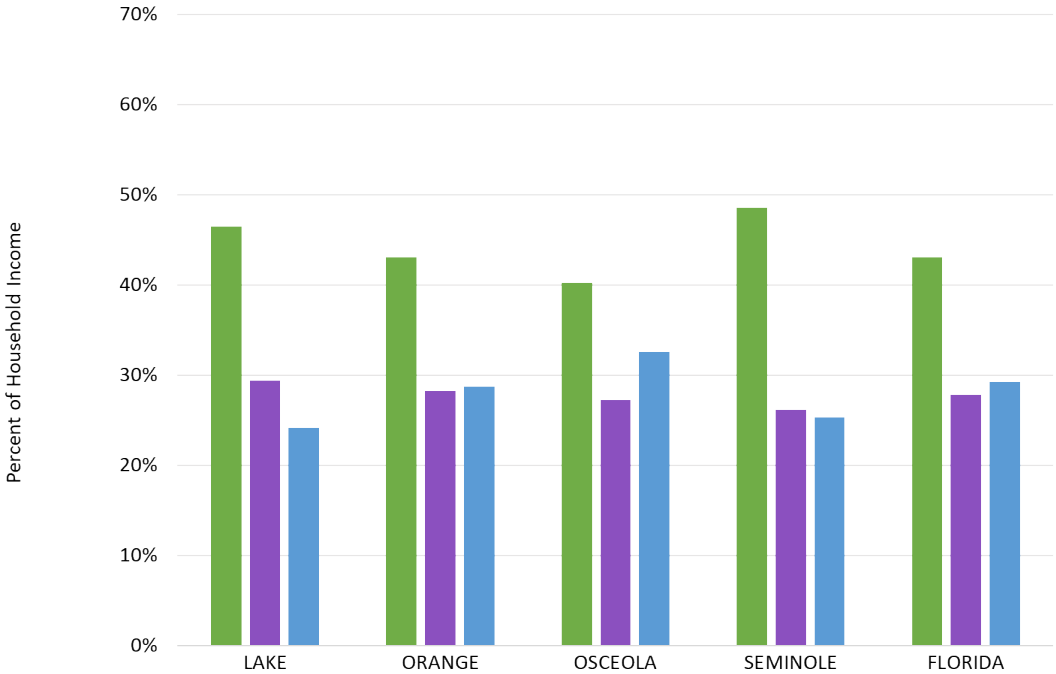
CHART 6.7: HOMEOWNER COST BURDEN (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Not Cost Burdened	71.0%	62.2%	56.5%	65.7%	65.1%
Cost Burdened	16.2%	20.5%	22.4%	19.3%	18.3%
Severely Cost Burdened	12.8%	17.3%	21.1%	14.9%	16.5%

Source: Florida Housing Data, Shimberg Center

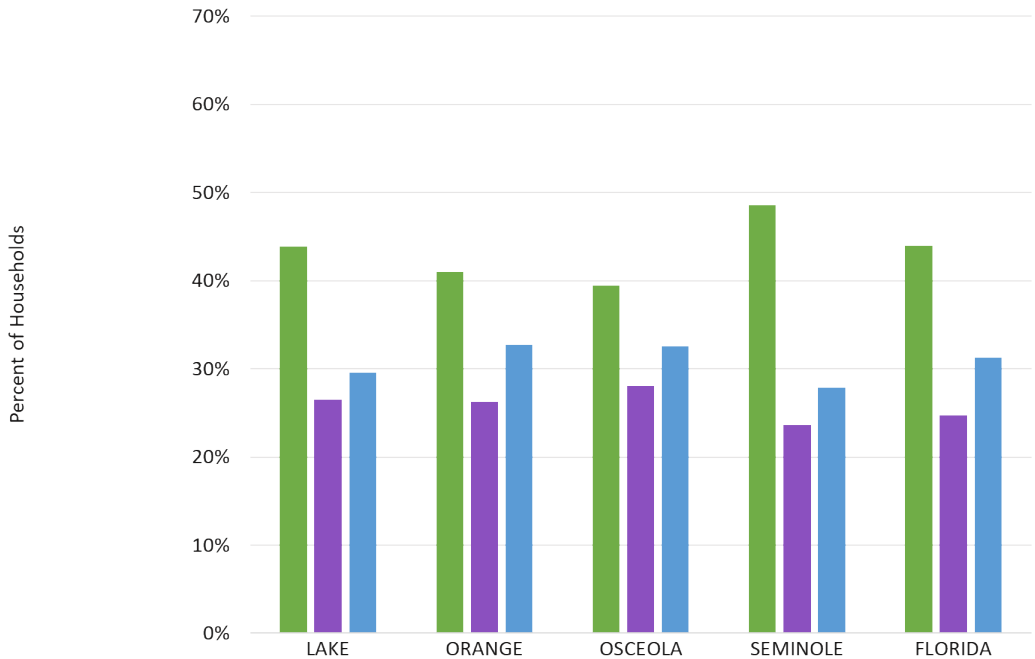
CHART 6.8: GROSS RENT AS A PERCENT OF INCOME- 5-YEAR ESTIMATES (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
LESS THAN 30%	46.5%	43.0%	40.2%	48.5%	43.0%
30-49.9%	29.4%	28.2%	27.2%	26.1%	27.8%
50% OR MORE	24.1%	28.7%	32.5%	25.3%	29.2%

Source: Florida Housing Data, Shimberg Center

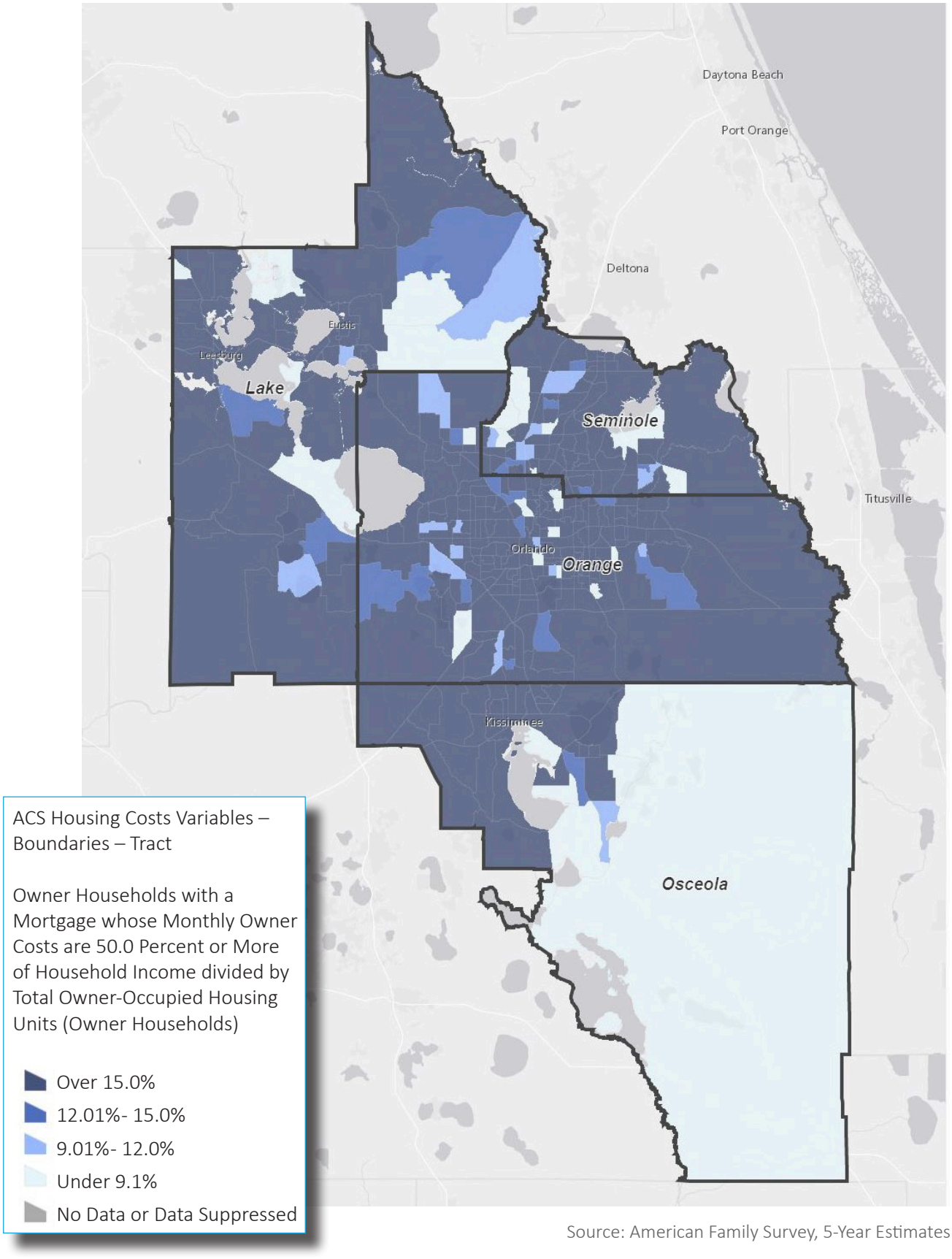
CHART 6.9: COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Not Cost Burdened	43.9%	41.0%	39.4%	48.6%	44.0%
Cost Burdened	26.5%	26.3%	28.0%	23.6%	24.8%
Severely Cost Burdened	29.6%	32.7%	32.5%	27.9%	31.3%

Source: Florida Housing Data, Shimberg Center

FIGURE 6.6: COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS MAP (2013-2017)



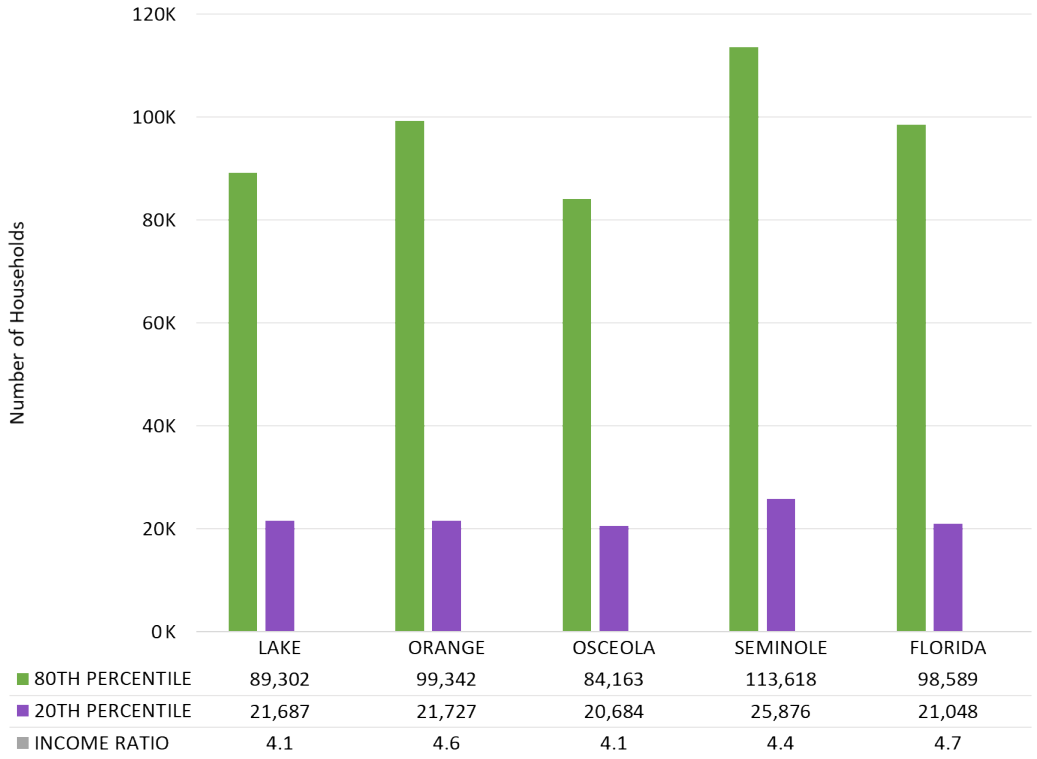
Source: American Family Survey, 5-Year Estimates

TABLE 6.1: HOMELESS INDIVIDUALS BY COUNTY (2010-2018)

County	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lake	796	1,008	1,019	282	187	265	198	242	312
Orange	1,494	2,872	2,281	2,937	1,701	1,396	1,228	1,522	1,539
Osceola	443	833	722	599	278	372	175	239	226
Seminole	397	810	658	842	275	344	210	313	288
Total	3,130	5,523	4,680	4,660	2,441	2,377	1,811	2,316	2,365

Source: Florida Department of Children and Families Council on Homelessness Annual Report

CHART 6.10: INCOME INEQUALITY (2018)



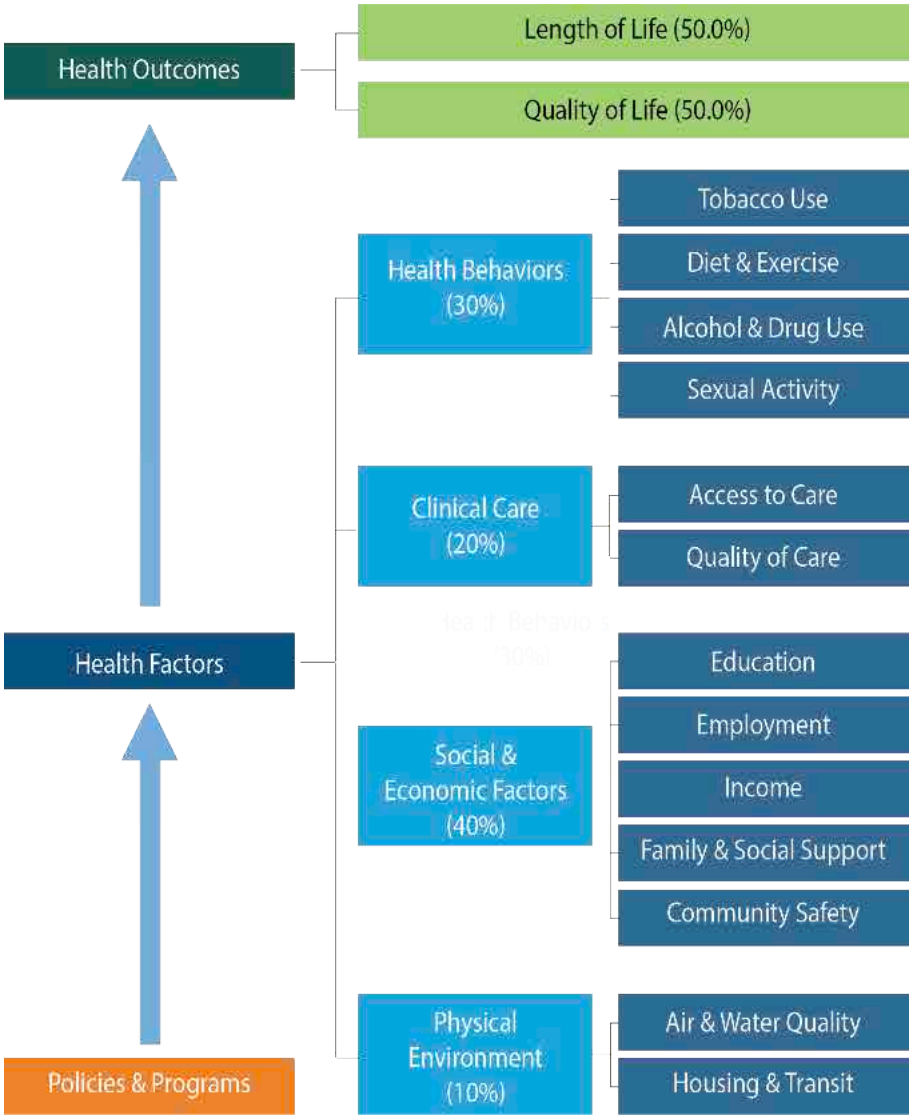
Source: Florida Housing Data, Shimberg Center

County Health Rankings and Roadmaps

The County Health Rankings & Roadmaps (CHR) program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. They believe America can become a nation where getting healthy, staying healthy and making sure our children grow up healthy are top priorities. They envision an America where we all strive to live together to build a national culture of health that enables all in our diverse society to lead healthy lives, now, and for generations to come.

The County Health Rankings are based on a model of community health that emphasizes the many factors that influence how long and how well we live. The rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors). Health outcomes weigh length of life and quality of life equally and health factors are comprised of health behaviors (30 percent), clinical care (20 percent), social and economic factors (40 percent) and physical environment (10 percent). The model is outlined in Figure 6.7. This model outlines how numerical rankings are determined. All 67 counties in Florida receive rankings.

FIGURE 6.7: COUNTY HEALTH RANKINGS



Source: County Health Rankings and Roadmaps

To assess changes in the four-county region since the 2016 CHNA, Table 6.2 includes data from 2016 and 2018. When looking at the identified health outcomes and factors by County Health Rankings, Osceola County is behind in the four-county region in health outcomes (30th) and health factors (32nd) in 2018.

When the components of health outcomes are broken down, Osceola County was 26th in the state in social & economic factors, 8th in the state for resident length of life and 51st in quality of life. Osceola County continues to be behind the four-county region in several key measures, including measures of the physical environment (65th) in 2018. (See Table 6.3)

TABLE 6.3: CENTRAL FLORIDA COUNTY HEALTH RANKINGS 2018

County	2016		2018	
	Health Outcomes	Health Factors	Health Outcomes	Health Factors
Lake	14	17	24	24
Orange	21	21	15	19
Osceola	32	40	30	32
Seminole	5	3	4	5

Source: County Health Rankings and Roadmaps

TABLE 6.4: HEALTH OUTCOME/FACTOR RANKINGS 2018

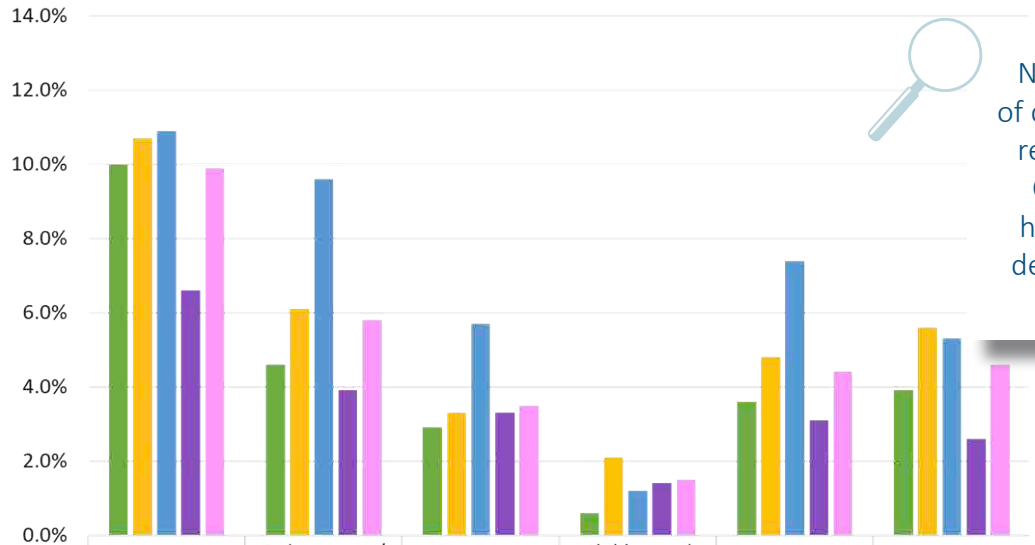
County	Length of Life	Quality of Life	Health Behavior	Clinical Care	Social & Economic Factors	Physical Environment
Lake	26	20	21	12	21	51
Orange	7	28	13	23	18	48
Osceola	8	51	18	48	26	65
Seminole	5	8	10	5	2	55

Source: County Health Rankings and Roadmaps

School and Student Characteristics: What the Community is Saying

Figure 6.8 illustrates the experience of the community survey respondents related to crime, delinquency and violence. Respondents from Osceola County are more likely to have experienced crime, delinquency/youth crime, domestic violence and violence than respondents from the other counties in the four-county region.

FIGURE 6.8: CRIME AND DELINQUENCY EXPERIENCE, COMMUNITY SURVEY 2019



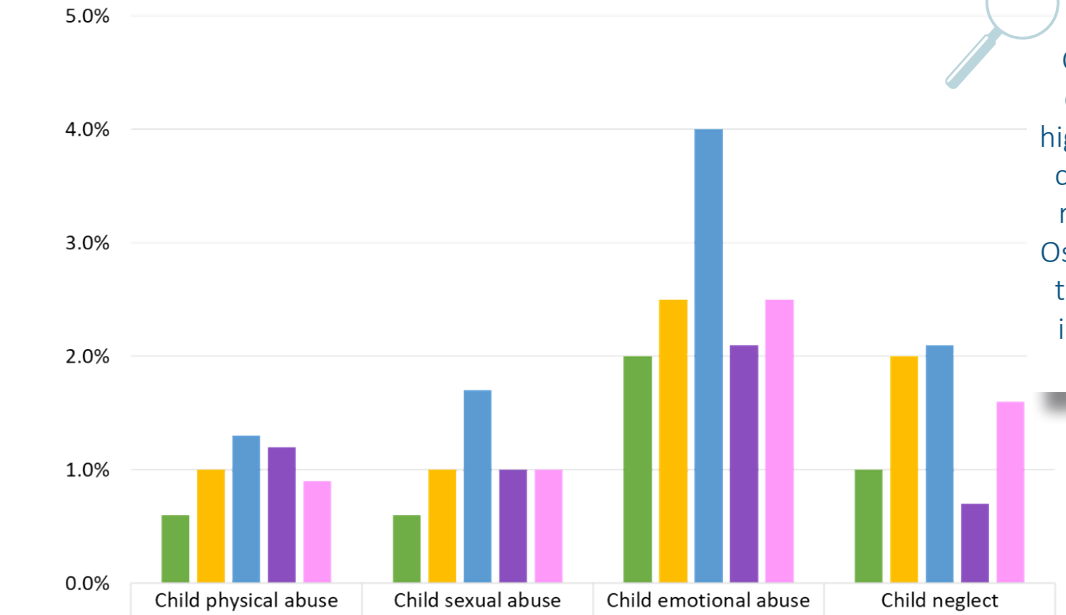
	Crime	Delinquency/ youth crime	Domestic violence	Child sexual abuse	Violence	Gun violence
LAKE	10.0%	4.6%	2.9%	0.6%	3.6%	3.9%
ORANGE	10.7%	6.1%	3.3%	2.1%	4.8%	5.6%
OSCEOLA	10.9%	9.6%	5.7%	1.2%	7.4%	5.3%
SEMINOLE	6.6%	3.9%	3.3%	1.4%	3.1%	2.6%
OVERALL	9.9%	5.8%	3.5%	1.5%	4.4%	4.6%

Nearly 10 percent of community survey respondents from Osceola County have experienced delinquency/youth crime.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Compared to the other counties in the four-county region, a higher percentage of community survey respondents in Osceola County indicated that they or their family have experienced child emotional abuse (4 percent) compared to 2.5 percent for the overall region. These are outlined in Figure 6.9.

FIGURE 6.9: CHILD ABUSE AND NEGLECT, COMMUNITY SURVEY 2019



	Child physical abuse	Child sexual abuse	Child emotional abuse	Child neglect
LAKE	0.6%	0.6%	2.0%	1.0%
ORANGE	1.0%	1.0%	2.5%	2.0%
OSCEOLA	1.3%	1.7%	4.0%	2.1%
SEMINOLE	1.2%	1.0%	2.1%	0.7%
OVERALL	0.9%	1.0%	2.5%	1.6%

Child neglect was experienced by a higher percentage of community survey respondents from Osceola County than the other counties in the four-county region.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to school and student characteristics:

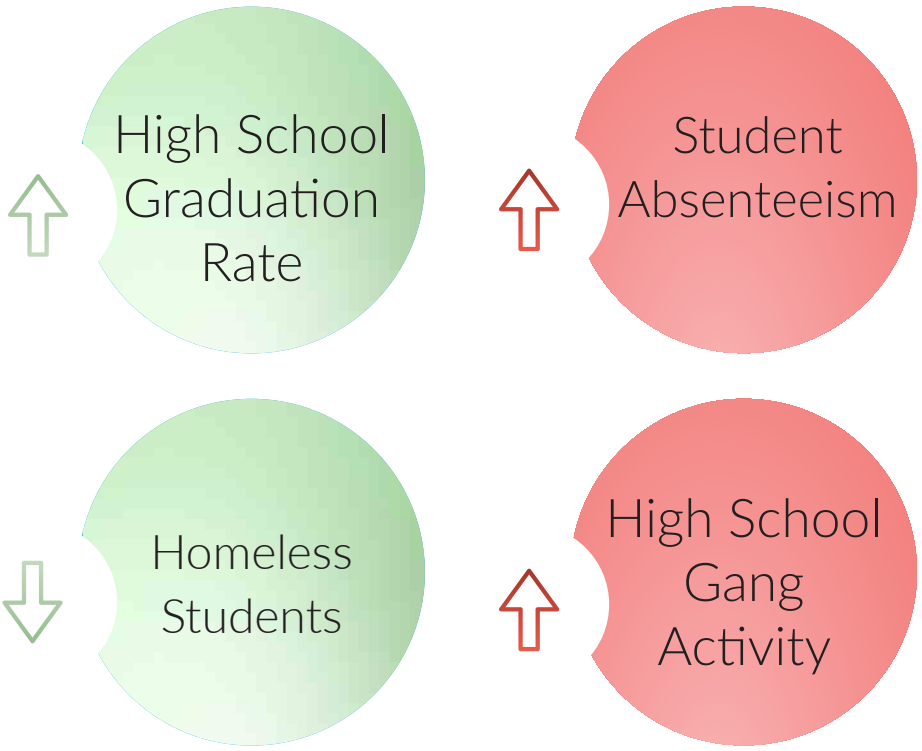
- Neighborhood safety
- Obesity
- Increased primary care access
- Bullying
- School violence

Primary research participants did not indicate any barriers to care or needed services related to school and student characteristics in Osceola County.

School and Student Demographic Characteristics at a Glance

The key indicators related to school and student demographic characteristics that have changed since the last CHNA are identified in Figure 6.10. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 6.10: SCHOOL AND STUDENT CHARACTERISTICS INDICATORS



Source: Strategy Solutions, Inc.

School and Student Characteristics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

STUDENT RACE/ETHNICITY BY PERCENT (2017)

In 2017, the majority of students in Osceola County (76.9 percent) were White, higher than the state (70 percent). Approximately 15 percent (15.4 percent) of students in Osceola County were Black, lower than the state (22.2 percent). More than half of the students (59.6 percent) were Hispanic, higher than the state (30.1 percent).

It should be noted that by measuring race and ethnicity separately, the percentages may total more than 100 percent. Students may identify as White or Black racially and also be Hispanic. (See Chart 6.11)

STUDENT RACE/ETHNICITY BY NUMBER (2017)

In 2017, there were 50,927 White students, 10,168 Black students and 39,473 students who identified themselves as Hispanic in Osceola County. (See Chart 6.12)

HIGH SCHOOL GRADUATION RATE (2012-2013/2016-2017)

The high school graduation rate in Osceola County has increased from 2012-2013 (78.1 percent) to 2016-2017 (86.3 percent). The county's rate was higher than the state rate in 2016-2017 of 82.3 percent. (See Chart 6.13)

STUDENT ABSENTEEISM (2013-2014/2017-2018)

The Osceola County's percentage of students absent 21 or more days increased from 10.9 percent in 2013-2014 to 12.7 percent in 2017-2018 which was consistently higher than the state. The state percentage increased from 9.5 percent in 2013-2014 to 11.3 percent in 2017-2018. (See Chart 6.14)

HOMELESS STUDENTS (2012-2013/2016-2017)

Osceola County's percentage of homeless students increased over time (4 percent in 2012-2013 to 4.8 percent in 2016-2017). The county percentage was higher than that of the state (2 percent in 2012-2013 and 2.5 percent in 2016-2017) during this time. (See Chart 6.15)

HIGH SCHOOL GANG ACTIVITY (2014/2017)

In Osceola County, high school gang activity percentage increased from 1.2 percent in 2014 to 2.7 percent in 2017. The percentage of high school gang activity in the state also increased from 2.1 percent in 2014 to 3 percent in 2017. (See Chart 6.16)

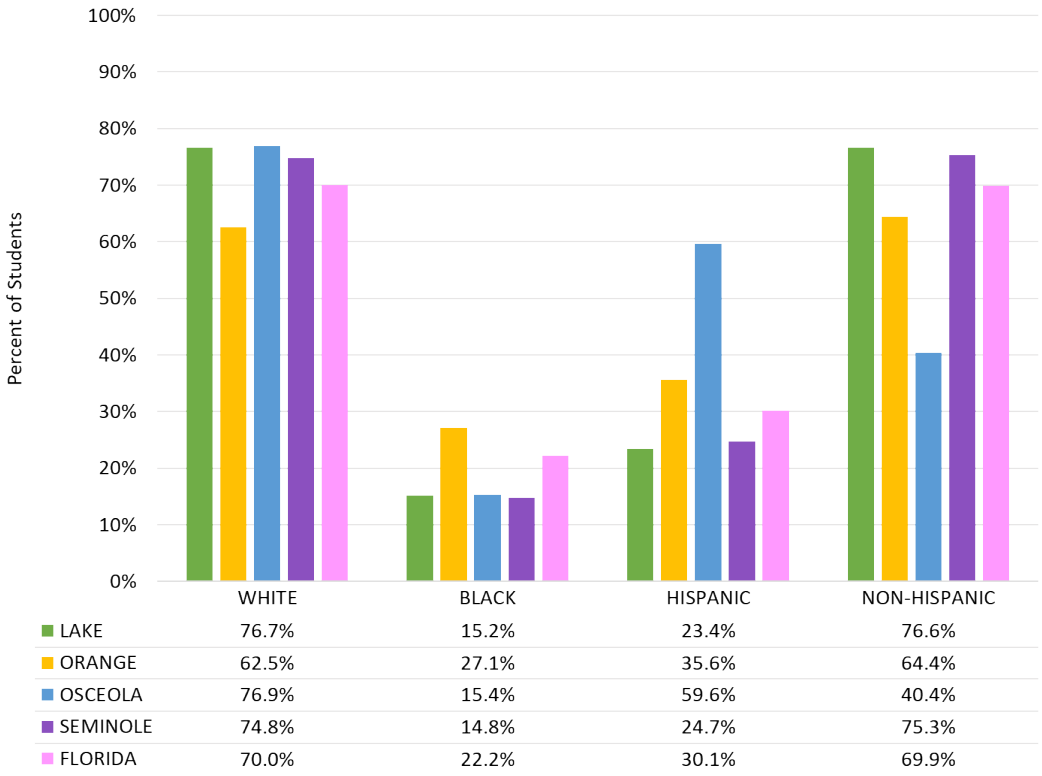
YOUTH ARRESTS, ALL OFFENSES, AGES 10-17 (2012-2016)

Osceola County's youth arrest rate per 100,000 for ages 10-17 decreased from 5,470.7 in 2012 to 3,092.4 in 2016. The state rate decreased from 5,232.7 in 2012 to 3,762.9 in 2016. (See Chart 6.17)

BULLYING PREVALENCE K-12 (2018)

More than half of all students in Osceola County admitted that they had taunted or teased another student in 2018 (53.5 percent), lower than the state (56 percent). Osceola County students were just as likely to skip school because of bullying as students statewide (both were 8.1 percent). Osceola County students were less likely to have ever physically bullied others compared to the state (13.9 percent versus 15.1 percent) or ever verbally bullied others (24.4 percent versus 27.1 percent) or to have ever cyber bullied others (9.4 percent versus 10.9 percent). (See Chart 6.18)

CHART 6.11: STUDENT RACE/ETHNICITY BY PERCENT (2017)

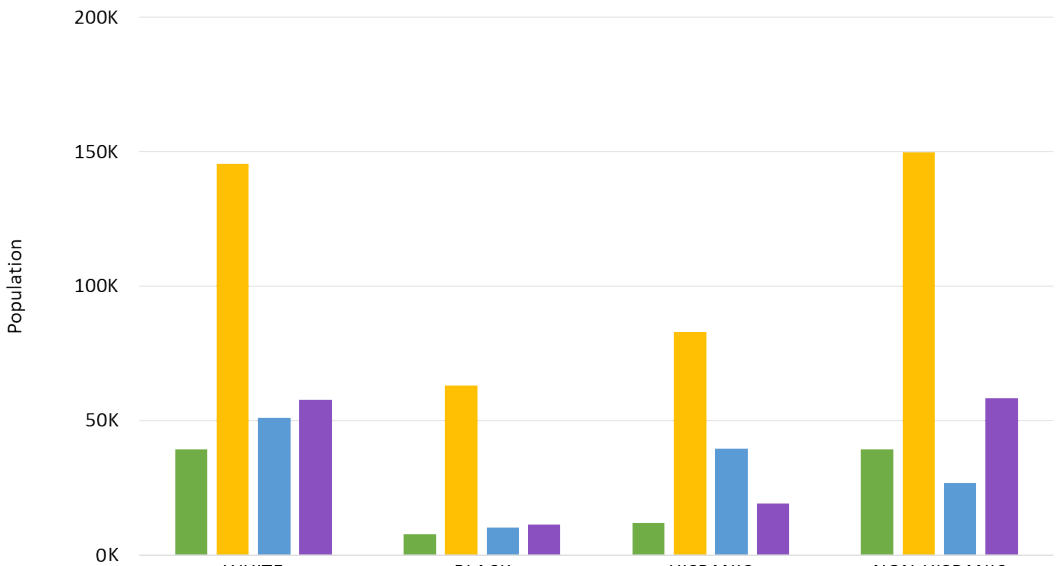


	WHITE	BLACK	HISPANIC	NON-HISPANIC
LAKE	76.7%	15.2%	23.4%	76.6%
ORANGE	62.5%	27.1%	35.6%	64.4%
OSCEOLA	76.9%	15.4%	59.6%	40.4%
SEMINOLE	74.8%	14.8%	24.7%	75.3%
FLORIDA	70.0%	22.2%	30.1%	69.9%

Source: School-Aged Child and Adolescent Profile, Florida Department of Health

*Race/Ethnicity percentages add up to more than 100 percent because Hispanic or Latino individuals can also be White, Black or another race.

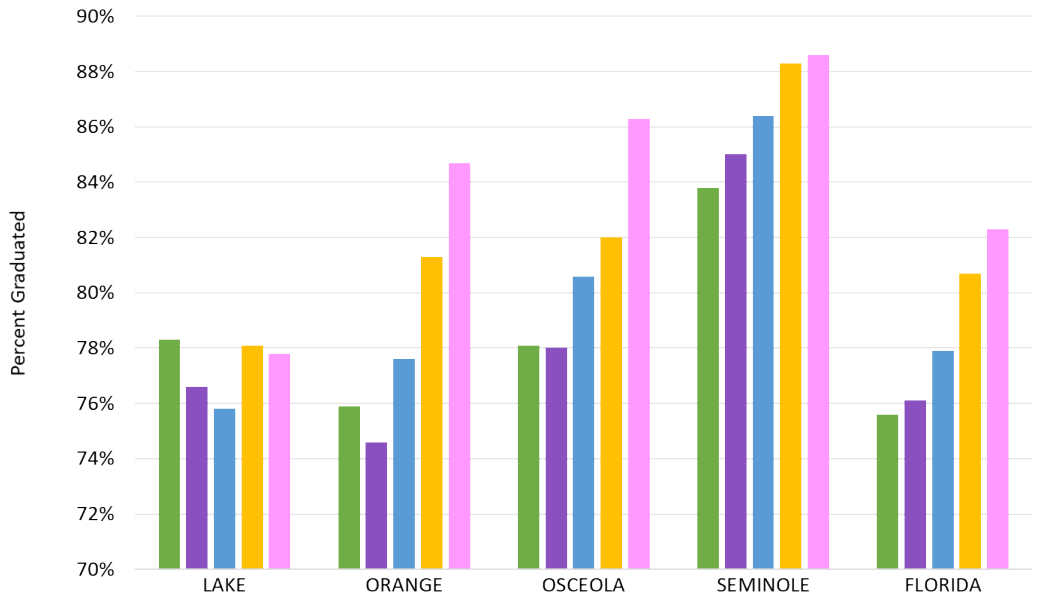
CHART 6.12: STUDENT RACE/ETHNICITY BY NUMBER (2017)



	WHITE	BLACK	HISPANIC	NON-HISPANIC
LAKE	39,445	7,838	12,029	39,407
ORANGE	145,466	63,086	82,894	149,729
OSCEOLA	50,927	10,168	39,473	26,732
SEMINOLE	57,876	11,460	19,095	58,252

Source: School-Aged Child and Adolescent Profile, Florida Department of Health

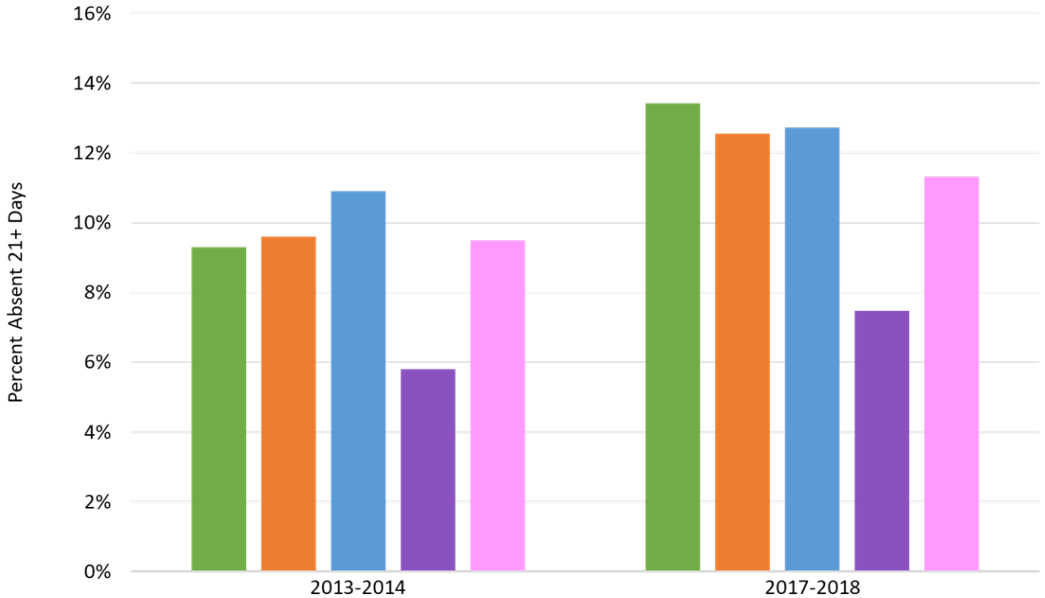
CHART 6.13: HIGH SCHOOL GRADUATION RATE (2012-2013/2016-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2012-2013	78.3%	75.9%	78.1%	83.8%	75.6%
2013-2014	76.6%	74.6%	78.0%	85.0%	76.1%
2014-2015	75.8%	77.6%	80.6%	86.4%	77.9%
2015-2016	78.1%	81.3%	82.0%	88.3%	80.7%
2016-2017	77.8%	84.7%	86.3%	88.6%	82.3%

Source: County Health Rankings and Roadmaps

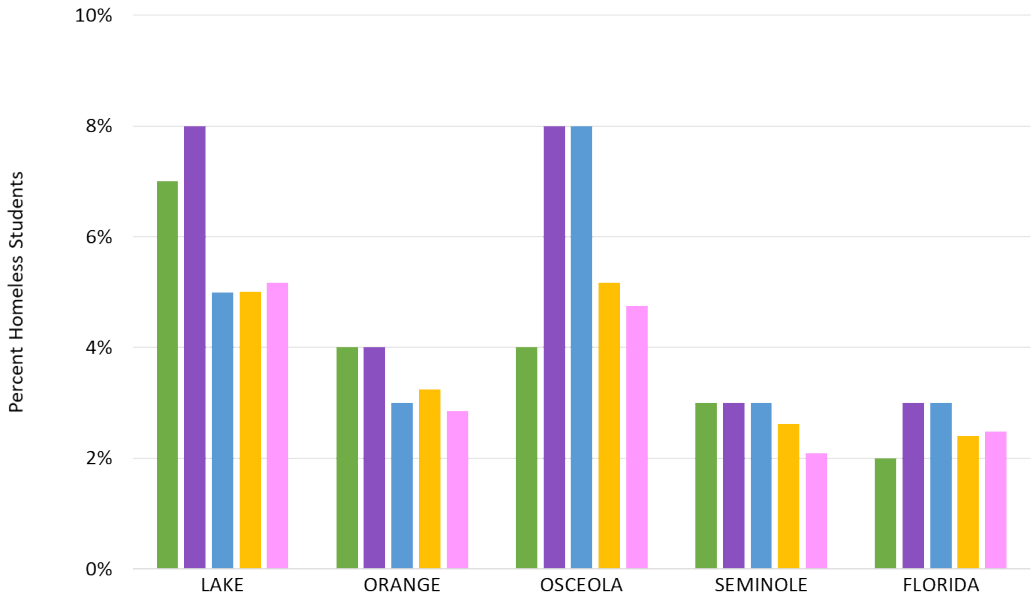
CHART 6.14: STUDENT ABSENTEEISM (2013-2014/2017-2018)



	2013-2014	2017-2018
LAKE	9.3%	13.4%
ORANGE	9.6%	12.6%
OSCEOLA	10.9%	12.7%
SEMINOLE	5.8%	7.5%
FLORIDA	9.5%	11.3%

Source: Florida Department of Education

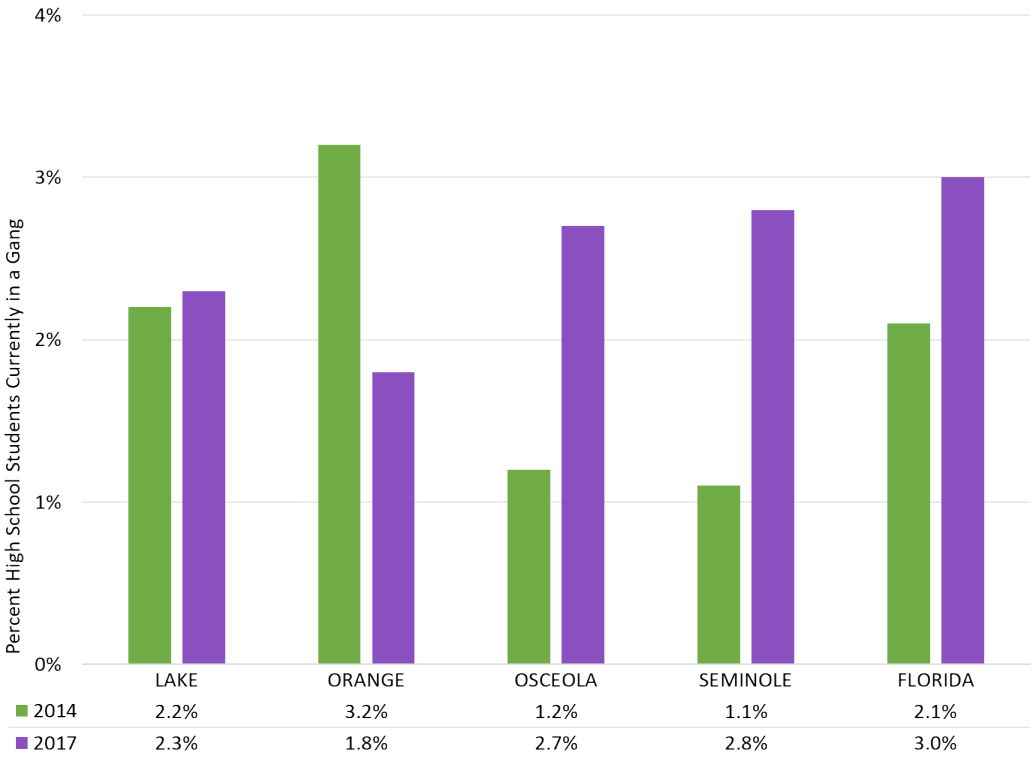
CHART 6.15: HOMELESS STUDENTS (2012-2013/2016-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2012-2013	7.0%	4.0%	4.0%	3.0%	2.0%
2013-2014	8.0%	4.0%	8.0%	3.0%	3.0%
2014-2015	5.0%	3.0%	8.0%	3.0%	3.0%
2015-2016	5.0%	3.2%	5.2%	2.6%	2.4%
2016-2017	5.2%	2.8%	4.8%	2.1%	2.5%

Source: Florida Department of Children & Families Council on Homelessness

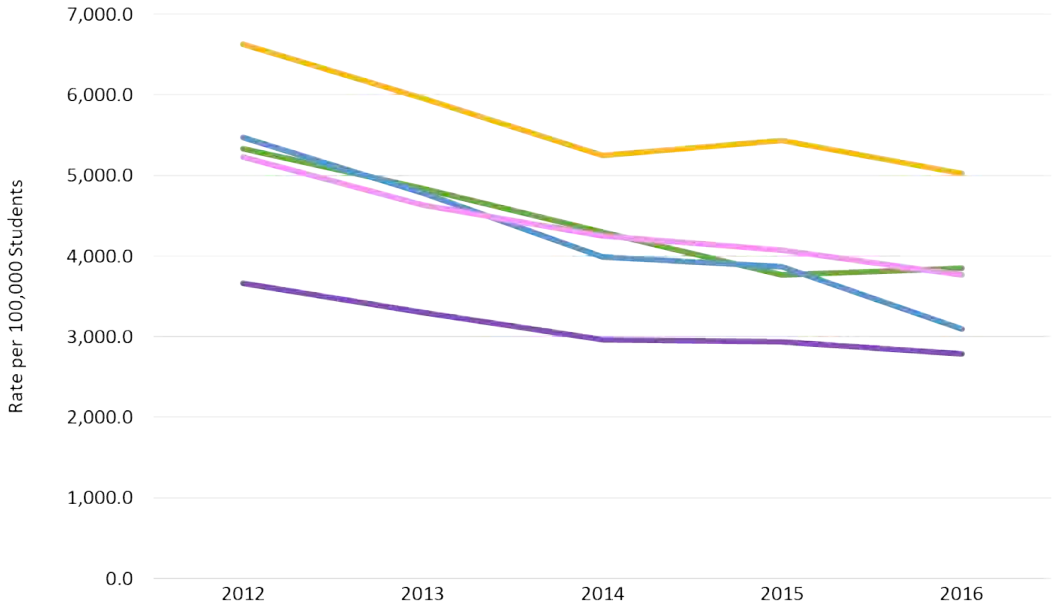
CHART 6.16: HIGH SCHOOL GANG ACTIVITY (2014/2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2014	2.2%	3.2%	1.2%	1.1%	2.1%
2017	2.3%	1.8%	2.7%	2.8%	3.0%

Source: Florida Substance Abuse Survey, Florida Department of Children & Families

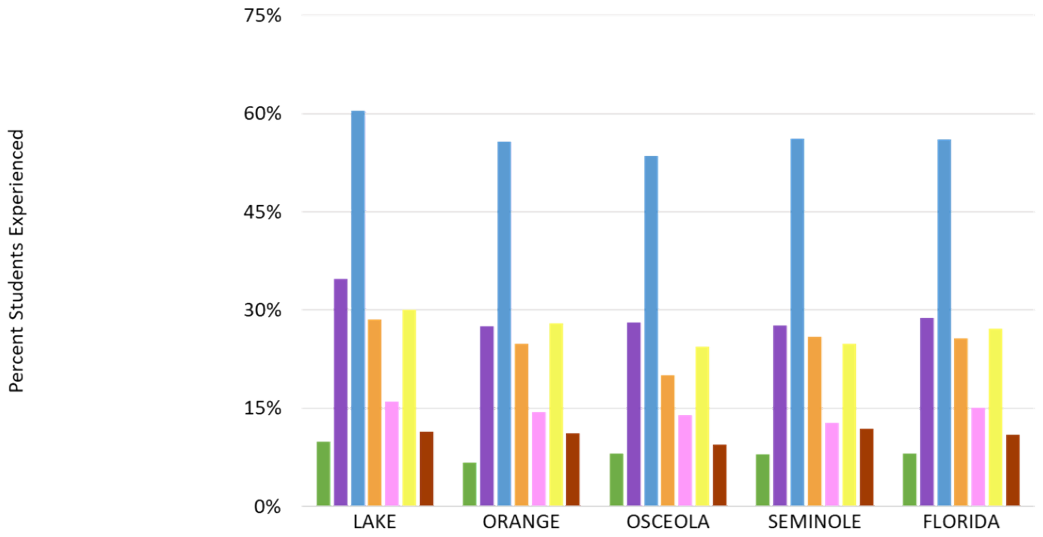
CHART 6.17: YOUTH ARRESTS, ALL OFFENSES, AGES 10-17 (2012-2016)



	2012	2013	2014	2015	2016
LAKE	5,331.3	4,834.0	4,300.4	3,763.3	3,846.0
ORANGE	6,629.1	5,953.5	5,252.9	5,438.2	5,026.9
OSCEOLA	5,470.7	4,783.8	3,989.8	3,865.2	3,092.4
SEMINOLE	3,661.4	3,303.0	2,967.5	2,940.7	2,791.2
FLORIDA	5,232.7	4,637.0	4,250.1	4,073.5	3,762.9

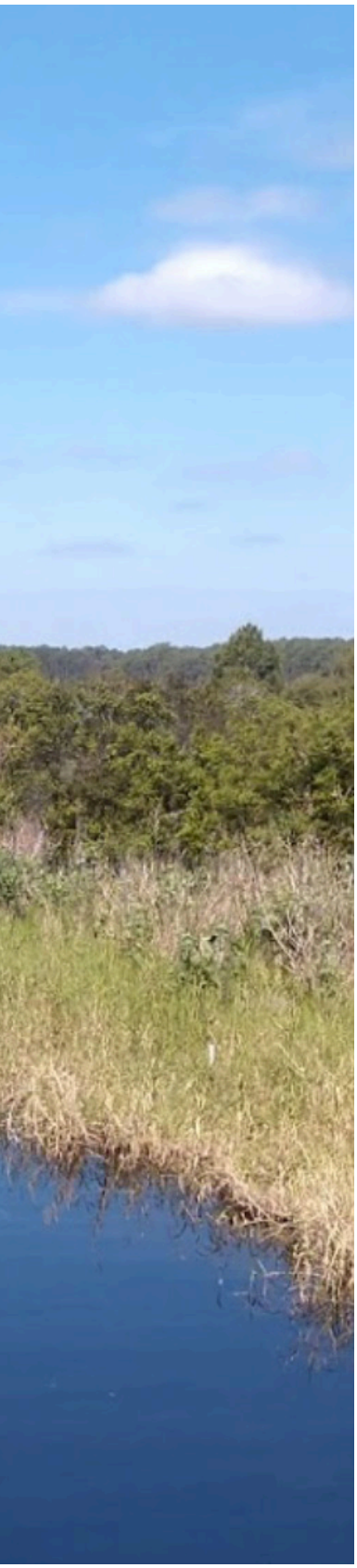
Source: FLHealthCHARTS: Florida Department of Health

CHART 6.18: BULLYING PREVALENCE K-12 (2018)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Skipped school/bullying	9.9%	6.7%	8.1%	7.9%	8.1%
Ever kicked/shoved	34.8%	27.5%	28.1%	27.6%	28.8%
Ever taunted/teased	60.4%	55.7%	53.5%	56.1%	56.0%
Ever victim of cyber bullying	28.5%	24.8%	20.0%	25.9%	25.6%
Ever physically bullied others	16.0%	14.4%	13.9%	12.8%	15.1%
Ever verbally bullied others	30.0%	27.9%	24.4%	24.8%	27.1%
Ever cyber bullied others	11.4%	11.1%	9.4%	11.9%	10.9%

Source: Florida Youth Substance Abuse Survey



CHAPTER SEVEN

Health Needs of the Community

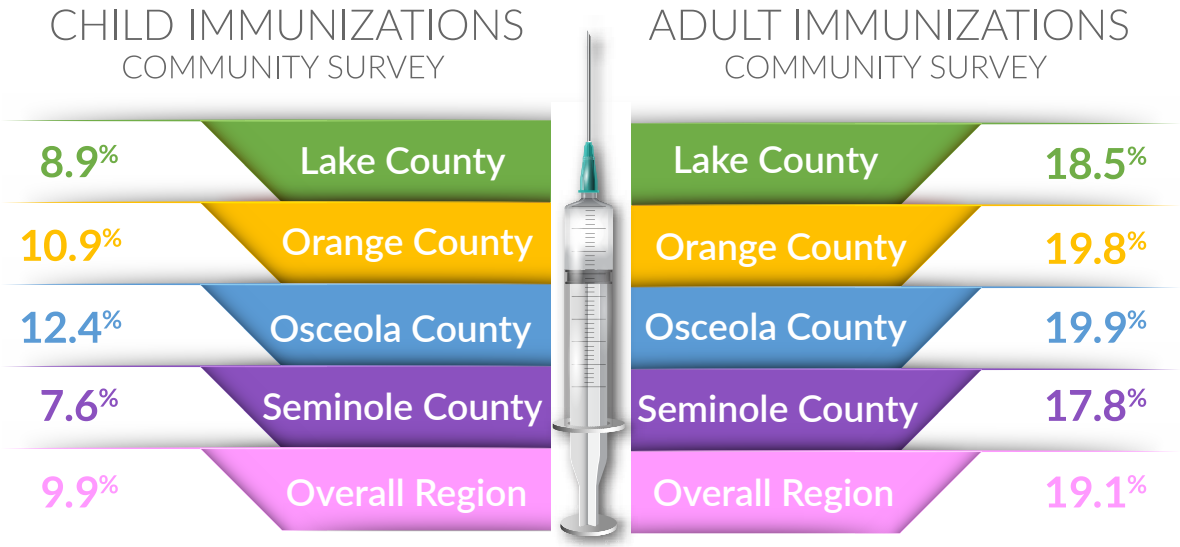
Lake Kissimmee State Park
Lake Wales, FL

Osceola County

Communicable Diseases: What the Community is Saying

Figure 7.1 identifies the percentages of community survey respondents within Osceola County who have experienced difficulty getting immunizations in the past 12 months. A higher percentage of Osceola County respondents had difficulty obtaining child and adult immunizations than any other respondents in the four-county region.

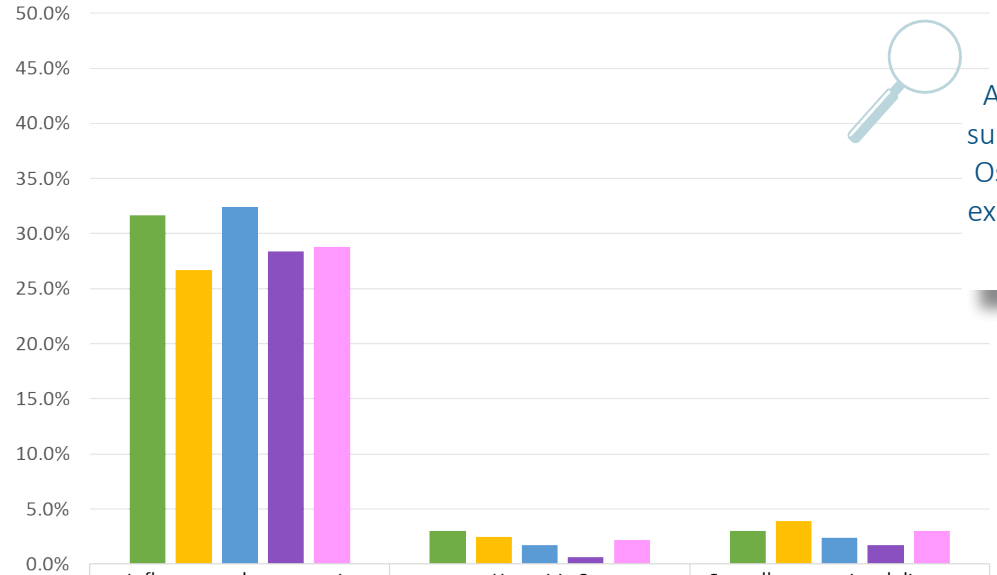
FIGURE 7.1: IMMUNIZATION CHALLENGES, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

In Osceola County, 32.4 percent of community survey respondents said they or someone in their family were affected by influenza or pneumonia over the past two years, higher than the four-county region overall (28.8 percent). Far fewer respondents reported being impacted by Hepatitis C and sexually transmitted diseases, at 1.7 percent and 2.4 percent respectively. This is outlined in Figure 7.2.

FIGURE 7.2: COMMUNICABLE DISEASES IMPACTING COMMUNITY SURVEY RESPONDENTS 2019



	Influenza and pneumonia	Hepatitis C	Sexually transmitted diseases
LAKE	31.7%	3.0%	3.0%
ORANGE	26.7%	2.5%	3.9%
OSCEOLA	32.4%	1.7%	2.4%
SEMINOLE	28.4%	0.6%	1.7%
OVERALL	28.8%	2.2%	3.0%

Almost one-third of survey respondents in Osceola County have experienced influenza or pneumonia.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to communicable diseases:

- HIV and Hepatitis C
- Stigma around HIV/AIDS
- Increase of Sexually Transmitted Diseases (STDs) as a result of substance abuse
- Perception that AIDS have been solved

Barriers to care identified by primary research participants included:

- Cost of treatment associated with communicable diseases, especially for HIV/AIDS
- High cost of medication for HIV/AIDS
- Limited access to specialty care

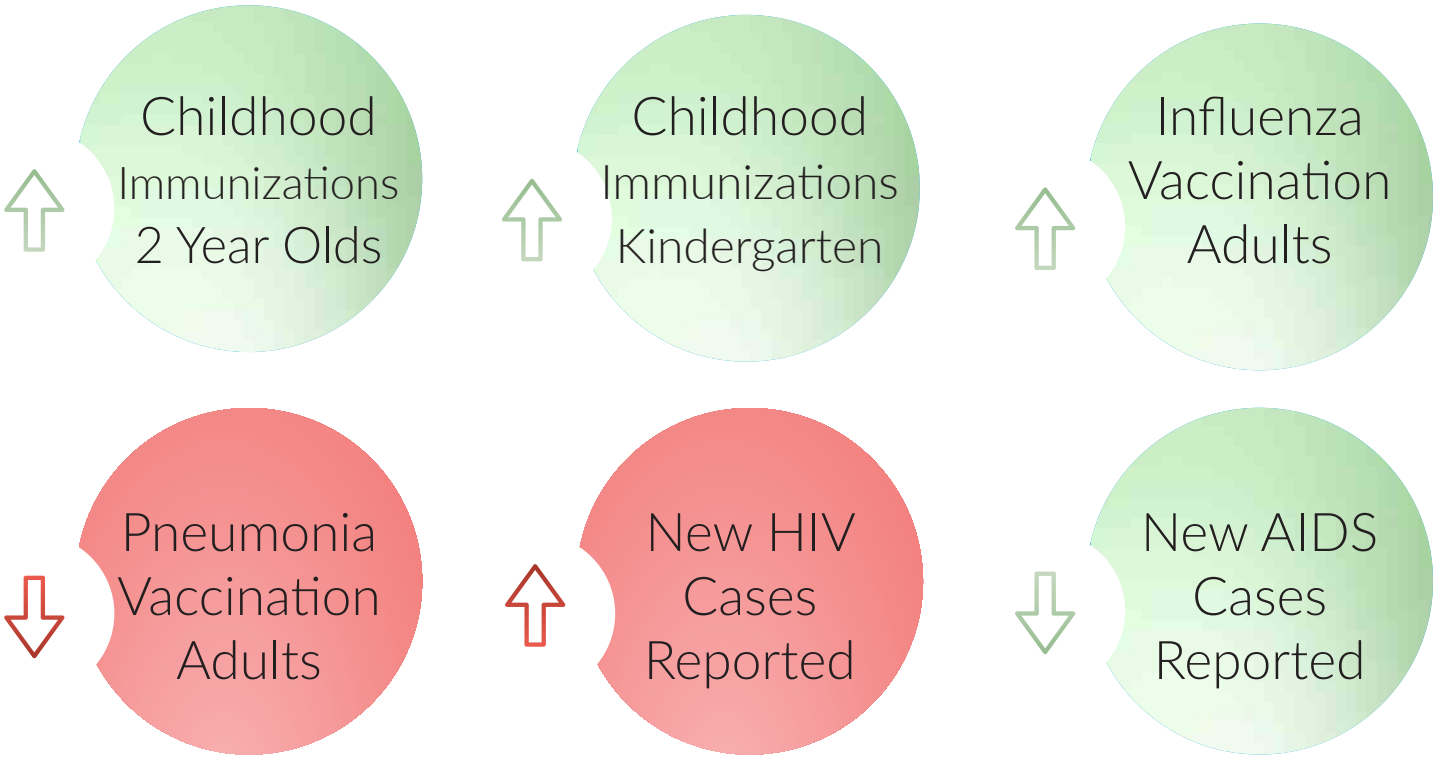
Needed services related to communicable diseases that were identified by primary research participants included:

- Availability and access to specialists, especially those that care for HIV/AIDS
- Psychiatric support services
- Prevention and education resources for testing and treatment options

Communicable Diseases at a Glance

The key indicators related to communicable diseases that have changed since the last CHNA are identified in Figure 7.3. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.3: COMMUNICABLE DISEASE INDICATORS



Source: Strategy Solutions, Inc.

Communicable Diseases: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

CHILDHOOD IMMUNIZATIONS 2 YEAR OLDS (2008-2017)

Osceola County's immunization percentage for 2 year olds decreased from 83.3 percent in 2008 to a low of 63.2 percent in 2010 before gradually increasing to 82.9 percent in 2017. In 2017, the state percentage (86.1 percent) was higher than the county. (See Chart 7.1)

CHILDHOOD IMMUNIZATIONS KINDERGARTEN (2009-2018)

Kindergarten-age children in the county have consistently had immunization percentages exceeding 85 percent. While state percentages have gradually increased from 2009 to 2018 (89.8 percent to 93.7 percent), county percentages have fluctuated. The Osceola County percentage has increased from 86.3 percent in 2009 to 92.9 percent in 2018. (See Chart 7.2)

INFLUENZA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)

Influenza (flu) vaccination percentages for adults ages 65 and older decreased in Osceola County from 59.9 percent in 2007 to 53.1 percent in 2013 then increased slightly to 53.2 percent in 2016. The state percentage increased from 64.6 percent in 2007 to 65.3 in 2010 before decreasing to 57.6 percent in 2016. (See Chart 7.3)

PNEUMONIA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)

Pneumonia vaccination percentages for Osceola County adults ages 65 and older decreased from 61 percent in 2007 to 44.9 percent in 2016. The county percentage was lower than the state percentage (65.6 percent) in 2016. (See Chart 7.4)

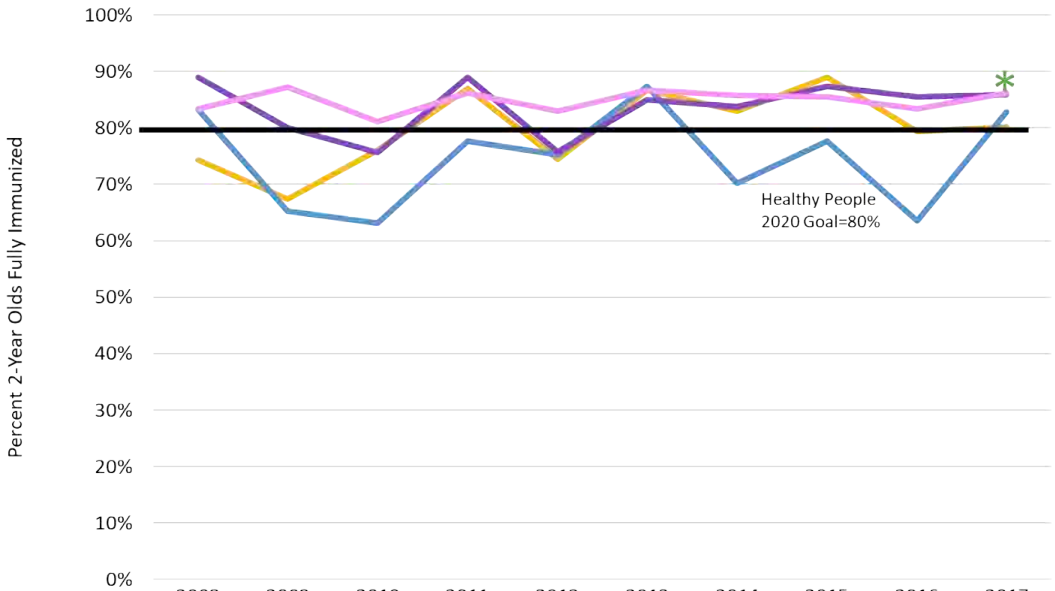
NEW HIV CASES REPORTED (2008-2017)

The rate of new HIV cases per 100,000 population increased in Osceola County from 24.1 in 2008 to 26.8 to 2017. The state rate decreased during the same time (32.5 to 24.1). (See Chart 7.5)

NEW AIDS CASES REPORTED (2008-2017)

The rate of new AIDS cases per 100,000 decreased in both Osceola County and the state from 2008 to 2017. Osceola County's rate was 11.5 in 2008 and 9.1 in 2017. The state rate decreased from 22.3 in 2008 to 9.9 in 2017. (See Chart 7.6)

CHART 7.1: CHILDHOOD IMMUNIZATIONS 2 YEAR OLDS (2008-2017)

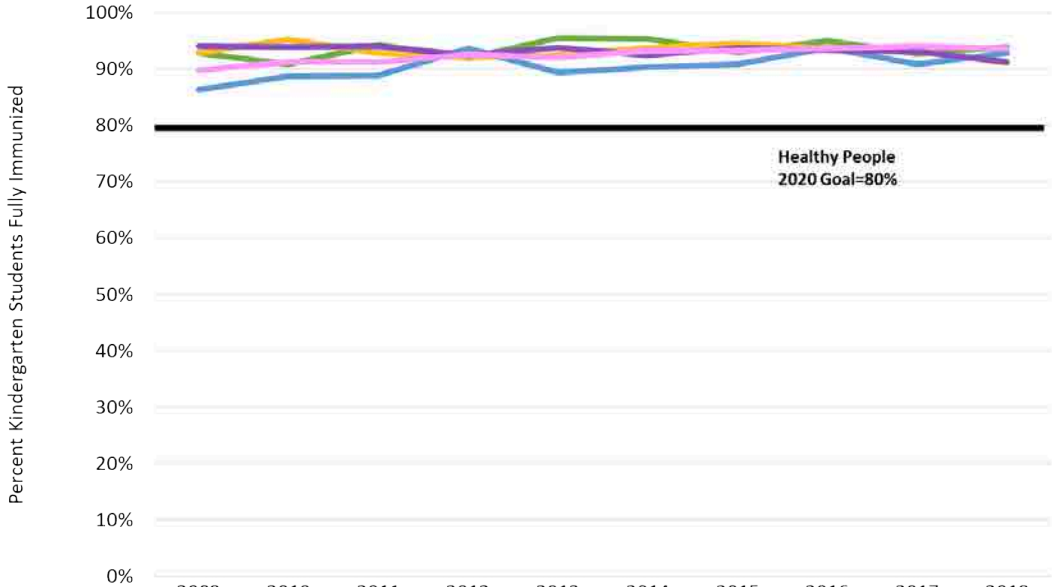


	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88.3%
ORANGE	74.3%	67.4%	76.1%	87.0%	74.4%	86.7%	83.0%	88.9%	79.4%	80.2%
OSCEOLA	83.3%	65.3%	63.2%	77.7%	75.2%	87.3%	70.2%	77.7%	63.6%	82.9%
SEMINOLE	89.0%	80.0%	75.7%	89.0%	75.8%	85.0%	83.7%	87.4%	85.5%	85.9%
FLORIDA	83.4%	87.2%	81.1%	86.1%	83.0%	86.7%	85.7%	85.5%	83.4%	86.1%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology, Immunization Section

*Represents a single data point where there has been inconsistent data for a county

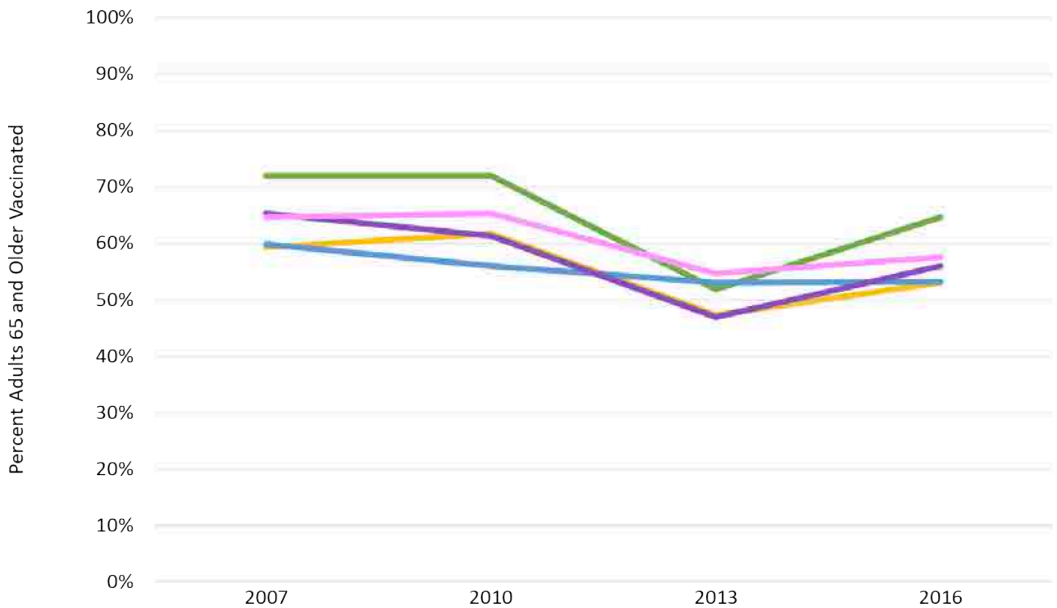
CHART 7.2: CHILDHOOD IMMUNIZATIONS KINDERGARTEN (2009-2018)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	92.9%	90.8%	94.3%	91.9%	95.5%	95.4%	93.0%	95.0%	92.7%	93.9%
ORANGE	92.9%	95.3%	92.8%	92.1%	92.4%	93.8%	94.6%	93.7%	93.3%	91.1%
OSCEOLA	86.3%	88.7%	88.9%	93.7%	89.4%	90.3%	90.8%	93.8%	90.9%	92.9%
SEMINOLE	94.0%	93.9%	94.1%	92.5%	93.8%	92.4%	93.8%	93.4%	93.1%	91.3%
FLORIDA	89.8%	91.3%	91.3%	92.6%	92.1%	93.2%	93.3%	93.7%	94.1%	93.7%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology, Immunization Section

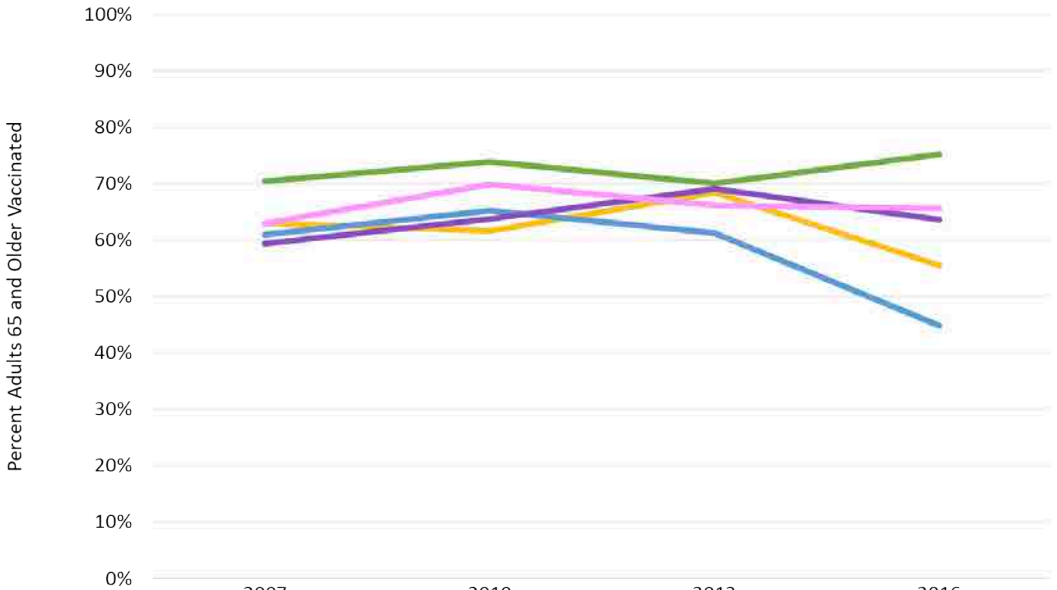
CHART 7.3: INFLUENZA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	71.9%	71.9%	51.8%	64.7%
ORANGE	59.3%	61.7%	47.4%	53.0%
OSCEOLA	59.9%	56.0%	53.1%	53.2%
SEMINOLE	65.3%	61.3%	47.0%	56.0%
FLORIDA	64.6%	65.3%	54.6%	57.6%

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

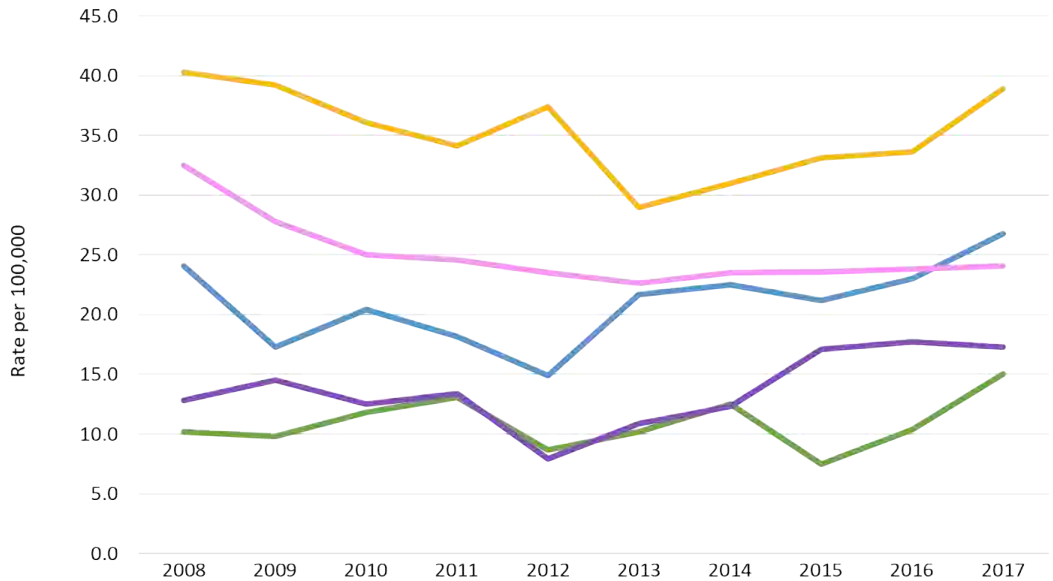
CHART 7.4: PNEUMONIA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	70.4%	73.9%	70.1%	75.2%
ORANGE	63.0%	61.6%	68.5%	55.6%
OSCEOLA	61.0%	65.2%	61.3%	44.9%
SEMINOLE	59.4%	63.8%	69.1%	63.6%
FLORIDA	63.0%	69.9%	66.2%	65.6%

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

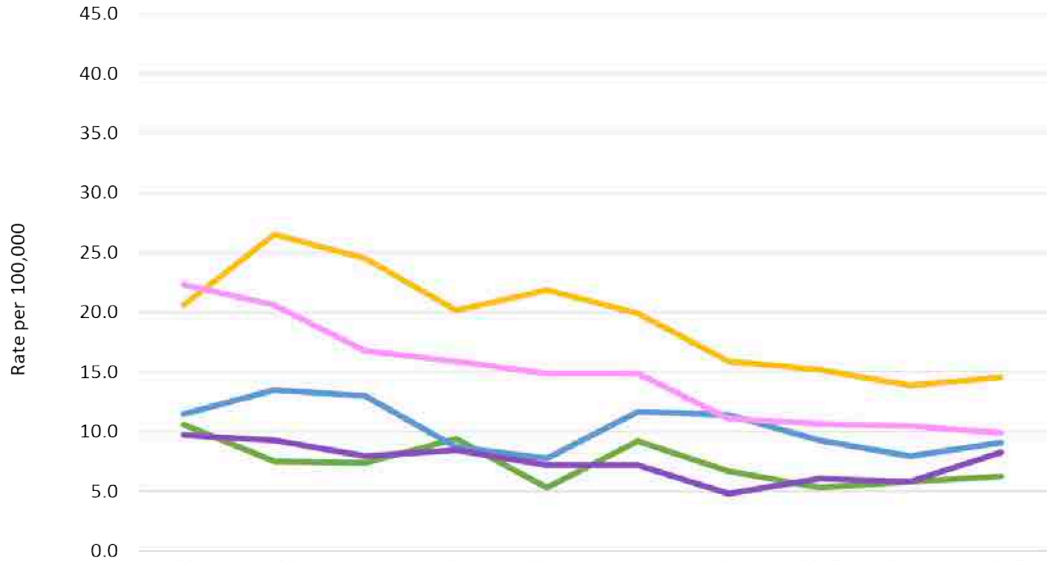
CHART 7.5: NEW HIV CASES REPORTED (2008-2017)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.2	9.8	11.8	13.1	8.7	10.2	12.5	7.5	10.4	15.0
ORANGE	40.3	39.2	36.1	34.1	37.4	29.0	31.0	33.1	33.6	38.9
OSCEOLA	24.1	17.3	20.4	18.2	14.9	21.7	22.5	21.2	23.0	26.8
SEMINOLE	12.8	14.5	12.5	13.4	7.9	10.9	12.3	17.1	17.7	17.3
FLORIDA	32.5	27.8	25.0	24.6	23.5	22.6	23.5	23.6	23.8	24.1

Source: FLHealthCHARTS: Florida Department of Health, Bureau of HIV/AIDS

CHART 7.6: NEW AIDS CASES REPORTED (2008-2017)



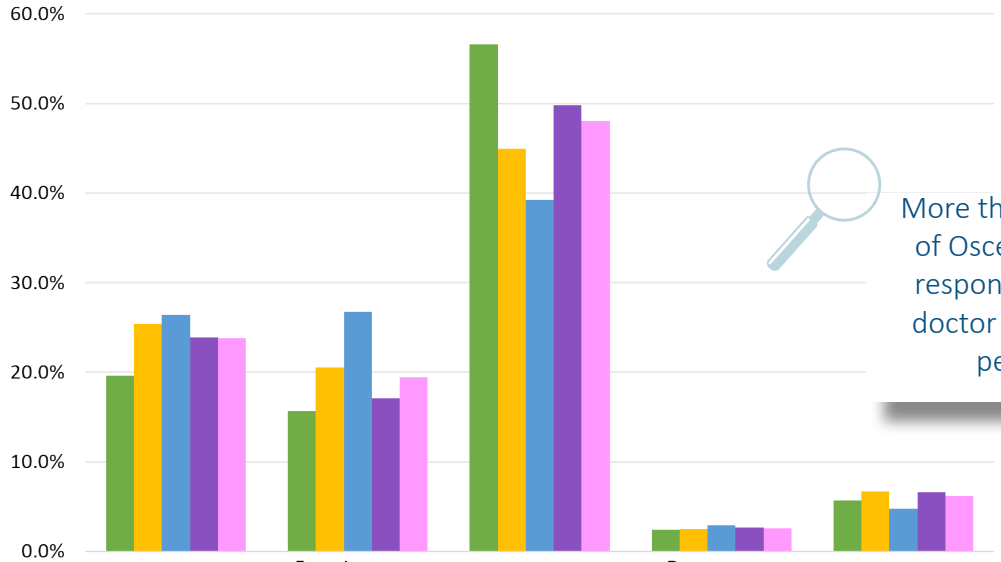
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.6	7.5	7.4	9.4	5.3	9.2	6.7	5.3	5.8	6.3
ORANGE	20.6	26.5	24.5	20.2	21.9	19.9	15.9	15.2	13.9	14.6
OSCEOLA	11.5	13.5	13.0	8.7	7.8	11.7	11.4	9.3	8.0	9.1
SEMINOLE	9.7	9.3	8.0	8.5	7.2	7.2	4.8	6.1	5.8	8.3
FLORIDA	22.3	20.6	16.8	15.9	14.9	14.9	11.1	10.7	10.5	9.9

Source: FLHealthCHARTS: Florida Department of Health, Bureau of HIV/AIDS

Preventative Care: What the Community is Saying

More than a quarter (26.4 percent) of the community survey respondents from Osceola County indicated that they see a doctor or a medical provider once a year compared to 23.8 percent for the overall region. In addition, 39.2 percent of the respondents only see a doctor or provider when they are sick compared to 48 percent for the overall region. This is illustrated in Figure 7.4.

FIGURE 7.4: FREQUENCY OF DOCTOR VISITS, COMMUNITY SURVEY 2019



	Once per year	Few times per year	Only when sick	Do not go to doctor	Other
LAKE	19.6%	15.7%	56.6%	2.4%	5.7%
ORANGE	25.4%	20.5%	44.9%	2.5%	6.7%
OSCEOLA	26.4%	26.7%	39.2%	2.9%	4.8%
SEMINOLE	23.9%	17.1%	49.8%	2.7%	6.6%
OVERALL	23.8%	19.4%	48.0%	2.6%	6.2%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

More than a quarter of Osceola County respondents see a doctor a few times per year.

Table 7.1 outlines the percentages of community survey respondents by county and overall that accessed preventative care services over the past two years.

TABLE 7.1: PREVENTATIVE CARE SERVICES, COMMUNITY SURVEY 2019*

	Overall	Lake	Orange	Osceola	Seminole
Annual exam	70.6%	75.2%	68.8%	67.5%	71.1%
Prostate specific antigen test (PSA Test)	4.6%	7.0%	4.0%	0.3%	5.4%
Dental exam	62.8%	66.6%	62.2%	55.0%	63.7%
Sigmoidoscopy	1.2%	1.1%	1.2%	0.3%	1.7%
Lab screenings or lab work	70.5%	76.4%	68.3%	66.4%	70.6%
Eye exam	58.7%	66.6%	55.6%	54.3%	58.5%
Colonoscopy	13.3%	16.9%	11.5%	11.1%	14.0%
Blood pressure screening	55.0%	58.2%	54.0%	43.9%	59.7%
Pap test	41.6%	38.0%	43.1%	45.7%	40.3%
Diabetic screening	28.7%	27.4%	30.6%	23.2%	28.9%
Mammogram	38.5%	44.1%	35.2%	38.4%	39.2%
Cholesterol screening	50.6%	54.4%	49.1%	40.5%	55.1%

*lowest scores are highlighted in red.
Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to preventative care:

- Understanding the relationship between health literacy and understanding health conditions
- Going to the emergency department because they do not have a primary care doctor
- Lack of trust for doctors in the senior community

Barriers to care identified by primary research participants included:

- Lack of health insurance
- Access to care

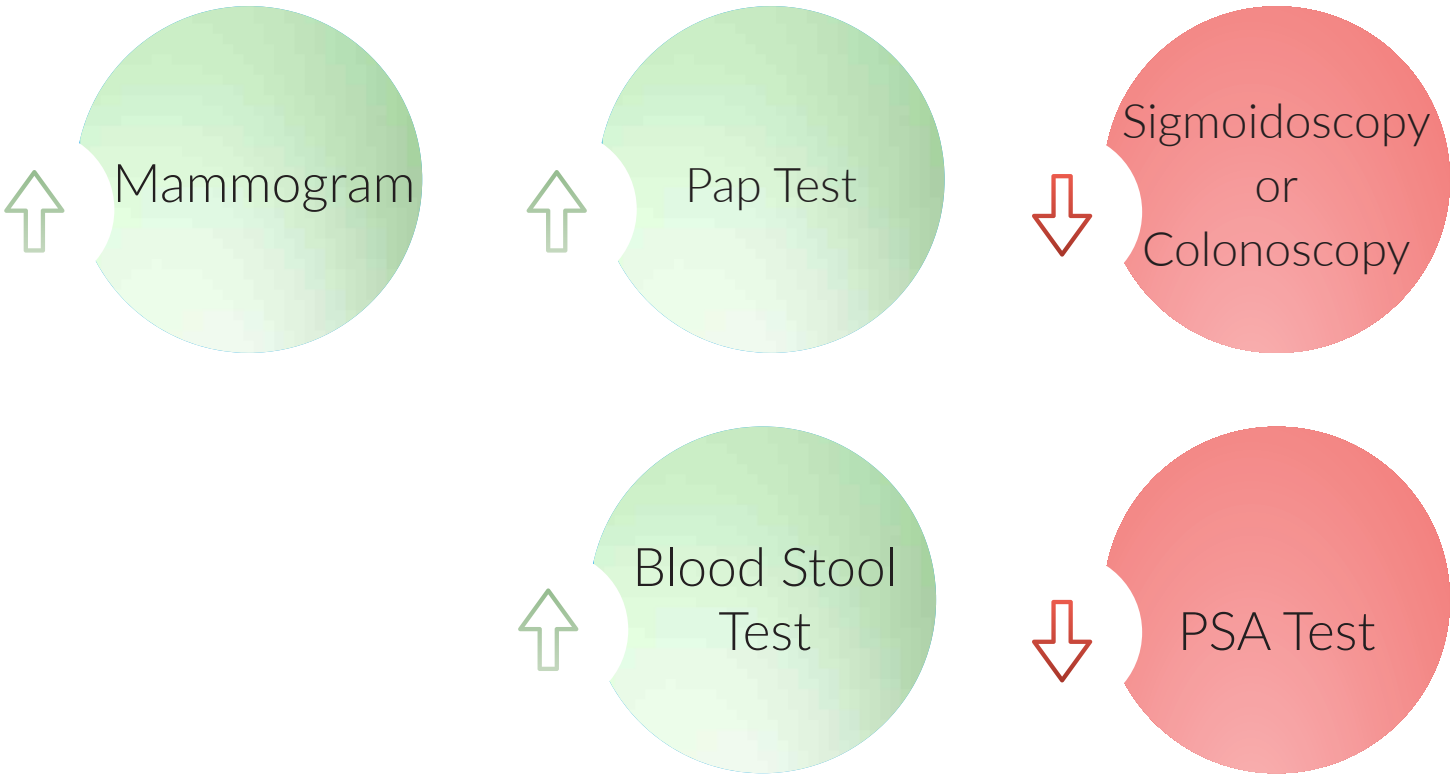
Needed services related to preventative care that were identified by primary research participants included:

- Health literacy programs
- More bilingual providers, especially Spanish-speaking
- Dental care for both children and adults
- Coordination with churches and community centers to offer services
- Increased access to integrated care
- Healthy living and healthy aging education

Preventative Care at a Glance

The key indicators related to preventative care that have changed since the last CHNA are identified in Figure 7.5. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.5: PREVENTATIVE CARE INDICATORS



Source: Strategy Solutions, Inc.

Preventative Care: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

USPSTF RECOMMENDATIONS ON PREVENTATIVE SERVICES

The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of national experts in disease prevention and evidence-based medicine. The task force works to improve the health of all Americans by making evidence-based recommendations about clinical preventative services. The USPSTF is the leading independent panel of private-sector experts in prevention and primary care. The USPSTF recommendations are based on rigorous, impartial assessments of the scientific evidence for the effectiveness of a broad range of clinical preventative services, including screening, counseling and preventative medications.

The mission of the USPSTF is to evaluate the benefits of individual services based on age, gender and risk factors for disease, make recommendations about which preventative services should be incorporated routinely into primary medical care and for which populations, and identify a research agenda for clinical preventative care. Recommendations issued by the USPSTF are assigned a letter grade of A, B, C, D or I to help clinicians recommend appropriate services to their patients. For a complete list of grades and their definitions, please visit: https://content.highmarkprc.com/files/region/hdebcbs/educationmanuals/clinicalguidelines/guideline-19-64.pdf.

The grades are defined in Figure 7.6. Note that USPSTF reports indicators as 'aged', whereas FLHealthCHARTS reports indicators as 'ages.'

FIGURE 7.6: USPSTF GRADE DEFINITIONS

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms

Source: U.S. Preventive Services Task Force

WOMEN AGED 40 AND OLDER WHO RECEIVED A MAMMOGRAM IN PAST YEAR (2002-2016)

2019 USPSTF recommendations:

- Women aged 40-49 years — C
- Women aged 50-74 years — B
- Women aged 75 years or older — I
- All women — I
- Women with dense breasts — I

In Osceola County, the percentage of women aged 40 years and older who received a mammogram in the previous year decreased from 59.5 percent in 2002 to 51.4 percent in 2016. The state percentage decreased from 65.3 percent in 2002 to 60.8 percent in 2016. The county's percentage was lower than the state percentage (60.8 percent) in 2016. (See Chart 7.7)

WOMEN AGED 18 AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2002-2016)

2018 USPSTF recommendations:

- Women younger than 21 years — D
- Women aged 21-65 years (Pap smear) every three years or 30-65 (in combo with HPV testing) every five years — A
- Women younger than 30 years, HPV testing — D
- Women older than 65, who have had adequate prior screening — D
- Women who have had a hysterectomy — D

The number of women aged 18 years and older who received a Pap test in the previous year decreased in both Osceola County (72.5 percent to 51.5 percent) and the state (70.7 percent to 48.4 percent) from 2002 to 2016. (See Chart 7.8)

ADULTS AGED 50 AND OLDER WHO RECEIVED A SIGMOIDOSCOPY OR COLONOSCOPY IN PAST FIVE YEARS (2002-2016)

2019 USPSTF recommendations:

Adults aged 50-75 years: — A

- Colonoscopy every 10 years or
- Fecal occult blood test home three-pack FOBT test or
- FIT fecal immunochemical test every year or
- Flexible sigmoidoscopy every five years or
- Flexible sigmoidoscopy every 10 years with FIT every year or
- CT colonography every five years or
- Cologuard (DNA stool screening) every three years

Adults aged 76-85 years — C

In both Osceola County and the state, the percentage of adults aged 50 years and older who had received a sigmoidoscopy or colonoscopy in the past five years increased from 2002 to 2016. In 2016, Osceola County's percentage increased from 43.6 percent in 2002 to 54 percent in 2016. The state percentage increased from 44.6 percent in 2002 to 53.9 percent in 2016. (See Chart 7.9)

ADULTS AGED 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN PAST YEAR (2002-2016)

The percentage in Osceola County of adults aged 50 and older who received a blood stool test in the past year decreased from 24.4 percent in 2002 to 21.5 percent in 2016. The 2016 county percentage was higher than that of the state (16 percent). (See Chart 7.10)

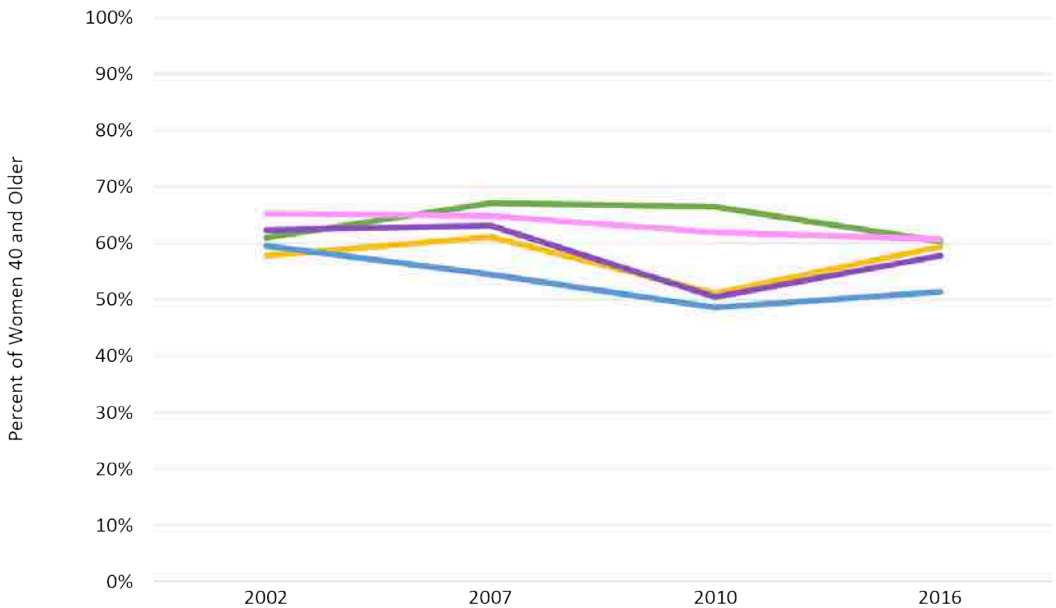
MEN AGED 50 AND OLDER WHO RECEIVED A PSA TEST IN PAST TWO YEARS (2007-2016)

2019 USPSTF recommendations:

- Men aged 55-69, screening with PSA (prostate specific antigen) — C

In Osceola County, the percentage of men aged 50 years and older receiving a PSA test increased from 50 percent in 2007 to 52.4 percent in 2016. Although the state rate also decreased from 60.2 percent in 2007 to 54.9 percent in 2016 it was consistently higher than that of the county. (See Chart 7.11)

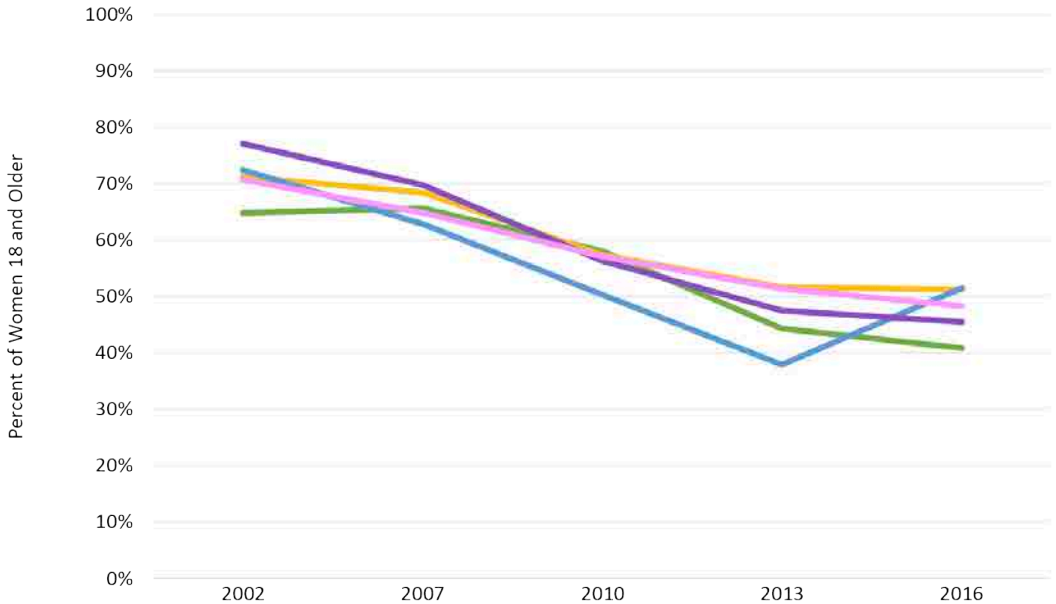
CHART 7.7: WOMEN AGED 40 AND OLDER WHO RECEIVED A MAMMOGRAM IN PAST YEAR (2002-2016)



	2002	2007	2010	2016
LAKE	61.0%	67.1%	66.5%	60.4%
ORANGE	57.8%	61.1%	51.2%	59.4%
OSCEOLA	59.5%	54.5%	48.6%	51.4%
SEMINOLE	62.3%	63.2%	50.5%	57.8%
FLORIDA	65.3%	64.9%	61.9%	60.8%

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

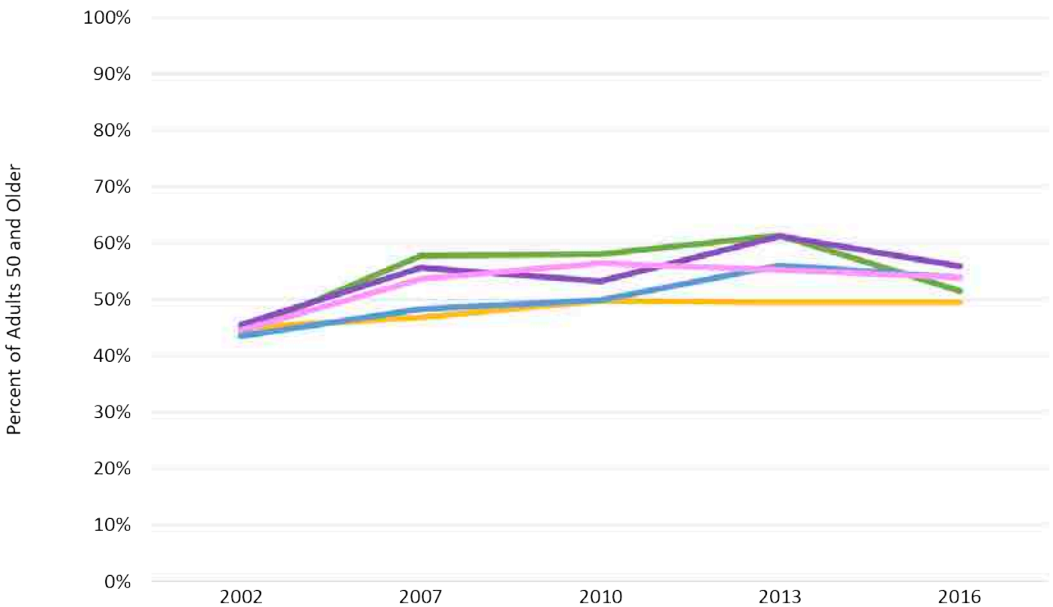
CHART 7.8: WOMEN AGED 18 AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2002-2016)



	2002	2007	2010	2013	2016
LAKE	64.8%	65.7%	58.1%	44.3%	40.9%
ORANGE	71.2%	68.4%	57.4%	51.7%	51.3%
OSCEOLA	72.5%	62.8%	50.3%	38.0%	51.5%
SEMINOLE	77.1%	69.8%	56.3%	47.5%	45.5%
FLORIDA	70.7%	64.8%	57.1%	51.4%	48.4%

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

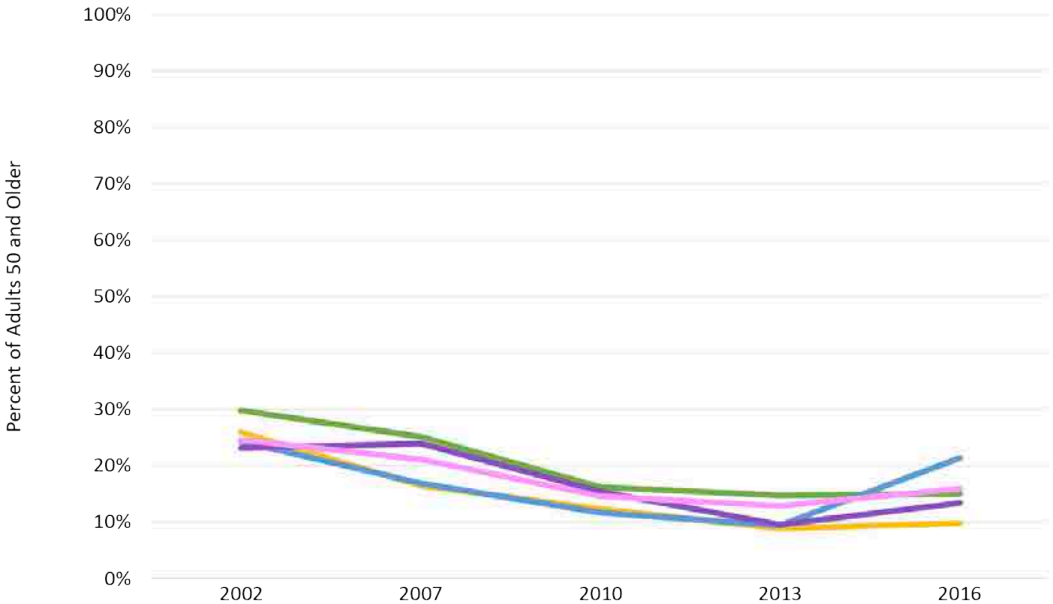
CHART 7.9: ADULTS AGED 50 AND OLDER WHO RECEIVED A SIGMOIDOSCOPY OR COLONOSCOPY IN PAST 5 YEARS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	44.2%	57.8%	58.1%	61.4%	51.5%
ORANGE	45.0%	46.9%	49.8%	49.6%	49.6%
OSCEOLA	43.6%	48.4%	50.0%	56.1%	54.0%
SEMINOLE	45.5%	55.7%	53.3%	61.2%	55.9%
FLORIDA	44.6%	53.7%	56.4%	55.3%	53.9%

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

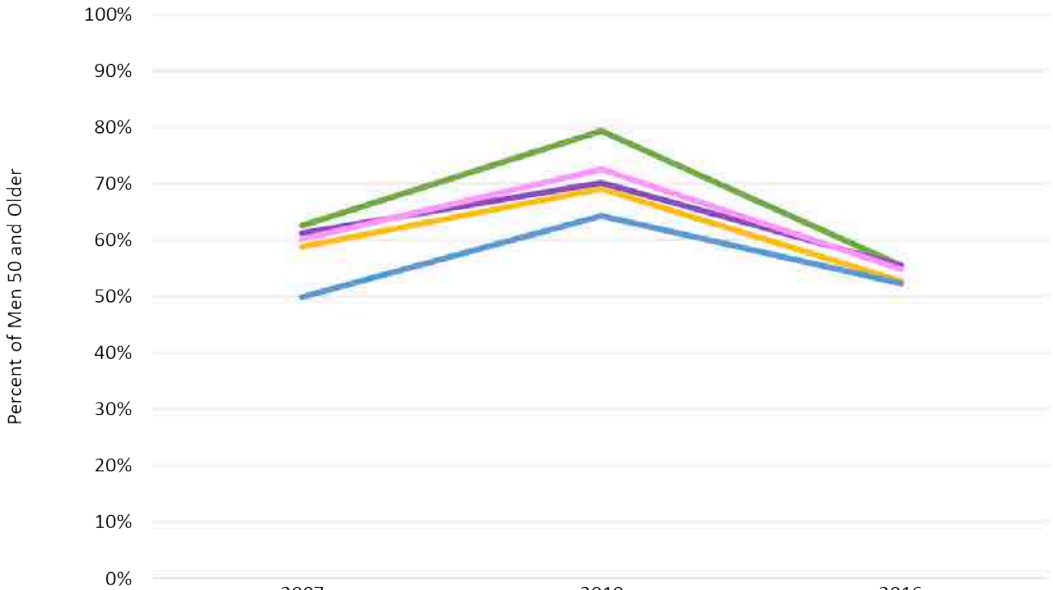
CHART 7.10: ADULTS AGED 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN PAST YEAR (2002-2016)



	2002	2007	2010	2013	2016
LAKE	29.8%	25.2%	16.3%	14.8%	15.0%
ORANGE	26.0%	16.5%	12.4%	8.9%	9.9%
OSCEOLA	24.4%	16.9%	11.7%	9.5%	21.5%
SEMINOLE	23.2%	24.0%	15.5%	9.6%	13.4%
FLORIDA	24.7%	21.2%	14.7%	12.9%	16.0%

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

CHART 7.11: MEN AGED 50 AND OLDER WHO RECEIVED A PSA TEST IN PAST TWO YEARS (2007-2016)



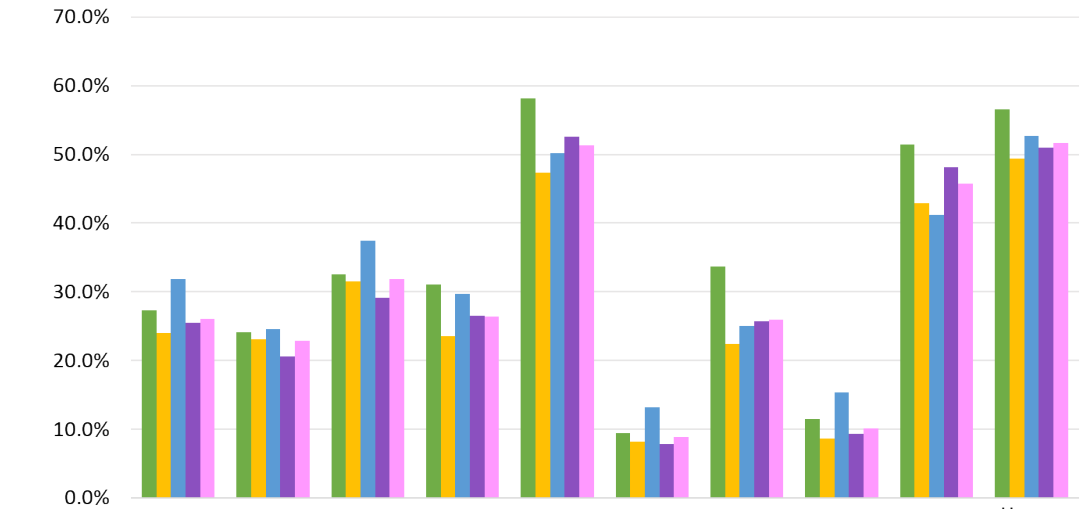
	2007	2010	2016
LAKE	62.6%	79.4%	55.5%
ORANGE	58.8%	69.1%	52.7%
OSCEOLA	50.0%	64.3%	52.4%
SEMINOLE	61.3%	70.2%	55.6%
FLORIDA	60.2%	72.6%	54.9%

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

Chronic Conditions: What the Community is Saying

Figure 7.7 illustrates the percentages of community survey respondents that are experiencing either chronic conditions or risk factors related to chronic conditions. More than half (50.2 percent) of Osceola County community survey respondents indicated that they consider themselves overweight or obese.

FIGURE 7.7: CHRONIC CONDITIONS AND RISK FACTORS, COMMUNITY SURVEY 2019



	Asthma/ COPD-related issues	Cancer	Diabetes	Heart disease	Obesity and overweight	Childhood obesity	Cardio-vascular disease	Stroke	High choles-terol	Hyper-tension/ high blood pressure
LAKE	27.3%	24.1%	32.5%	31.1%	58.1%	9.4%	33.7%	11.5%	51.4%	56.6%
ORANGE	24.0%	23.1%	31.5%	23.5%	47.3%	8.2%	22.4%	8.6%	42.9%	49.4%
OSCEOLA	31.8%	24.6%	37.4%	29.7%	50.2%	13.2%	25.0%	15.3%	41.2%	52.7%
SEMINOLE	25.5%	20.6%	29.1%	26.5%	52.6%	7.8%	25.7%	9.3%	48.1%	51.0%
OVERALL	26.0%	22.9%	31.8%	26.4%	51.3%	8.9%	25.9%	10.1%	45.7%	51.7%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Primary research participants identified the following needs and issues related to chronic conditions:

- Obesity
- Hypertension
- Prediabetes/diabetes
- People who are noncompliant with their medications
- Increased number of co-morbidities and untreated chronic conditions
- Heart disease
- Living with a disability
- Cancer

Barriers to care identified by primary research participants included:

- Lack of affordable specialty care
- Lack of accessible, affordable healthy foods

Needed services related to chronic conditions identified by primary research participants included:

- Increased services for those with disabilities
- Accessible chronic condition education
- More specialists needed in nephrology, endocrinology, neurology and dermatology
- More senior services needed

Chronic Conditions at a Glance

The key indicators related to chronic conditions that have changed since the last CHNA are identified in Figure 7.8. Red means that the indicator has worsened green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.8: CHRONIC CONDITIONS INDICATORS

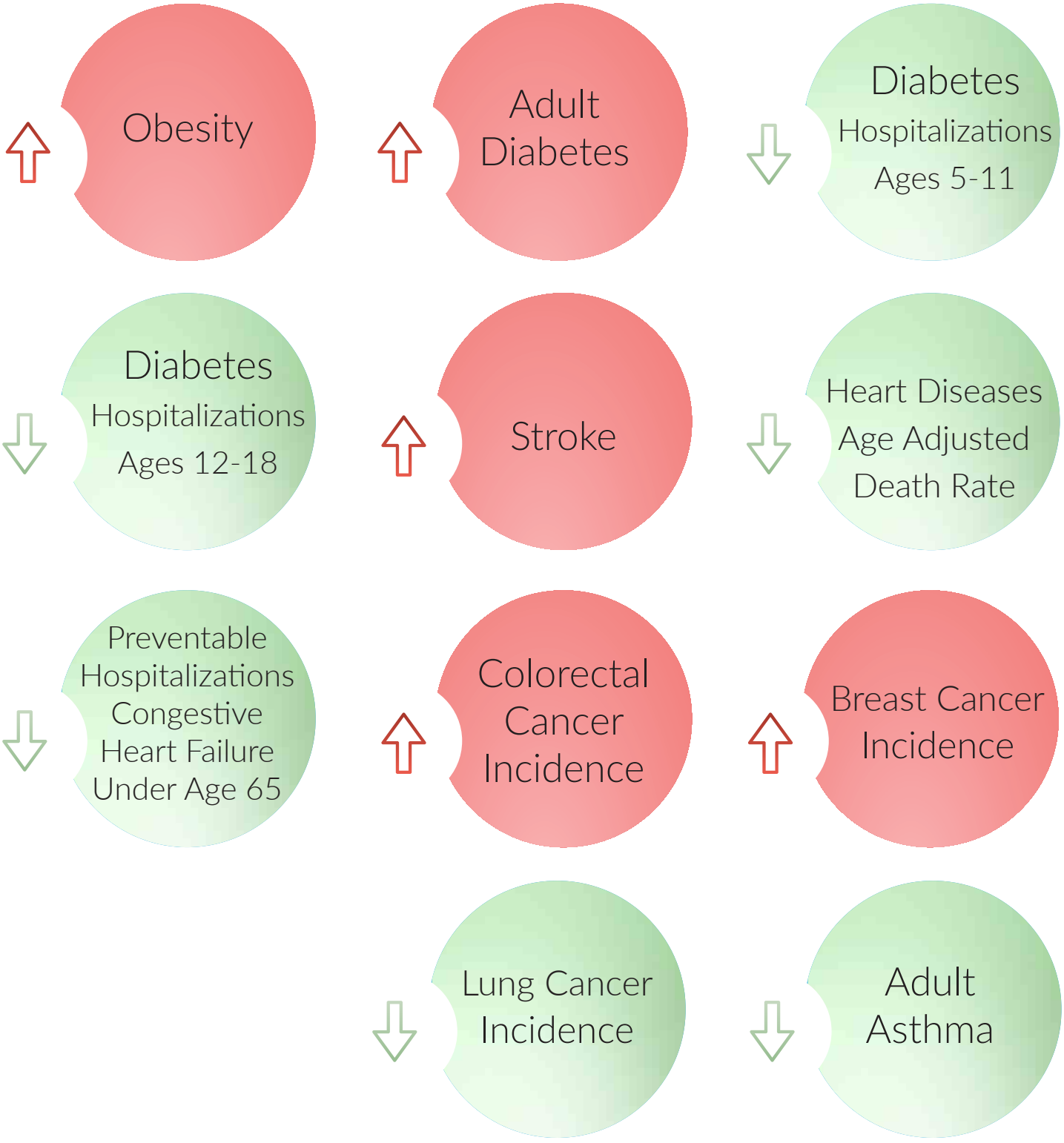
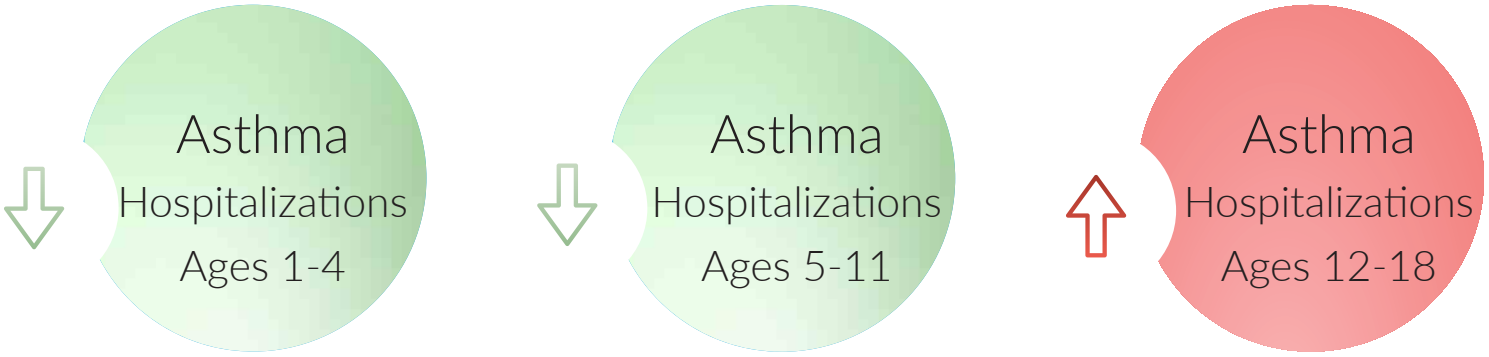


FIGURE 7.8: CHRONIC CONDITIONS INDICATORS, CONTINUED



Source: Strategy Solutions, Inc.

Chronic Conditions: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WHO ARE OBESE (2002-2016)

Osceola County's percentage of adults who are obese trended upward from 2002 (21.4 percent) to 2016 (31.9 percent). The percentages of adults who are obese in Osceola County stayed below the HP2020 goal of 30.5 percent from 2002 to 2016 except for 2010 and 2016 when the percentage increased to 31.9 percent. The state percentage increased from 20.4 percent in 2002 to 27.4 percent in 2016. (See Chart 7.12)

MIDDLE SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)

The percentage of middle school students reporting a body mass index (BMI) at or above the 95th percentile remained relatively constant at the state level from 2006 (11.3 percent) to 2012 (11.6 percent), then increased in 2016 (12.6 percent). The Osceola County percentage decreased from 12.3 percent in 2006 to 10.7 percent in 2010 and later increased to 13.3 percent in 2016. Note that there was no data available for 2012. (See Chart 7.13)

HIGH SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)

The state's percentage for high school students reporting a BMI at or above the 95th percentile increased from 11.2 in 2006 to 13.3 percent in 2016. During this time, Osceola County's percentage increased from 10.1 percent in 2006 to 11.2 percent in 2016. (See Chart 7.14)

ADULTS DIAGNOSED WITH DIABETES (2002-2016)

The state percentage of adults diagnosed with diabetes steadily increased from 8.2 percent in 2002 to 11.8 percent in 2016. Osceola County's percentage more than doubled from 6.2 percent in 2002 to 14.7 percent in 2016, higher than the state percentage (11.8 percent) in 2016. (See Chart 7.15)

DIABETES HOSPITALIZATIONS CHILDREN AGES 5-11 (2011-2017)

Osceola County's rate per 100,000 of diabetes hospitalizations for children ages 5-11 fluctuated from 32.6 in 2011 to a high of 87.5 in 2013 before gradually decreasing to 46.5 in 2017. The state rate also fluctuated from 40.9 in 2011 to a high of 45.4 in 2016 before decreasing to 41.1 in 2017. (See Chart 7.16)

DIABETES HOSPITALIZATIONS CHILDREN AGES 12-18 (2011-2017)

Osceola County's rate per 100,000 of diabetes hospitalizations among children aged 12-18 years fluctuated from 98.9 in 2011 to a high of 190.9 in 2015 before dropping to 120.9 in 2017. The state rate increased from 111.6 in 2011 to a high of 140.3 in 2016 with a slight decrease to 138.3 in 2017. (See Chart 7.17)

ADULTS EVER TOLD THEY HAVE HYPERTENSION (HIGH BLOOD PRESSURE) (2002-2013)

The percentage of adults ever told they have hypertension in Osceola County increased from 26 percent in 2002 to 32 percent in 2013. The state percentage also increased from 2002 to 2013 (27.7 percent in 2002 and 34.6 percent in 2013). (See Chart 7.18)

ADULTS WITH HYPERTENSION WHO TAKE BLOOD PRESSURE MEDICATION (2002-2013)

The percentage of adults with hypertension who take blood pressure medication in Osceola County decreased from 74.9 percent in 2002 to 65.5 percent in 2013. The state percentage increased from 76 percent in 2002 to 79.4 percent in 2013 during this time. (See Chart 7.19)

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A STROKE (2007-2016)

The percentage of adults who have ever been told they had a stroke in Osceola County increased from 2.6 percent in 2007 to 3.5 percent in 2016. The county's percentage mirrored the state (3.5 percent) in 2016. (See Chart 7.20)

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD HIGH CHOLESTEROL (2002-2013)

The percentage of adults who have ever been told they had high cholesterol in Osceola County increased between 2002 (35.2 percent) and 2013 (37.2 percent). This exceeds the 13.5 percent target for HP2020. The state percentage decreased from 35.2 percent in 2002 to 33.4 percent in 2013. (See Chart 7.21)

HEART DISEASES, AGE-ADJUSTED DEATH RATE (2007-2017)

Osceola County's age adjusted death rate per 100,000 from heart diseases increased over time from 169.4 in 2007 to a high of 204.2 in 2014 before decreasing to 180.3 in 2017. The state rate decreased from 163.8 in 2007 to 148.5 in 2017. (See Chart 7.22)

PREVENTABLE HOSPITALIZATIONS UNDER AGE 65 FROM CONGESTIVE HEART FAILURE (2007-2017)

Preventable hospitalizations for populations under age 65 from congestive heart failure per 100,000 have decreased in Osceola County and the state from 2007 to 2017. The county rate (96 in 2007 and 67.2 in 2017) has been lower than the state rate (117.9 in 2007 and 73.7 in 2017) for this time frame. (See Chart 7.23)

COLORECTAL CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

While the rates have fluctuated between 2007 and 2016, Osceola County has seen an increase in colorectal cancer incidence, from 44.1 in 2007 and dropped to 27.6 in 2010 before gradually increasing to 45 in 2016. The state rate gradually decreased from 42.2 in 2007 to 36.5 in 2016. (See Chart 7.24)

FEMALE BREAST CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

The incidence of female breast cancer rate per 100,000 had a net increase in Osceola County from 99 in 2007 to 130.5 in 2016. The state rate increased from 113.7 in 2007 to 121.8 in 2016. (See Chart 7.25)

LUNG CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

The age-adjusted lung cancer incidence rate per 100,000 in Osceola County decreased from 62.1 in 2014 to 49.4 in 2010 before increasing to 59.1 in 2016. The state rate decreased from 65.9 in 2007 to 57.5 in 2016. (See Chart 7.26)

ADULTS WHO CURRENTLY HAVE ASTHMA (2007-2016)

The percentage of adults who currently have asthma increased in Osceola County from 7.3 percent in 2007 to 10.2 percent in 2010, followed by a decrease to 7.4 percent (2016). Osceola County's percentage was higher than the state percentage in 2016 (6.7 percent). (See Chart 7.27)

MIDDLE SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)

Osceola County and the state have seen increasing percentages of middle school students with known asthma. The county percentage increased from 17 percent in 2006 to 23.3 percent in 2016. The county percentage was higher than the state (19.5 percent) in 2016. (See Chart 7.28)

HIGH SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)

Osceola County's percentage of high school students with known asthma increased from 15.8 percent in 2006 to 23.5 percent in 2016. This was slightly higher than the state percentage in 2016 (20.5 percent). (See Chart 7.29)

ASTHMA HOSPITALIZATIONS AGES 1-4 (2003-2017)

The rate of asthma hospitalizations per 100,000 children aged 1-4 in both Osceola County and the state fluctuated from 2003 to 2017 with an overall decrease. The Osceola County rate was 827 in 2003 with a spike to 1050.4 in 2009 before decreasing to 494.5 in 2017. The state rate was 982 in 2003 and decreased to 551.8 in 2017. (See Chart 7.30)

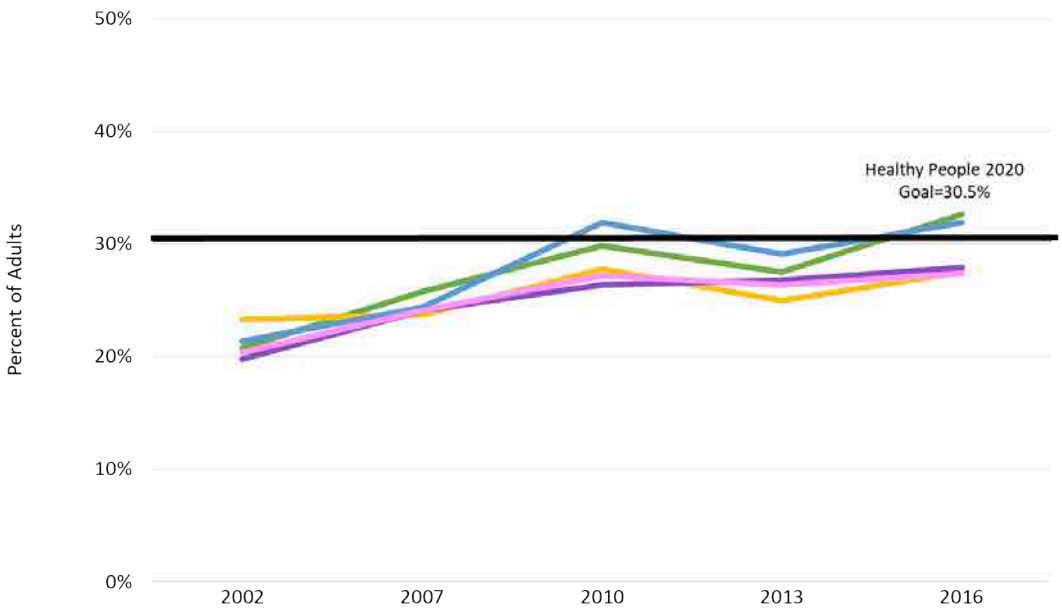
ASTHMA HOSPITALIZATIONS AGES 5-11 (2003-2017)

The rate of asthma hospitalizations per 100,000 children ages 5-11 fluctuated from 2003 to 2017, with an increase occurring in both Osceola County and the state. Osceola County's rate increased from 392 in 2003 to 421.3 in 2017. The state rate increased from 366.7 (2003) to 382.3 (2017). (See Chart 7.31)

ASTHMA HOSPITALIZATIONS AGES 12-18 (2003-2017)

From 2003 to 2017, the rate of asthma hospitalizations per 100,000 for children ages 12-18 has fluctuated in Osceola County and the state, both increasing over that time. The Osceola County rate increased from 293.5 in 2003 to 521.8 in 2017, higher than the 2017 state rate (443.9). (See Chart 7.32)

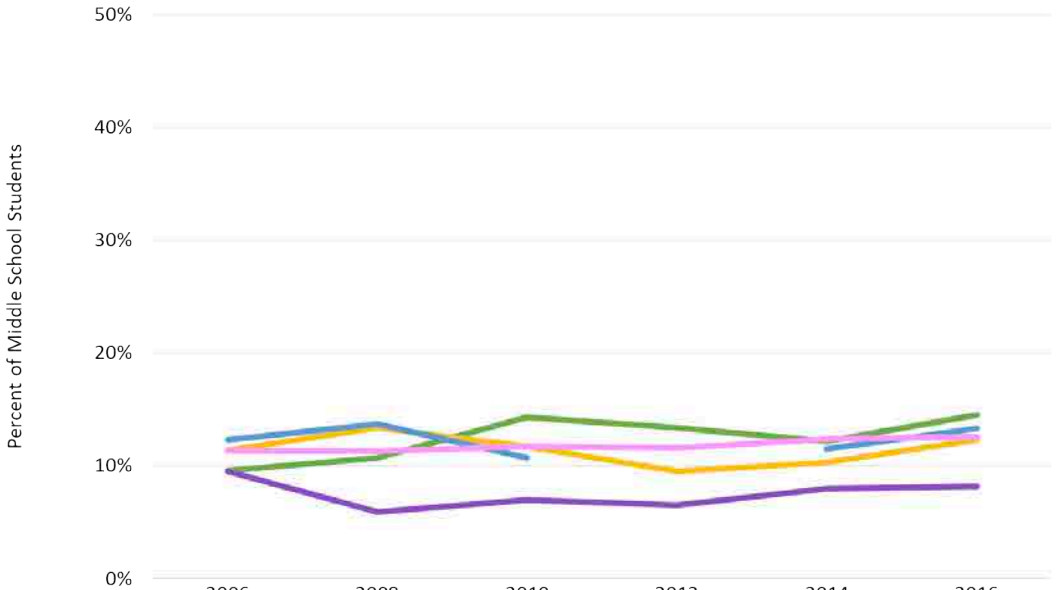
CHART 7.12: ADULTS WHO ARE OBESE (2002-2016)



	2002	2007	2010	2013	2016
LAKE	20.8%	25.8%	29.8%	27.5%	32.6%
ORANGE	23.3%	23.7%	27.8%	25.0%	27.5%
OSCEOLA	21.4%	24.4%	31.9%	29.1%	31.9%
SEMINOLE	19.8%	24.1%	26.4%	26.8%	27.9%
FLORIDA	20.4%	24.1%	27.2%	26.4%	27.4%

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

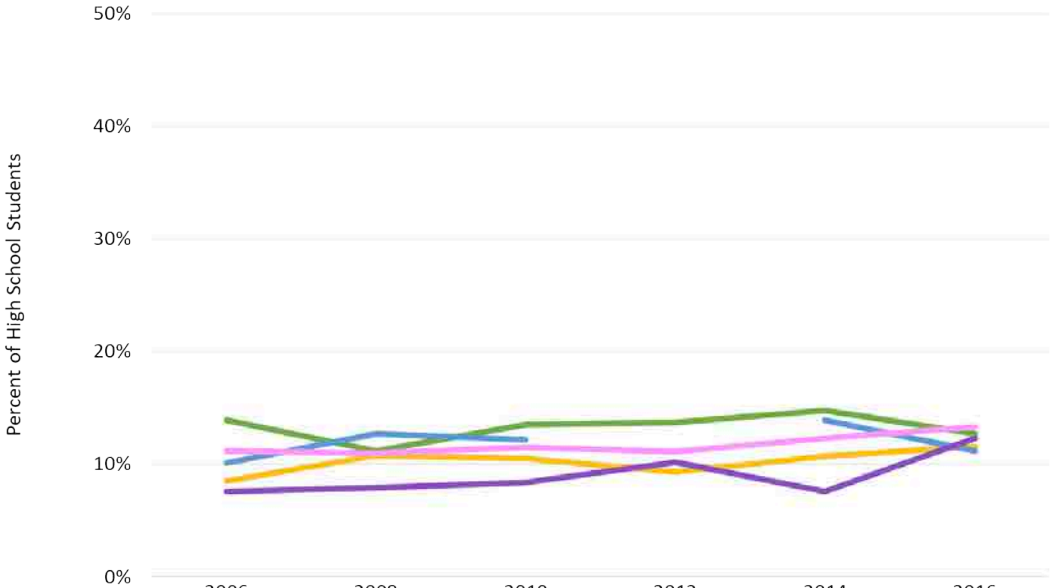
CHART 7.13: MIDDLE SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	9.6%	10.7%	14.3%	13.4%	12.2%	14.5%
ORANGE	11.4%	13.4%	11.7%	9.5%	10.3%	12.3%
OSCEOLA	12.3%	13.7%	10.7%	N/A	11.5%	13.3%
SEMINOLE	9.5%	5.9%	7.0%	6.5%	8.0%	8.2%
FLORIDA	11.3%	11.3%	11.7%	11.6%	12.4%	12.6%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

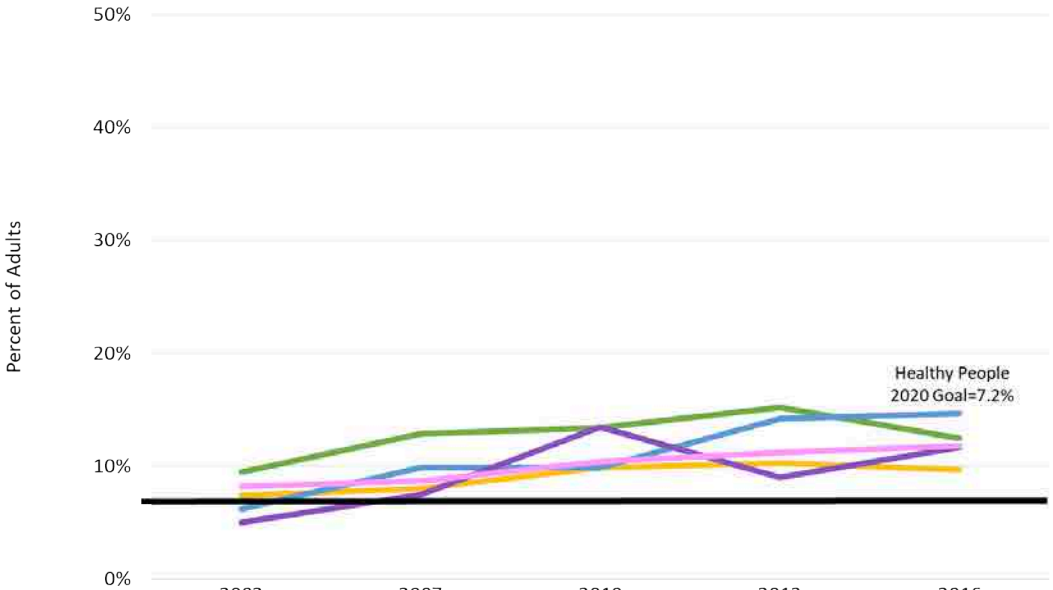
CHART 7.14: HIGH SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	13.9%	11.2%	13.5%	13.7%	14.8%	12.7%
ORANGE	8.5%	10.8%	10.5%	9.3%	10.7%	11.6%
OSCEOLA	10.1%	12.7%	12.2%	N/A	13.9%	11.2%
SEMINOLE	7.6%	7.9%	8.4%	10.2%	7.6%	12.3%
FLORIDA	11.2%	11.0%	11.5%	11.1%	12.3%	13.3%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

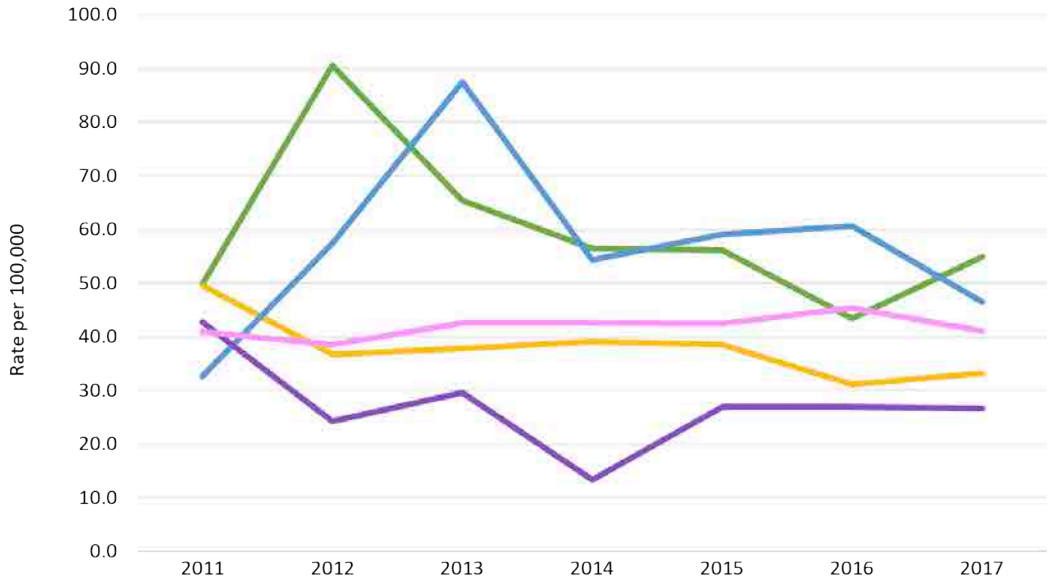
CHART 7.15: ADULTS DIAGNOSED WITH DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	9.5%	12.9%	13.4%	15.2%	12.5%
ORANGE	7.4%	8.0%	9.9%	10.3%	9.7%
OSCEOLA	6.2%	9.9%	9.9%	14.2%	14.7%
SEMINOLE	5.0%	7.5%	13.5%	9.0%	11.7%
FLORIDA	8.2%	8.7%	10.4%	11.2%	11.8%

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

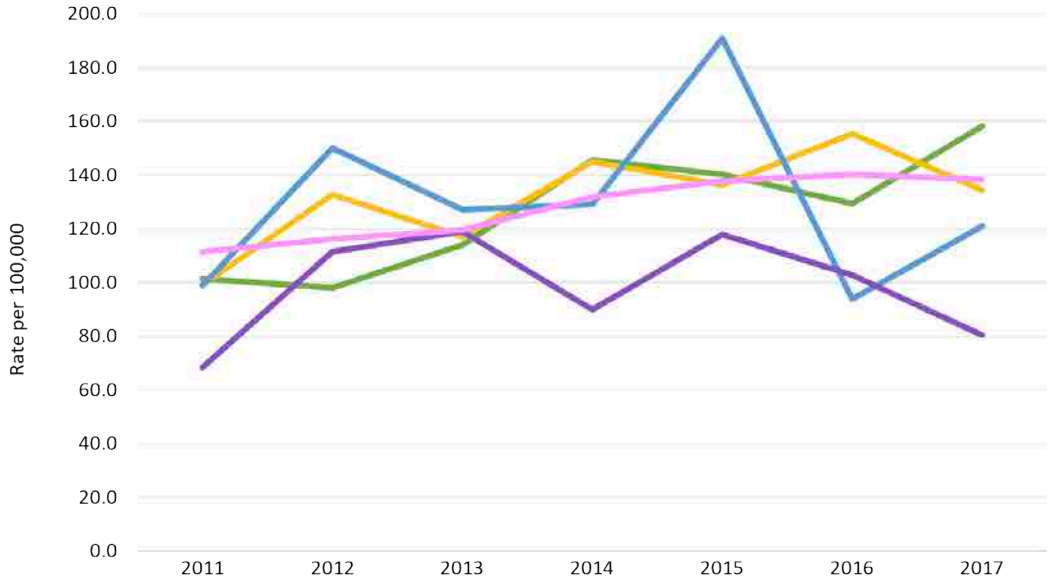
CHART 7.16: DIABETES HOSPITALIZATIONS CHILDREN AGES 5-11 (2011-2017)



	2011	2012	2013	2014	2015	2016	2017
LAKE	49.8	90.5	65.4	56.4	56.2	43.4	54.9
ORANGE	49.6	36.7	37.9	39.1	38.5	31.1	33.2
OSCEOLA	32.6	57.4	87.5	54.3	59.1	60.7	46.5
SEMINOLE	42.8	24.3	29.6	13.4	26.9	26.9	26.6
FLORIDA	40.9	38.5	42.6	42.6	42.4	45.4	41.1

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

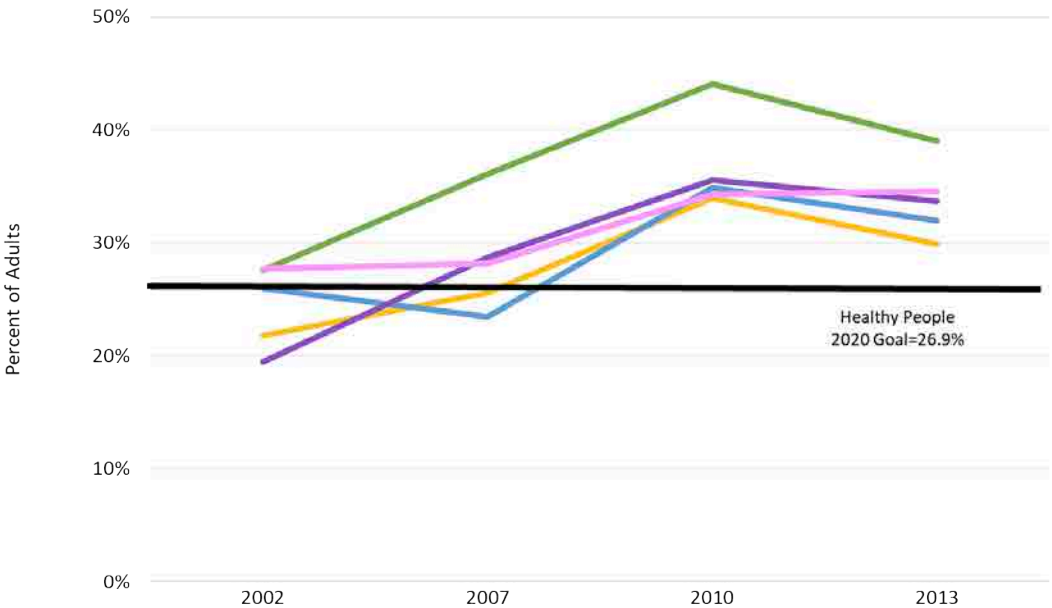
CHART 7.17: DIABETES HOSPITALIZATIONS CHILDREN AGES 12-18 (2011-2017)



	2011	2012	2013	2014	2015	2016	2017
LAKE	101.4	98.0	114.1	145.6	140.2	129.5	158.1
ORANGE	99.2	132.8	117.0	145.0	136.5	155.5	134.4
OSCEOLA	98.9	150.1	127.0	129.0	190.9	93.8	120.9
SEMINOLE	68.3	111.4	118.9	89.9	117.9	102.9	80.5
FLORIDA	111.6	116.1	119.6	131.8	137.8	140.3	138.3

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

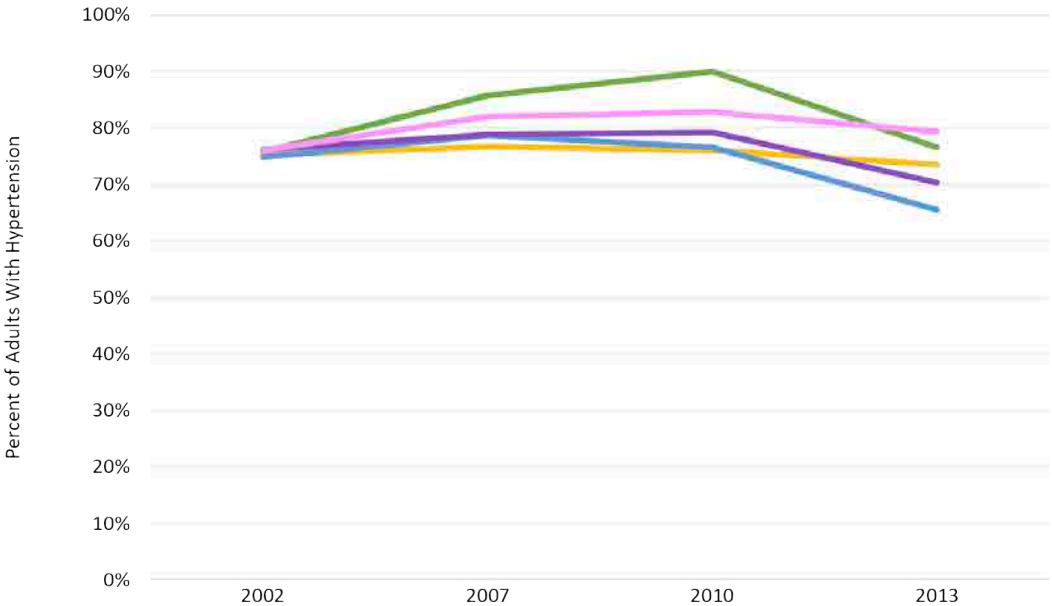
CHART 7.18: ADULTS EVER TOLD THEY HAVE HYPERTENSION (HIGH BLOOD PRESSURE) (2002-2013)



	2002	2007	2010	2013
LAKE	27.6%	36.1%	44.1%	39.0%
ORANGE	21.8%	25.6%	34.0%	29.9%
OSCEOLA	26.0%	23.5%	34.9%	32.0%
SEMINOLE	19.5%	28.7%	35.6%	33.7%
FLORIDA	27.7%	28.2%	34.3%	34.6%

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

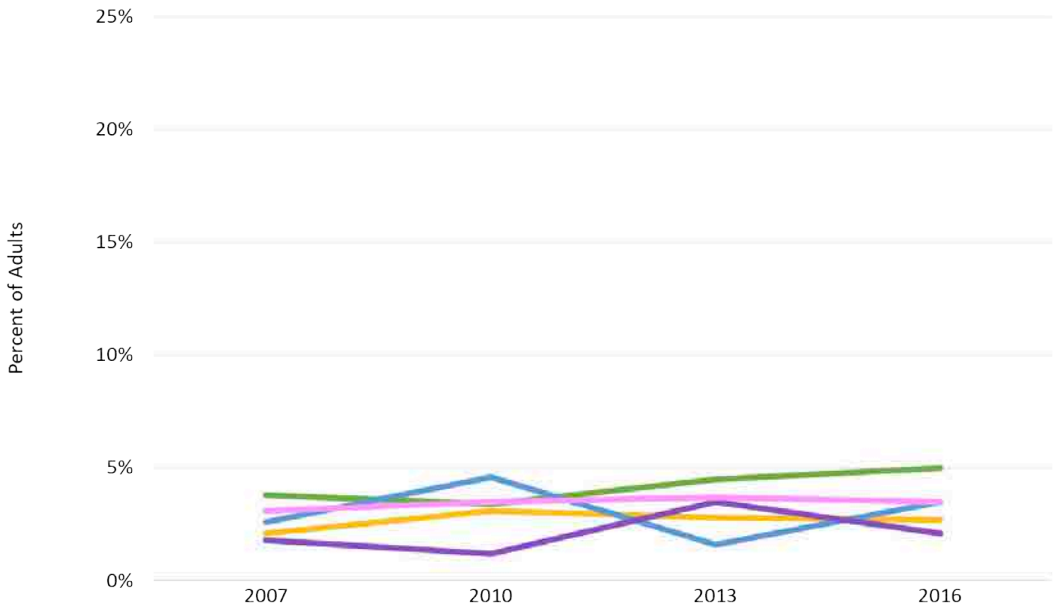
CHART 7.19: ADULTS WITH HYPERTENSION WHO TAKE BLOOD PRESSURE MEDICATION (2002-2013)



	2002	2007	2010	2013
LAKE	75.8%	85.8%	90.0%	76.6%
ORANGE	75.3%	76.7%	76.0%	73.5%
OSCEOLA	74.9%	78.7%	76.6%	65.5%
SEMINOLE	76.2%	78.9%	79.2%	70.4%
FLORIDA	76.0%	82.1%	82.8%	79.4%

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

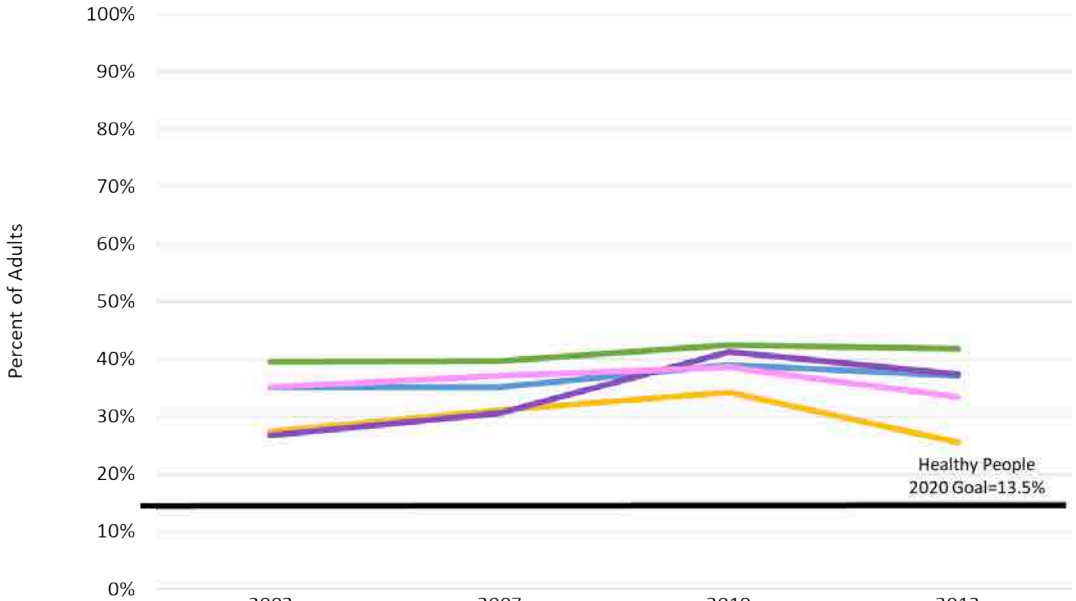
CHART 7.20: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	3.8%	3.4%	4.5%	5.0%
ORANGE	2.1%	3.1%	2.8%	2.7%
OSCEOLA	2.6%	4.6%	1.6%	3.5%
SEMINOLE	1.8%	1.2%	3.5%	2.1%
FLORIDA	3.1%	3.5%	3.7%	3.5%

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

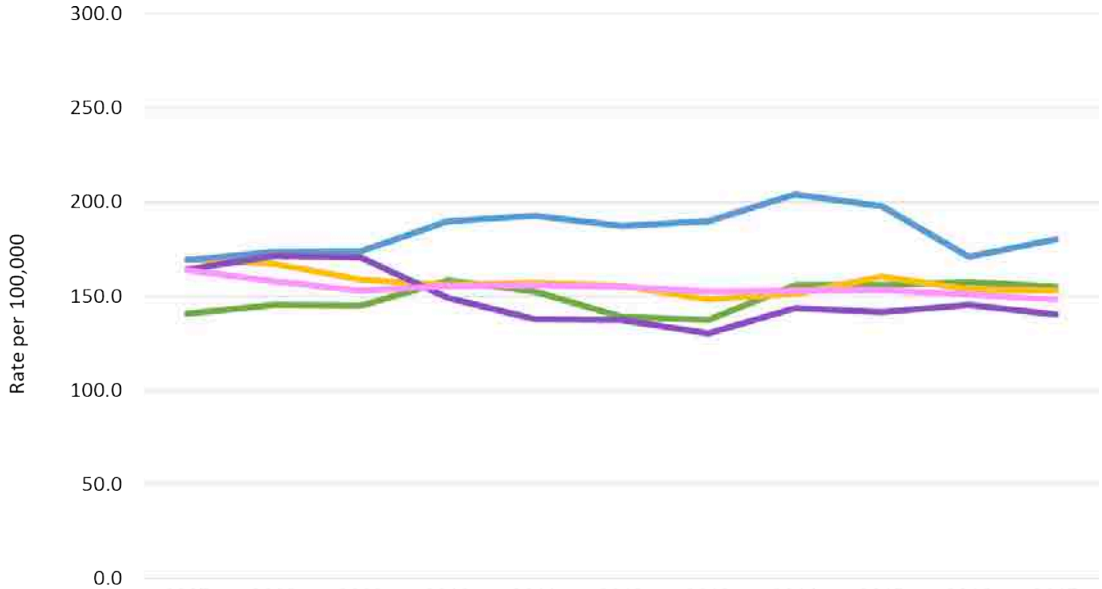
CHART 7.21: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD HIGH CHOLESTEROL (2002-2013)



	2002	2007	2010	2013
LAKE	39.6%	39.7%	42.5%	41.8%
ORANGE	27.4%	31.1%	34.2%	25.6%
OSCEOLA	35.2%	35.2%	39.0%	37.2%
SEMINOLE	26.7%	30.6%	41.3%	37.4%
FLORIDA	35.2%	37.1%	38.6%	33.4%

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

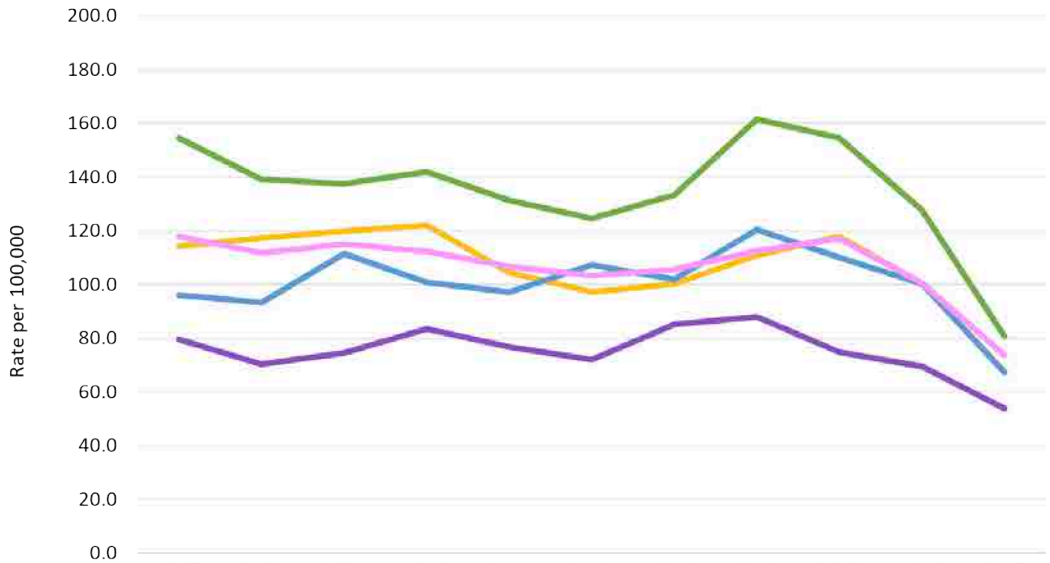
CHART 7.22: HEART DISEASES AGE-ADJUSTED DEATH RATE (2007-2017)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	141.0	145.4	145.1	158.3	152.6	139.0	137.5	156.0	156.0	157.4	155.2
ORANGE	169.6	167.2	158.9	155.7	157.0	155.3	148.5	151.2	160.6	153.7	152.9
OSCEOLA	169.4	173.7	174.1	189.8	193.0	187.4	190.0	204.2	197.8	170.9	180.3
SEMINOLE	164.2	171.5	170.7	149.3	137.7	137.5	130.4	143.9	141.8	145.4	140.5
FLORIDA	163.8	158.0	152.8	155.3	155.8	155.1	152.6	153.0	153.3	150.7	148.5

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

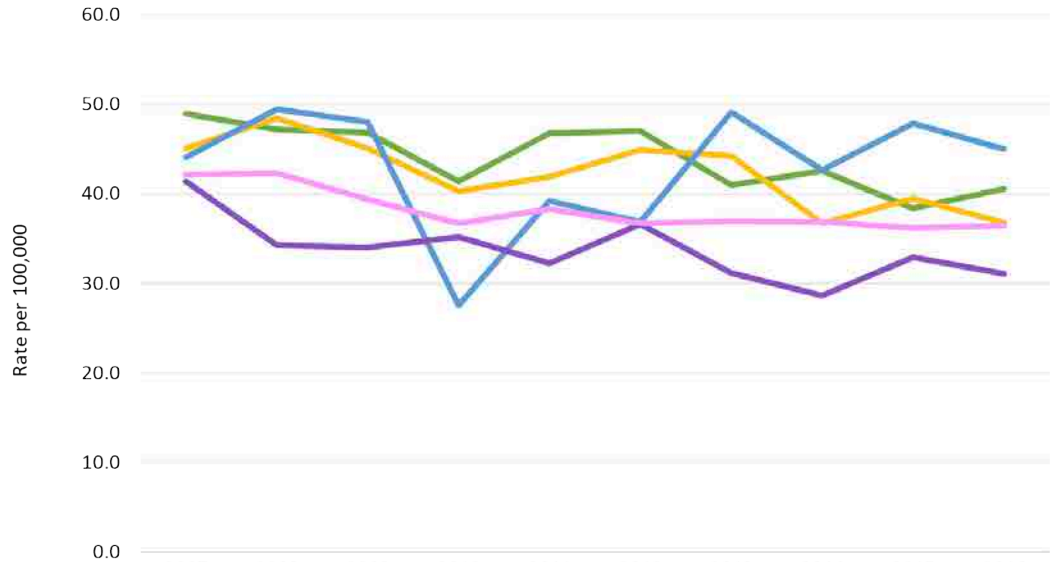
CHART 7.23: PREVENTABLE HOSPITALIZATIONS UNDER AGE 65 FROM CONGESTIVE HEART FAILURE (2007-2017)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	154.5	139.2	137.6	141.9	131.4	124.7	133.4	161.6	154.6	127.6	80.7
ORANGE	114.2	117.4	119.9	122.2	104.4	97.3	100.2	110.8	117.8	100.2	67.7
OSCEOLA	96.0	93.4	111.4	100.8	97.2	107.4	102.1	120.3	110.0	100.3	67.2
SEMINOLE	79.7	70.4	74.6	83.5	76.7	72.0	85.1	88.1	74.9	69.5	53.9
FLORIDA	117.9	111.7	115.1	112.4	106.6	103.4	105.7	112.7	117.0	100.6	73.7

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

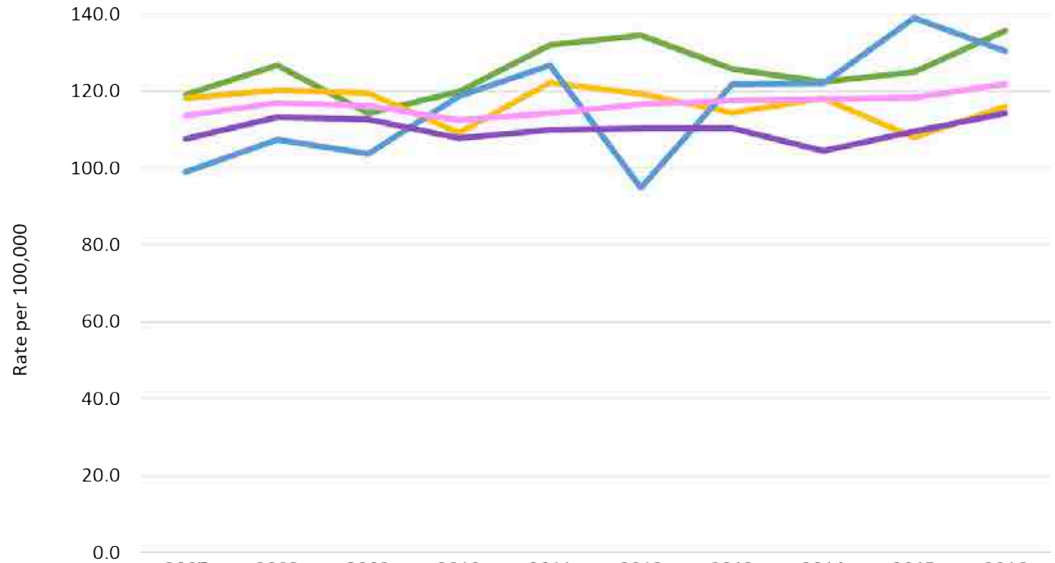
CHART 7.24: COLORECTAL CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	49.0	47.2	46.9	41.4	46.8	47.0	41.0	42.6	38.4	40.6
ORANGE	45.1	48.5	45.1	40.3	41.9	44.9	44.3	36.7	39.5	36.8
OSCEOLA	44.1	49.5	48.0	27.6	39.2	36.9	49.1	42.7	47.9	45.0
SEMINOLE	41.4	34.3	34.0	35.2	32.3	36.6	31.2	28.7	32.9	31.1
FLORIDA	42.2	42.3	39.4	36.7	38.3	36.7	37.0	36.9	36.2	36.5

Source: FLHealthCHARTS: University of Miami (FL) Medical School. Florida Cancer Data System

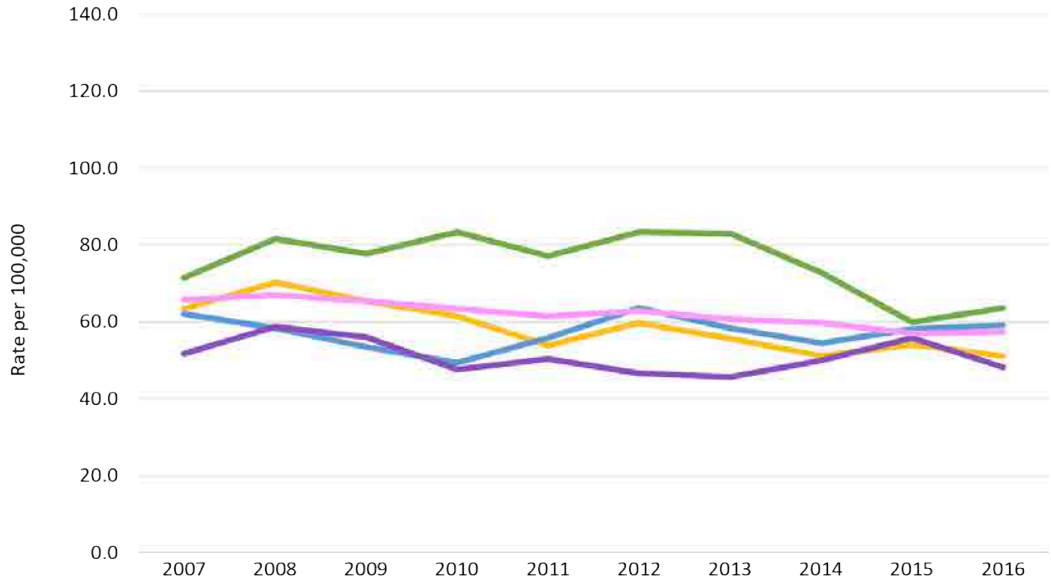
CHART 7.25: FEMALE BREAST CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	119.1	126.8	114.3	119.9	132.1	134.5	125.8	122.4	124.9	135.8
ORANGE	118.2	120.3	119.6	109.1	122.3	119.3	114.4	118.1	108.0	116.0
OSCEOLA	99.0	107.5	103.6	118.8	126.7	95.0	121.9	122.1	139.0	130.5
SEMINOLE	107.6	113.2	112.7	107.7	109.9	110.3	110.4	104.5	109.5	114.2
FLORIDA	113.7	116.9	116.1	112.4	114.3	116.6	117.5	118.0	118.3	121.8

Source: FLHealthCHARTS: University of Miami (FL) Medical School. Florida Cancer Data System

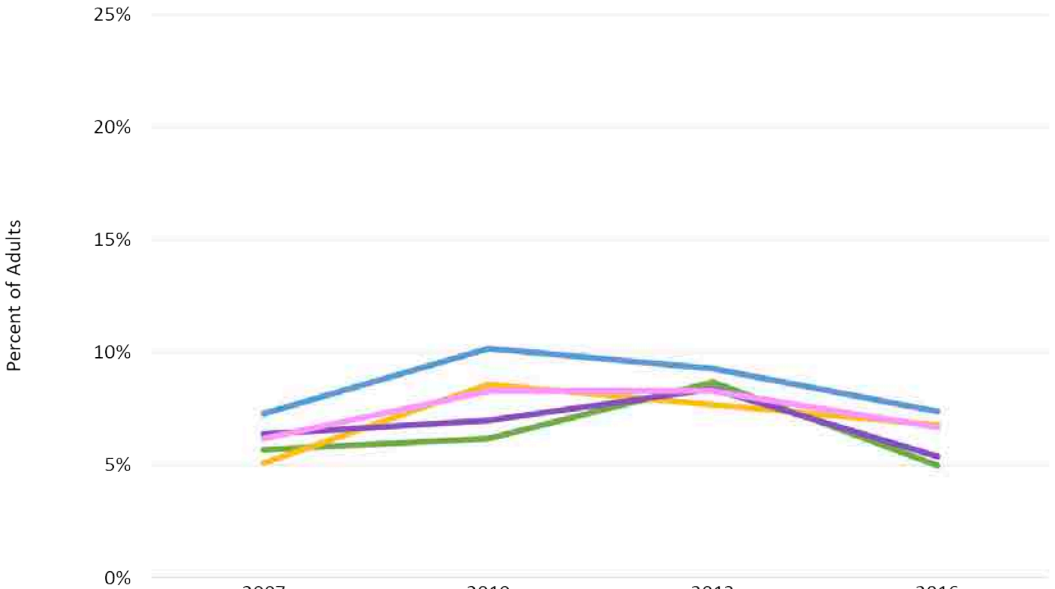
CHART 7.26: LUNG CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	71.5	81.7	77.7	83.3	77.1	83.4	83.0	72.9	59.9	63.6
ORANGE	63.5	70.2	65.4	61.5	53.8	59.7	55.6	51.1	54.0	51.2
OSCEOLA	62.1	58.3	53.5	49.4	55.9	63.6	58.4	54.5	58.1	59.1
SEMINOLE	51.8	58.7	56.1	47.6	50.4	46.7	45.7	49.9	55.8	48.2
FLORIDA	65.9	67.0	65.5	63.4	61.6	62.8	60.7	59.7	57.0	57.5

Source: FLHealthCHARTS: University of Miami (FL) Medical School. Florida Cancer Data System

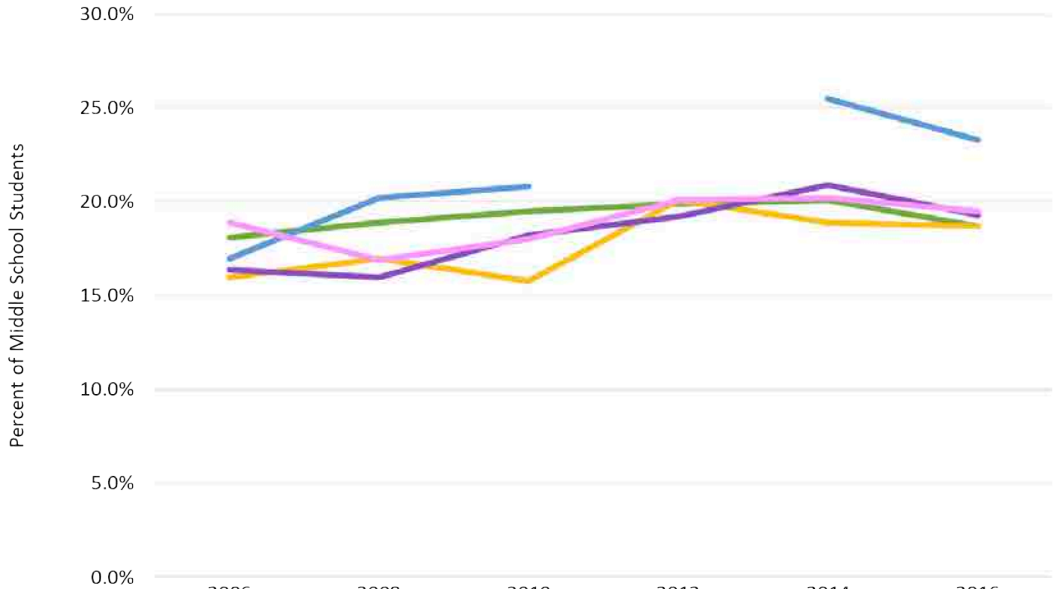
CHART 7.27: ADULTS WHO CURRENTLY HAVE ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	5.7%	6.2%	8.7%	5.0%
ORANGE	5.1%	8.6%	7.7%	6.8%
OSCEOLA	7.3%	10.2%	9.3%	7.4%
SEMINOLE	6.4%	7.0%	8.4%	5.4%
FLORIDA	6.2%	8.3%	8.3%	6.7%

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

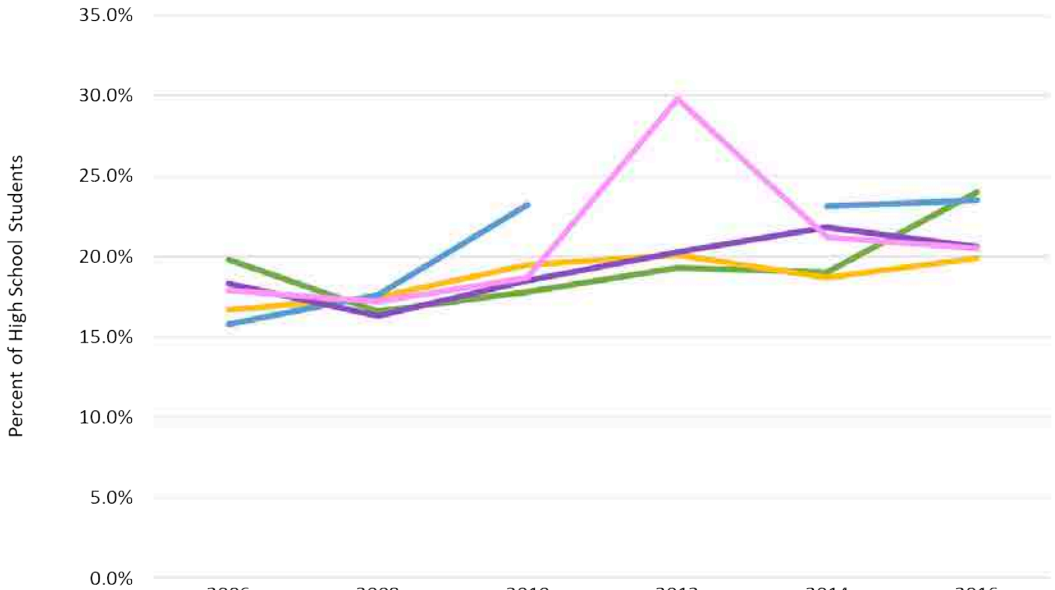
CHART 7.28: MIDDLE SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	18.1%	18.9%	19.5%	19.9%	20.1%	18.7%
ORANGE	16.0%	17.0%	15.8%	20.1%	18.9%	18.7%
OSCEOLA	17.0%	20.2%	20.8%	N/A	25.5%	23.3%
SEMINOLE	16.4%	16.0%	18.2%	19.2%	20.9%	19.3%
FLORIDA	18.9%	16.9%	18.0%	20.1%	20.2%	19.5%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

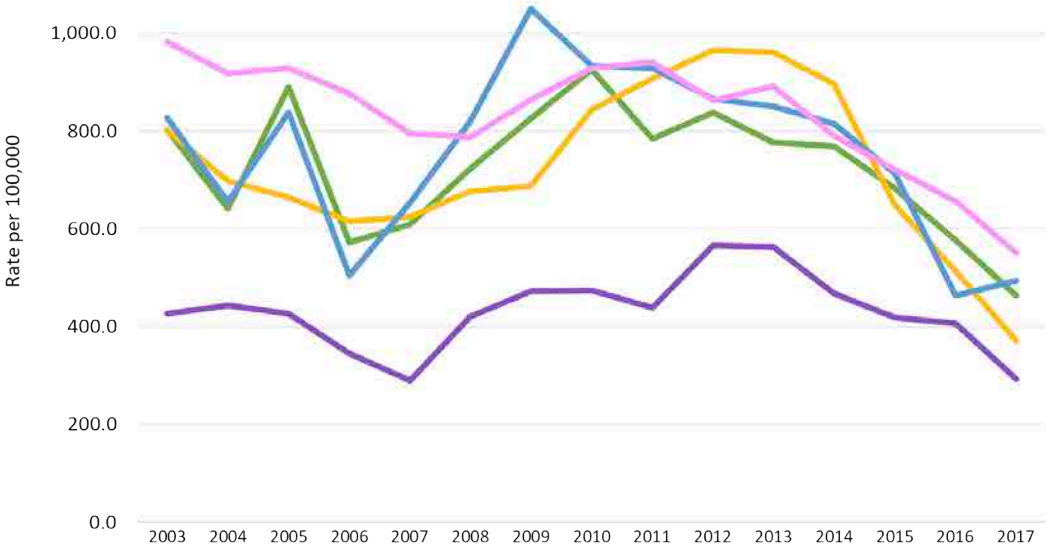
CHART 7.29: HIGH SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	19.8%	16.6%	17.8%	19.3%	19.0%	24.0%
ORANGE	16.7%	17.5%	19.5%	20.1%	18.7%	19.9%
OSCEOLA	15.8%	17.6%	23.2%	N/A	23.1%	23.5%
SEMINOLE	18.3%	16.3%	18.5%	20.3%	21.8%	20.6%
FLORIDA	17.9%	17.2%	18.7%	29.8%	21.2%	20.5%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

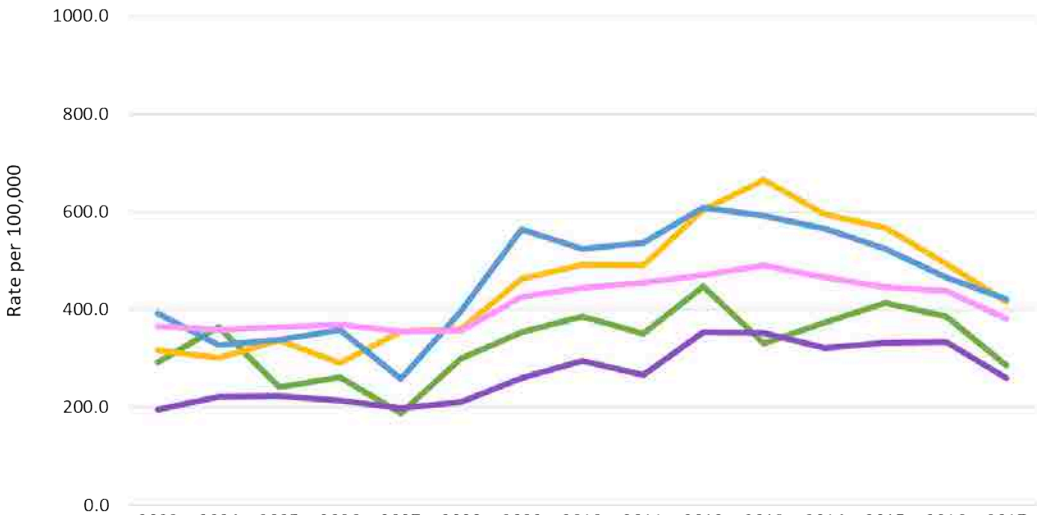
CHART 7.30: ASTHMA HOSPITALIZATIONS AGES 1-4 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	803.1	641.7	890.9	572.8	609.2	723.4	826.2	926.2	784.0	838.0	776.8	769.0	683.9	577.8	464.5
ORANGE	801.7	698.2	664.3	615.4	624.3	677.0	687.7	844.9	906.8	965.2	961.3	896.6	649.2	514.3	372.2
OSCEOLA	827.0	655.5	837.5	505.0	653.5	819.8	1050.4	933.9	928.4	865.1	850.3	814.8	713.7	464.1	494.5
SEMINOLE	427.5	443.5	426.7	345.7	291.0	421.4	472.8	474.1	438.9	566.2	563.1	468.9	419.0	407.1	293.6
FLORIDA	982.0	917.4	929.3	876.2	795.2	787.5	864.2	928.8	941.5	862.3	892.3	790.7	721.9	657.4	551.8

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

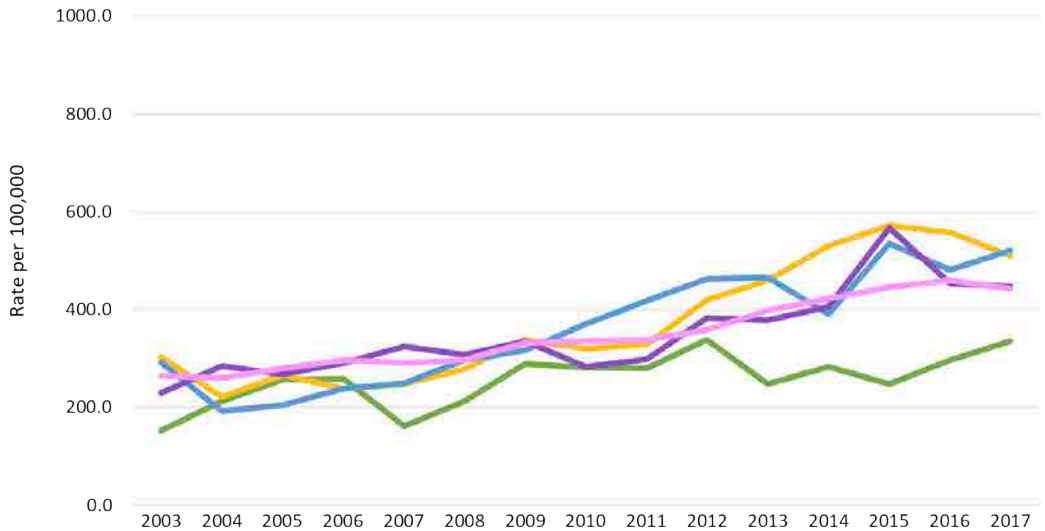
CHART 7.31: ASTHMA HOSPITALIZATIONS AGES 5-11 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	293.1	365.3	241.5	261.4	189.0	299.8	354.7	387.2	350.9	448.6	331.3	374.7	413.6	386.8	286.2
ORANGE	318.0	301.7	337.6	290.7	356.0	359.6	463.4	492.5	490.3	603.8	665.2	595.4	568.2	494.0	416.4
OSCEOLA	392.0	328.7	338.9	358.2	259.6	397.9	564.5	524.4	536.9	609.7	591.8	566.4	525.1	466.5	421.3
SEMINOLE	196.4	221.5	223.4	214.5	199.7	211.8	260.9	296.0	267.5	354.2	352.7	322.3	333.2	333.7	260.8
FLORIDA	366.7	358.3	364.7	368.9	356.5	357.7	426.6	445.2	456.1	470.7	490.3	466.5	446.5	438.9	382.3

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

CHART 7.32: ASTHMA HOSPITALIZATIONS AGES 12-18 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	153.4	213.3	257.4	259.7	162.7	213.8	290.4	282.8	279.9	338.9	248.6	283.1	248.3	298.2	335.5
ORANGE	303.2	221.8	266.0	239.6	247.7	279.1	338.8	320.8	329.0	419.6	459.9	530.0	572.0	558.4	510.5
OSCEOLA	293.5	193.5	206.0	239.3	249.6	297.9	317.2	370.7	418.7	463.2	465.7	390.3	535.0	481.3	521.8
SEMINOLE	230.6	285.9	268.7	291.2	325.8	308.4	335.5	283.4	298.9	382.7	379.1	406.9	567.1	454.1	447.5
FLORIDA	265.0	260.7	281.0	297.7	291.4	298.1	332.6	336.0	338.4	359.4	398.8	423.6	445.9	460.1	443.9

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

Leading Causes of Death: Summary of Indicators

According to the Centers for Disease Control and Prevention, cause-of-death ranking is a useful tool for illustrating the relative burden of cause-specific mortality. However, it should be used with a clear understanding of what the rankings mean. Literally, the rankings denote the most frequently occurring causes of death among those causes eligible to be ranked. Rankings do not illustrate cause-specific mortality risk as depicted by mortality rates. The rank of a specific cause (i.e., its mortality burden relative to other causes) may decline over time even if its mortality rate has not changed, or its rank may remain the same over time even if its mortality rate is decreasing.

Another tool used to depict the relative burden of cause-specific mortality is the proportion of total deaths from the rankable causes. This maps directly to the rankings such that, within a given year or population group, the causes with the highest rankings also have the highest proportion of total deaths. When making comparisons over time, however, it is important to note that the rank of a specific cause may remain the same even though the proportion of deaths attributable to that cause may have changed. Similarly, two population groups may have the same rank for a specific cause but different attributable proportions.

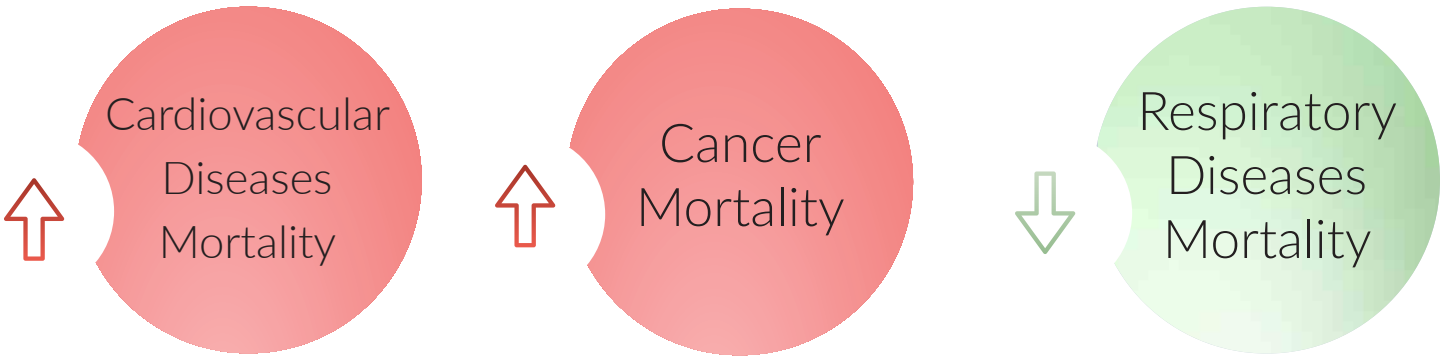
The following includes both a narrative as well as visual (chart or table) summary of indicators reported on in this section.

LEADING CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, OSCEOLA COUNTY (2012-2017)

In Osceola County, cardiovascular diseases were the leading cause of death per 100,000 population. The county rate increased slightly from 242.3 in 2014 to 243.6 in 2017. The cancer death rate also increased from 147.6 in 2014 to 154.2 in 2017. Respiratory diseases death rate decreased from 68.7 in 2014 to 54.6 in 2017. (See Table 7.2)

Figure 7.9 identifies the leading causes of death for Osceola County in 2017. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.9: LEADING CAUSES OF DEATH INDICATORS, OSCEOLA COUNTY



Source: Strategy Solutions, Inc.

TOP 10 LEADING RANKABLE CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, OSCEOLA COUNTY (2012-2017)

Cardiovascular diseases were the top leading rankable cause of death in Osceola County with the rate decreasing from 187.3 in 2012 to 180.3 in 2017. Cancer was the second leading rankable cause of death in the county, with the rate decreasing from 163.2 in 2012 to 154.2 in 2017. Unintentional injury death rates increased from 34.3 in 2012 to 48.6 in 2017. (See Table 7.3)

TABLE 7.2: LEADING CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, OSCEOLA COUNTY (2012-2017)

	2012	2013	2014	2015	2016	2017	Total
Cardiovascular diseases	239.4	235.3	242.3	249.7	227.1	243.6	239.6
Cancer	163.2	161.3	147.6	146.0	146.0	154.2	152.8
Other causes (residual)	71.7	86.9	64.2	67.9	58.9	80.4	71.5
Respiratory diseases	68.9	64.0	68.7	67.2	68.7	54.6	65.0
External causes	50.6	56.0	58.9	51.8	66.6	66.5	58.7
Nervous system diseases	22.1	21.3	29.4	25.1	27.0	30.4	26.2
Infectious diseases	12.8	23.8	20.2	25.6	23.2	21.3	21.3
Nutritional and metabolic diseases	18.8	24.1	22.6	16.6	19.3	27.1	21.5
Urinary tract diseases	18.3	15.4	15.2	20.1	15.1	15.4	16.5
Digestive diseases	12.4	15.2	12.0	10.9	11.8	8.8	11.7

Source: Florida Department of Health, Office of Vital Statistics, DeathStat Database

TABLE 7.3: TOP 10 LEADING RANKABLE CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, OSCEOLA COUNTY (2012-2017)

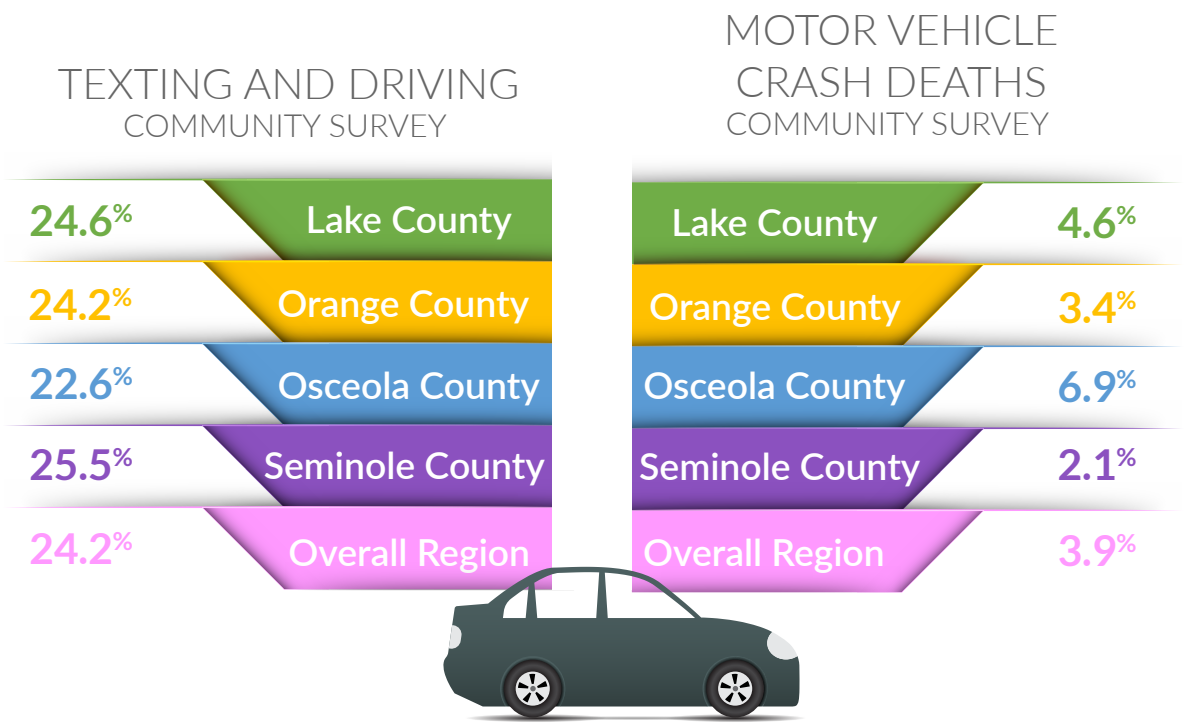
	2012	2013	2014	2015	2016	2017	Total
Heart diseases	187.3	190.0	204.2	197.8	170.9	180.3	187.9
Cancer	163.2	161.3	147.6	146.0	146.0	154.2	152.8
Unintentional injury	34.3	41.5	42.7	35.3	48.0	48.6	42.0
Chronic lower respiratory disease	37.7	39.0	43.9	38.2	39.8	32.4	38.3
Cerebrovascular diseases	36.8	27.4	28.6	38.8	43.9	48.4	37.9
Diabetes mellitus	17.9	24.1	21.0	13.9	16.6	23.2	19.4
Alzheimer's disease	15.7	15.3	23.7	18.6	21.3	22.6	19.8
Nephritis, nephrotic syndrome, nephrosis	18.3	15.4	14.9	20.1	14.8	15.4	16.4
Septicemia	6.2	13.6	9.8	13.9	17.6	13.5	12.7
Influenzas & pneumonia	16.6	12.9	14.3	12.6	9.7	10.4	12.5

Source: Florida Department of Health, Office of Vital Statistics, DeathStat Database

Injury: What the Community is Saying

Figure 7.10 displays the input from community survey respondents related to injury. Residents of Osceola County have a lower rate of having experienced texting and driving (22.6 percent) compared to the overall region (24.2 percent). Osceola County respondents were more likely to experience a motor vehicle crash death (6.9 percent) compared to the region (3.9 percent).

FIGURE 7.10: INJURY INDICATORS, COMMUNITY SURVEY 2019



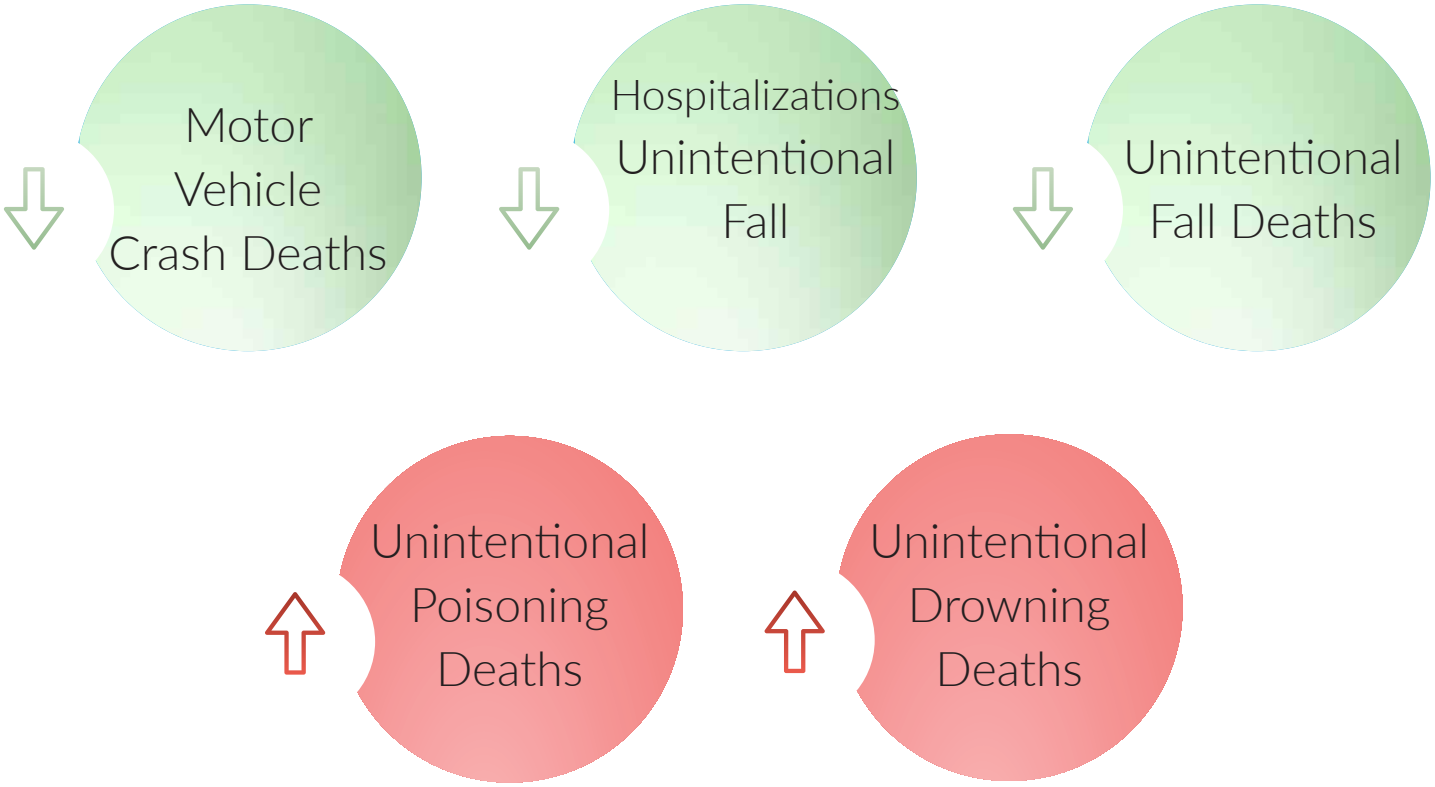
Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Primary research participants in Osceola County did not discuss injury-related needs, issues, barriers to care and needed services related to injury.

Injury at a Glance

The key indicators related to injury that have changed since the CHNA are identified in Figure 7.11. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.11: INJURY INDICATORS



Source: Strategy Solutions, Inc.

Injury: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

MOTOR VEHICLE CRASH DEATHS (2002-2017)

Osceola County's rates of motor vehicle deaths per 100,000 people fluctuated from 2002 to 2017. The Osceola County rate decreased from 26.9 in 2002 to nine in 2012 before increasing again to 12.8 in 2017. The state rate decreased from 18.7 in 2002 to 14.9 in 2017. (See Chart 7.33)

NON-FATAL HOSPITALIZATIONS FOR MOTOR VEHICLE-RELATED INJURIES BY AGE (2017)

In 2017, individuals age 15-19 had the highest rate (98.5) per 100,000 of non-fatal hospitalizations for motor vehicle-related injuries in the state. The rate for this age group in 2017 in Osceola County was 112.2, the highest of all groups reported in the county. (See Chart 7.34)

CHILD MOTOR VEHICLE CRASH DEATHS BY AGE (2015-2017)

Osceola County had 15 child motor vehicle crash deaths per 100,000, for ages 19-21 from 2015-2017, which was the highest in the county for all age groups. When compared to the state, Osceola County had lower rates except for ages 5-11 which were 2.2 for both county and state. (See Chart 7.35)

HOSPITALIZATIONS FOR NON-FATAL UNINTENTIONAL FALLS (2006-2017)

Hospitalizations for non-fatal unintentional falls per 100,000 increased in Osceola County (104.5 to 253.6) and the state (282.1 to 353.4) from 2006 to 2017. (See Chart 7.36)

UNINTENTIONAL FALL, AGE-ADJUSTED DEATHS (2006-2017)

Osceola County's unintentional fall age-adjusted death rate per 100,000 increased from 3.8 in 2006 to 9.5 in 2017. The state rate increased from 6.8 in 2006 to 10.1 in 2017. (See Chart 7.37)

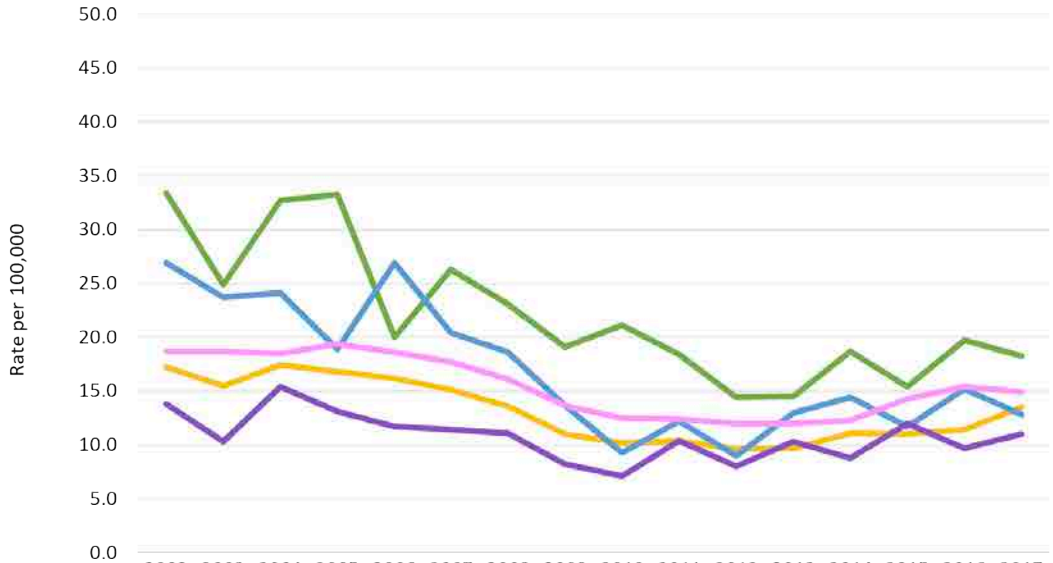
UNINTENTIONAL POISONING, AGE-ADJUSTED DEATHS (2002-2017)

Unintentional poisoning age-adjusted deaths per 100,000 increased in Osceola County and across the state between 2002 and 2017. Osceola County's rate increased from 4.1 in 2002 to 19.4 in 2017. The state rate was 9.5 in 2002 and increased to 23.5 in 2017. (See Chart 7.38)

UNINTENTIONAL DROWNING, AGE-ADJUSTED DEATHS (2002-2017)

In Osceola County, the rate of unintentional drowning age-adjusted deaths per 100,000 fluctuated from 2002 to 2017. In 2002, the rate was 2.7 per 100,000; this declined to 0.4 in 2008 and rose into 1.5 in 2017. The state rate remained relatively consistent from 2.1 in 2002 to two in 2017. (See Chart 7.39)

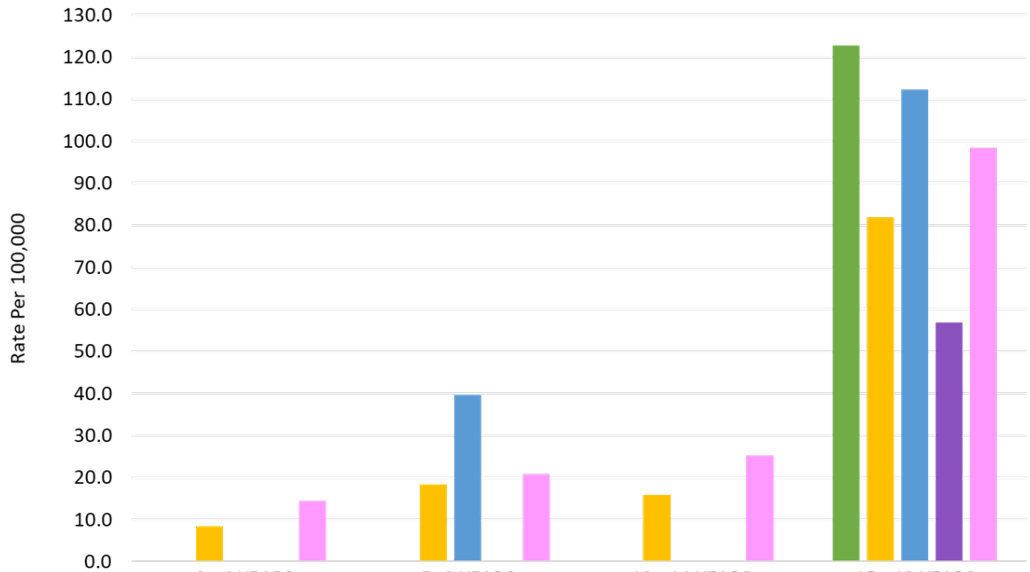
CHART 7.33: MOTOR VEHICLE CRASH DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	33.4	24.9	32.7	33.3	20.0	26.3	23.1	19.1	21.1	18.4	14.4	14.5	18.7	15.4	19.7	18.3
ORANGE	17.2	15.5	17.4	16.8	16.2	15.1	13.6	11.0	10.2	10.4	9.6	9.7	11.1	11.0	11.4	13.5
OSCEOLA	26.9	23.7	24.1	18.9	26.9	20.4	18.6	13.7	9.3	12.2	9.0	13.0	14.4	11.7	15.2	12.8
SEMINOLE	13.8	10.3	15.4	13.1	11.7	11.4	11.1	8.2	7.1	10.4	8.0	10.3	8.8	12.0	9.7	11.0
FLORIDA	18.7	18.7	18.5	19.4	18.6	17.7	16.1	13.7	12.5	12.4	12.0	12.0	12.3	14.3	15.4	14.9

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

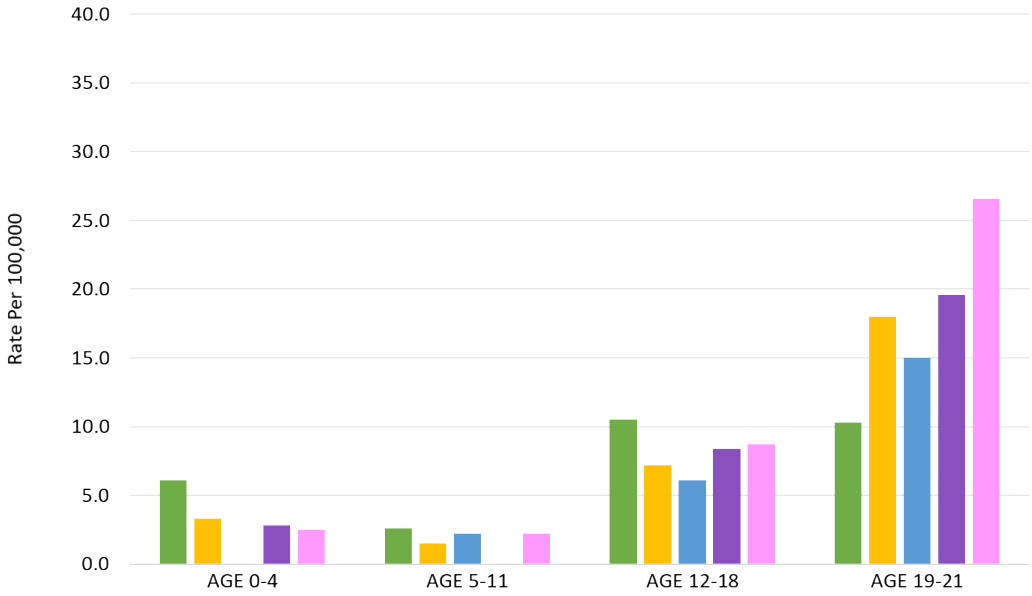
CHART 7.34: NON-FATAL HOSPITALIZATIONS FOR MOTOR VEHICLE-RELATED INJURIES BY AGE (2017)



	0 - 4 YEARS	5 -9 YEARS	10 - 14 YEARS	15 - 19 YEARS
LAKE	N/A	N/A	N/A	122.8
ORANGE	8.4	18.4	15.9	81.9
OSCEOLA	0.0	39.7	N/A	112.2
SEMINOLE	N/A	N/A	N/A	56.9
FLORIDA	14.5	20.8	25.2	98.5

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

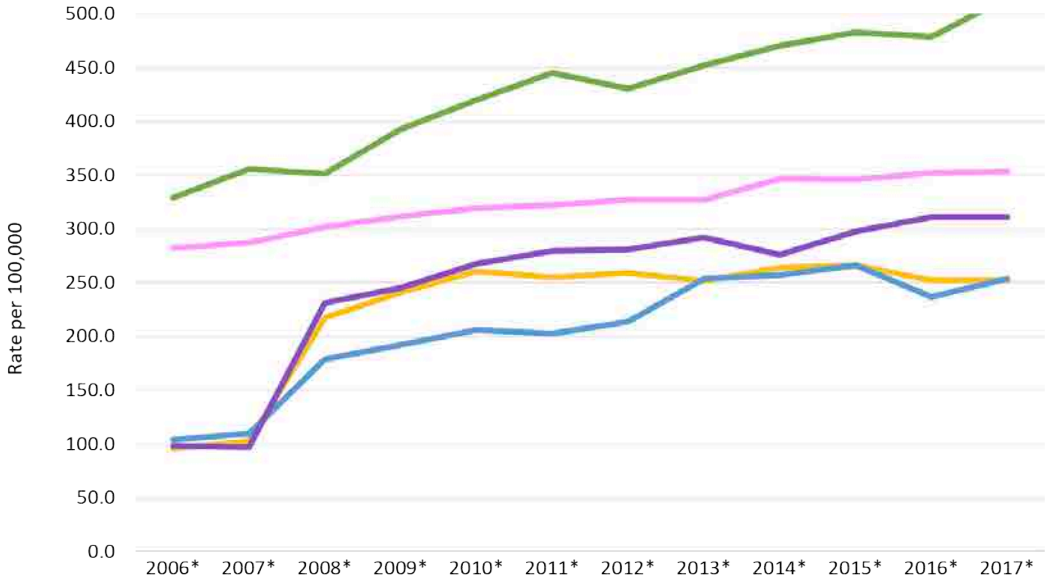
CHART 7.35: CHILD MOTOR VEHICLE CRASH DEATHS BY AGE (2015-2017)



	AGE 0-4	AGE 5-11	AGE 12-18	AGE 19-21
LAKE	6.1	2.6	10.5	10.3
ORANGE	3.3	1.5	7.2	18.0
OSCEOLA	0.0	2.2	6.1	15.0
SEMINOLE	2.8	0.0	8.4	19.6
FLORIDA	2.5	2.2	8.7	26.6

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

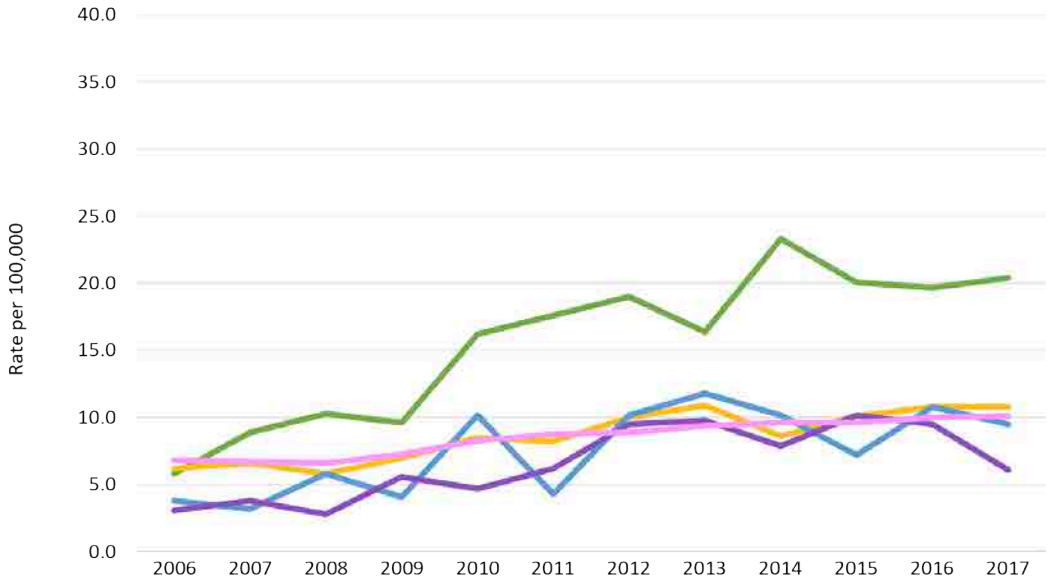
CHART 7.36: HOSPITALIZATIONS FOR NON-FATAL UNINTENTIONAL FALLS (2006-2017)



	2006*	2007*	2008*	2009*	2010*	2011*	2012*	2013*	2014*	2015*	2016*	2017*
LAKE	328.9	355.7	351.6	392.7	419.7	444.9	430.5	451.9	470.1	483.1	478.7	515.0
ORANGE	96.1	102.7	217.7	241.4	260.9	255.2	259.0	251.7	264.5	266.1	252.6	252.6
OSCEOLA	104.5	109.8	178.9	191.9	206.3	202.9	213.6	253.5	257.5	266.0	237.2	253.6
SEMINOLE	98.8	97.5	231.3	245.6	267.4	279.7	281.0	292.1	276.3	297.5	311.3	310.9
FLORIDA	282.1	287.5	302.1	311.5	319.3	322.5	327.2	327.2	346.6	345.7	352.2	353.4

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)
*All rates are significantly different than the state

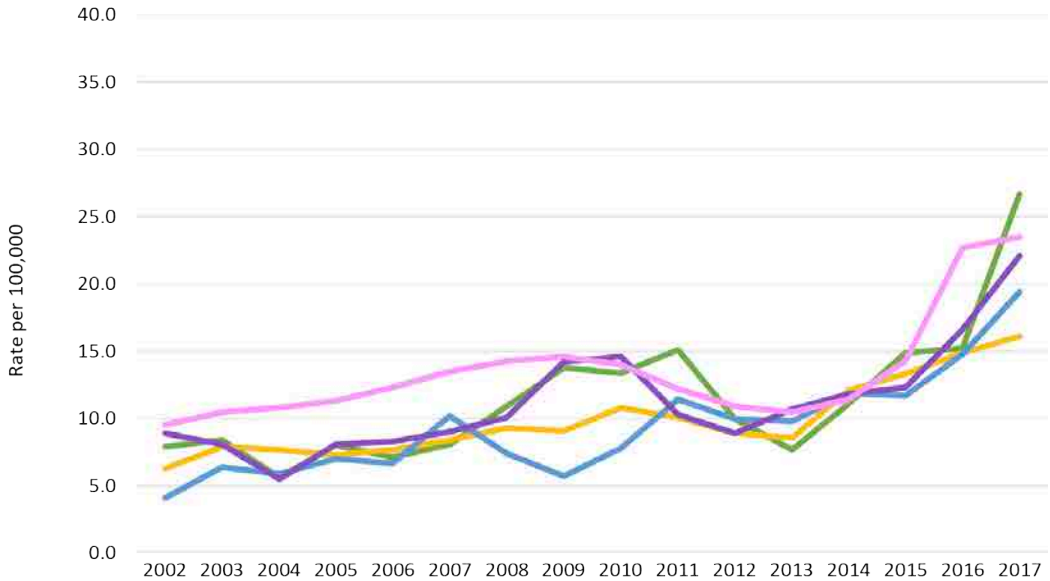
CHART 7.37: UNINTENTIONAL FALL, AGE-ADJUSTED DEATHS (2006-2017)



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	5.8	8.9	10.3	9.6	16.2	17.6	19.0	16.4	23.3	20.1	19.7	20.4
ORANGE	6.2	6.6	5.8	7.0	8.5	8.2	10.0	10.9	8.6	10.1	10.8	10.8
OSCEOLA	3.8	3.2	5.8	4.1	10.2	4.3	10.2	11.8	10.2	7.2	10.8	9.5
SEMINOLE	3.1	3.8	2.8	5.6	4.7	6.2	9.5	9.8	7.9	10.2	9.5	6.1
FLORIDA	6.8	6.7	6.6	7.3	8.3	8.8	8.9	9.4	9.6	9.6	10.0	10.1

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

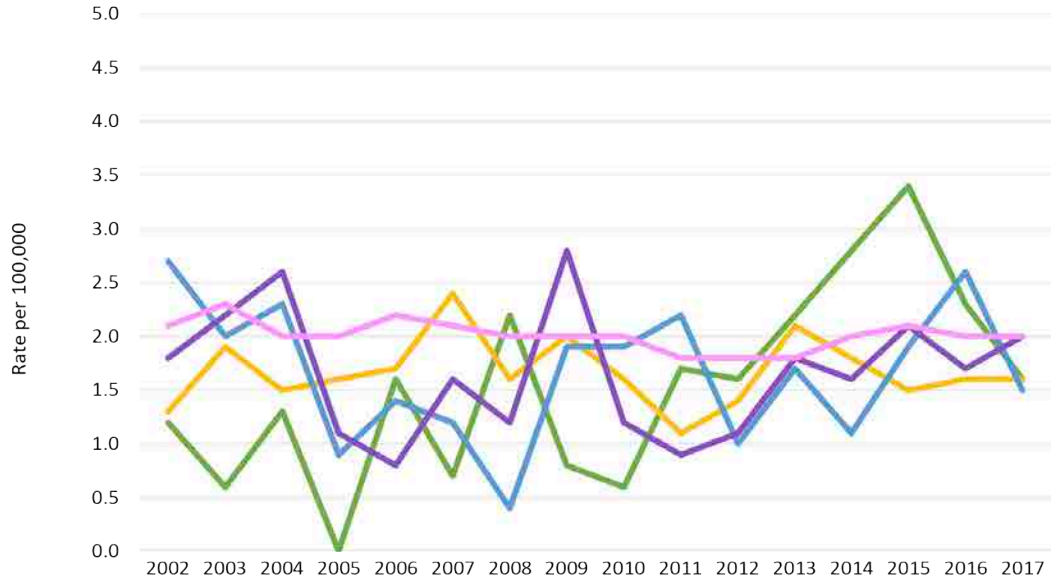
CHART 7.38: UNINTENTIONAL POISONING, AGE-ADJUSTED DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.9	8.4	5.6	8.0	7.1	8.1	10.9	13.8	13.4	15.1	10.0	7.7	11.1	14.9	15.2	26.7
ORANGE	6.3	7.9	7.7	7.3	7.7	8.4	9.3	9.1	10.8	10.1	8.9	8.6	12.1	13.3	14.9	16.1
OSCEOLA	4.1	6.4	5.9	7.0	6.7	10.2	7.4	5.7	7.8	11.4	10.0	9.8	11.9	11.7	14.8	19.4
SEMINOLE	8.9	8.1	5.5	8.1	8.3	9.0	10.1	14.2	14.6	10.3	8.9	10.7	11.8	12.3	16.6	22.1
FLORIDA	9.5	10.5	10.8	11.3	12.3	13.5	14.3	14.6	14.0	12.2	10.9	10.5	11.4	14.3	22.7	23.5

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

CHART 7.39: UNINTENTIONAL DROWNING AGE-ADJUSTED DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	1.2	0.6	1.3	0.0	1.6	0.7	2.2	0.8	0.6	1.7	1.6	2.2	2.8	3.4	2.3	1.6
ORANGE	1.3	1.9	1.5	1.6	1.7	2.4	1.6	2.0	1.6	1.1	1.4	2.1	1.8	1.5	1.6	1.6
OSCEOLA	2.7	2.0	2.3	0.9	1.4	1.2	0.4	1.9	1.9	2.2	1.0	1.7	1.1	1.9	2.6	1.5
SEMINOLE	1.8	2.2	2.6	1.1	0.8	1.6	1.2	2.8	1.2	0.9	1.1	1.8	1.6	2.1	1.7	2.0
FLORIDA	2.1	2.3	2.0	2.0	2.2	2.1	2.0	2.0	2.0	1.8	1.8	1.8	2.0	2.1	2.0	2.0

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

Leading Causes of Injury Deaths: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

TOP 10 LEADING CAUSES OF INJURY DEATH, AGE-ADJUSTED, OSCEOLA COUNTY (2012-2017)

In Osceola County, poisoning was the leading cause of injury death, with the rate per 100,000 almost doubling between 2012 (12.1) and 2017 (20.6). Firearm was the second leading cause of injury death, with rate per 100,000 increasing for the six reportable years (7.6 in 2012 and 10 in 2017). Fall was the third leading cause of injury death, with rates decreasing slightly from 2012 (10.2) to 2017 (9.5). Motor vehicle traffic-occupant was the fourth leading cause of injury death, with rates having the highest increase in the six-year reportable period from 1.4 in 2012 to 7.6 in 2017. Suffocation was the fifth leading cause of injury death, with rates increasing from 3.1 in 2012 to 4.9 in 2017. (See Table 7.4)

TABLE 7.4: TOP 10 LEADING CAUSES OF INJURY DEATH, AGE-ADJUSTED, OSCEOLA COUNTY (2012-2017)

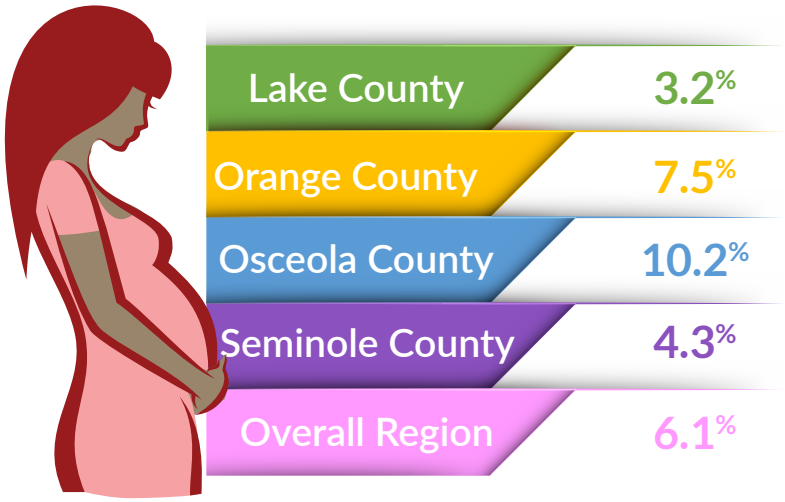
	2012	2013	2014	2015	2016	2017
Poisoning	12.1	12.0	13.7	14.3	17.8	20.6
Firearm	7.6	7.6	7.2	8.0	11.0	10.0
Fall	10.2	11.8	10.2	7.5	10.8	9.5
Motor vehicle traffic - occupant	1.4	3.1	3.6	2.6	0.5	7.6
Suffocation	3.1	4.8	3.9	2.0	4.0	4.9
Motor vehicle traffic - pedestrian	0.0	0.0	0.3	0.0	0.3	2.9
Drowning, submersion	1.4	1.7	1.4	2.7	2.6	1.7
Unspecified	1.1	0.6	2.0	2.1	1.0	1.3
Cut, pierce	0.6	0.3	1.0	0.6	0.6	1.2
Other specified & not elsewhere classifiable	1.1	0.3	1.3	0.9	0.3	1.1

Source: Florida Department of Health, Office of Vital Statistics, DeathStat Database

Birth Characteristics: What the Community is Saying

Figure 7.12 outlines the percentages of community survey respondents that experienced difficulty in accessing prenatal care. Osceola County respondents (10.2 percent) reported more difficulty in accessing prenatal care than the region overall (6.1 percent).

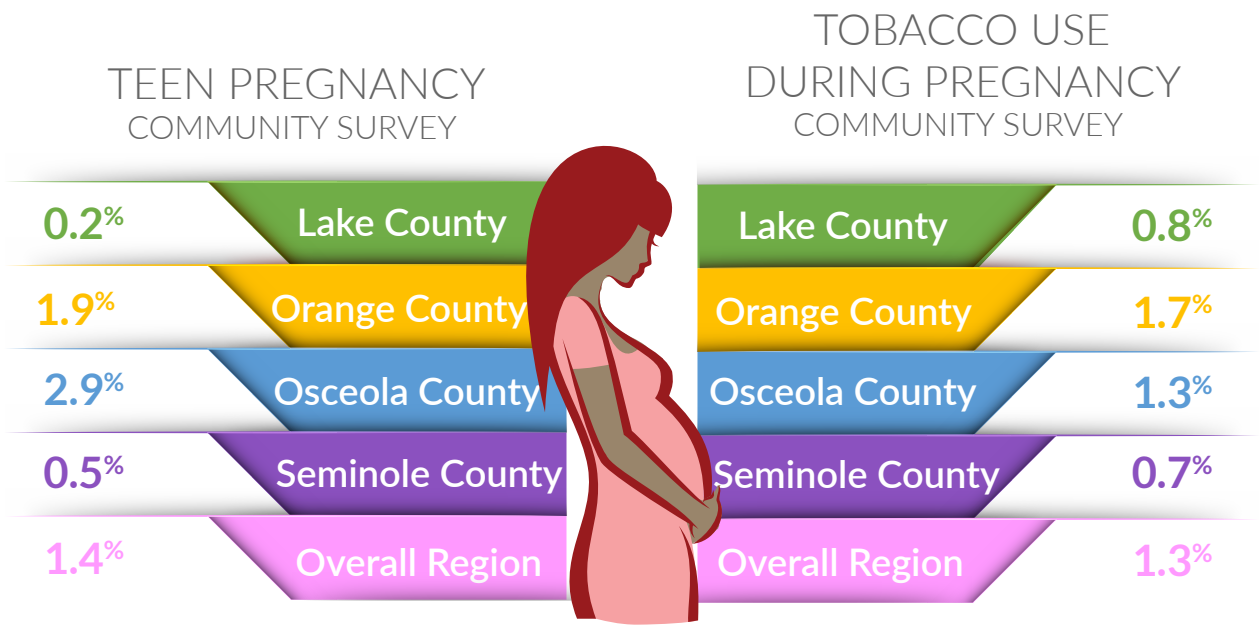
FIGURE 7.12: DIFFICULTY ACCESSING PRENATAL CARE, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.13 outlines the percentage of community survey respondents that experienced teen pregnancy and smoking during pregnancy. Nearly 3 percent of Osceola County respondents indicated that they experienced teen pregnancy. Osceola County had the highest percentage in the four-county region.

FIGURE 7.13: TEEN PREGNANCY AND SMOKING DURING PREGNANCY, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to birth characteristics:

- High infant mortality rate for Hispanic and African American populations
- Premature births
- Low birth weights
- Obesity
- Substance abuse
- Genetics and infections

Barriers to care identified by primary research participants included:

- Affordable prenatal care
- Lack of housing services
- Lack of access to quality healthcare and social services

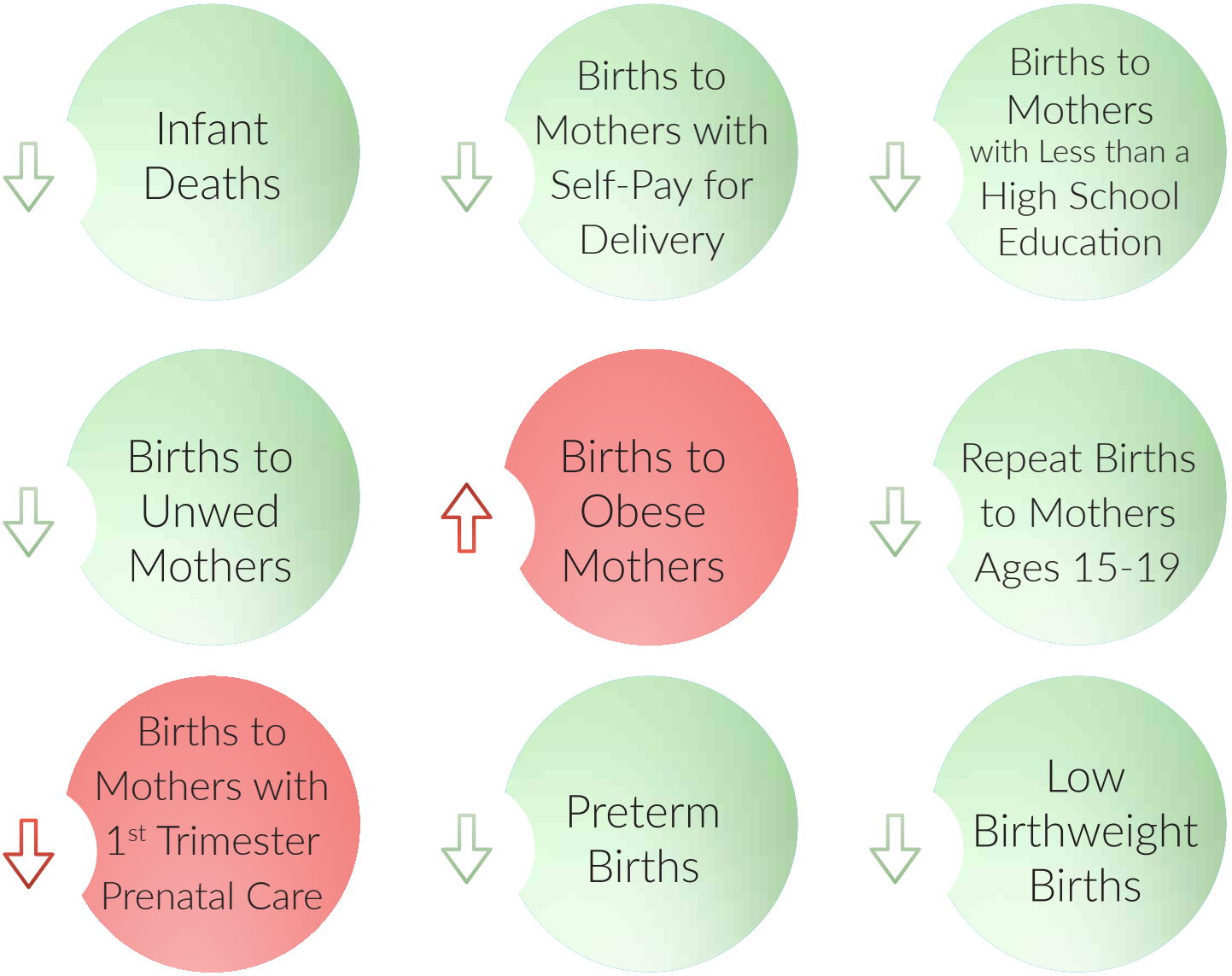
Needed services related to birth characteristics that were identified by primary research participants included:

- More high-risk OB/GYN physicians
- Medication assisted treatment for mothers with opioid use disorders
- More accessible, quality prenatal care, especially for immigrants
- Support systems
- Access to birth control
- Access to WIC services
- Need for education regarding the importance for oral hygiene during pregnancy
- Awareness of maternity fitness and nutrition

Birth Characteristics at a Glance

The key indicators related to birth characteristics that have changed since the last CHNA are identified in Figure 7.14. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.14: BIRTH CHARACTERISTICS INDICATORS



Source: Strategy Solutions, Inc.

Birth Characteristics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons, located on the previous page, illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

INFANT DEATHS PER 1,000 LIVE BIRTHS (2003-2017)

The rate for infant deaths per 1,000 live births in Osceola County decreased from 4.8 in 2003 to 3.9 in 2017. The county (3.9) remained below the HP2020 goal of 6 in 2017. The state rate (6.1) was slightly above the HP2020 goal in 2017. (See Chart 7.40)

BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)

The percentages of births with self-pay for delivery has fluctuated between 2004 and 2017. The percentage increased in Osceola County from 6.1 percent to 8.9 in 2011 before decreasing to 6 in 2017. Osceola County's percentage was lower than the state (6.2 percent) in 2017. (See Chart 7.41)

BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION (2003-2017)

The percentage of births to mothers with less than a high school education decreased in Osceola County and the state between 2003 and 2017. Osceola County's percentage decreased from 17.6 percent in 2003 to 8.3 percent in 2017. The state percentage decreased from 20 percent to 12.1 percent during that time. (See Chart 7.42)

BIRTHS TO UNWED MOTHERS (2003-2017)

The percentage of births to unwed mothers was higher in Osceola County than the state from 2003 to 2017. Both state and county percentages increased in this time period. Osceola County increased from 40 percent in 2003 to 49 percent in 2017 and the state increased from 39.9 percent to 46.9 percent during this time. (See Chart 7.43)

BIRTHS TO MOTHERS WHO WERE OBESE AT TIME OF PREGNANCY (2004-2017)

The percentage of births to mothers who were obese at time of pregnancy has increased in Osceola County and the state between 2004 and 2017. Osceola County's percentages increased from 19.1 percent to 26 percent during this time period. The state percentage increased from 18.7 percent (2004) to 25 percent (2017). (See Chart 7.44)

REPEAT BIRTHS TO MOTHERS AGES 15-19 (2003-2017)

The percentage of repeat births to mothers ages 15-19 decreased in both the county and the state from 2003 to 2017. In Osceola County, there was a decrease from 17.6 percent to 10 percent and a decrease in the state from 19.9 percent to 15.2 percent during this time. (See Chart 7.45)

BIRTHS TO MOTHERS WITH FIRST TRIMESTER PRENATAL CARE (2003-2017)

The percentage of births to mothers with first trimester prenatal care decreased for both state and county 2003 and 2017. In Osceola County, the percentage decreased from 88.6 percent in 2003 to 81.1 percent in 2017. The state percentage decreased from 85.8 percent in 2003 to 77.3 percent in 2017. (See Chart 7.46)

PRETERM BIRTHS <37 WEEKS GESTATION (2003-2017)

Osceola County's percentage of preterm births decreased from 11.3 percent to 9.2 percent from 2003 to 2017. The state percentage decreased from 10.8 percent to 10.2 percent during this time. (See Chart 7.47)

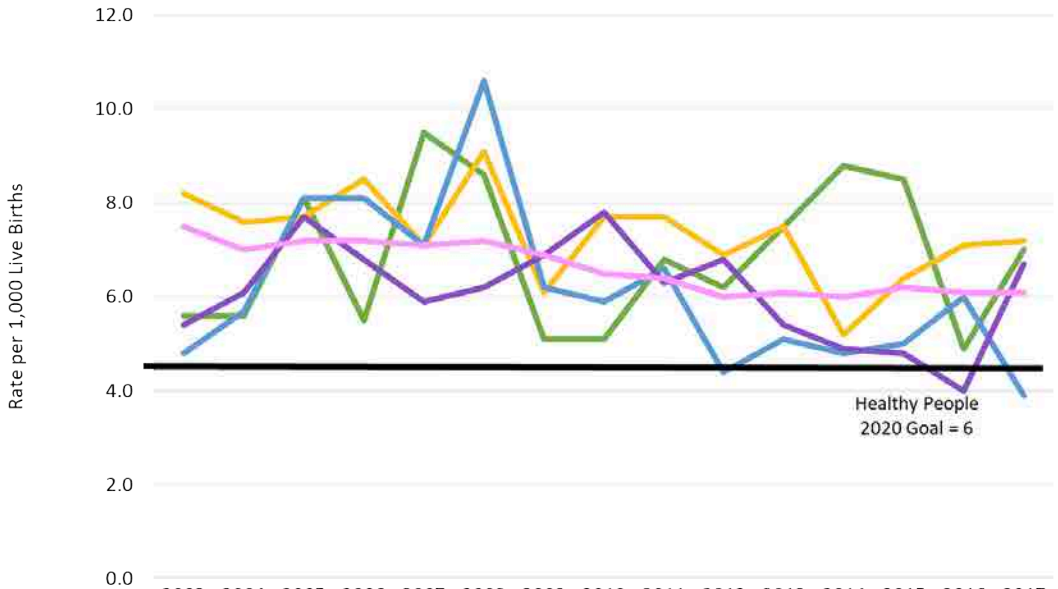
LOW BIRTHWEIGHT BIRTHS <2500 GRAMS (2003-2017)

The percentage of low birthweight babies born in Osceola County increased from 8 percent in 2003 to a high of 9.4 percent in 2006 before decreasing to 8.1 percent in 2017. The state percentage increased from 8.5 percent in 2003 to 8.8 percent in 2017. (See Chart 7.48)

BIRTHS COVERED BY MEDICAID (2004-2017)

The percentage of births covered by Medicaid has consistently increased in Osceola County as well as the state. The county's rate increased from 35.9 percent in 2004 to 59.3 percent in 2017. The state percentage has grown from 36.6 percent to 48.9 percent during this time. (See Chart 7.49)

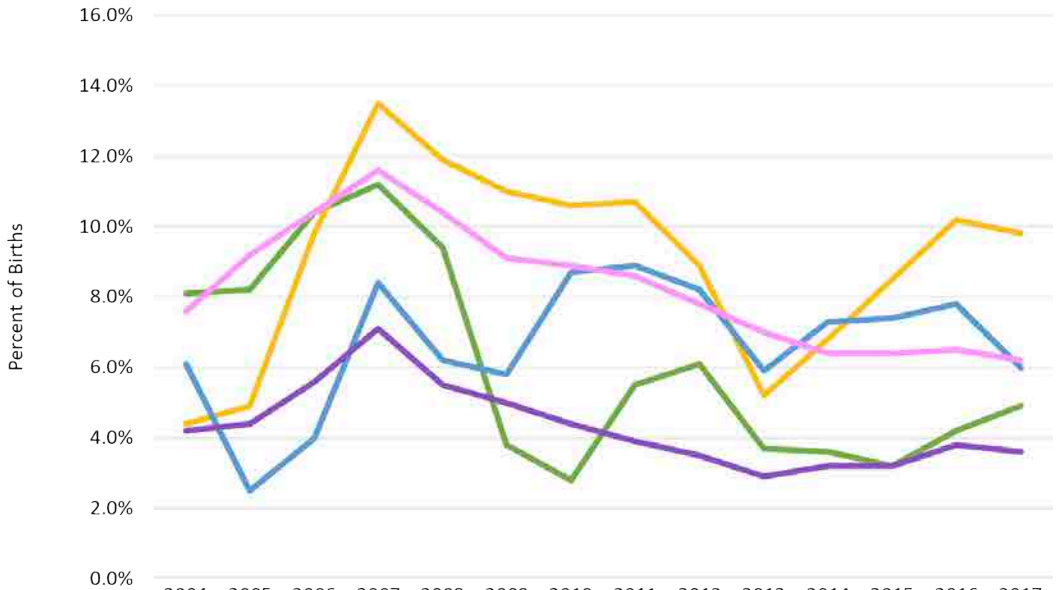
CHART 7.40: INFANT DEATHS PER 1,000 LIVE BIRTHS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	5.6	5.6	8.1	5.5	9.5	8.6	5.1	5.1	6.8	6.2	7.5	8.8	8.5	4.9	7.0
ORANGE	8.2	7.6	7.7	8.5	7.1	9.1	6.1	7.7	7.7	6.9	7.5	5.2	6.4	7.1	7.2
OSCEOLA	4.8	5.7	8.1	8.1	7.1	10.6	6.2	5.9	6.6	4.4	5.1	4.8	5.0	6.0	3.9
SEMINOLE	5.4	6.1	7.7	6.8	5.9	6.2	6.9	7.8	6.3	6.8	5.4	4.9	4.8	4.0	6.7
FLORIDA	7.5	7.0	7.2	7.2	7.1	7.2	6.9	6.5	6.4	6.0	6.1	6.0	6.2	6.1	6.1

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

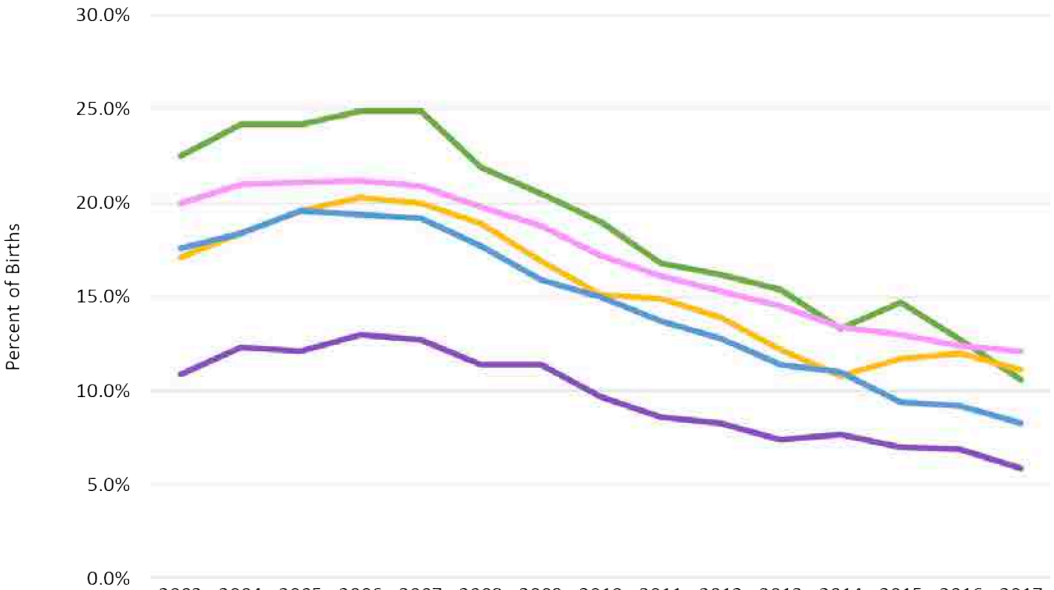
CHART 7.41: BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.1%	8.2%	10.4%	11.2%	9.4%	3.8%	2.8%	5.5%	6.1%	3.7%	3.6%	3.2%	4.2%	4.9%
ORANGE	4.4%	4.9%	9.8%	13.5%	11.9%	11.0%	10.6%	10.7%	8.9%	5.2%	6.8%	8.5%	10.2%	9.8%
OSCEOLA	6.1%	2.5%	4.0%	8.4%	6.2%	5.8%	8.7%	8.9%	8.2%	5.9%	7.3%	7.4%	7.8%	6.0%
SEMINOLE	4.2%	4.4%	5.6%	7.1%	5.5%	5.0%	4.4%	3.9%	3.5%	2.9%	3.2%	3.2%	3.8%	3.6%
FLORIDA	7.6%	9.2%	10.4%	11.6%	10.4%	9.1%	8.9%	8.6%	7.8%	7.0%	6.4%	6.4%	6.5%	6.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

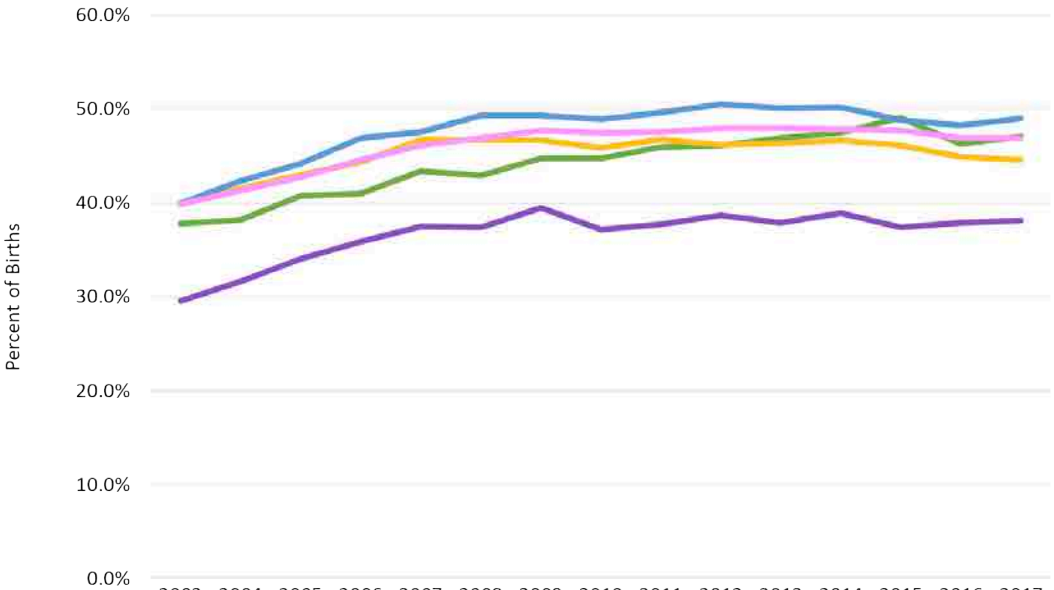
CHART 7.42: BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	22.5%	24.2%	24.2%	24.9%	24.9%	21.9%	20.5%	19.0%	16.8%	16.2%	15.4%	13.3%	14.7%	12.7%	10.6%
ORANGE	17.1%	18.4%	19.6%	20.3%	20.0%	18.9%	16.9%	15.1%	14.9%	13.9%	12.2%	10.8%	11.7%	12.0%	11.1%
OSCEOLA	17.6%	18.4%	19.6%	19.4%	19.2%	17.7%	15.9%	15.0%	13.7%	12.8%	11.4%	11.0%	9.4%	9.2%	8.3%
SEMINOLE	10.9%	12.3%	12.1%	13.0%	12.7%	11.4%	11.4%	9.7%	8.6%	8.3%	7.4%	7.7%	7.0%	6.9%	5.9%
FLORIDA	20.0%	21.0%	21.1%	21.2%	20.9%	19.8%	18.8%	17.2%	16.1%	15.3%	14.5%	13.4%	13.0%	12.4%	12.1%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

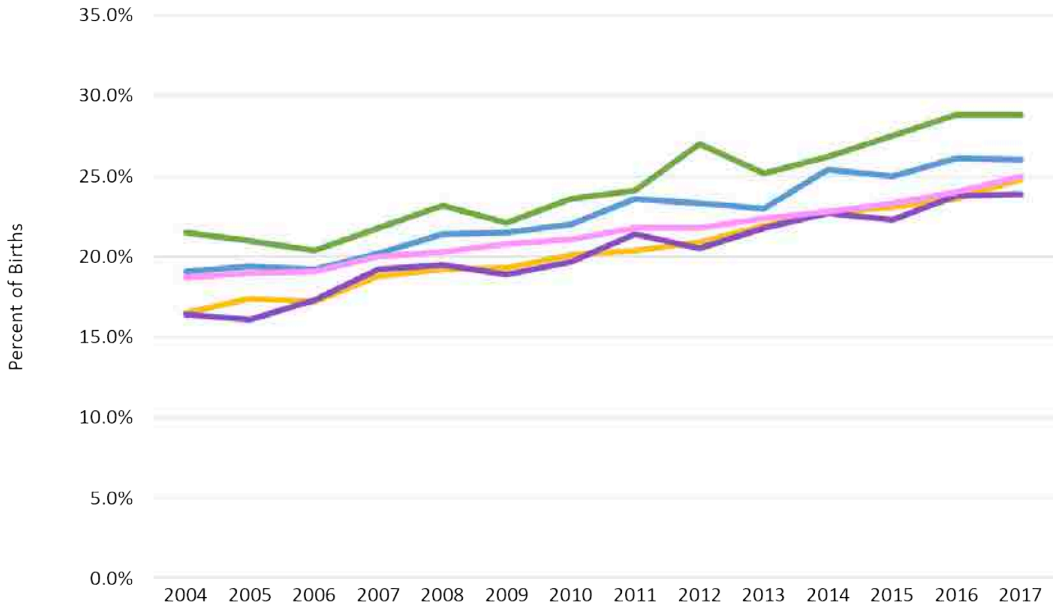
CHART 7.43: BIRTHS TO UNWED MOTHERS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	37.8%	38.2%	40.8%	41.0%	43.4%	42.9%	44.8%	44.8%	46.0%	46.1%	46.9%	47.5%	49.1%	46.3%	47.1%
ORANGE	39.9%	41.6%	43.0%	44.4%	46.8%	46.7%	46.7%	45.9%	46.8%	46.2%	46.4%	46.7%	46.1%	44.9%	44.6%
OSCEOLA	40.0%	42.4%	44.2%	46.9%	47.6%	49.3%	49.3%	48.9%	49.6%	50.5%	50.1%	50.2%	48.8%	48.3%	49.0%
SEMINOLE	29.6%	31.7%	34.1%	35.9%	37.5%	37.4%	39.5%	37.2%	37.7%	38.7%	37.9%	38.9%	37.4%	37.9%	38.1%
FLORIDA	39.9%	41.3%	42.8%	44.6%	46.1%	46.9%	47.7%	47.5%	47.6%	48.0%	48.0%	47.9%	47.7%	46.9%	46.9%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

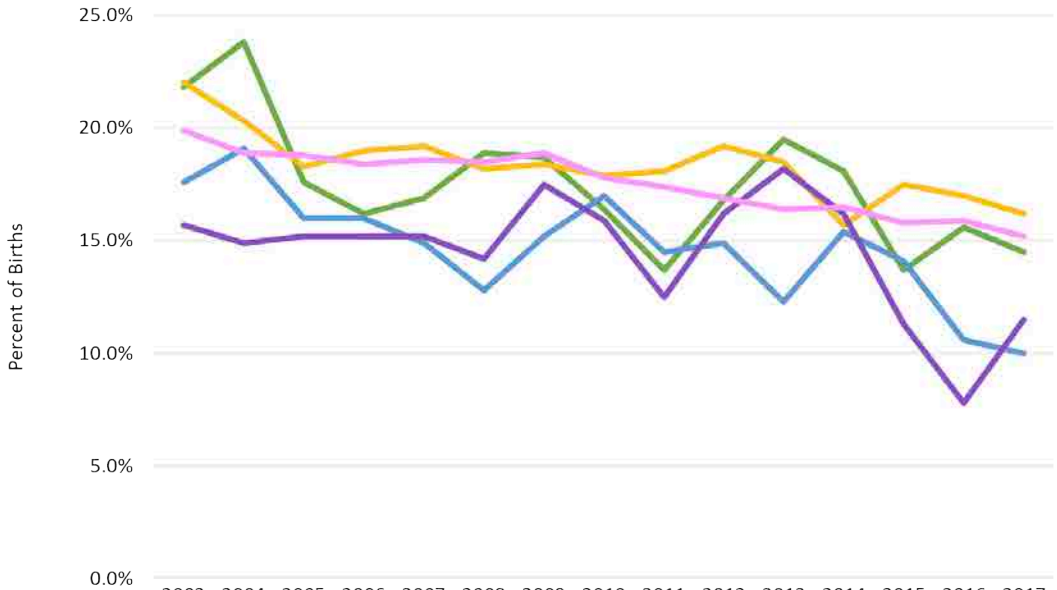
CHART 7.44: BIRTHS TO MOTHERS WHO WERE OBESE AT TIME OF PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.5%	21.0%	20.4%	21.8%	23.2%	22.1%	23.6%	24.1%	27.0%	25.2%	26.2%	27.5%	28.8%	28.8%
ORANGE	16.5%	17.4%	17.2%	18.8%	19.2%	19.3%	20.1%	20.4%	20.9%	21.9%	22.7%	23.1%	23.6%	24.8%
OSCEOLA	19.1%	19.4%	19.2%	20.2%	21.4%	21.5%	22.0%	23.6%	23.3%	23.0%	25.4%	25.0%	26.1%	26.0%
SEMINOLE	16.4%	16.1%	17.3%	19.2%	19.5%	18.9%	19.7%	21.4%	20.5%	21.8%	22.7%	22.3%	23.8%	23.9%
FLORIDA	18.7%	19.0%	19.1%	20.0%	20.3%	20.8%	21.1%	21.8%	21.8%	22.4%	22.8%	23.3%	24.0%	25.0%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

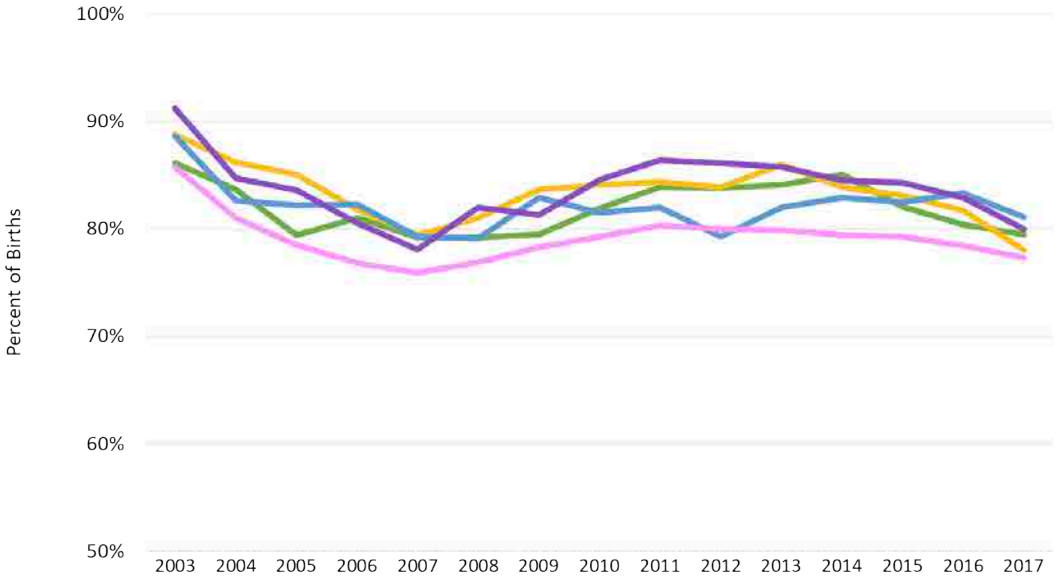
CHART 7.45: REPEAT BIRTHS TO MOTHERS AGES 15-19 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.8%	23.8%	17.6%	16.2%	16.9%	18.9%	18.7%	16.4%	13.7%	16.8%	19.5%	18.1%	13.7%	15.6%	14.5%
ORANGE	22.0%	20.3%	18.3%	19.0%	19.2%	18.2%	18.4%	17.9%	18.1%	19.2%	18.5%	15.7%	17.5%	17.0%	16.2%
OSCEOLA	17.6%	19.1%	16.0%	16.0%	14.9%	12.8%	15.2%	17.0%	14.5%	14.9%	12.3%	15.4%	14.1%	10.6%	10.0%
SEMINOLE	15.7%	14.9%	15.2%	15.2%	15.2%	14.2%	17.5%	15.9%	12.5%	16.2%	18.2%	16.2%	11.3%	7.8%	11.5%
FLORIDA	19.9%	18.9%	18.8%	18.4%	18.6%	18.5%	18.9%	17.8%	17.4%	16.9%	16.4%	16.5%	15.8%	15.9%	15.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

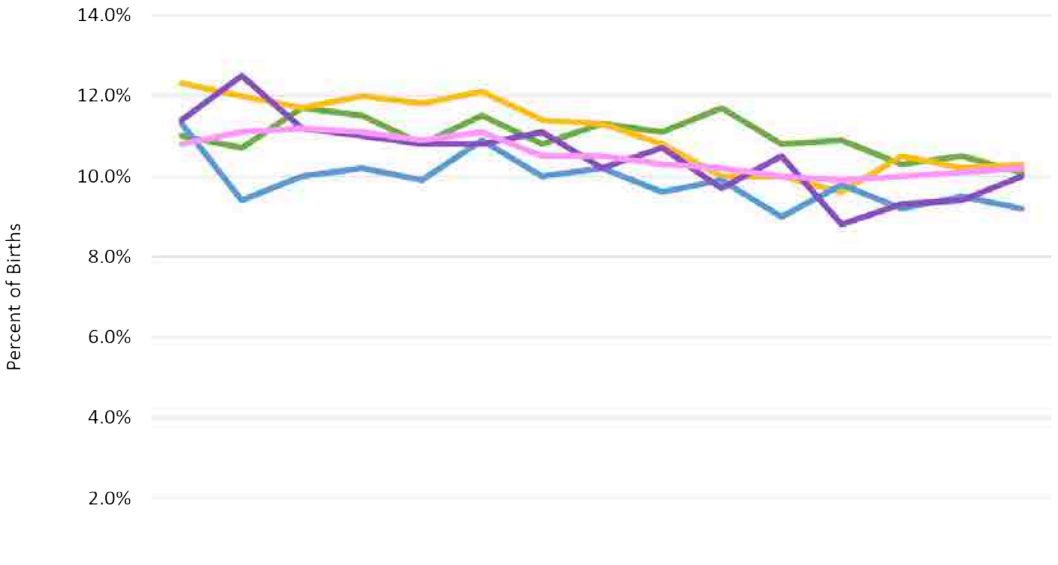
CHART 7.46: BIRTHS TO MOTHERS WITH FIRST TRIMESTER PRENATAL CARE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	86.1%	83.7%	79.4%	81.0%	79.2%	79.2%	79.5%	81.9%	83.9%	83.8%	84.1%	85.1%	82.1%	80.4%	79.5%
ORANGE	88.8%	86.2%	85.1%	81.8%	79.4%	81.0%	83.7%	84.1%	84.4%	83.9%	86.0%	83.9%	83.1%	81.7%	78.0%
OSCEOLA	88.6%	82.6%	82.2%	82.3%	79.3%	79.1%	82.9%	81.5%	82.0%	79.3%	82.0%	82.9%	82.5%	83.3%	81.1%
SEMINOLE	91.2%	84.7%	83.6%	80.5%	78.1%	82.0%	81.3%	84.6%	86.4%	86.1%	85.8%	84.5%	84.3%	82.9%	80.0%
FLORIDA	85.8%	81.0%	78.5%	76.8%	75.9%	76.9%	78.3%	79.3%	80.3%	80.0%	79.9%	79.4%	79.3%	78.4%	77.3%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

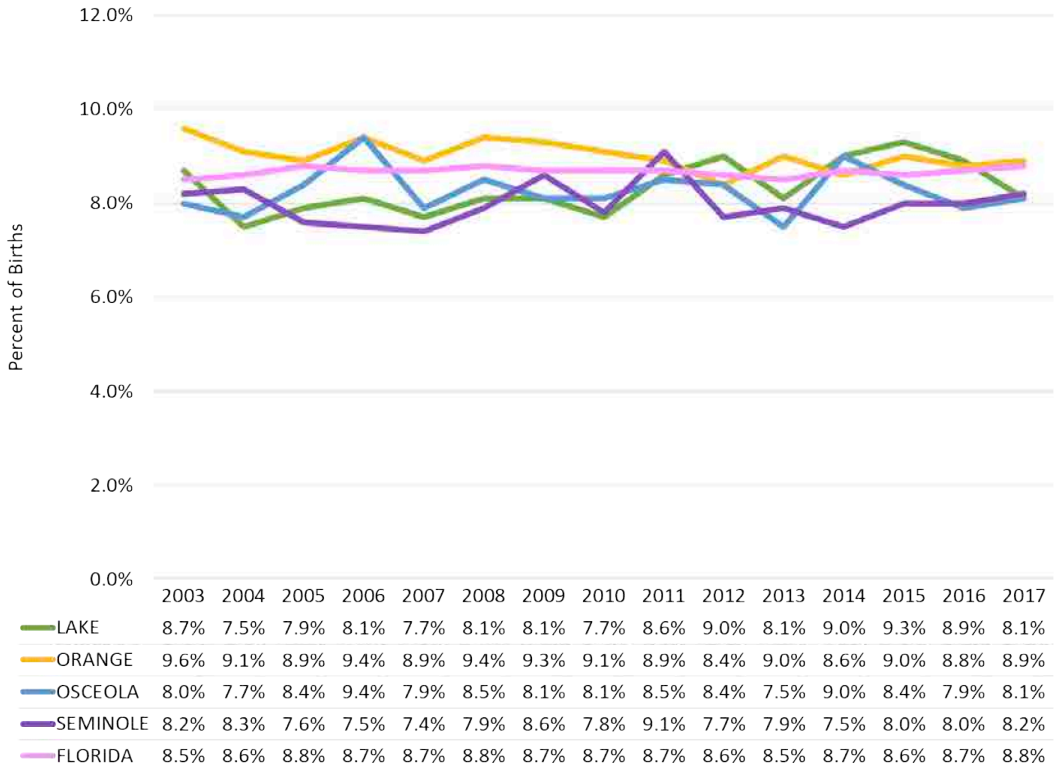
CHART 7.47: PRE-TERM BIRTHS <37 WEEKS GESTATION (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	11.0%	10.7%	11.7%	11.5%	10.8%	11.5%	10.8%	11.3%	11.1%	11.7%	10.8%	10.9%	10.3%	10.5%	10.1%
ORANGE	12.3%	12.0%	11.7%	12.0%	11.8%	12.1%	11.4%	11.3%	10.8%	10.0%	10.0%	9.6%	10.5%	10.2%	10.3%
OSCEOLA	11.3%	9.4%	10.0%	10.2%	9.9%	10.9%	10.0%	10.2%	9.6%	9.9%	9.0%	9.8%	9.2%	9.5%	9.2%
SEMINOLE	11.4%	12.5%	11.2%	11.0%	10.8%	10.8%	11.1%	10.2%	10.7%	9.7%	10.5%	8.8%	9.3%	9.4%	10.0%
FLORIDA	10.8%	11.1%	11.2%	11.1%	10.9%	11.1%	10.5%	10.5%	10.3%	10.2%	10.0%	9.9%	10.0%	10.1%	10.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

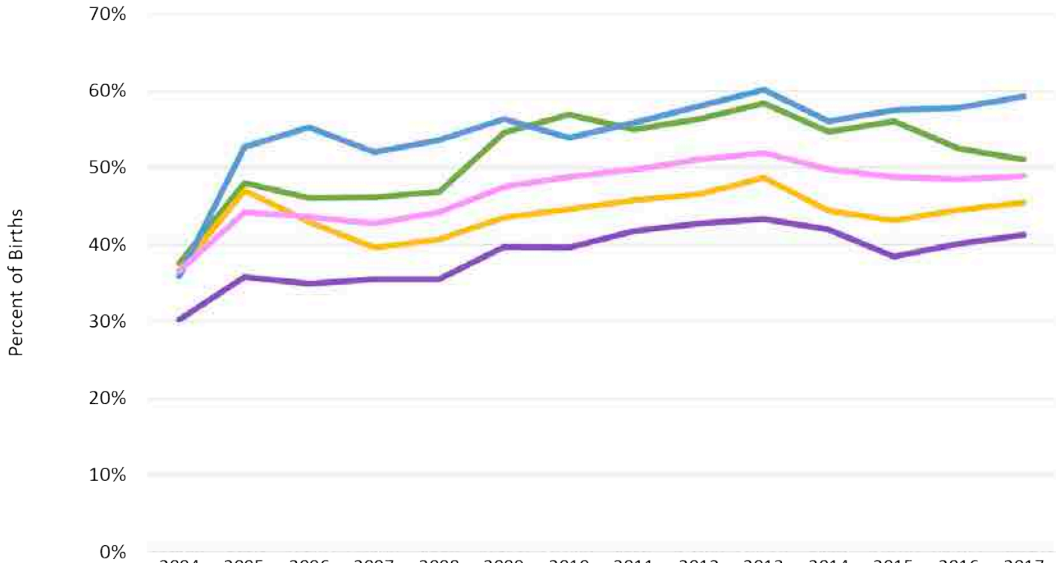
CHART 7.48: LOW BIRTHWEIGHT BIRTHS <2500 GRAMS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.7%	7.5%	7.9%	8.1%	7.7%	8.1%	8.1%	7.7%	8.6%	9.0%	8.1%	9.0%	9.3%	8.9%	8.1%
ORANGE	9.6%	9.1%	8.9%	9.4%	8.9%	9.4%	9.3%	9.1%	8.9%	8.4%	9.0%	8.6%	9.0%	8.8%	8.9%
OSCEOLA	8.0%	7.7%	8.4%	9.4%	7.9%	8.5%	8.1%	8.1%	8.5%	8.4%	7.5%	9.0%	8.4%	7.9%	8.1%
SEMINOLE	8.2%	8.3%	7.6%	7.5%	7.4%	7.9%	8.6%	7.8%	9.1%	7.7%	7.9%	7.5%	8.0%	8.0%	8.2%
FLORIDA	8.5%	8.6%	8.8%	8.7%	8.7%	8.8%	8.7%	8.7%	8.7%	8.6%	8.5%	8.7%	8.6%	8.7%	8.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

CHART 7.49: BIRTHS COVERED BY MEDICAID (2004-2017)



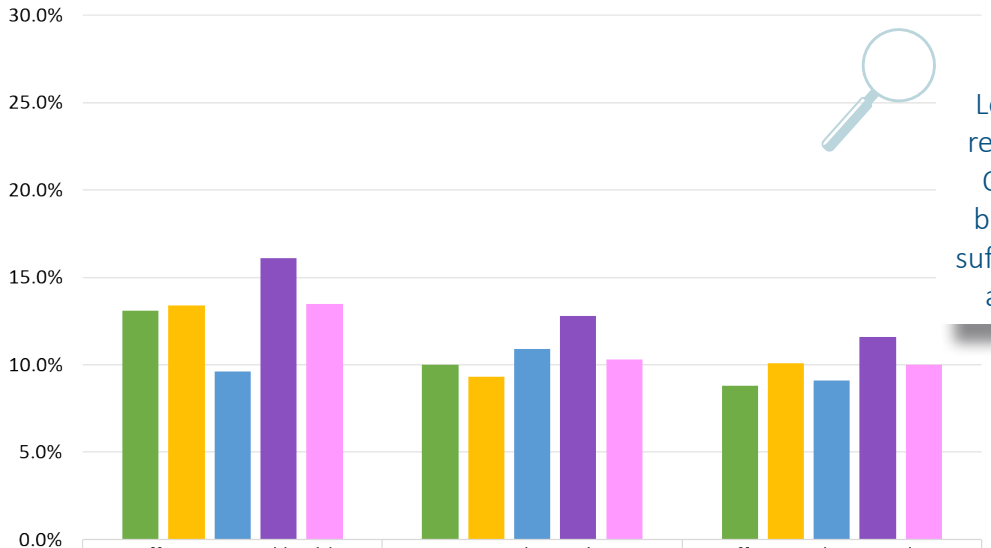
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	37.6%	48.0%	46.1%	46.2%	46.8%	54.6%	56.9%	55.0%	56.3%	58.4%	54.7%	56.0%	52.5%	51.1%
ORANGE	36.6%	47.0%	42.9%	39.6%	40.7%	43.5%	44.6%	45.8%	46.6%	48.7%	44.4%	43.1%	44.5%	45.5%
OSCEOLA	35.9%	52.7%	55.3%	52.0%	53.6%	56.3%	53.9%	55.8%	58.0%	60.1%	56.0%	57.5%	57.8%	59.3%
SEMINOLE	30.2%	35.8%	34.9%	35.5%	35.5%	39.7%	39.6%	41.8%	42.7%	43.3%	42.0%	38.4%	40.1%	41.3%
FLORIDA	36.6%	44.2%	43.6%	42.7%	44.2%	47.5%	48.8%	49.8%	51.1%	51.9%	49.8%	48.8%	48.5%	48.9%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

Quality of Life/Mental Health: What the Community is Saying

Figure 7.15 illustrates the percentages of community survey responses from Osceola County on quality of life and mental health questions. Less than 1 in 10 respondents indicated that there are sufficient mental health services. In Osceola County, only 10.9 percent of respondents indicated that they know how to access mental health services.

FIGURE 7.15: QUALITY OF LIFE AND MENTAL HEALTH, COMMUNITY SURVEY 2019



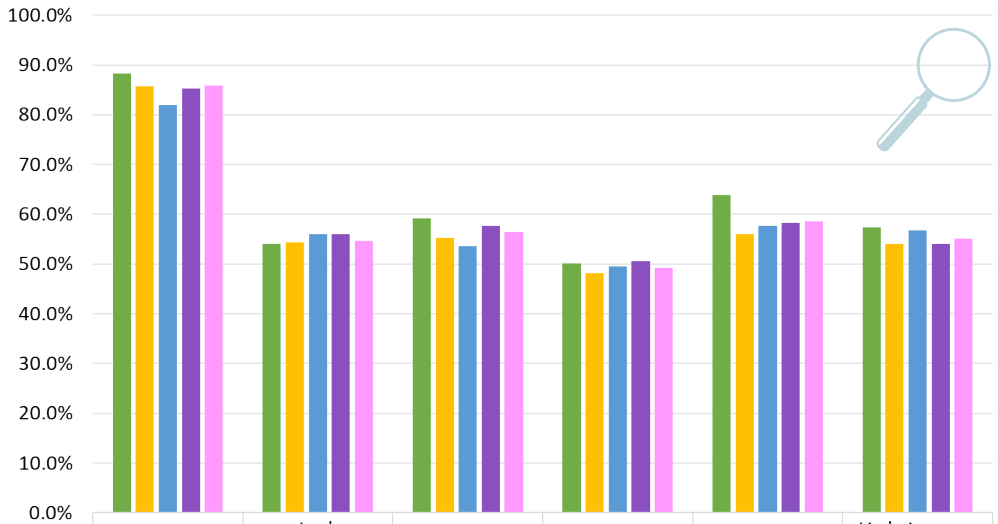
	Sufficient mental health services	Community knows how to access mental health services	Sufficient substance abuse services
LAKE	13.1%	10.0%	8.8%
ORANGE	13.4%	9.3%	10.1%
OSCEOLA	9.6%	10.9%	9.1%
SEMINOLE	16.1%	12.8%	11.6%
OVERALL	13.5%	10.3%	10.0%

Less than 1 in 10 respondents from Osceola County believe there are sufficient substance abuse services.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.16 illustrates the mental health-related challenges identified by community survey respondents. The majority of Osceola County community survey respondents (82 percent) indicated that they or a family member have had difficulty sleeping in the past two weeks. A little more than half (56 percent) of the respondents indicated that they lack companionship or feel left out (53.6 percent) or have little interest/ pleasure in activities (56.8 percent). Nearly half of the respondents stated that they feel isolated (49.5 percent).

FIGURE 7.16: MENTAL HEALTH-RELATED EXPERIENCES, COMMUNITY SURVEY 2019



More than half of the respondents indicated that they feel depressed.

	Difficulty sleeping	Lack companion-ship	Feel left out	Feel isolated	Depressed/ hopeless	Little interest or pleasure in activities
LAKE	88.3%	54.0%	59.1%	50.1%	63.9%	57.4%
ORANGE	85.7%	54.3%	55.3%	48.2%	56.0%	54.0%
OSCEOLA	82.0%	56.0%	53.6%	49.5%	57.6%	56.8%
SEMINOLE	85.3%	56.0%	57.6%	50.5%	58.3%	54.0%
OVERALL	85.8%	54.7%	56.4%	49.2%	58.5%	55.1%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to quality of life/mental health:

- Co-occurring substance use disorder and mental health illness
- High levels of stress that people experience

Barriers to care identified by primary research participants included:

- Continued stigma associated with mental health
- Many providers do not accept certain insurances
- High prescription costs
- Long wait times to get an appointment
- Access to mental health services
- Lack of community support

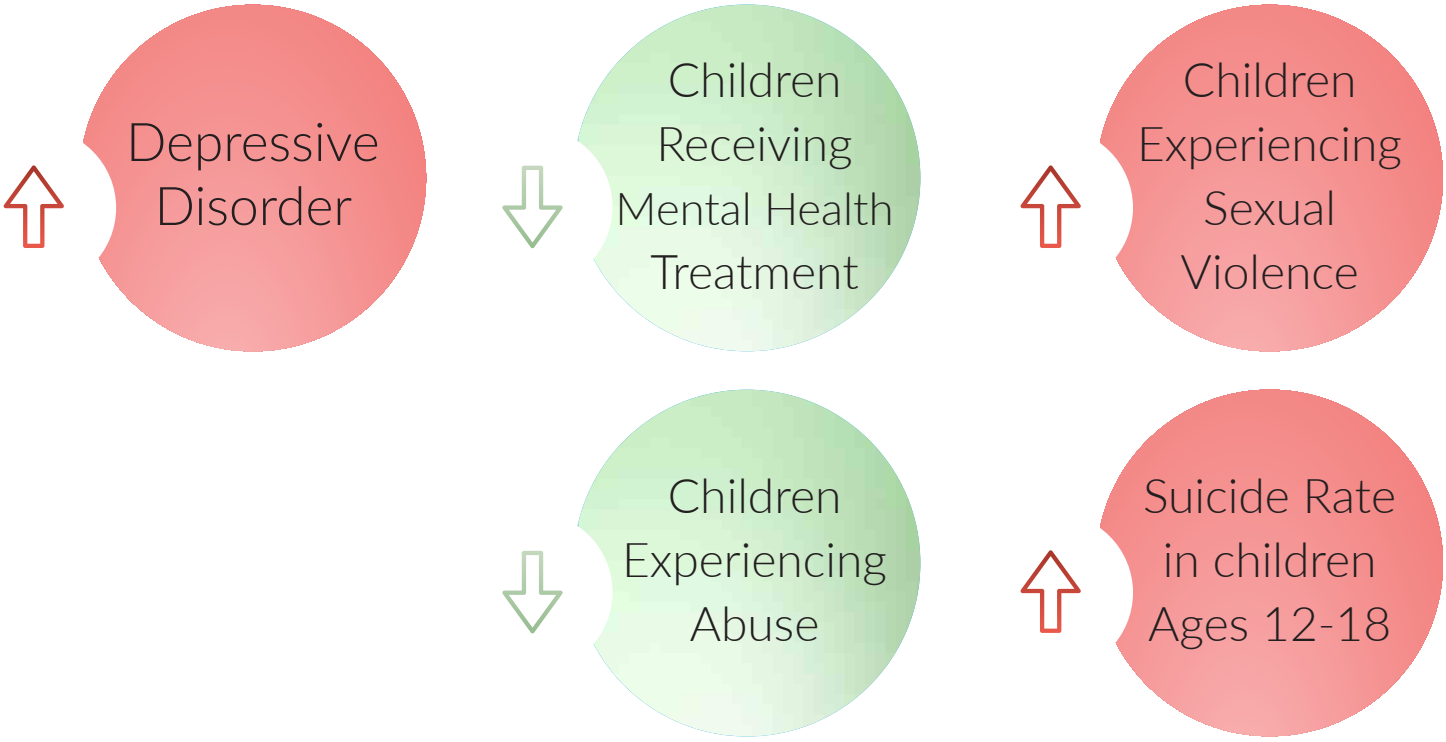
Needed services related to quality of life/mental health that were identified by primary research participants included:

- Widespread education to remove stigma
- Geriatric psychology
- More resources for the LGBTQ community, homeless, sexual assault and human trafficking victims
- Education on the appropriate use of the Marchman Act versus the Baker Act
- Supported services to manage mental health
- Better community plan around mental illness and addiction treatment

Quality of Life/Mental Health at a Glance

The key indicators related to quality of life/mental health that have changed since the last CHNA are identified in Figure 7.17. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.17: MENTAL HEALTH/QUALITY OF LIFE INDICATORS



Source: Strategy Solutions, Inc.

Quality of Life/Mental Health: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A DEPRESSIVE DISORDER (2013-2016)

The percentage of adults who have ever been told they had a depressive disorder increased in Osceola County and decreased in the state from 2013 to 2016. In the county, the percentage increased from 15.4 percent to 16.6 percent and the state percentage decreased from 16.8 percent to 14.2 percent. (See Chart 7.50)

ADULTS WITH A DEPRESSIVE DISORDER BY AGE (2013-2016)

The percentage of adults with depressive disorder increased in all groups in Osceola County except for adults 18-44 which decreased from 15.3 percent in 2013 to 12.4 percent in 2016. In the state, there was a decrease in all groups from 2013 to 2016. In 2013 and 2016, county percentages (15.3 percent and 12.4 percent) for adults 18-44 were lower than the state percentages (15.8 percent and 13.3 percent).

The percentage for adults 45-64 increased in the county from 17.4 percent in 2013 to 23 percent in 2016, while the state percentage fell from 19.6 percent to 17.3 percent during this time. Percentages for those 65 and older in Osceola County increased from 12.1 percent in 2013 to 15.3 percent in 2016 while the state percentage decreased from 14.6 percent to 11.8 percent from 2013 to 2016. (See Chart 7.51)

ADULTS WITH A DEPRESSIVE DISORDER BY INCOME (2013-2016)

The percentage of adults with incomes under $25K in Osceola County increased from 17 percent in 2013 to 22.8 percent in 2016 percent while the state decreased during the same time period from 23.8 percent to 20.6 percent. Adults with incomes from $25K to $49K had a decrease in Osceola County from 23.4 percent to 16.2 percent, while at the state level, there was a decrease from 16.5 percent to 14.9 percent during this time. The percentage for those with incomes of $50K and above in Osceola County decreased from 4.8 percent (2013) to 4.4 percent (2016) and in the state from 11.3 percent to 9.9 percent over this time. (See Chart 7.52)

CHILDREN AGES 1-5 RECEIVING MENTAL HEALTH TREATMENT SERVICES (2004-2016)

The rate of children ages 1-5 receiving mental health treatment services per 100,000 in Osceola County and across the state has varied widely from 2004 to 2016 although there has been an overall decline. The rates in Osceola County increased from 2004 (14.1) to 2006 (20.2) and then decreased in 2016 (1). Osceola County's utilization rate (1 per 100,000) was lower than the state rate (3.4 per 100,000) in 2016. (See Chart 7.53)

CHILDREN IN GRADES K-12 WITH EMOTIONAL/BEHAVIORAL DISABILITY (2004-2018)

The percentage of children in grades K-12 with an emotional or behavioral disability decreased in Osceola County from 2004 (1.2 percent) to 2018 (0.4 percent). The percentage in Osceola County consistently was equal to or lower than the state throughout this time period (1.3 percent, 1.2 percent, respectively) except for 2008. The state percentage decreased from 1.5 percent to 0.5 percent from 2004 to 2018. (See Chart 7.54)

CHILDREN AGES 5-11 EXPERIENCING SEXUAL VIOLENCE (2003-2017)

The rate per 100,000 of children aged 5-11 experiencing sexual violence fluctuated in Osceola County from 2003 and 2017. Osceola County's rate increased from 89.7 in 2003 to 109.3 in 2011 before decreasing to 89.8 in 2012. The state rate increased from 51.3 in 2003 to 59.6 in 2017. (See Chart 7.55)

CHILDREN AGES 5-11 EXPERIENCING CHILD ABUSE (2003-2017)

The rate of children aged 5-11 experiencing child abuse per 100,000 has fluctuated in Osceola County from 2003 to 2017. The Osceola County rate increased from 1251.7 in 2003 to 1639.6 in 2011, followed by a decrease to 542.1 in 2017. The state rate increased from 674.6 in 2003 to 857.9 in 2017. (See Chart 7.56)

SUICIDE RATE OF CHILDREN AGES 12-18 (2004-2017)

The suicide rate per 100,000 of children aged 12-18 has increased in Osceola County and the state from 2004 to 2017. The Osceola County rate increased from 4.2 in 2004 to 5.9 in 2017 with drops to rate of 0 in 2006, 2007, 2010 and 2011. The state rate increased from 3.2 (2004) to 5.5 (2017). (See Chart 7.57)

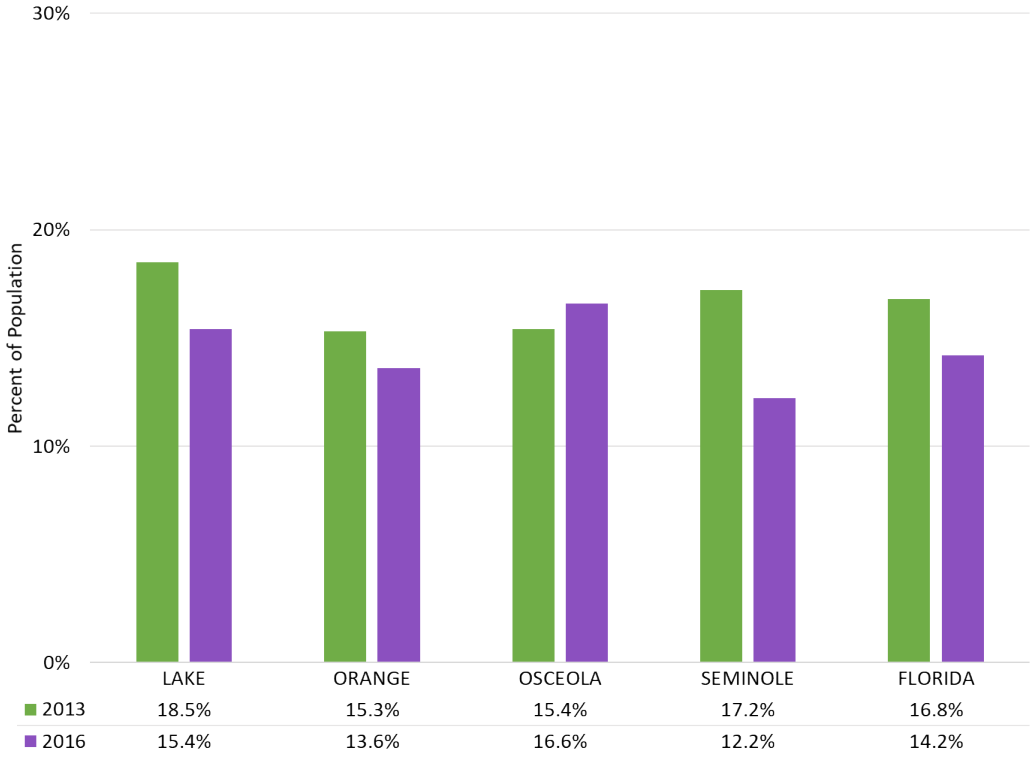
SUICIDE RATE AGES 19-21 (2004-2017)

The suicide rate ages 19-21 per 100,000 fluctuated between 2004 and 2017 with Osceola County's rate trending downward over time. Osceola County's rate increased from 21.1 in 2004 to 35.6 in 2008 before decreasing to 14.6 in 2017. The county rate dropped to 0 in 2007, 2010, 2013 and 2015. The state rate increased from 12 in 2004 to 13.3 in 2017. (See Chart 7.58)

SUICIDE RATE AGES 22 AND OLDER (2004-2017)

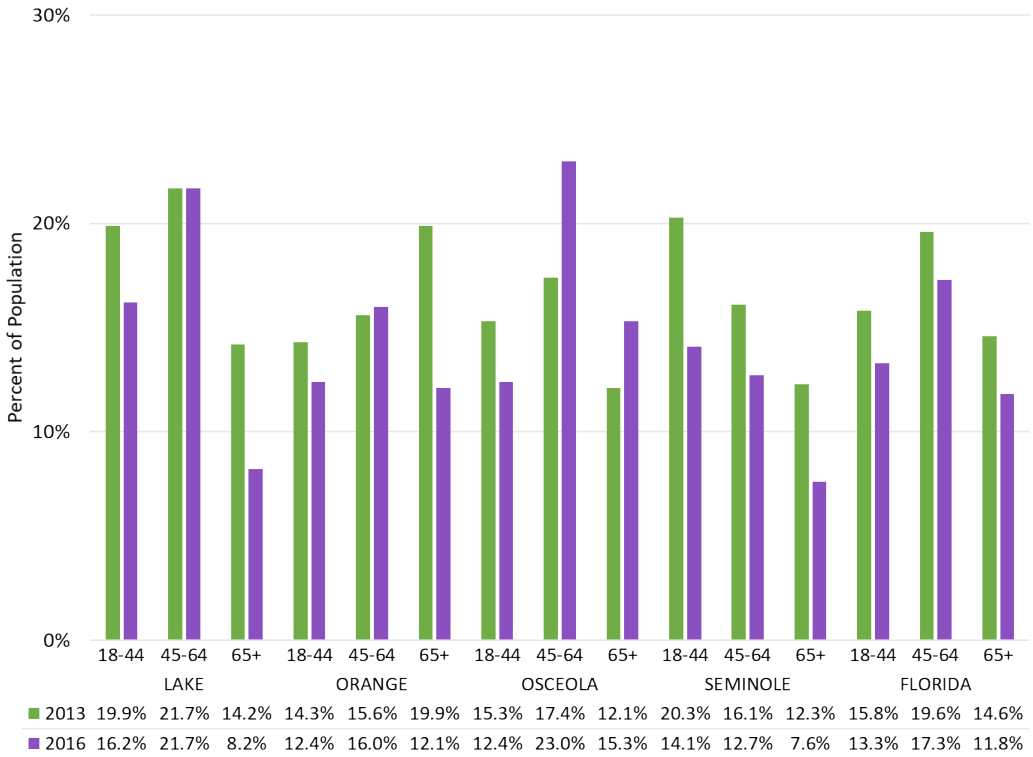
The suicide rate ages 22 and older per 100,000 fluctuated in Osceola County between 2004 and 2017. Osceola County's rate increased from 13 in 2005 to 18.2 in 2005 before decreasing to 16.8 in 2017. The state rate increased from 17.8 in 2004 to 19.4 in 2017. (See Chart 7.59)

CHART 7.50: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A DEPRESSIVE DISORDER (2013-2016)



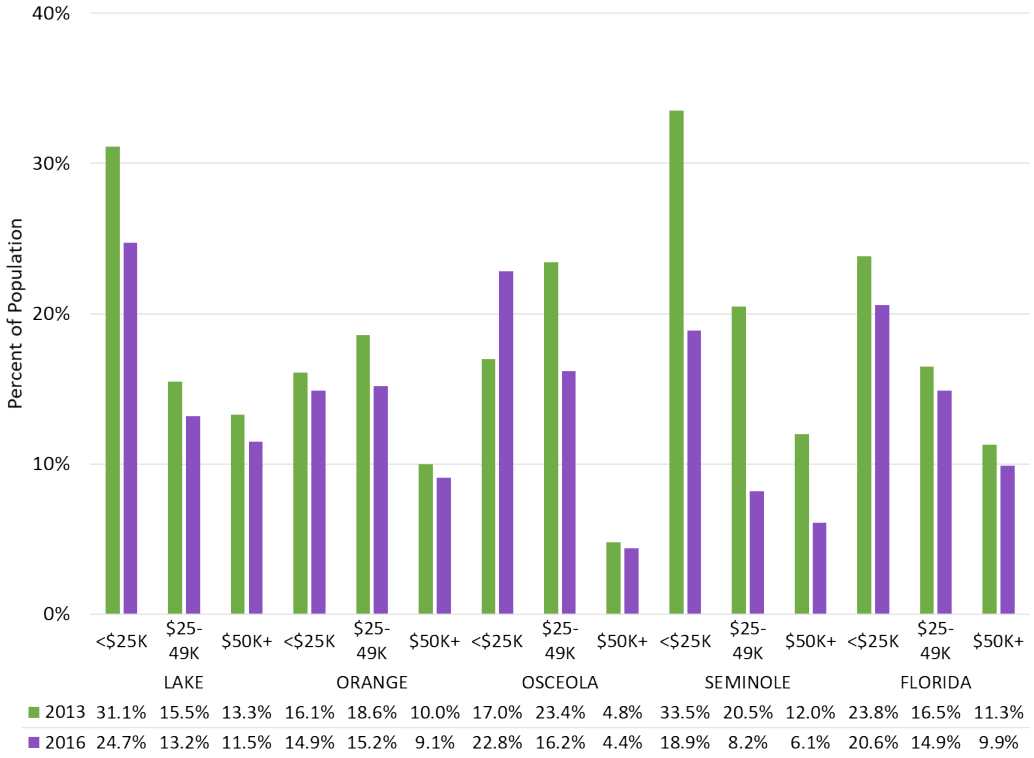
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.51: ADULTS WITH A DEPRESSIVE DISORDER BY AGE (2013-2016)



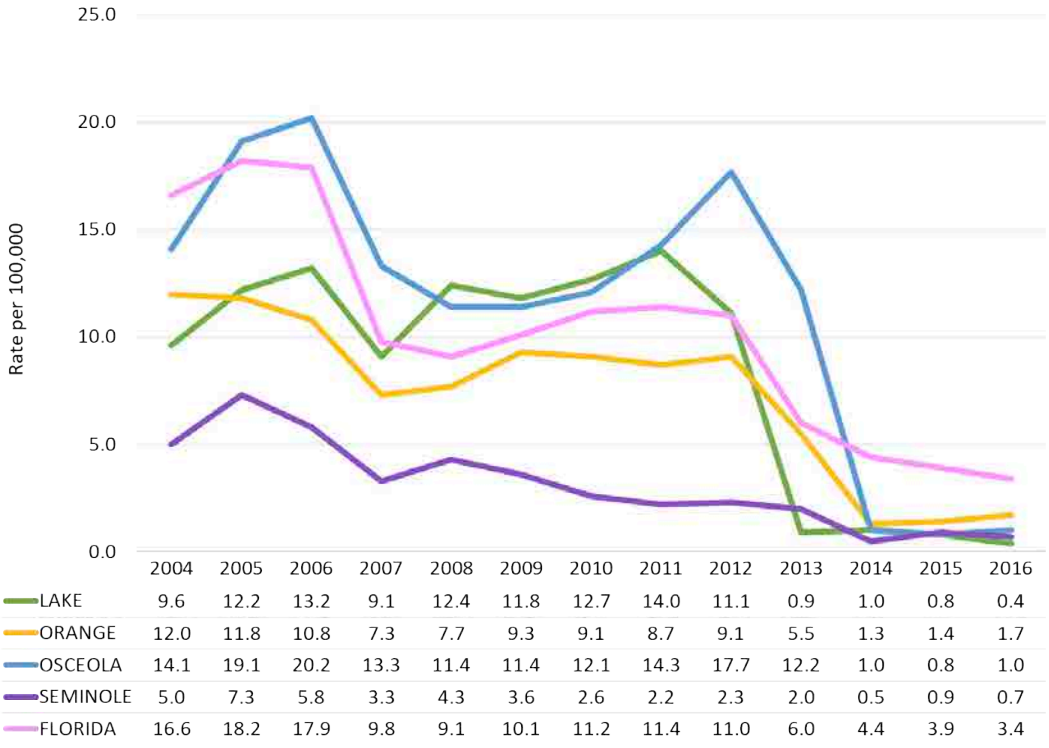
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.52: ADULTS WITH A DEPRESSIVE DISORDER BY INCOME (2013-2016)



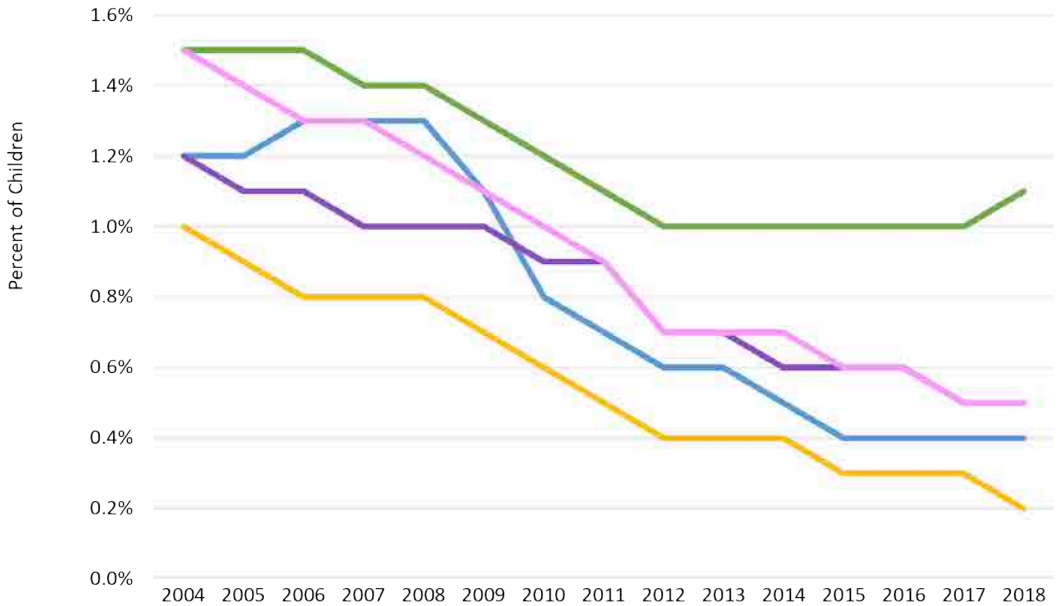
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.53: CHILDREN AGES 1-5 RECEIVING MENTAL HEALTH TREATMENT SERVICES (2004-2016)



Source: FLHealthCHARTS: Florida Department of Children and Families

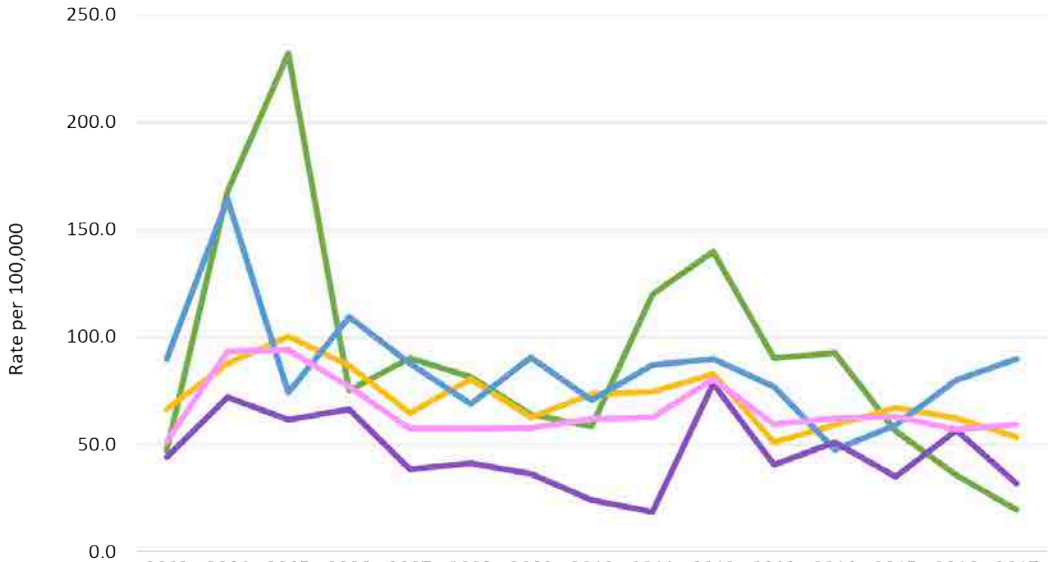
CHART 7.54: CHILDREN IN GRADES K-12 WITH EMOTIONAL/BEHAVIORAL DISABILITY (2004-2018)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	1.5%	1.5%	1.5%	1.4%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%
ORANGE	1.0%	0.9%	0.8%	0.8%	0.8%	0.7%	0.6%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%
OSCEOLA	1.2%	1.2%	1.3%	1.3%	1.3%	1.1%	0.8%	0.7%	0.6%	0.6%	0.5%	0.4%	0.4%	0.4%	0.4%
SEMINOLE	1.2%	1.1%	1.1%	1.0%	1.0%	1.0%	0.9%	0.9%	0.7%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%
FLORIDA	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.0%	0.9%	0.7%	0.7%	0.7%	0.6%	0.6%	0.5%	0.5%

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

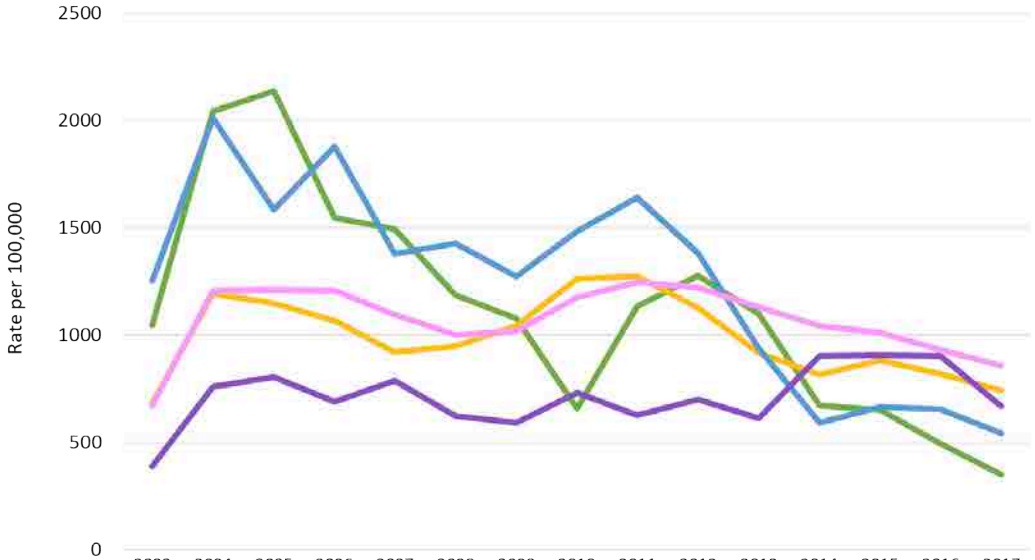
CHART 7.55: CHILDREN AGES 5-11 EXPERIENCING SEXUAL VIOLENCE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	47.1	167.9	232.2	75.3	90.2	81.4	64.1	58.3	119.7	139.9	90.0	92.7	56.2	35.5	19.6
ORANGE	66.3	87.7	100.4	86.6	64.6	80.5	62.6	73.5	74.4	82.8	50.9	59.1	67.2	62.2	53.4
OSCEOLA	89.7	164.3	74.0	109.3	87.7	68.7	90.5	70.7	87.1	89.7	77.0	47.5	59.1	79.9	89.8
SEMINOLE	43.9	72.1	61.6	66.4	38.4	41.3	36.5	24.2	18.7	78.4	40.4	51.0	34.9	56.5	31.9
FLORIDA	51.3	93.2	93.9	76.8	57.5	57.5	57.7	61.8	62.6	80.3	59.4	62.2	62.8	56.9	59.6

Source: FLHealthCHARTS: Florida Department of Children and Families Florida Safe Families Network Data Mart

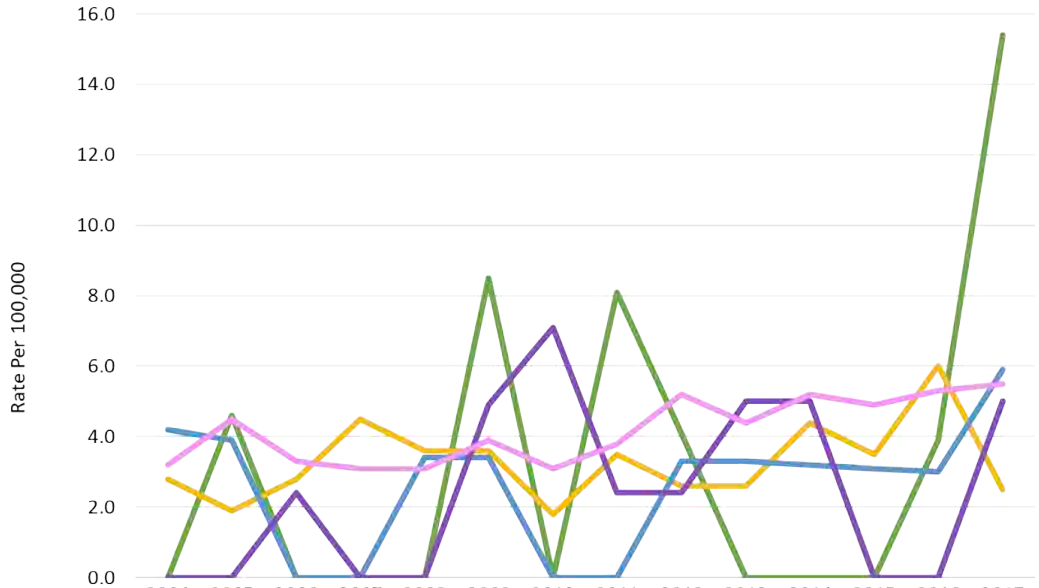
CHART 7.56: CHILDREN AGES 5-11 EXPERIENCING CHILD ABUSE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	1046.8	2043.8	2136.5	1546.0	1494.9	1186.2	1077.0	657.9	1135.3	1275.9	1100.4	672.9	650.5	493.4	352.9
ORANGE	682.6	1192.3	1146.7	1069.0	920.8	948.2	1043.0	1261.8	1274.4	1126.7	917.8	815.3	881.9	819.1	744.5
OSCEOLA	1251.7	2012.1	1585.3	1877.8	1378.3	1428.8	1273.8	1483.9	1639.6	1380.8	938.4	593.6	666.2	655.0	542.1
SEMINOLE	390.3	759.7	806.4	692.2	788.7	622.5	592.2	731.8	628.5	700.2	613.9	902.4	905.5	904.1	670.7
FLORIDA	674.6	1205.9	1209.8	1206.5	1097.0	1000.9	1020.3	1175.1	1244.4	1223.1	1129.8	1043.9	1011.4	930.3	857.9

Source: FLHealthCHARTS: Florida Department of Children and Families Florida Safe Families Network Data Mart

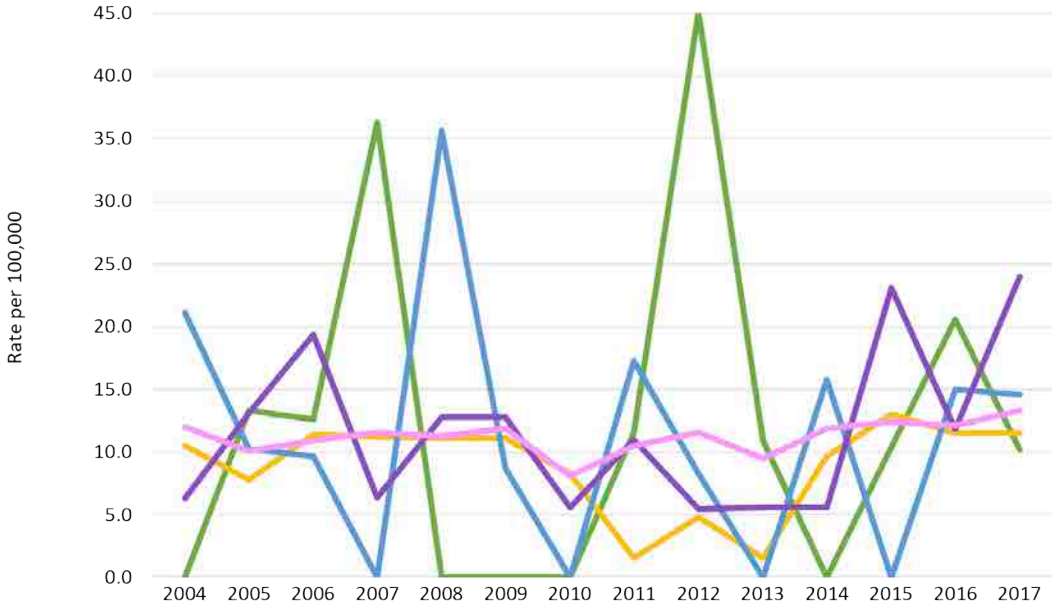
CHART 7.57: SUICIDE RATE OF CHILDREN AGES 12-18 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	0.0	4.6	0.0	0.0	0.0	8.5	0.0	8.1	4.1	0.0	0.0	0.0	3.9	15.4
ORANGE	2.8	1.9	2.8	4.5	3.6	3.6	1.8	3.5	2.6	2.6	4.4	3.5	6.0	2.5
OSCEOLA	4.2	3.9	0.0	0.0	3.4	3.4	0.0	0.0	3.3	3.3	3.2	3.1	3.0	5.9
SEMINOLE	0.0	0.0	2.4	0.0	0.0	4.9	7.1	2.4	2.4	5.0	5.0	0.0	0.0	5.0
FLORIDA	3.2	4.5	3.3	3.1	3.1	3.9	3.1	3.8	5.2	4.4	5.2	4.9	5.3	5.5

Source: FLHealthCHARTS: Florida Department oh Health, Bureau of Vital Statistics

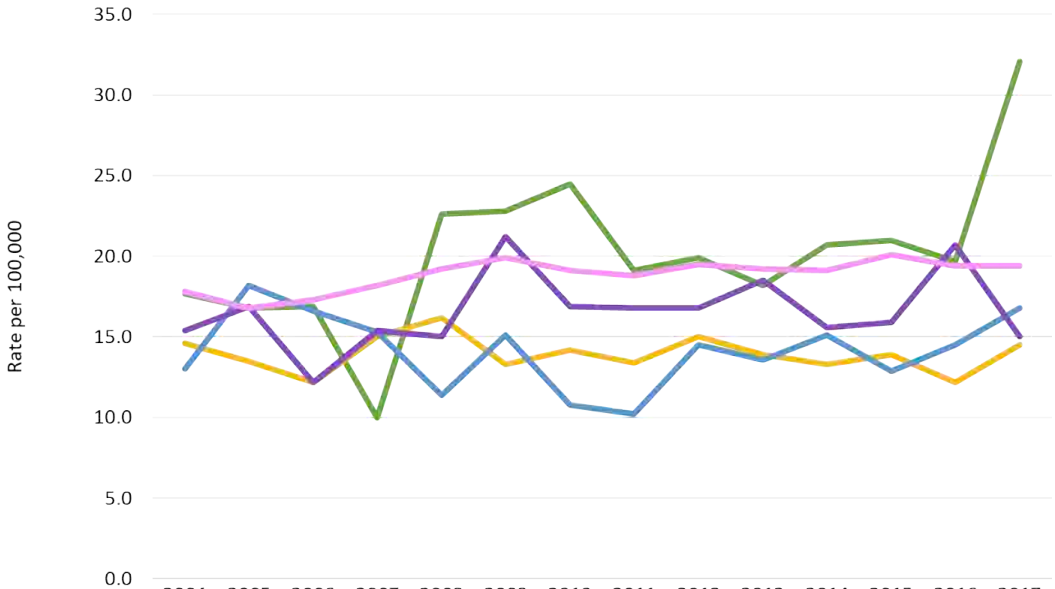
CHART 7.58: SUICIDE RATE AGES 19-21 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	0.0	13.3	12.6	36.3	0.0	0.0	0.0	11.6	45.1	10.9	0.0	10.4	20.6	10.2
ORANGE	10.5	7.8	11.4	11.2	11.1	11.1	8.3	1.6	4.8	1.6	9.7	13.0	11.5	11.5
OSCEOLA	21.1	10.3	9.7	0.0	35.6	8.7	0.0	17.3	8.3	0.0	15.8	0.0	15.0	14.6
SEMINOLE	6.3	13.1	19.4	6.4	12.8	12.8	5.6	11.0	5.5	5.6	5.6	23.1	11.8	24.0
FLORIDA	12.0	10.1	10.9	11.6	11.3	11.9	8.1	10.5	11.6	9.5	11.9	12.4	12.1	13.3

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

CHART 7.59: SUICIDE RATE AGES 22 AND OLDER (2004-2017)



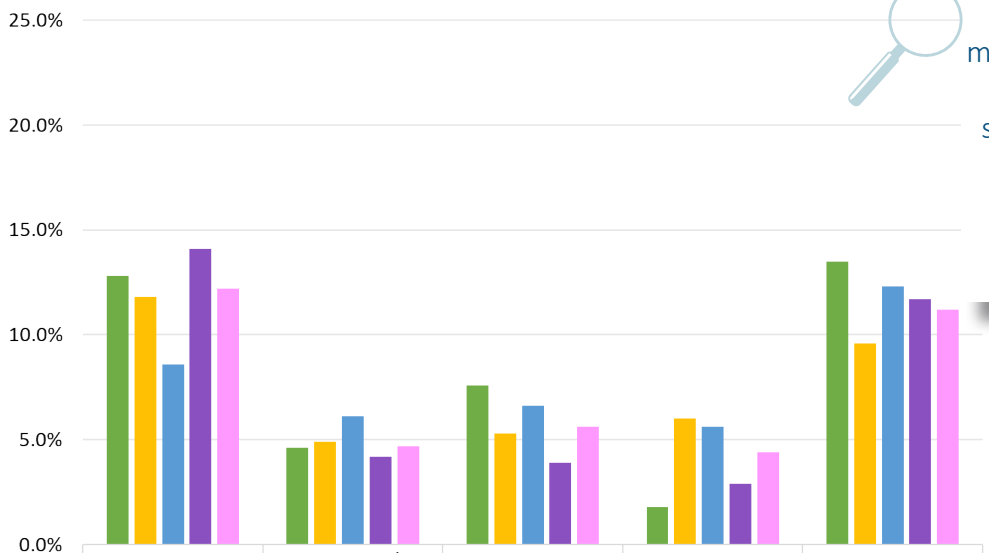
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	17.7	16.8	16.9	10.0	22.6	22.8	24.5	19.1	19.9	18.2	20.7	21.0	19.7	32.1
ORANGE	14.6	13.5	12.2	15.0	16.2	13.3	14.2	13.4	15.0	13.9	13.3	13.9	12.2	14.5
OSCEOLA	13.0	18.2	16.6	15.3	11.4	15.1	10.8	10.2	14.5	13.6	15.1	12.9	14.5	16.8
SEMINOLE	15.4	16.9	12.2	15.4	15.0	21.2	16.9	16.8	16.8	18.5	15.6	15.9	20.7	15.0
FLORIDA	17.8	16.8	17.3	18.2	19.2	19.9	19.1	18.8	19.5	19.2	19.1	20.1	19.4	19.4

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

Behavioral Risk Factors: What the Community is Saying

Figure 7.18 illustrates the percentages of community survey respondents experiencing various behavioral risk factors. Sexual behaviors were defined in the survey as unprotected, irresponsible/risky.

FIGURE 7.18: BEHAVIORAL RISK FACTORS, COMMUNITY SURVEY 2019



	Alcohol abuse	Prescription drug abuse	Illegal drug use	Sexual behaviors	Tobacco use
LAKE	12.8%	4.6%	7.6%	1.8%	13.5%
ORANGE	11.8%	4.9%	5.3%	6.0%	9.6%
OSCEOLA	8.6%	6.1%	6.6%	5.6%	12.3%
SEMINOLE	14.1%	4.2%	3.9%	2.9%	11.7%
OVERALL	12.2%	4.7%	5.6%	4.4%	11.2%

In Osceola County, more than six percent of community survey respondents experienced prescription drug abuse or illegal drug use.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to behavioral risk factors:

- Prevalence of substance abuse disorders
- Incidence of substance use and homelessness is increasing
- More rehabilitation is needed
- Kids self-medicating with synthetic drugs
- Rate of smoking is high

Barriers to care identified by primary research participants included:

- Lack of affordable treatment options
- Lack of housing services
- Financial services for those struggling and/or who are underinsured

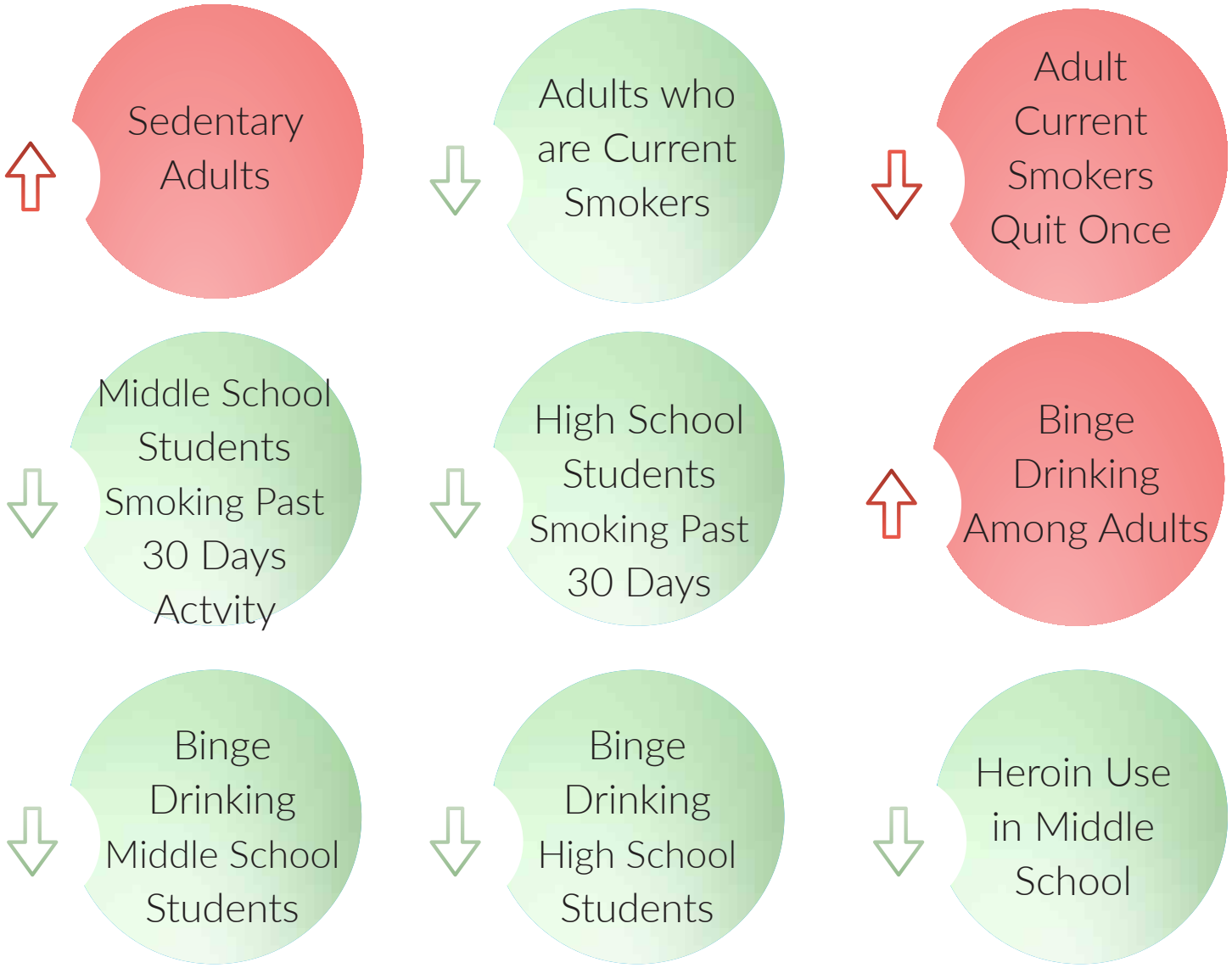
Needed services related to behavioral risk factors that were identified by primary research participants included:

- State funding for inpatient and outpatient treatment facilities for substance use disorders
- More medication assisted treatment services
- More transitional housing
- More rehabilitation services
- Address the underlying causes of substance use

Behavioral Risk Factors at a Glance

The key indicators related to behavioral risk factors that have changed since the last CHNA are identified in Figure 7.19. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.19: BEHAVIORAL RISK FACTOR INDICATORS



Source: Strategy Solutions, Inc.

Behavioral Risk Factors: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons, located on the previous page, illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

MIDDLE SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)

The percentage of middle school students without sufficient vigorous physical activity increased in both Osceola County and the state between 2014 and 2016. The county's percentage increased from 78 percent to 80.3 percent. The state percentage increased from 75.2 percent to 78.3 percent. (See Chart 7.60)

HIGH SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)

The percentage of high school students without sufficient vigorous physical activity increased in both Osceola County and the state between 2014 and 2016. The county's percentage increased from 77.7 percent to 80.7 percent and the state increased from 78.5 percent to 80.6 percent during this time. (See Chart 7.61)

SEDENTARY ADULTS (2002-2016)

The percentage of sedentary adults in Osceola County increased from 2002 (32.3 percent) to 2016 (34.5 percent). The state percentage increased over this time period (26.4 percent to 29.8 percent). (See Chart 7.62)

ADULTS WHO ARE CURRENT SMOKERS (2002-2016)

The percentage of adults who are current smokers in Osceola County decreased from 26.1 percent in 2002 to 13.9 percent in 2016. The state level decreased from 22.2 percent to 15.5 percent during this time. (See Chart 7.63)

ADULT CURRENT SMOKERS WHO QUIT SMOKING AT LEAST ONCE IN PAST YEAR (2002-2016)

The percentage of adult current smokers who quit at least once in the past year decreased in Osceola County but increased in the state between 2002 and 2016. Osceola County's percentage decreased from 64.7 percent to 53.3 percent and the state percentage increased from 55.3 percent to 62.1 percent. (See Chart 7.64)

MIDDLE SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)

The percentage of middle school students smoking cigarettes in the past 30 days decreased in Osceola County and the state between 2010 and 2018. Osceola County's percentage decreased from 3.8 percent in 2010 to 0.8 percent in 2018. The state percentage decreased from 4.9 percent to 1.3 percent during this time. (See Chart 7.65)

HIGH SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)

The percentage of high school students smoking cigarettes in the past 30 days decreased in Osceola County and state between 2010 and 2018. Osceola County's percentage decreased from 9.5 percent to 2.6 percent from 2010 to 2018. The state percentage decreased from 13.1 percent to 3.6 percent during this time. (See Chart 7.66)

BINGE DRINKING AMONG ADULTS (2002-2016)

The percentage of binge drinking among adults increased in both Osceola County and the state from 2002 to 2016. In Osceola County, the percentage increased from 12.6 percent in 2002 to 16.1 percent in 2016. In the state, there was an increase from 16.4 percent to 17.5 percent during this same time. (See Chart 7.67)

BINGE DRINKING MIDDLE SCHOOL STUDENTS (2012-2018)

The percentage of binge drinking middle school students decreased in Osceola County and the state. Data was not available for Osceola County in 2012. The county percentage declined from 4 percent in 2014 to 1.5 percent in 2018. The state percentage also decreased from 5 percent to 3.1 percent between 2012 and 2018. (See Chart 7.68)

BINGE DRINKING HIGH SCHOOL STUDENTS (2012-2018)

The percentage of binge drinking high school students decreased in Osceola County and the state. Data was not available for Osceola County in 2012. The county's percentage decreased from 11 percent in 2014 to 8.5 percent in 2018. The state also decreased from 16 percent in 2012 to 9.6 percent in 2018. (See Chart 7.69)

HEROIN USE IN MIDDLE SCHOOL (2010-2018)

There was a decrease in the percentage of middle school students who reported heroin use in both Osceola County and the state. Osceola County's percentage decreased from 0.7 percent to 0 percent between 2010 and 2018. Data was not available for the county in 2012. The state percentage decreased from 0.9 percent to 0.4 percent. (See Chart 7.70)

HEROIN USE IN HIGH SCHOOL (2010-2018)

There was a decrease in the percentage of high school students who reported heroin use in both Osceola County and the state. Osceola County's percentage decreased from 0.8 percent to 0 percent between 2010 and 2018. Data was not available for the county in 2012. The state percentage dropped from 1.1 percent to 0.3 percent during this time. (See Chart 7.71)

HEROIN-RELATED DEATHS (2013-2017)

There was a decrease in the percentage of high school students who reported heroin use in both Osceola County and the state. Osceola County's percentage decreased from 0.8 percent to 0 percent between 2010 and 2018. Data was not available for the county in 2012. The state percentage dropped from 1.1 percent to 0.3 percent during this time. (See Chart 7.72)

FENTANYL-RELATED DEATHS (2013-2017)

The rate per 100,000 of fentanyl-related deaths increased in Osceola County and the state from 2013 to 2017. In Osceola County, the rate increased from 1.3 to 11.1, while the state's rate increased from 0.9 to 8.3 during that time. (See Chart 7.73)

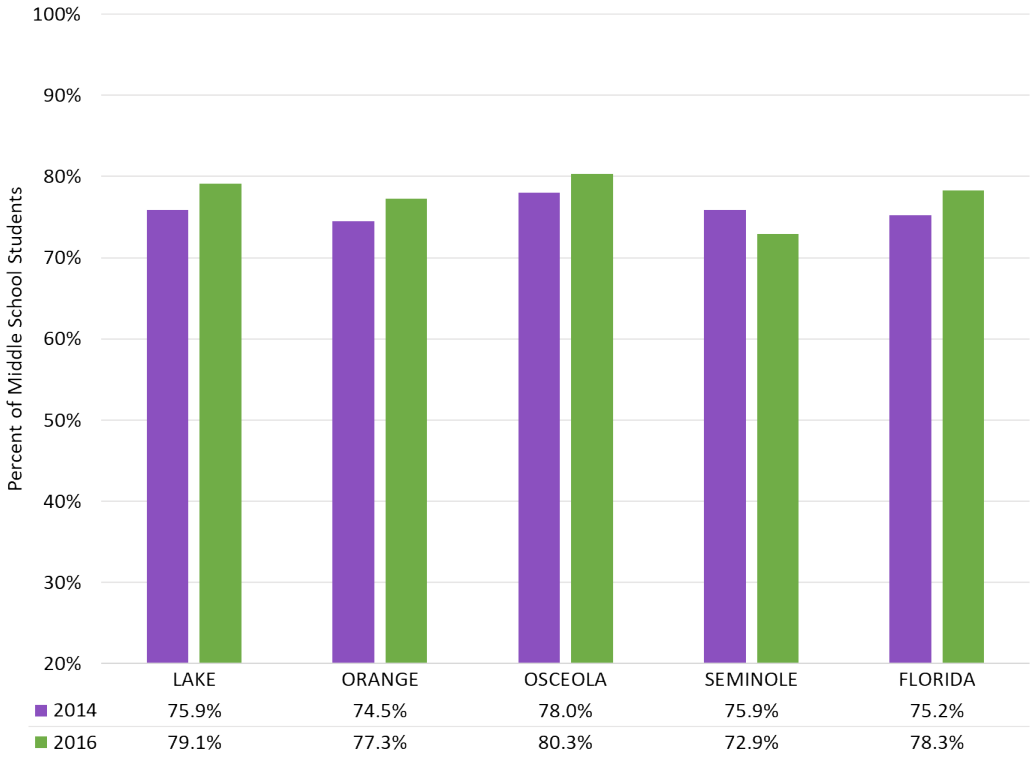
RATE OF CONTROLLED PRESCRIPTIONS OF OPIOIDS (2013-2017)

The rate per 100,000 of controlled prescriptions of opioids increased in Osceola County from 526 in 2013 to 562.1 in 2017. The state rate decreased from 735 in 2013 to 671 in 2015 (there was no data available for 2017). (See Chart 7.74)

DRUG ARRESTS (2013-2017)

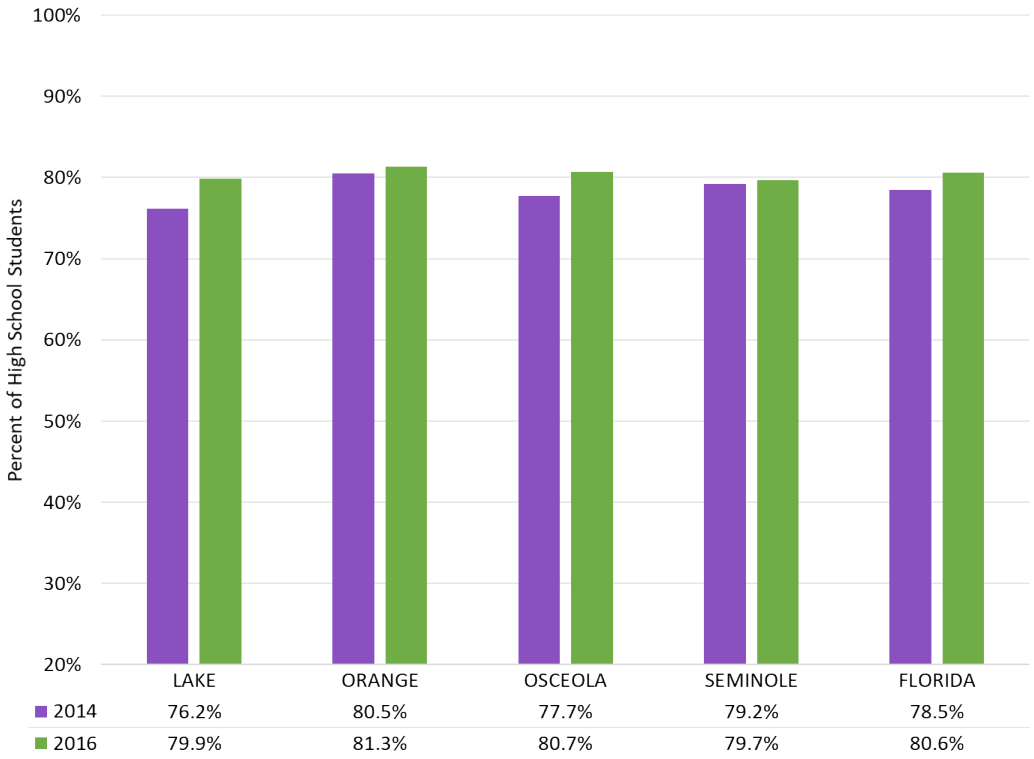
The rate of drug arrests per 100,000 increased in Osceola County between 2013 and 2017 from 950.2 to 671.5. There is no data available for the state for this indicator. (See Chart 7.75)

CHART 7.60: MIDDLE SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)



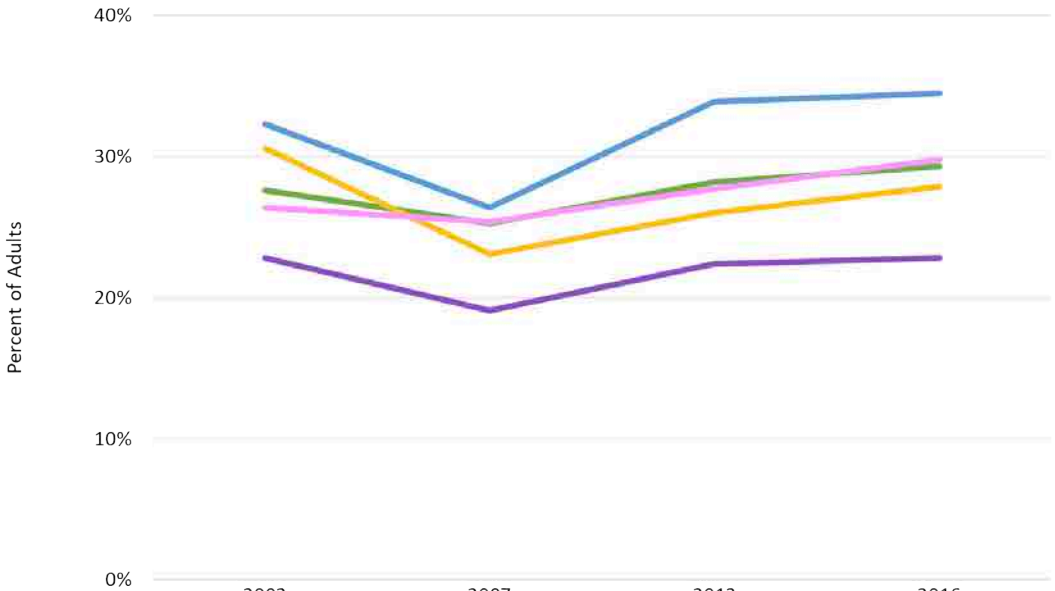
Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey

CHART 7.61: HIGH SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)



Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey

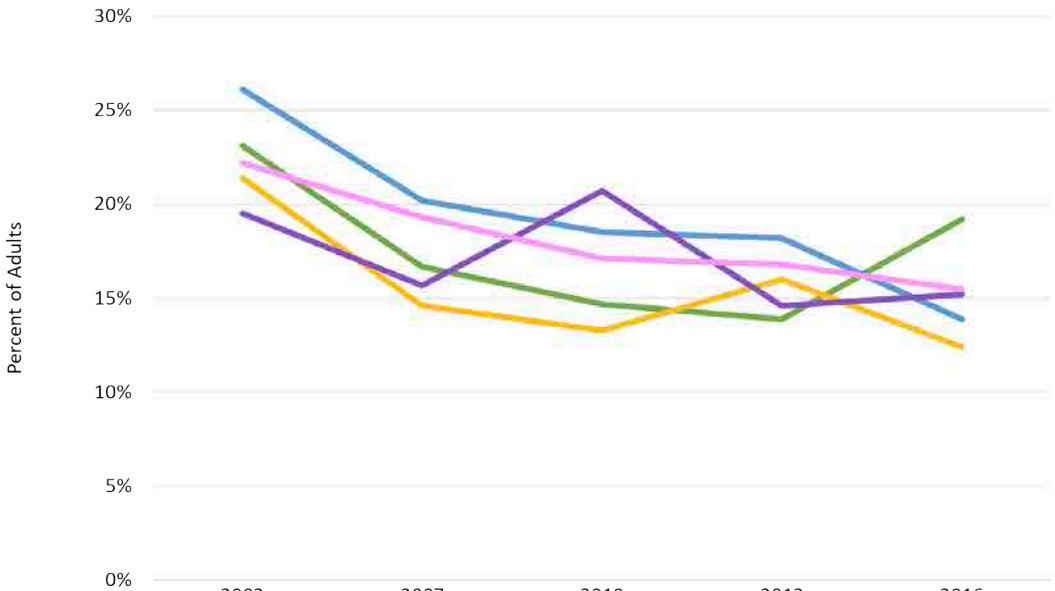
CHART 7.62: SEDENTARY ADULTS (2002-2016)



	2002	2007	2013	2016
LAKE	27.6%	25.3%	28.2%	29.3%
ORANGE	30.6%	23.1%	26.0%	27.9%
OSCEOLA	32.3%	26.4%	33.9%	34.5%
SEMINOLE	22.8%	19.1%	22.4%	22.8%
FLORIDA	26.4%	25.4%	27.7%	29.8%

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

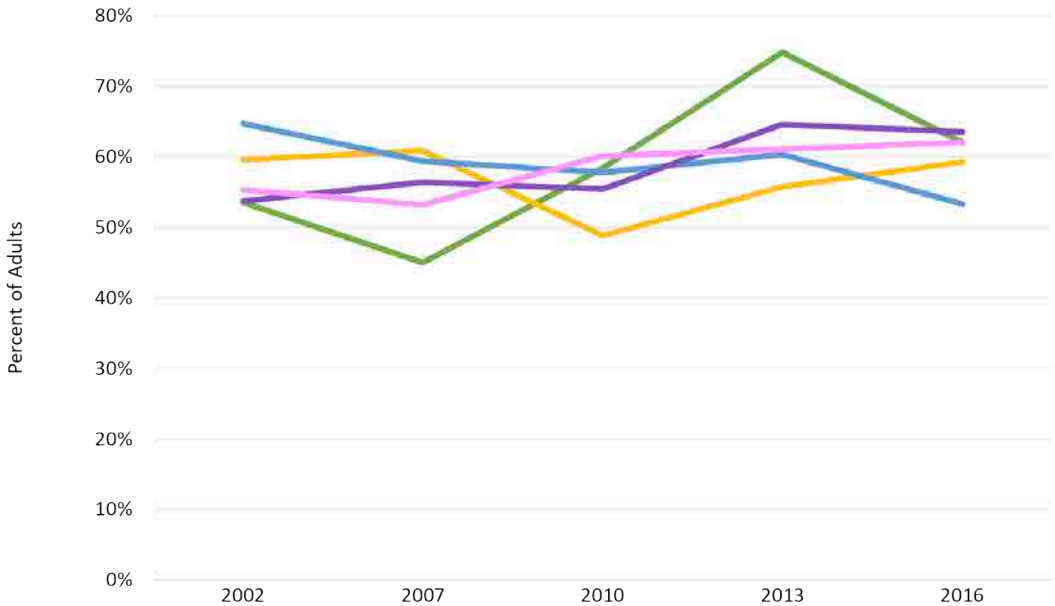
CHART 7.63: ADULTS WHO ARE CURRENT SMOKERS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	23.1%	16.7%	14.7%	13.9%	19.2%
ORANGE	21.4%	14.6%	13.3%	16.0%	12.4%
OSCEOLA	26.1%	20.2%	18.5%	18.2%	13.9%
SEMINOLE	19.5%	15.7%	20.7%	14.6%	15.2%
FLORIDA	22.2%	19.3%	17.1%	16.8%	15.5%

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

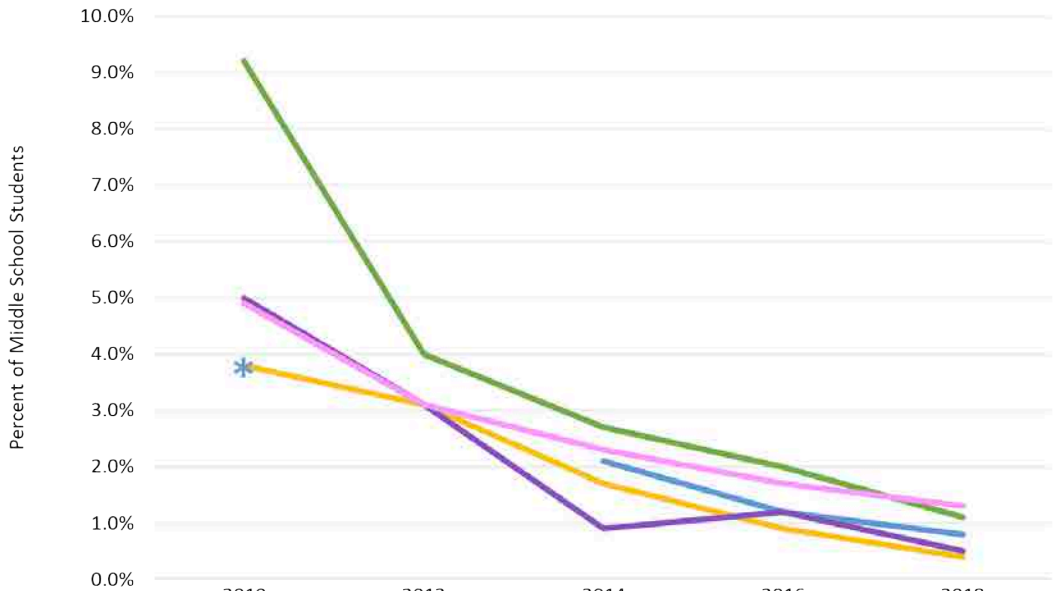
CHART 7.64: ADULT CURRENT SMOKERS WHO QUIT SMOKING AT LEAST ONCE IN PAST YEAR (2002-2016)



	2002	2007	2010	2013	2016
LAKE	53.5%	45.0%	58.4%	74.8%	62.1%
ORANGE	59.6%	60.9%	48.9%	55.8%	59.3%
OSCEOLA	64.7%	59.4%	57.8%	60.3%	53.3%
SEMINOLE	53.7%	56.4%	55.4%	64.6%	63.5%
FLORIDA	55.3%	53.2%	60.1%	61.1%	62.1%

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

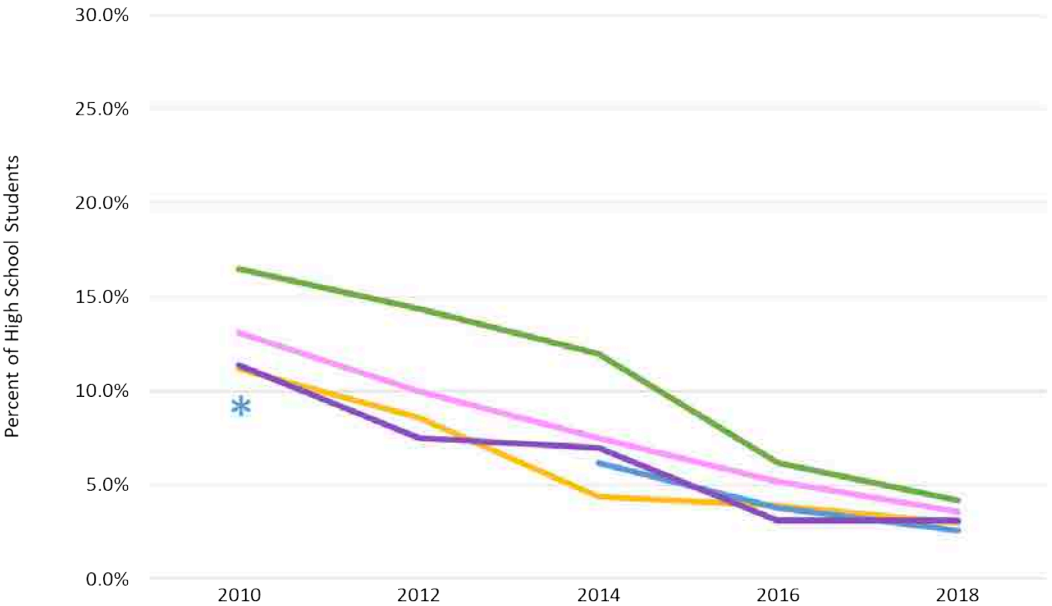
CHART 7.65: MIDDLE SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)



	2010	2012	2014	2016	2018
LAKE	9.2%	4.0%	2.7%	2.0%	1.1%
ORANGE	3.8%	3.1%	1.7%	0.9%	0.4%
OSCEOLA	3.8%	N/A	2.1%	1.2%	0.8%
SEMINOLE	5.0%	3.1%	0.9%	1.2%	0.5%
FLORIDA	4.9%	3.1%	2.3%	1.7%	1.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Survey Tobacco Survey
*Represents a single data point where there has been inconsistent data for a county

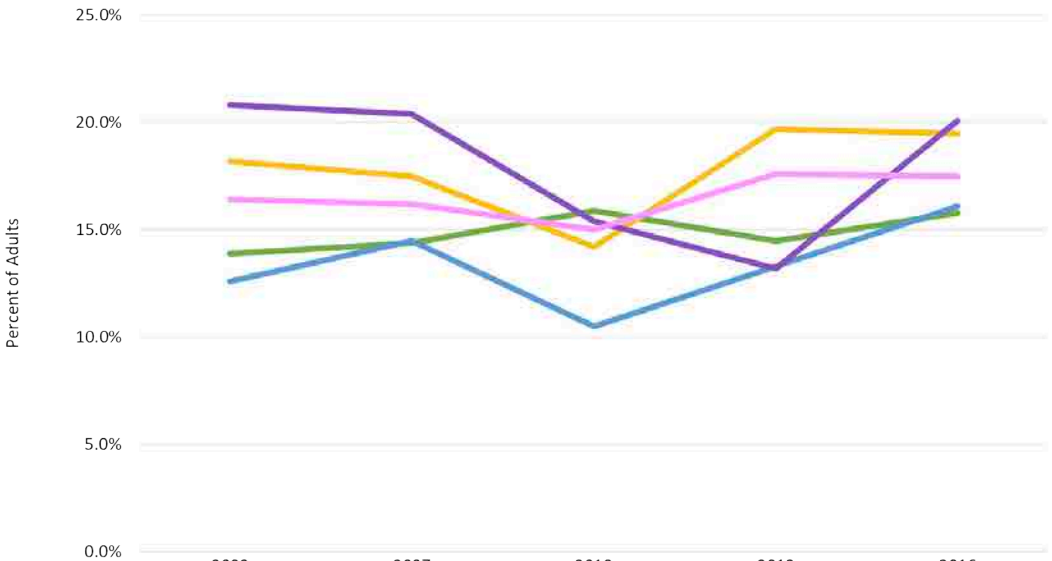
CHART 7.66: HIGH SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)



	2010	2012	2014	2016	2018
LAKE	16.5%	14.4%	12.0%	6.2%	4.2%
ORANGE	11.2%	8.6%	4.4%	3.9%	3.0%
OSCEOLA	9.5%	N/A	6.2%	3.8%	2.6%
SEMINOLE	11.4%	7.5%	7.0%	3.1%	3.1%
FLORIDA	13.1%	10.0%	7.5%	5.2%	3.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey
*Represents a single data point where there has been inconsistent data for a county

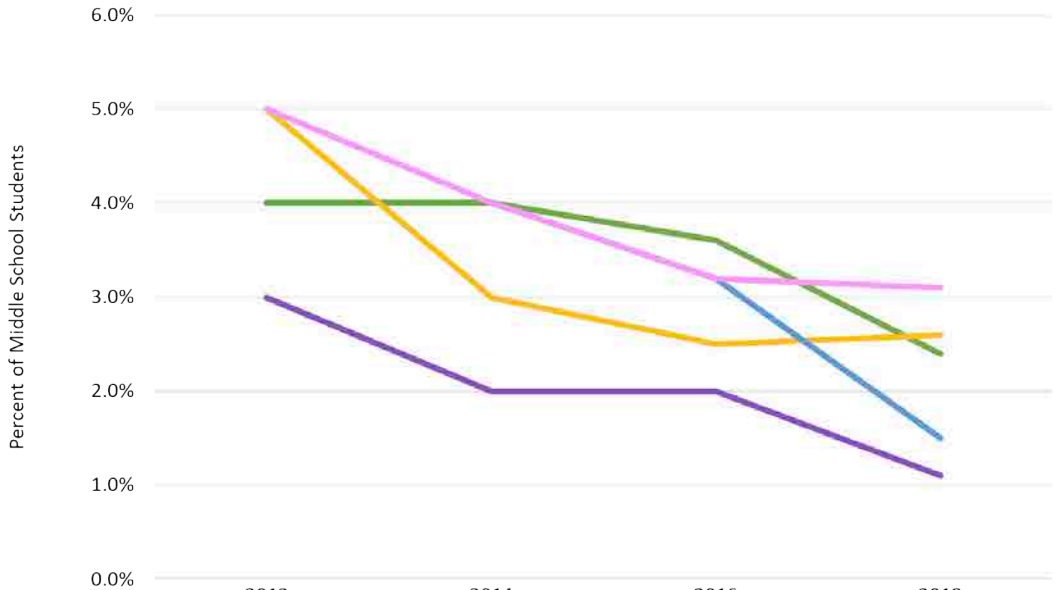
CHART 7.67: BINGE DRINKING AMONG ADULTS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	13.9%	14.4%	15.9%	14.5%	15.8%
ORANGE	18.2%	17.5%	14.2%	19.7%	19.5%
OSCEOLA	12.6%	14.5%	10.5%	13.3%	16.1%
SEMINOLE	20.8%	20.4%	15.4%	13.2%	20.1%
FLORIDA	16.4%	16.2%	15.0%	17.6%	17.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance Survey

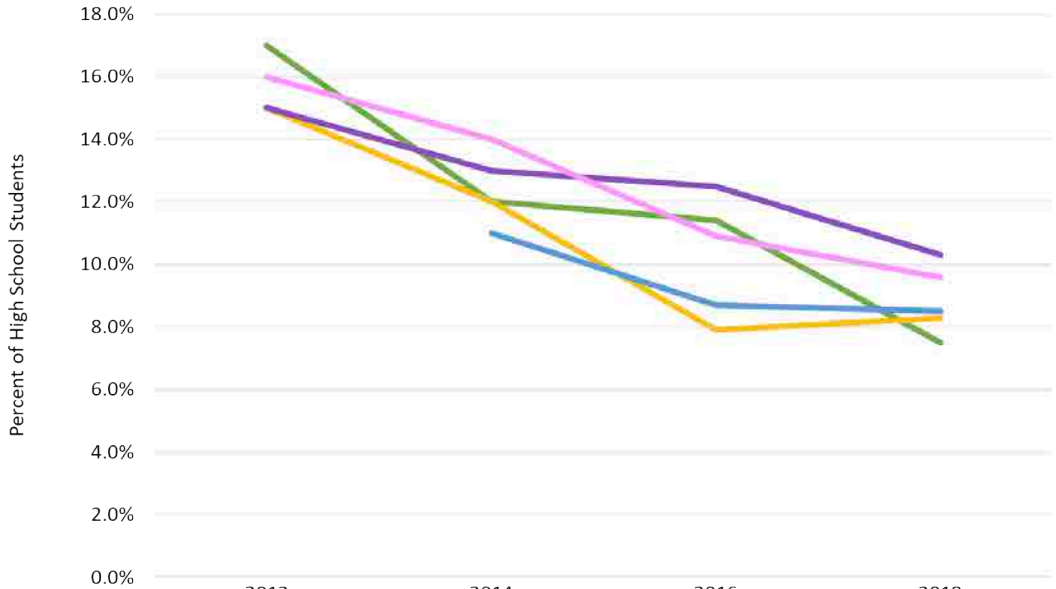
CHART 7.68: BINGE DRINKING MIDDLE SCHOOL STUDENTS (2012-2018)



	2012	2014	2016	2018
LAKE	4.0%	4.0%	3.6%	2.4%
ORANGE	5.0%	3.0%	2.5%	2.6%
OSCEOLA	N/A	4.0%	3.2%	1.5%
SEMINOLE	3.0%	2.0%	2.0%	1.1%
FLORIDA	5.0%	4.0%	3.2%	3.1%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
Note: Data is not available for Osceola County in 2012, the data for Osceola County for 2014 is not shown on the chart because it closely aligns with Florida and is hidden behind the state line.

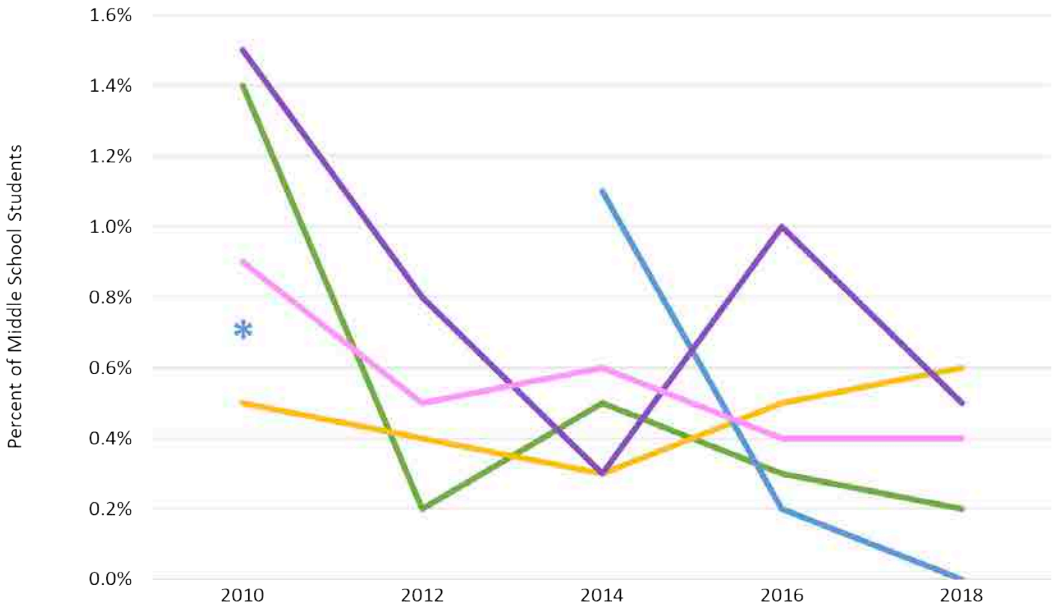
CHART 7.69: BINGE DRINKING HIGH SCHOOL STUDENTS (2012-2018)



	2012	2014	2016	2018
LAKE	17.0%	12.0%	11.4%	7.5%
ORANGE	15.0%	12.0%	7.9%	8.3%
OSCEOLA	N/A	11.0%	8.7%	8.5%
SEMINOLE	15.0%	13.0%	12.5%	10.3%
FLORIDA	16.0%	14.0%	10.9%	9.6%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey

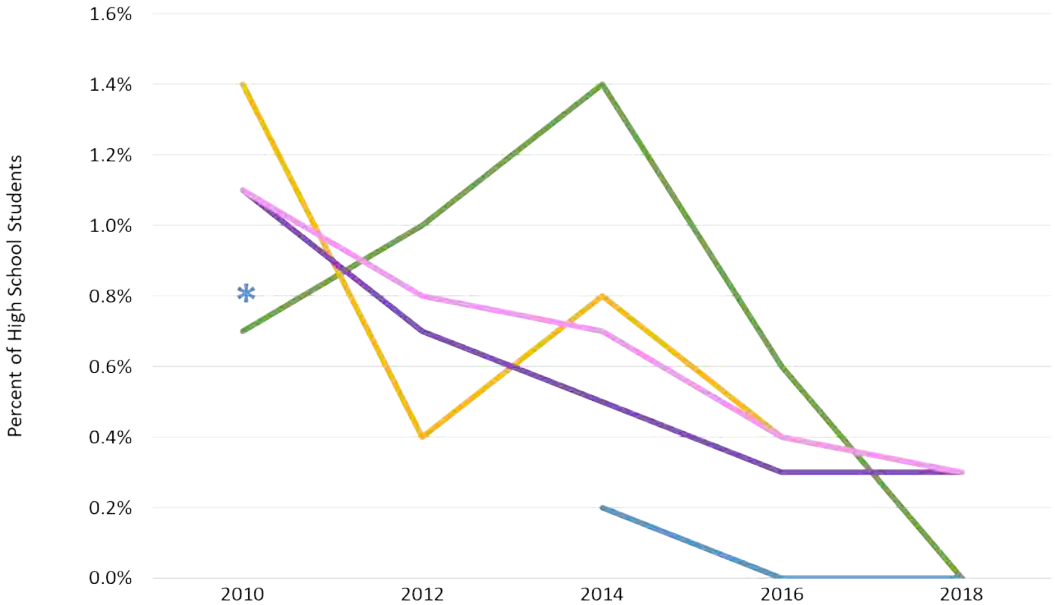
CHART 7.70: HEROIN USE IN MIDDLE SCHOOL (2010-2018)



	2010	2012	2014	2016	2018
LAKE	1.4%	0.2%	0.5%	0.3%	0.2%
ORANGE	0.5%	0.4%	0.3%	0.5%	0.6%
OSCEOLA	0.7%	N/A	1.1%	0.2%	0.0%
SEMINOLE	1.5%	0.8%	0.3%	1.0%	0.5%
FLORIDA	0.9%	0.5%	0.6%	0.4%	0.4%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
*Represents a single data point where there has been inconsistent data for a county

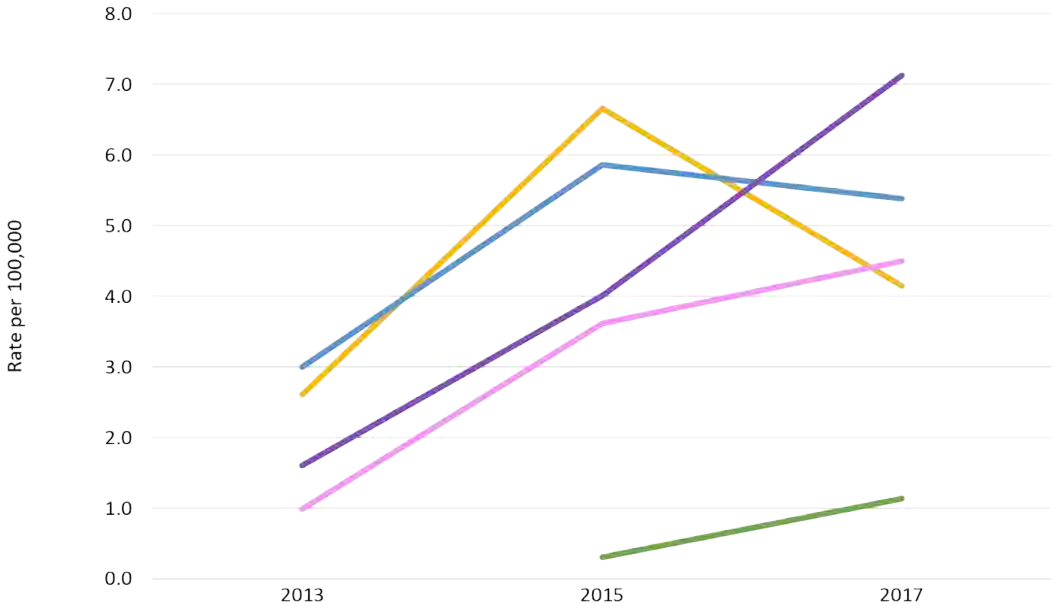
CHART 7.71: HEROIN USE IN HIGH SCHOOL (2010-2018)



	2010	2012	2014	2016	2018
LAKE	0.7%	1.0%	1.4%	0.6%	0.0%
ORANGE	1.4%	0.4%	0.8%	0.4%	0.3%
OSCEOLA	0.8%	N/A	0.2%	0.0%	0.0%
SEMINOLE	1.1%	0.7%	0.5%	0.3%	0.3%
FLORIDA	1.1%	0.8%	0.7%	0.4%	0.3%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
*Represents a single data point where there has been inconsistent data for a county

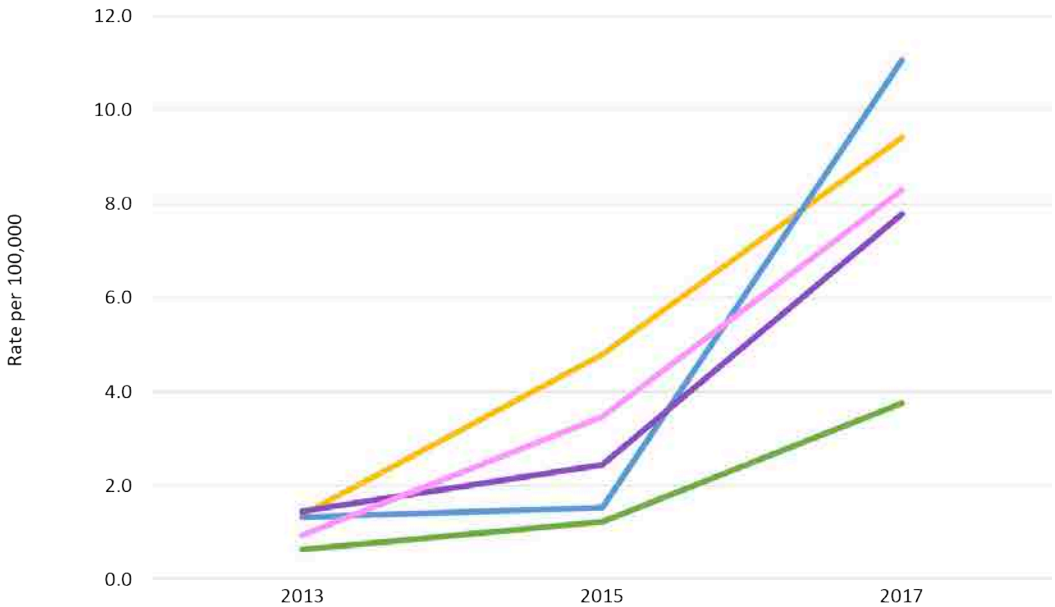
CHART 7.72: HEROIN-RELATED DEATHS (2013-2017)



	2013	2015	2017
LAKE	N/A	0.3	1.1
ORANGE	2.6	6.7	4.2
OSCEOLA	3.0	5.9	5.4
SEMINOLE	1.6	4.0	7.1
FLORIDA	1.0	3.6	4.5

Source: Medical Examiners Contacted Via Email, Orange County Health Department, FDLE

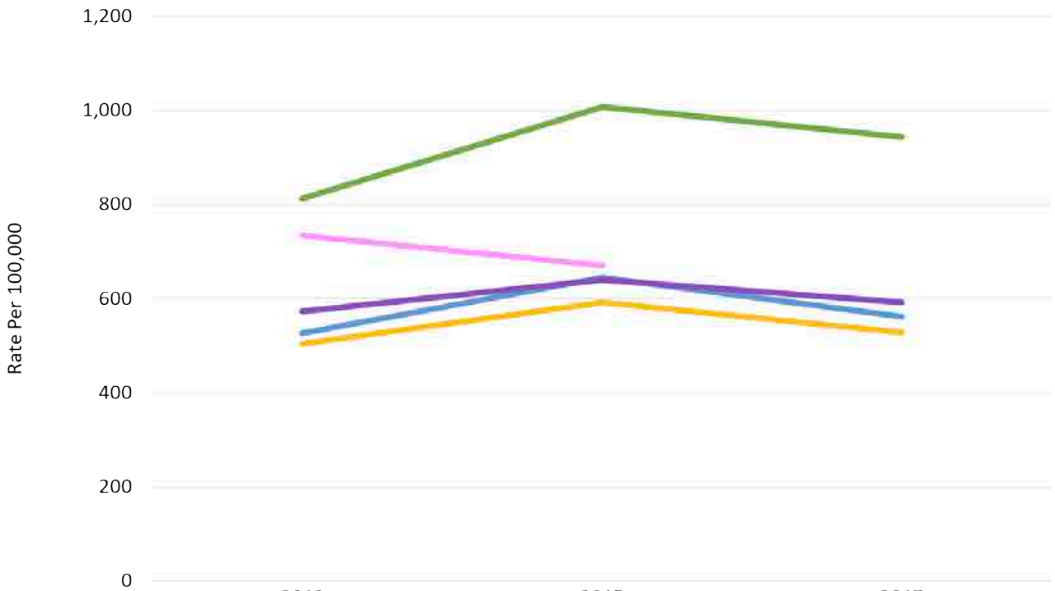
CHART 7.73: FENTANYL-RELATED DEATHS (2013-2017)



	2013	2015	2017
LAKE	0.7	1.2	3.8
ORANGE	1.4	4.8	9.4
OSCEOLA	1.3	1.5	11.1
SEMINOLE	1.5	2.5	7.8
FLORIDA	0.9	3.5	8.3

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

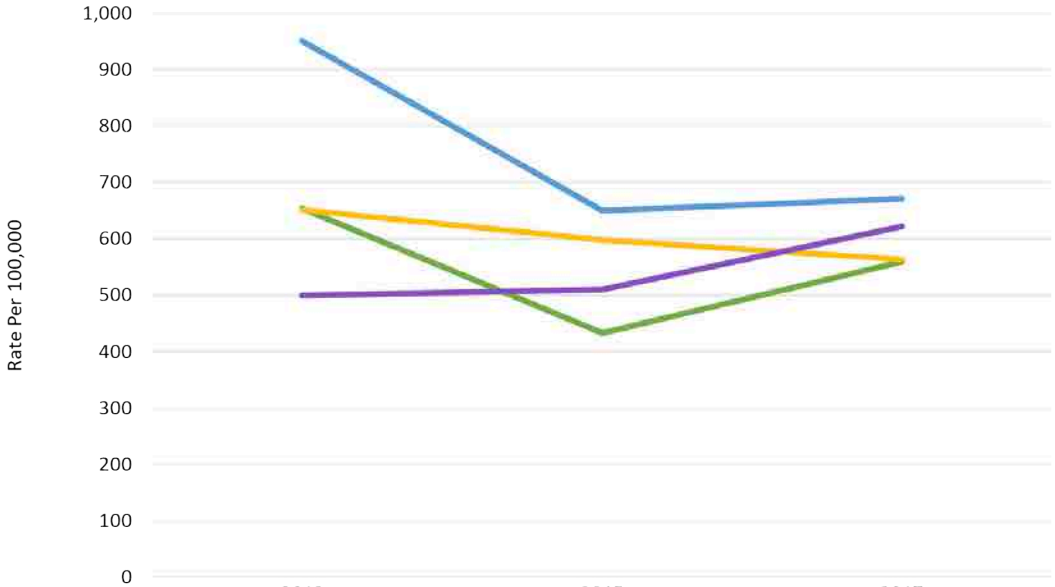
CHART 7.74: RATE OF CONTROLLED PRESCRIPTIONS OF OPIOIDS (2013-2017)



	2013	2015	2017
LAKE	813.2	1006.8	942.9
ORANGE	503.8	592.5	527.7
OSCEOLA	526.0	645.1	562.1
SEMINOLE	573.3	639.9	592.2
FLORIDA	735.0	671.0	N/A

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

CHART 7.75: DRUG ARRESTS (2013-2017)



	2013	2015	2017
LAKE	654.1	433.1	558.9
ORANGE	651.9	598.7	563.5
OSCEOLA	950.2	649.6	671.5
SEMINOLE	499.9	509.8	621.7

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

Injury Related to Behavioral Risk Factors: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The percentage of motor vehicle crashes that were alcohol-related decreased in both Osceola County and the state between 2014 and 2016. The county's percentage decreased from 1.45 percent in 2014 to 1.09 percent in 2016 which was lower than the state percentage, which decreased from 1.64 percent to 1.32 percent during this time. (See Chart 7.76)

DRUG-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The percentage of Osceola County's drug-related motor vehicle crashes decreased from 0.20 percent in 2014 to 0.09 percent in 2016. The state's percentage increased slightly from 0.14 percent to 0.16 percent. (See Chart 7.77)

DRUG AND ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The combined drug and alcohol-related motor vehicle crash percentage in Osceola County was consistently lower than the state from 0.07 percent in 2014 to 0.05 percent in 2016. The state percentage increased from 0.09 percent in 2014 to 0.10 percent in 2015 before decreasing to 0.09 percent in 2016. (See Chart 7.78)

ALCOHOL-RELATED INJURIES (2014-2016)

Alcohol-related injuries as a percentage of all injuries decreased in Osceola County and the state between 2014 and 2016. Osceola County's percentage decreased from 0.98 percent in 2014 to 0.78 percent in 2016. In the state, there was a decrease from 1.5 percent to 1.24 percent during this time. (See Chart 7.79)

DRUG-RELATED INJURIES (2014-2016)

Drug-related injuries as a percentage in Osceola County fluctuated from 2014 and 2016. Osceola County's percentage decreased from 0.13 percent in 2014 to 0 percent in 2015 before increasing to 0.17 percent in 2016. The state percentage decreased from 0.21 in 2014 to 0.20 in 2015 before increasing back to 0.21 percent in 2016. (See Chart 7.80)

DRUG AND ALCOHOL-RELATED INJURIES (2014-2016)

The percentages of drug and alcohol-related injuries in Osceola County and the state were both 0.10 percent in 2014. In 2015, the county percentage decreased to 0.02 percent while the state percentage increased to 0.13 percent. In 2016, the county percentage continued to decrease to 0 percent while the state percentage decreased back to 0.10 percent. (See Chart 7.81)

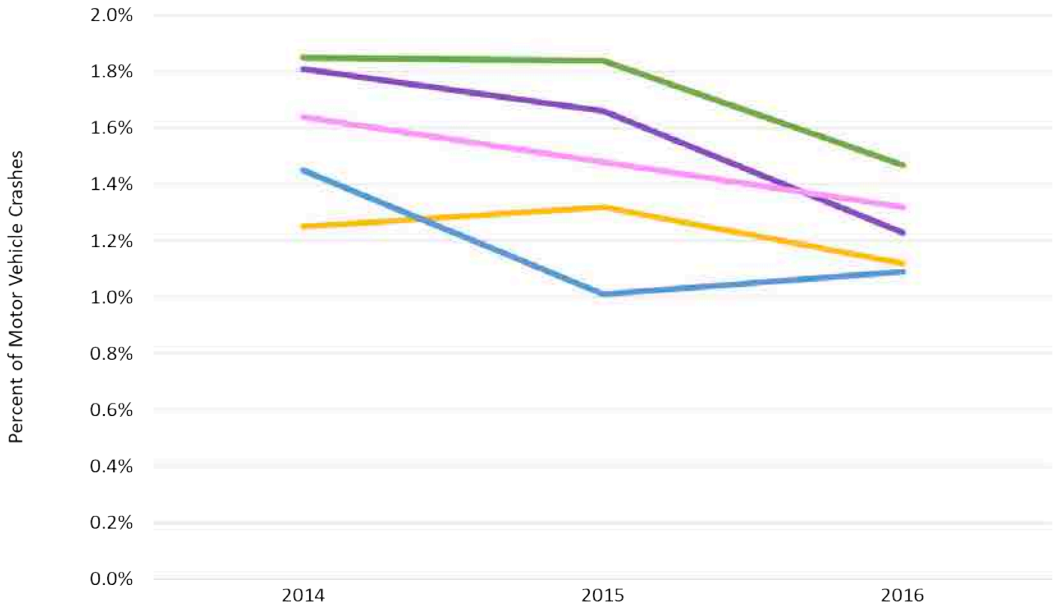
FIREARMS DISCHARGE, AGE-ADJUSTED DEATH RATE (2004-2017)

The firearms discharge age-adjusted death rate per 100,000 has fluctuated in Osceola County from 2004 to 2017, with a net increase in both. Osceola County's rate increased from 7.4 in 2004 to a high of 13 in 2007 before decreasing to 10 in 2017 with fluctuations in between. The state rate increased from 10.5 in 2004 to 12.5 in 2017. (See Chart 7.82)

DOMESTIC VIOLENCE (2013-2017)

The domestic violence rate per 100,000 in Osceola County decreased from 822.9 in 2013 to 574.9 in 2017. The state rate decreased from 560.9 to 522.3 during this time period. (See Chart 7.83)

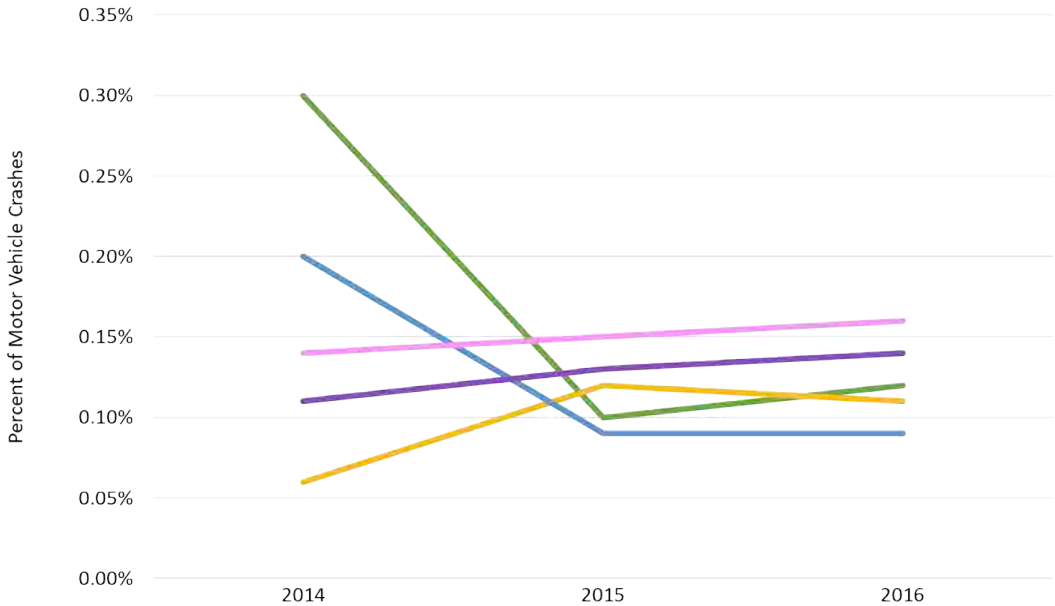
CHART 7.76: ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	1.85%	1.84%	1.47%
ORANGE	1.25%	1.32%	1.12%
OSCEOLA	1.45%	1.01%	1.09%
SEMINOLE	1.81%	1.66%	1.23%
FLORIDA	1.64%	1.48%	1.32%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

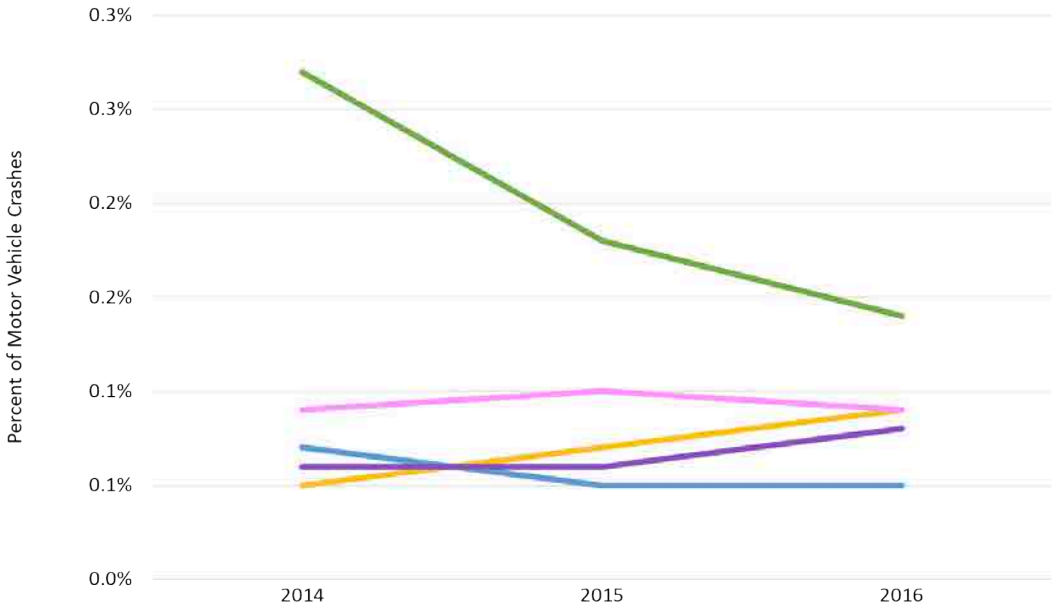
CHART 7.77: DRUG-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	0.30%	0.10%	0.12%
ORANGE	0.06%	0.12%	0.11%
OSCEOLA	0.20%	0.09%	0.09%
SEMINOLE	0.11%	0.13%	0.14%
FLORIDA	0.14%	0.15%	0.16%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

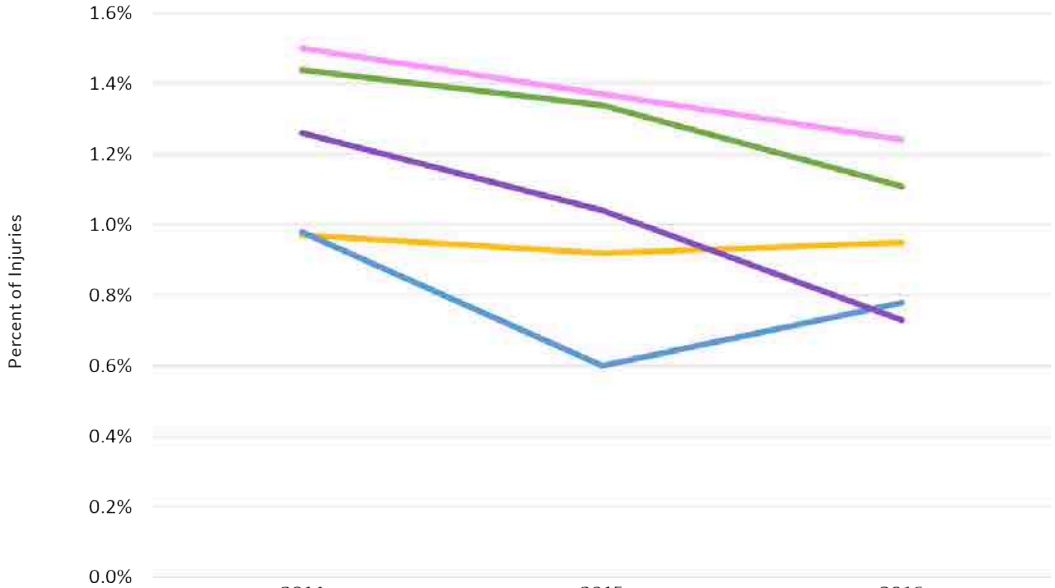
CHART 7.78: DRUG AND ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	0.27%	0.18%	0.14%
ORANGE	0.05%	0.07%	0.09%
OSCEOLA	0.07%	0.05%	0.05%
SEMINOLE	0.06%	0.06%	0.08%
FLORIDA	0.09%	0.10%	0.09%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

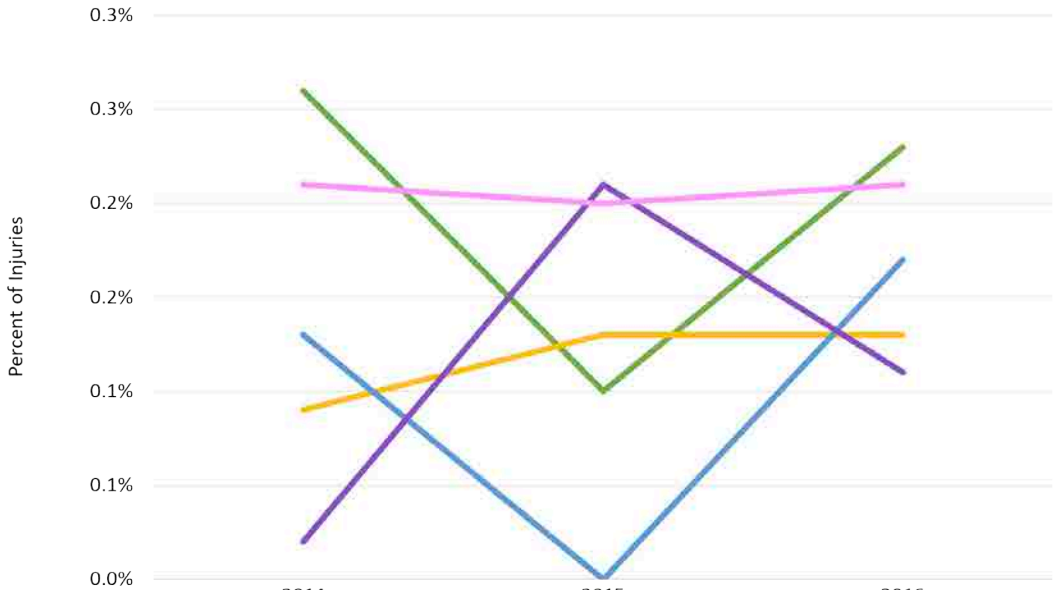
CHART 7.79: ALCOHOL-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	1.44%	1.34%	1.11%
ORANGE	0.97%	0.92%	0.95%
OSCEOLA	0.98%	0.60%	0.78%
SEMINOLE	1.26%	1.04%	0.73%
FLORIDA	1.50%	1.37%	1.24%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

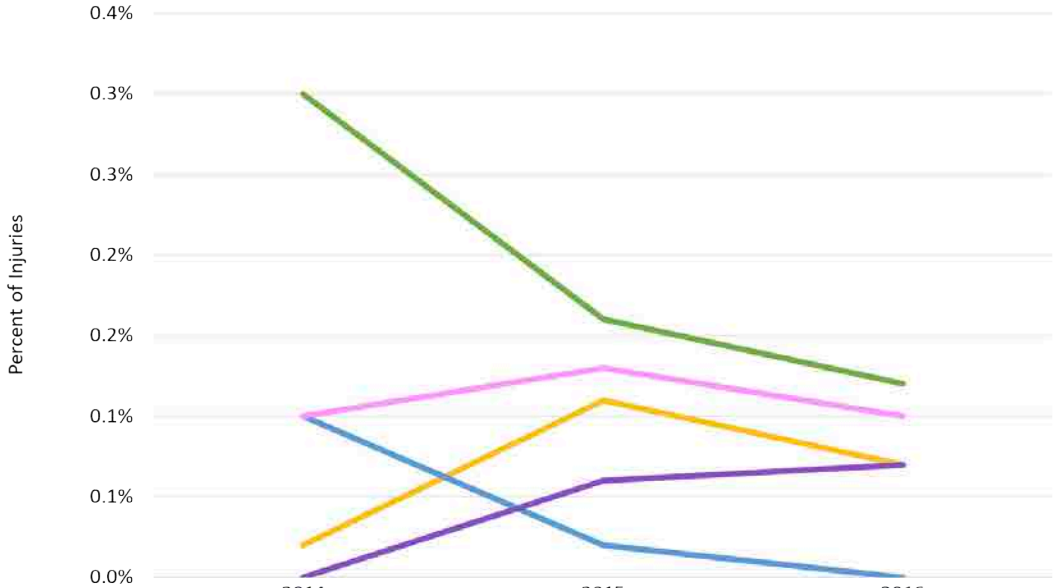
CHART 7.80: DRUG-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	0.26%	0.10%	0.23%
ORANGE	0.09%	0.13%	0.13%
OSCEOLA	0.13%	0.00%	0.17%
SEMINOLE	0.02%	0.21%	0.11%
FLORIDA	0.21%	0.20%	0.21%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

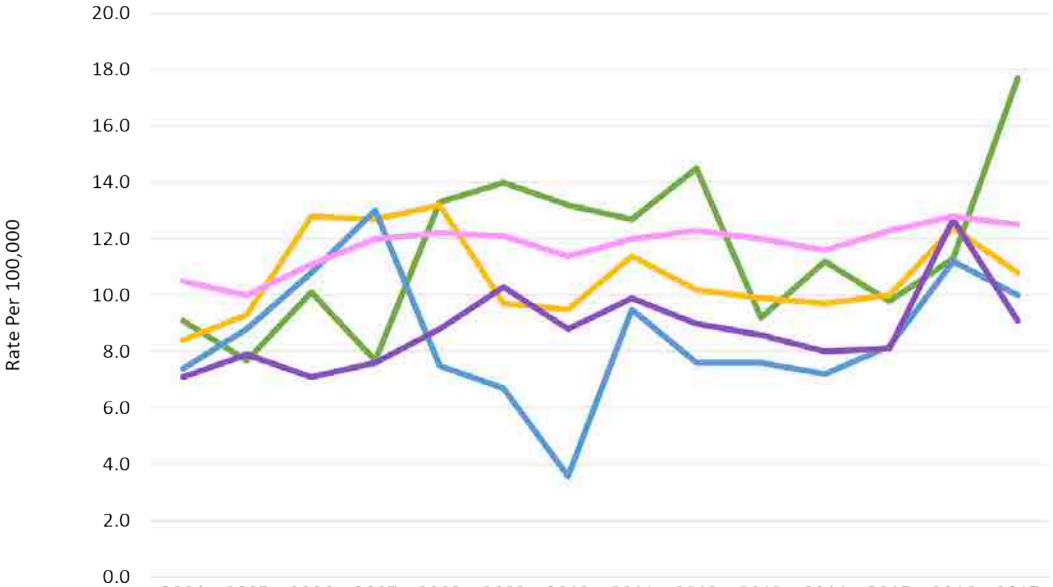
CHART 7.81: DRUG AND ALCOHOL-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	0.30%	0.16%	0.12%
ORANGE	0.02%	0.11%	0.07%
OSCEOLA	0.10%	0.02%	0.00%
SEMINOLE	0.00%	0.06%	0.07%
FLORIDA	0.10%	0.13%	0.10%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

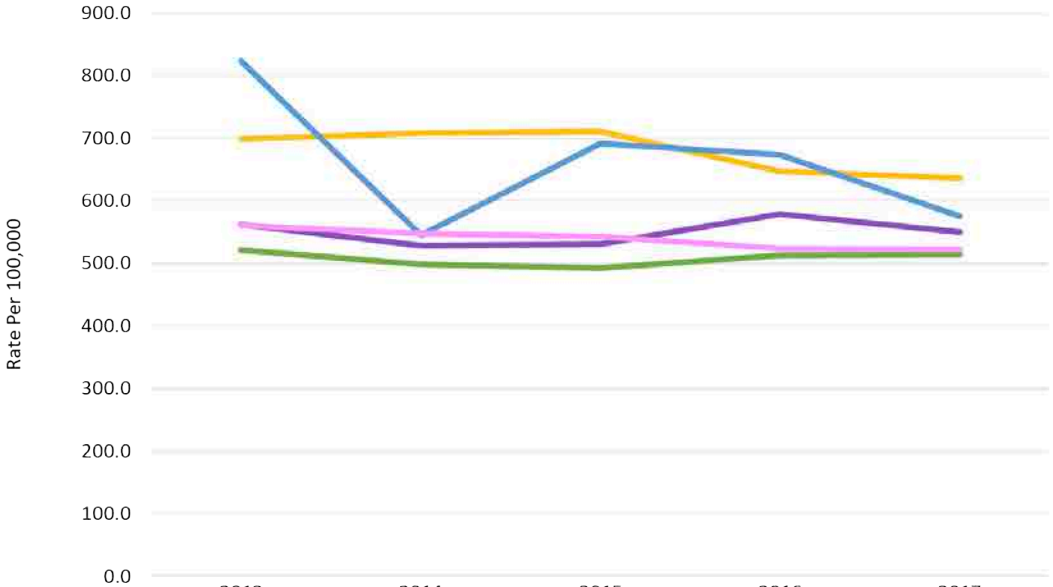
CHART 7.82: FIREARMS DISCHARGE, AGE-ADJUSTED DEATH RATE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.1	7.7	10.1	7.7	13.3	14.0	13.2	12.7	14.5	9.2	11.2	9.8	11.3	17.7
ORANGE	8.4	9.3	12.8	12.7	13.2	9.7	9.5	11.4	10.2	9.9	9.7	10.0	12.4	10.8
OSCEOLA	7.4	8.8	10.8	13.0	7.5	6.7	3.6	9.5	7.6	7.6	7.2	8.2	11.2	10.0
SEMINOLE	7.1	7.9	7.1	7.6	8.8	10.3	8.8	9.9	9.0	8.6	8.0	8.1	12.7	9.1
FLORIDA	10.5	10.0	11.1	12.0	12.2	12.1	11.4	12.0	12.3	12.0	11.6	12.3	12.8	12.5

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

CHART 7.83: DOMESTIC VIOLENCE (2013-2017)



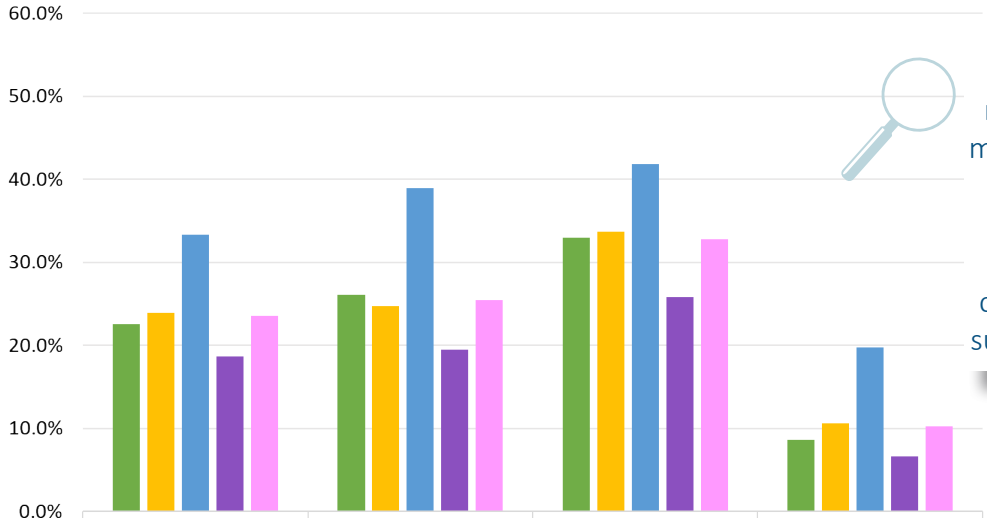
	2013	2014	2015	2016	2017
LAKE	520.9	499.1	492.8	513.3	514.0
ORANGE	698.6	708.4	710.7	647.4	636.3
OSCEOLA	822.9	545.4	691.5	674.0	574.9
SEMINOLE	561.9	529.2	530.6	579.4	550.0
FLORIDA	560.9	547.9	543.4	524.3	522.3

Source: FLHealthCHARTS: Florida Department of Law Enforcement

Built Environment: What the Community is Saying

Figure 7.20 outlines the experience of community survey respondents related to the built environment. More than one-third of Osceola County respondents indicated that they lack recreational opportunities (33.3 percent) and safe roads and sidewalks (38.9 percent). More than 40 percent of the respondents indicated that they lack access to high quality, affordable, healthy food (41.8 percent). Nearly 1 in 5 of Osceola County respondents indicated that they lack access to fresh, available, safe drinking water (19.8 percent).

FIGURE 7.20: BUILT ENVIRONMENT INDICATORS, COMMUNITY SURVEY 2019



Osceola County respondents were more likely to report they lack access to fresh, available drinking water compared to other survey respondents.

	Lack recreational opportunities	Lack safe roads/sidewalks	Lack access to high quality, affordable healthy food	Lack access to fresh, available drinking water
LAKE	22.6%	26.1%	33.0%	8.6%
ORANGE	23.9%	24.7%	33.7%	10.6%
OSCEOLA	33.3%	38.9%	41.8%	19.8%
SEMINOLE	18.7%	19.5%	25.8%	6.6%
OVERALL	23.6%	25.5%	32.8%	10.3%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to built environment:

- Insufficient access to healthy and affordable food options
- Lack of useable sidewalks
- Poor air and water quality
- High cost of medication

Barriers to care identified by primary research participants included:

- Unaffordability of healthy food options
- Transportation to and from home and to appointments
- Not enough access to recreation and exercise spaces
- Limited access to high quality primary care physicians and specialists

Needed services related to built environment that were identified by primary research participants included:

- More transit options to connect within and with other cities
- Road improvements should include public transportation access points
- Better environment including air and water quality
- More accessibility for bicyclists and pedestrian-safe routes

Built Environment: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

POPULATION LIVING WITHIN ½ MILE OF A PARK (2016)

In 2016, the percentage of the population living within a half mile of a park in Osceola County was 26.3 percent, while the state was 43.2 percent. (See Figure 7.21)

RECREATION AND FITNESS FACILITIES (2016)

The US Census Bureau considers a recreation and fitness facility an establishment primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports. Osceola County had a total of 27 recreation and fitness facilities. (See Table 7.5)

PERCENTAGE OF THE POPULATION WITH ACCESS TO EXERCISE (2018)

Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Physical activity locations are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility. Individuals who reside in a rural census block that is within three miles of a recreational facility are considered to have access to exercise opportunities.

According to the above definition, Osceola County residents have less access to exercise (76 percent) compared to the state percentage (88 percent). (See Figure 7.22)

FOOD DESERTS (2014)

Based on guidelines from the Healthy Food Financing Initiative (HFFI) working group, to qualify as a food desert census tract at least 33 percent of the tract's population, or a minimum of 500 people in the tract, must have low access to a supermarket or large grocery store. Some census tracts that contain supermarkets or large grocery stores may meet the criteria of a food desert if a substantial number or share of people within that census tract are more than one mile (urban areas) or 10 miles (rural areas) from the nearest supermarket. Residents of food desert census tracts may live within 1 or 10 miles of a supermarket; these residents were not counted as low access and thus not counted in the total. (Community Commons, 2015). There are a concentrated areas of food deserts throughout Osceola County. (See Figure 7.23)

MODIFIED RETAIL FOOD ENVIRONMENT INDEX (2015)

Centers for Disease Control and Prevention (CDC) created a modified retail food environment index (mRFEI) which identifies food deserts and food swamps by combining them into a single measure within census tracts for every state. According to the USDA, a food swamp refers to neighborhoods saturated with fast food chains, corner stores, and other unhealthy food providers, while food deserts are parts of the county lacking fresh fruit, vegetables and other healthy foods, usually found in impoverished areas. Although the state-wide mRFEI was created by census tract level, large static mRFEI maps for each state could not identify small communities within the state.

North American Industry Classification Codes (NAICS) were utilized to categorize retail food businesses as healthy or less healthy. Retail food data was purchased from Environmental Systems Research Institute (ESRI) and was current as of January 2015. The mRFEI ranges from 0 to 100 and was calculated as the number of healthy food retailers divided by the sum of healthy food retailers plus less healthy food retailers and multiplied by 100.

$$mRFEI = 100 \text{ x } \frac{\text{\# Healthy Food Retailers}}{\text{\# Healthy Food Retailers + \# Less Healthy Food Retailers}}$$

Lower scores indicate that census tracts contain a higher number of less healthy retailers than healthy retailers. The mRFEI was calculated based on food retailers within a census tract and within a half mile buffer of a census tract boundary, identified using geoprocessing tools including clip, buffer, count and spatial join with ARCGIS 10.3 and PYWIN 32. Classification of the mRFEI used the same methodology as the CDC's original maps: 0 (no healthy food retailers), 0.1–5 (fewer less healthy food retailers), 5.1–10, 10.1–37.5, and 37.6–100 (more healthy food retailers). Since the mRFEI is based on census tracts it is possible for there to be variations within a county, with pockets having high availability of healthy food retailers, while other areas have low availability.

In Osceola County, 70 percent of the county has food retailers that are considered healthy and 10 percent of the county has areas which lack healthy food retailers. (See Table 7.6)

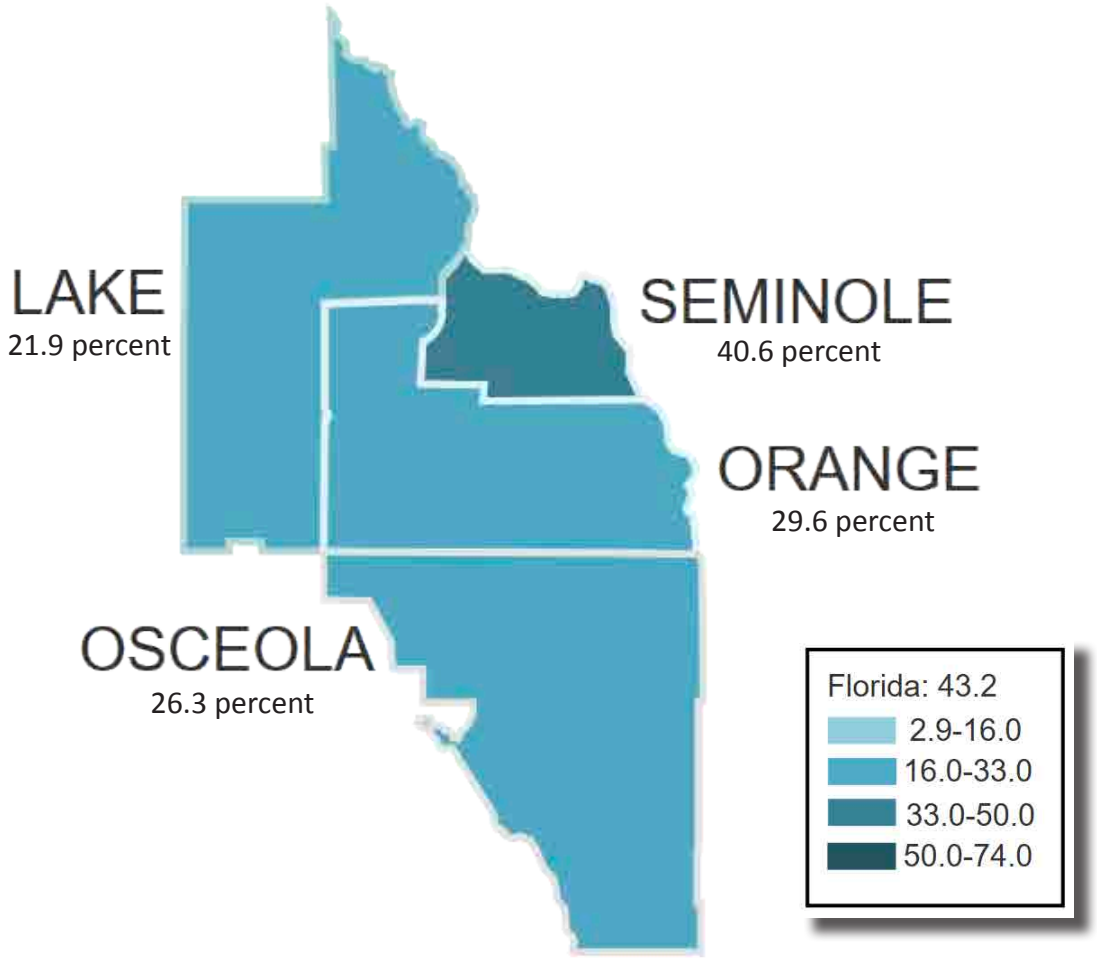
FRUIT AND VEGETABLE EXPENDITURES (2016)

This indicator analyzes fruit and vegetable expenditures by low-income households and higher income households and compares the sensitivity of both groups' purchases to changes in income. On average, low-income households spent $3.59 per capita per week on fruits and vegetables in 2000, while higher income households spent $5.02; a statistically significant difference. In addition, a statistical demand model indicates that marginal increases in income received by low-income households are not spent on additional fruits and vegetables. In contrast, increases in income received by higher income households do result in an increase in fruit and vegetable expenditures. One interpretation of this finding is that low-income households will allocate an additional dollar of income to other food or nonfood items deemed more essential to the household such as meats, clothing or housing.

The United States Department of Agriculture (USDA) maps fruit and vegetable expenditures by census tracts with the amount of expenditure broken into and mapped as a quintile. A quintile is a statistical value of a data set that represents 20 percent of a given population. The USDA considers the highest expenditures as the first quintile (80 percent to 100 percent).

In Osceola County, there are two areas that have the highest expenditure level on fruits and vegetables, with the majority of the county in the third and fourth quintile. (See Figure 7.24)

FIGURE 7.21: POPULATION LIVING WITHIN ½ MILE OF A PARK (2016)



Source: FLHealthCHARTS, Florida Department of Public Health

TABLE 7.5: RECREATION AND FITNESS FACILITIES (2016)

County - Primary	County – Secondary*	ZCTA	Geographic Area Name	Number Of Establishments
Lake		32159	Zip 32159 (Lady Lake, FL)	2
Lake		32726	Zip 32726 (Eustis, FL)	1
Lake	Orange	32757	Zip 32757 (Mount Dora, FL)	4
Lake		32778	Zip 32778 (Tavares, FL)	4
Lake		32784	Zip 32784 (Umatilla, FL)	1
Lake		34698	Zip 34698 (Dunedin, FL)	8
Lake		34711	Zip 34711 (Clermont, FL)	11
Lake		34714	Zip 34714 (Clermont, FL)	2
Lake		34715	Zip 34715 (Clermont, FL)	3
Lake		34731	Zip 34731 (Fruitland Park, FL)	1
Lake		34736	Zip 34736 (Groveland, FL)	3
Lake		34737	Zip 34737 (Howey in the Hills, FL)	2
Lake		34748	Zip 34748 (Leesburg, FL)	3
Lake		34788	Zip 34788 (Leesburg, FL)	3
Volusia	Lake	32720	Zip 32720 (Deland, FL)	1
Total Establishments in Lake County				41
Orange	Seminole	32703	Zip 32703 (Apopka, FL)	9
Orange		32709	Zip 32709 (Christmas, FL)	1
Orange		32712	Zip 32712 (Apopka, FL)	2
Orange	Seminole	32751	Zip 32751 (Maitland, FL)	7
Orange		32789	Zip 32789 (Winter Park, FL)	21
Orange	Seminole	32792	Zip 32792 (Winter Park, FL)	9
Orange		32801	Zip 32801 (Orlando, FL)	5
Orange		32803	Zip 32803 (Orlando, FL)	10
Orange		32804	Zip 32804 (Orlando, FL)	8
Orange		32805	Zip 32805 (Orlando, FL)	2
Orange		32806	Zip 32806 (Orlando, FL)	6
Orange		32807	Zip 32807 (Orlando, FL)	6
Orange		32808	Zip 32808 (Orlando, FL)	1
Orange		32809	Zip 32809 (Orlando, FL)	8
Orange		32810	Zip 32810 (Orlando, FL)	3
Orange		32811	Zip 32811 (Orlando, FL)	6
Orange		32812	Zip 32812 (Orlando, FL)	4
Orange		32814	Zip 32814 (Orlando, FL)	5
Orange		32817	Zip 32817 (Orlando, FL)	8
Orange		32818	Zip 32818 (Orlando, FL)	1
Orange		32819	Zip 32819 (Orlando, FL)	27
Orange		32821	Zip 32821 (Orlando, FL)	1
Orange		32822	Zip 32822 (Orlando, FL)	5
Orange		32824	Zip 32824 (Orlando, FL)	1

*Note that some zip codes cross county lines

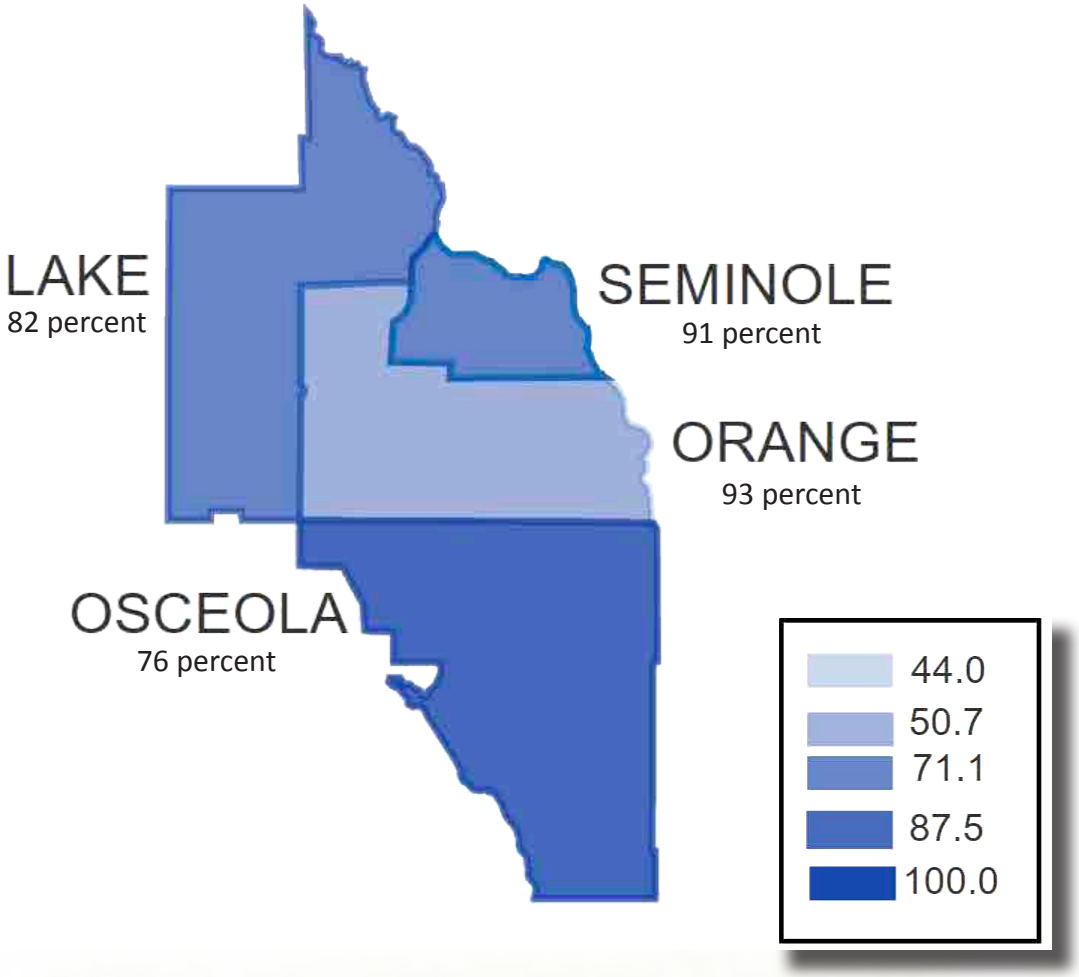
TABLE 7.5: RECREATION AND FITNESS FACILITIES (2016), CONTINUED

County - Primary	County – Secondary*	ZCTA	Geographic Area Name	Number Of Establishments
Orange		32825	Zip 32825 (Orlando, FL)	2
Orange		32827	Zip 32827 (Orlando, FL)	5
Orange		32828	Zip 32828 (Orlando, FL)	18
Orange		32829	Zip 32829 (Orlando, FL)	2
Orange		32832	Zip 32832 (Orlando, FL)	3
Orange		32835	Zip 32835 (Orlando, FL)	8
Orange		32836	Zip 32836 (Orlando, FL)	2
Orange		32837	Zip 32837 (Orlando, FL)	10
Orange		32839	Zip 32839 (Orlando, FL)	2
Orange		34761	Zip 34761 (Ocoee, FL)	9
Orange		34786	Zip 34786 (Windermere, FL)	10
Orange	Lake	34787	Zip 34787 (Winter Garden, FL)	20
Total Establishments in Orange County				247
Okeechobee	Osceola	34972	Zip 34972 (Okeechobee, FL)	1
Osceola		34741	Zip 34741 (Kissimmee, FL)	9
Osceola		34743	Zip 34743 (Kissimmee, FL)	2
Osceola		34744	Zip 34744 (Kissimmee, FL)	2
Osceola		34746	Zip 34746 (Kissimmee, FL)	1
Osceola		34747	Zip 34747 (Kissimmee, FL)	3
Osceola		34758	Zip 34758 (Kissimmee, FL)	1
Osceola		34769	Zip 34769 (Saint Cloud, FL)	2
Osceola		34771	Zip 34771 (Saint Cloud, FL)	2
Osceola		34772	Zip 34772 (Saint Cloud, FL)	1
Polk	Osceola	33896	Zip 33896 (Davenport, FL)	1
Total Establishments in Osceola County				27
Seminole		32701	Zip 32701 (Altamonte Springs, FL)	3
Seminole		32707	Zip 32707 (Casselberry, FL)	6
Seminole		32708	Zip 32708 (Winter Springs, FL)	7
Seminole		32714	Zip 32714 (Altamonte Springs, FL)	13
Seminole		32746	Zip 32746 (Lake Mary, FL)	14
Seminole		32750	Zip 32750 (Longwood, FL)	15
Seminole		32765	Zip 32765 (Oviedo, FL)	14
Seminole		32766	Zip 32766 (Oviedo, FL)	2
Seminole		32771	Zip 32771 (Sanford, FL)	5
Seminole		32779	Zip 32779 (Longwood, FL)	6
Total Establishments in Seminole County				85

*Note that some zip codes cross county lines

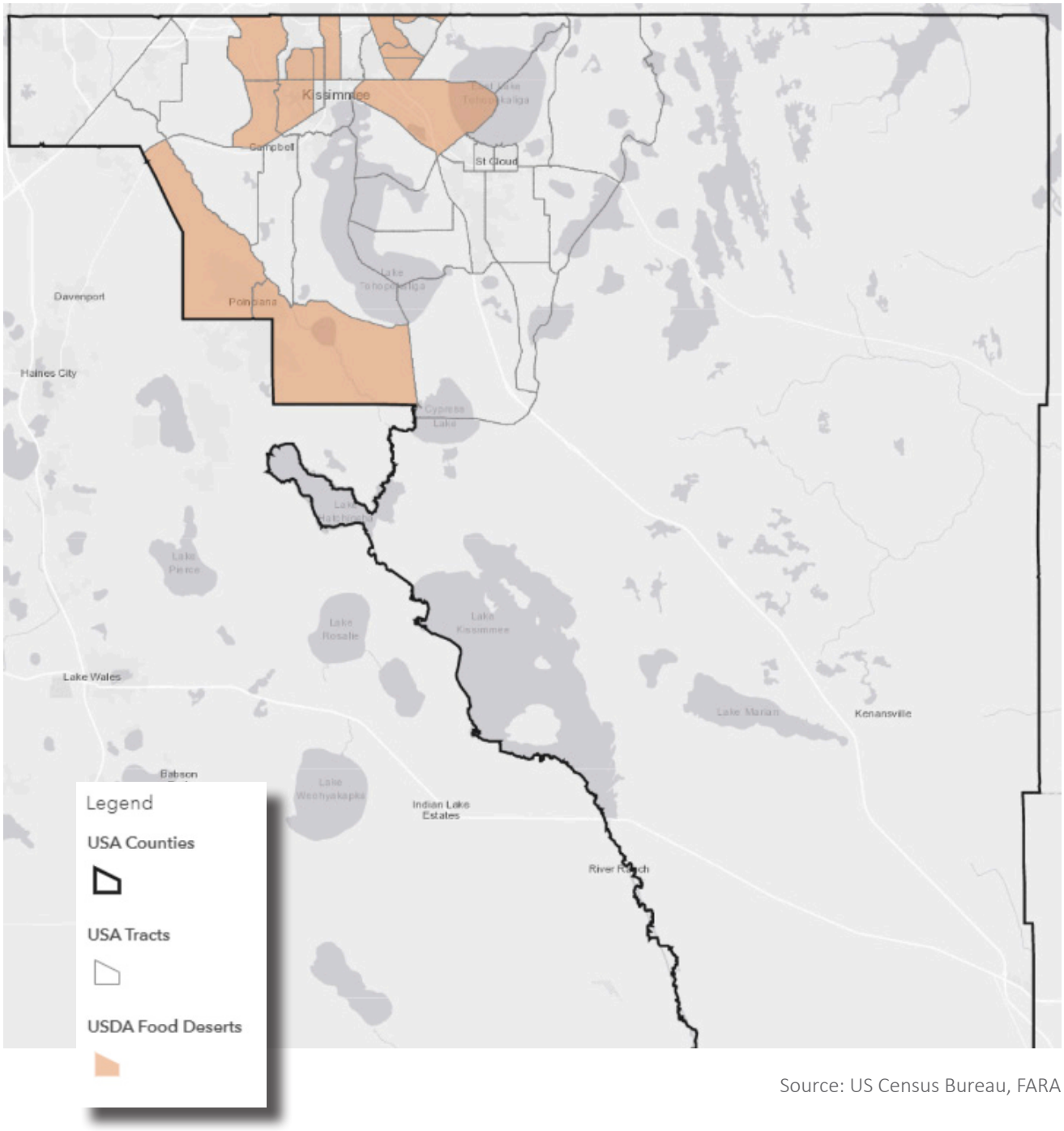
Data Source: US Census Bureau, County Business Patterns. Source Geography: ZCTA

FIGURE 7.22: PERCENTAGE OF THE POPULATION WITH ACCESS TO EXERCISE (2018)



Source: County Health Rankings and Roadmaps

FIGURE 7.23: OSCEOLA COUNTY FOOD DESERTS (2014)



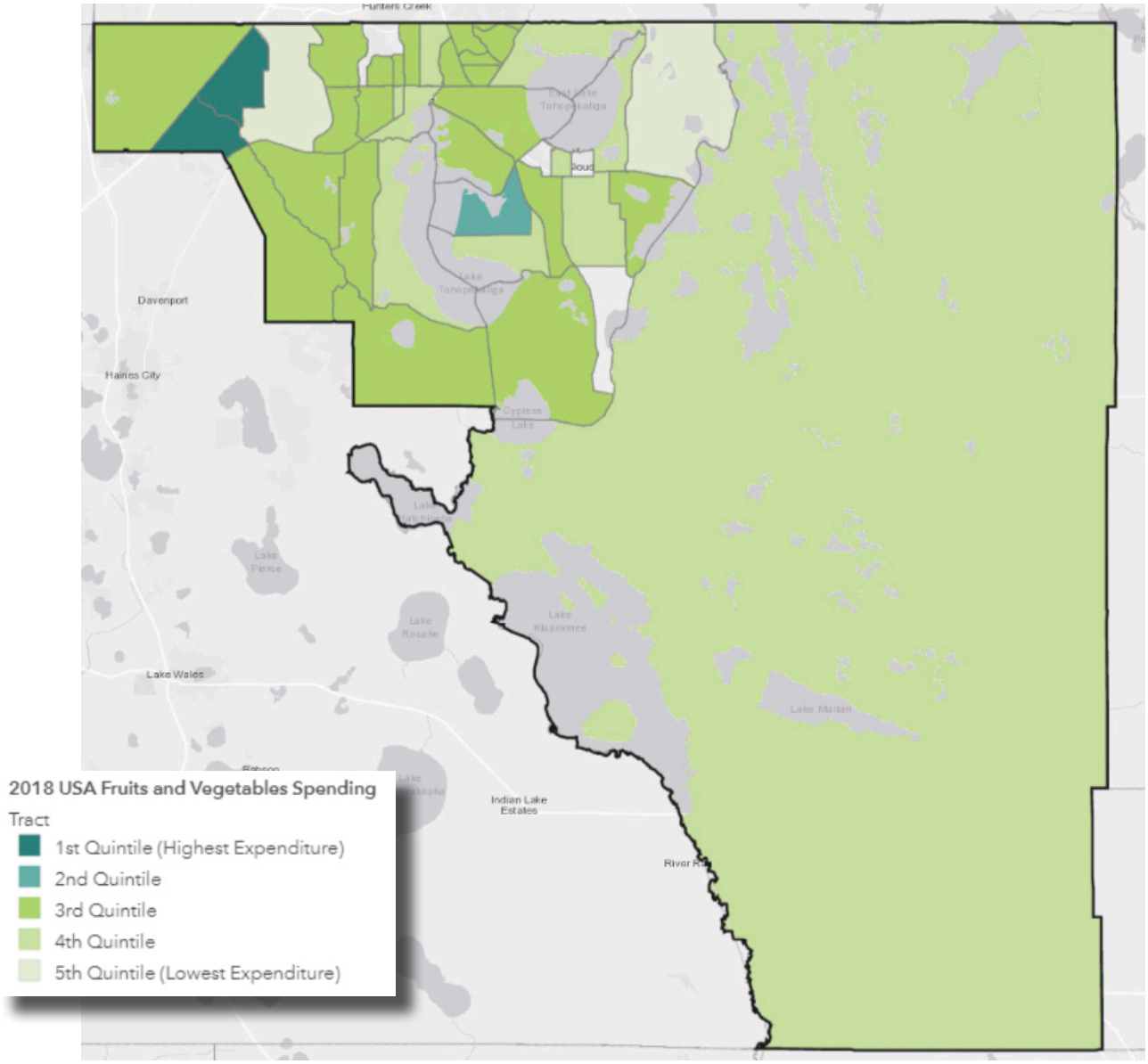
Source: US Census Bureau, FARA

TABLE 7.6: MODIFIED RETAIL FOOD ENVIRONMENT INDEX (2015)

	Lake		Orange		Osceola		Seminole	
Zero	3	20.0 %	19	12.3%	2	10.0%	7	10.8%
Under 10	2	13.3%	68	44.2%	4	20.0%	26	40.0%
10	0	0.0%	8	5.2%	0	0.0%	2	3.1%
Above 10	10	66.7%	59	38.3%	14	70.0%	30	46.2%
Total	15		154		20		65	

Source: Centers for Disease Control

FIGURE 7.24: FRUIT AND VEGETABLE EXPENDITURES, OSCEOLA COUNTY (2016)



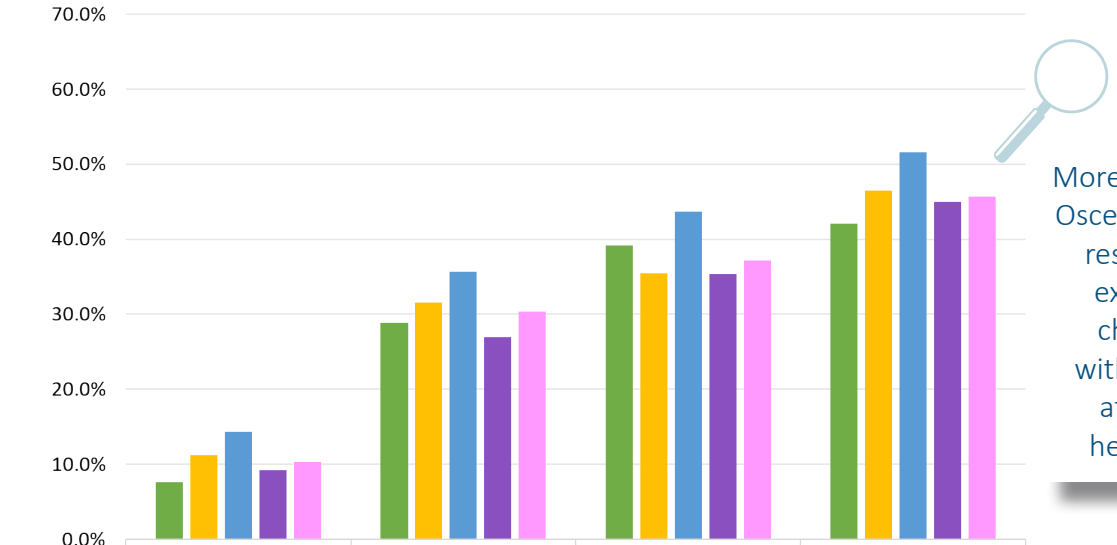
Source: United States Department of Agriculture, Economic Research Service

Healthcare Access: What the Community is Saying

Figure 7.25 illustrates the experience of community survey respondents related to barriers to access. Residents of Osceola County were more likely than respondents from the four-county region overall to have experienced difficulty with transportation and other challenges related to access to health care.

In Osceola County, 14.3 percent of the respondents indicated that they have experienced challenges with access to transportation and more than one-fourth of respondents have experienced difficulty in finding a specialist.

FIGURE 7.25: BARRIERS TO ACCESS, COMMUNITY SURVEY 2019



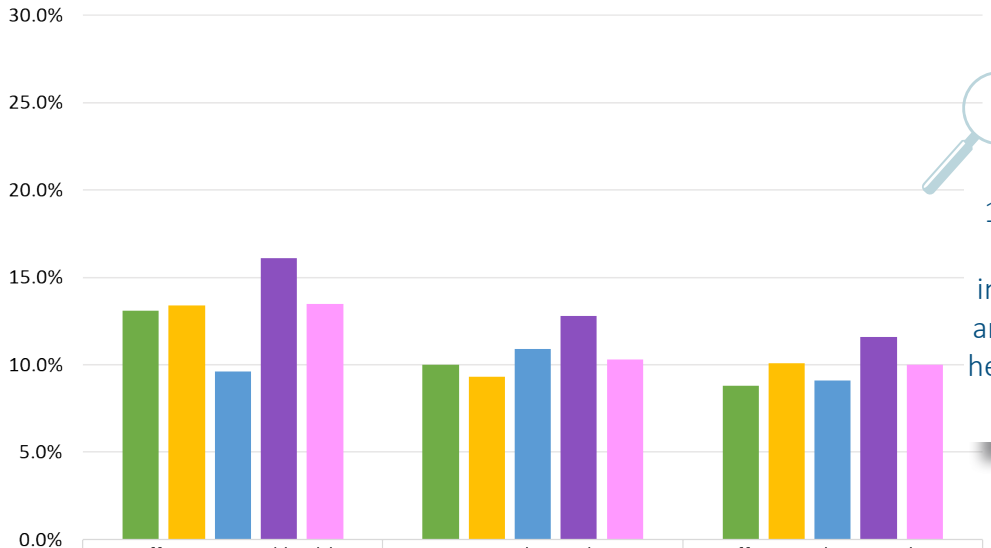
	Access to transportation	Access to primary care providers	Access to specialists	Access to affordable health care
LAKE	7.6%	28.8%	39.2%	42.1%
ORANGE	11.2%	31.6%	35.5%	46.5%
OSCEOLA	14.3%	35.7%	43.7%	51.6%
SEMINOLE	9.2%	26.9%	35.4%	45.0%
OVERALL	10.3%	30.4%	37.2%	45.7%

More than half of Osceola County's respondents experience challenges with access to affordable health care.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.26 illustrates the percentages of community survey respondents who indicated that the community does not have sufficient access to mental health services.

FIGURE 7.26: MENTAL HEALTH CARE ACCESS, COMMUNITY SURVEY 2019



	Sufficient mental health services	Community knows how to access mental health services	Sufficient substance abuse services
LAKE	13.1%	10.0%	8.8%
ORANGE	13.4%	9.3%	10.1%
OSCEOLA	9.6%	10.9%	9.1%
SEMINOLE	16.1%	12.8%	11.6%
OVERALL	13.5%	10.3%	10.0%

Less than one in 10 Osceola County respondents indicated that there are sufficient mental health and substance abuse services.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to access to quality health care:

- Lack of insurance
- Limited access to high quality primary care physicians and specialists
- Fear of deportation
- Lack of knowledge of available services
- Lack of providers
- Limited service hours

Barriers to care identified by primary research participants included:

- High cost of insurance through employers
- Transportation
- Cost of prescriptions
- Appointment times and availability

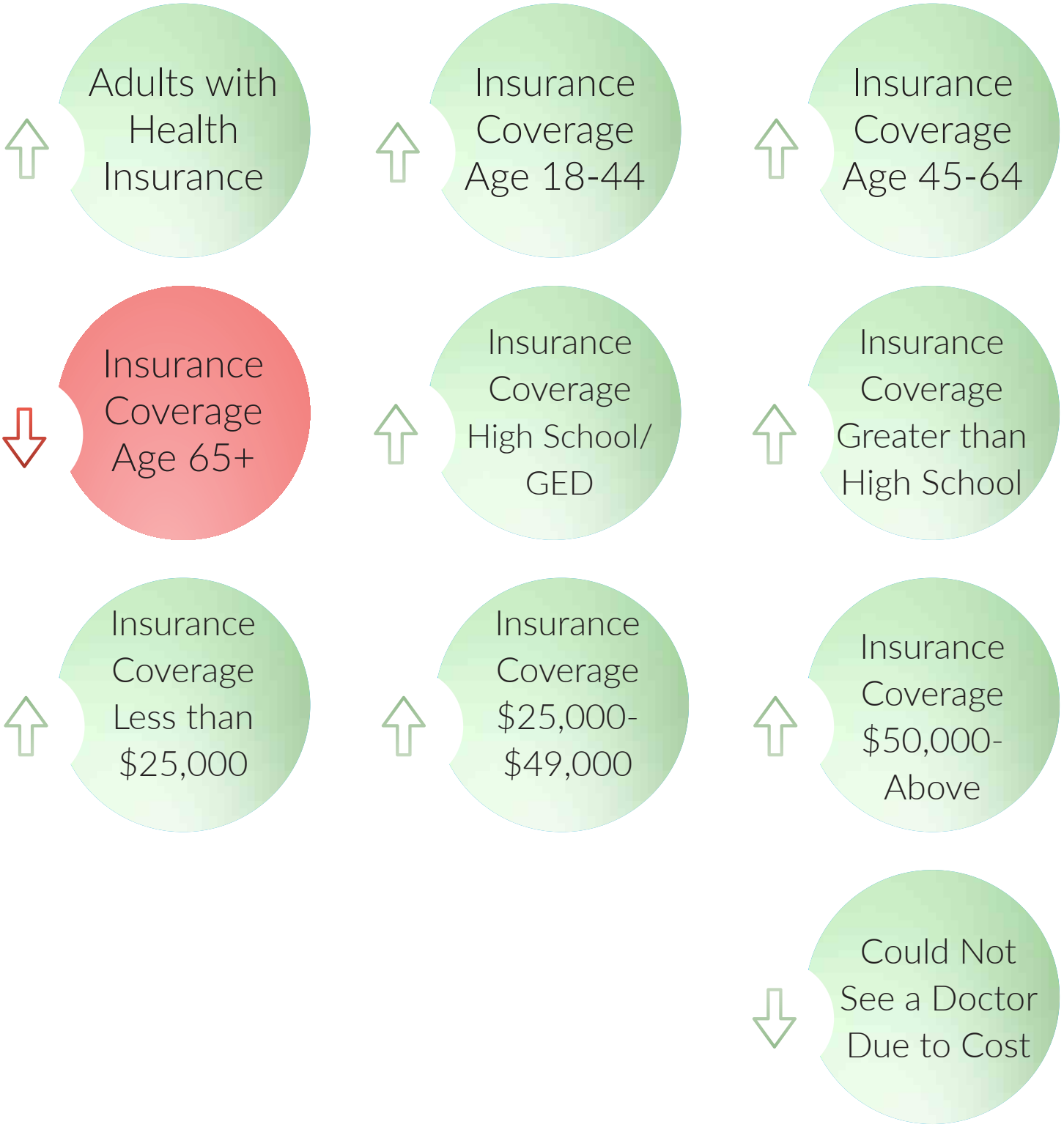
Needed services related to access to quality health care that were identified by primary research participants included:

- Distribution of information on available services

Healthcare Access at a Glance

The key indicators related to healthcare access that have changed since the last CHNA are identified in Figure 7.27. Red means that the indicator has worsened and green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.27 HEALTHCARE ACCESS INDICATORS



Source: Strategy Solutions, Inc.

Healthcare Access: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons illustrate, located on the previous page, observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE (2007-2016)

The percentage of adults with any type of health care insurance coverage in Osceola County decreased from 77.8 percent in 2007 to 77.1 in 2016. In the state, the percentage increased from 81.4 percent in 2007 to 83.7 in 2016. (See Chart 7.84)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE (2007-2016)

The percentage of adults ages 18-44 in Osceola County with any type of health care insurance decreased from 70.4 percent in 2007 to 67 percent in 2016. The state percentage for this age group increased during this time from 72.4 percent to 74.5 percent.

The percentage of adults ages 45-64 in Osceola County with any type of health care insurance decreased from 80.2 percent in 2007 to 79.3 percent in 2016. The state percentage for this age group increased from 82.7 percent in 2007 to 84.3 percent in 2016.

The percentage of adults ages 65 and older with insurance in Osceola County increased from 96.7 percent in 2007 to 97.2 percent in 2016. This was higher than other age groups in the county between 2007 and 2016. Similarly, the state percentage increased from 97.3 percent in 2007 to 98.1 percent in 2016 which was higher than other age groups at the state level. (See Charts 7.85-7.87)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION (2007-2016)

Adults with less than a high school education are less likely to have health insurance. Between 2007 and 2016, the percentage of adults with less than a high school education with health insurance in Osceola County decreased from 66.4 percent in 2007 to 64.6 percent in 2016. The state percentage increased from 60.8 percent in 2007 to 64.7 percent during that time.

Those with a high school/GED education have higher percentages of health insurance coverage than those without a high school education. The percentage in Osceola County increased from 69.3 percent in 2007 to 71.4 percent in 2016. The state percentage increased from 73.8 percent to 80.6 percent during this time.

Those with education beyond high school in Osceola County and the state had higher percentages of having health insurance compared to those with lower levels of education. Osceola County's percentage increased from 84.1 in 2007 to 81.4 percent in 2016 and the state percentage increased from 88.3 percent in 2007 to 89.9 percent in 2016. (See Charts 7.88-7.90)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME (2007-2016)

Residents with annual incomes under $25K in both Osceola County and the state were less likely to have insurance coverage than any other income group with the percentage covered increasing as income increases. Those that have annual incomes of $50K and over have the highest insurance rates of all income groups.

In Osceola County, the percentage of adults with incomes less than $25K with insurance coverage decreased from 68.1 percent in 2007 to a low of 48.5 percent in 2013 before increasing to 70.1 percent in 2016. The state increased from 64.5 percent in 2007 to 71 percent in 2016.

The percentage of adults with incomes between $25K-$49K who had health insurance increased in both the county and the state. Osceola County's percentage increased from 78.1 percent in 2007 to 83.1 percent in 2016 and the state increased from 79 percent to 84.2 percent during the same time.

The percentage of adults with income of $50K and greater in Osceola County increased from 87.9 percent in 2007 to 91.9 percent in 2016. The state increased from 93.2 percent to 94.4 percent during this time. (See Charts 7.91 to 7.93)

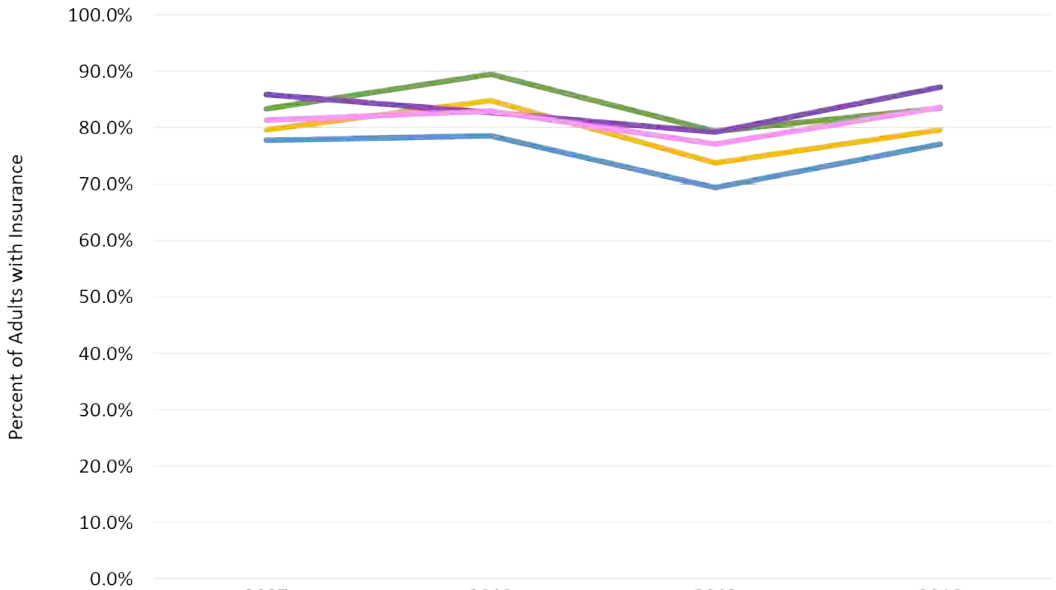
ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST (2007-2016)

The percentage of adults in Osceola County and the state that could not see a doctor due to cost in the past year has increased from 2007 to 2016. In Osceola County, there was an increase from 17.8 percent to 23.8 percent and in the state from 15.1 percent to 16.6 percent. (See Chart 7.94)

ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST, BY ANNUAL INCOME (2016)

In 2016, those with annual incomes under $25K were more likely to indicate that they were not able to see a doctor in the past year due to cost than those with higher incomes. This trend—that those with lower incomes are more likely not to see the doctor due to cost—is similar in both Osceola County and the state. In Osceola County, 37.5 percent of those with an income of less than $25K were less likely to see the doctor in the past year due to cost compared to 4.6 percent of those with incomes $50K or greater. In the state, 27.7 percent of those with an income of less than $25K were less likely to see the doctor in the past year due to cost compared to 8.4 percent of those with incomes $50K or greater. (See Chart 7.95)

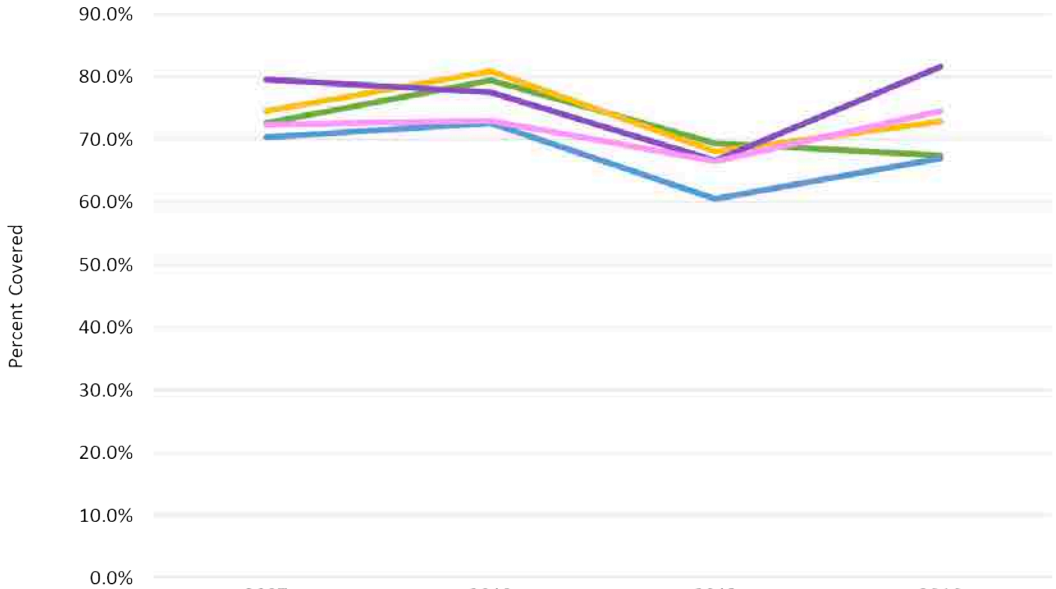
CHART 7.84: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	83.4%	89.5%	79.4%	83.5%
ORANGE	79.7%	84.8%	73.8%	79.7%
OSCEOLA	77.8%	78.6%	69.4%	77.1%
SEMINOLE	85.9%	82.7%	79.2%	87.2%
FLORIDA	81.4%	83.0%	77.1%	83.7%

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

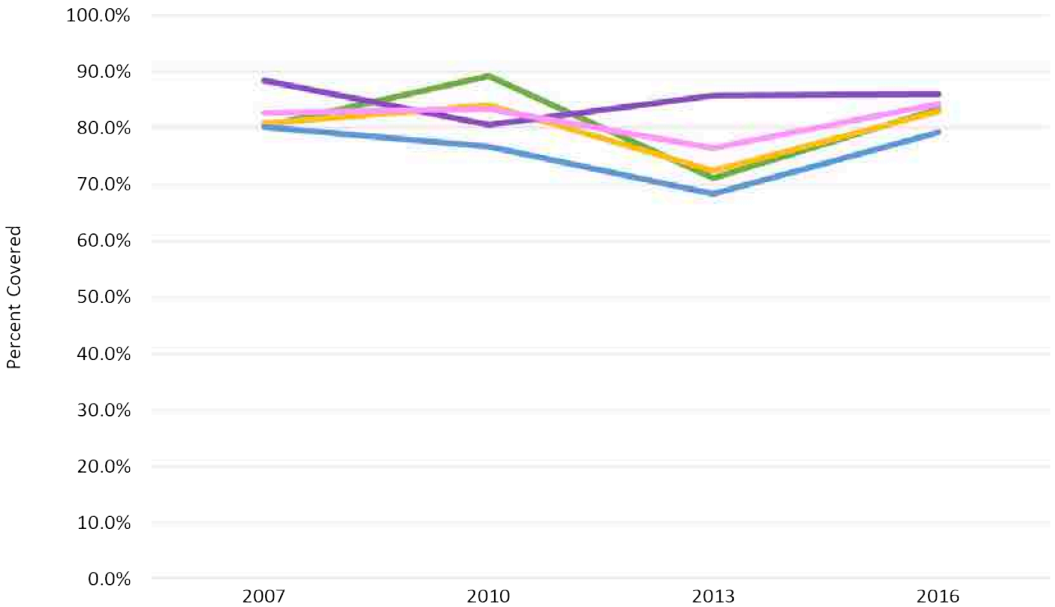
CHART 7.85: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 18-44 (2007-2016)



	2007	2010	2013	2016
LAKE	72.6%	79.5%	69.4%	67.5%
ORANGE	74.5%	80.9%	68.1%	72.9%
OSCEOLA	70.4%	72.7%	60.6%	67.0%
SEMINOLE	79.6%	77.5%	66.6%	81.6%
FLORIDA	72.4%	73.0%	66.5%	74.5%

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

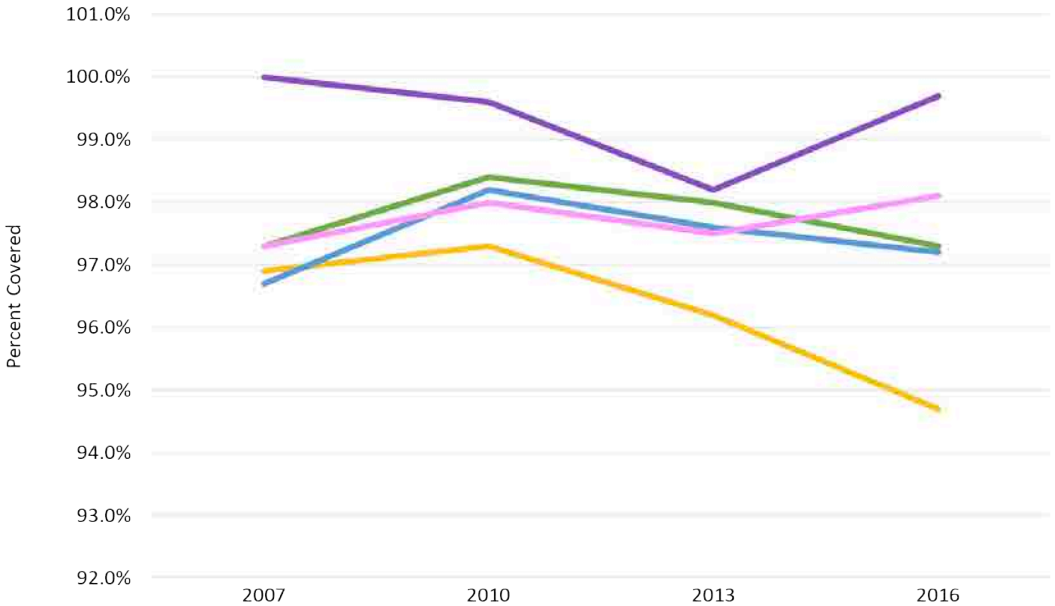
CHART 7.86: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 45-64 (2007-2016)



	2007	2010	2013	2016
LAKE	80.3%	89.2%	71.1%	83.4%
ORANGE	80.8%	84.1%	72.4%	83.0%
OSCEOLA	80.2%	76.7%	68.4%	79.3%
SEMINOLE	88.4%	80.6%	85.8%	86.1%
FLORIDA	82.7%	83.4%	76.4%	84.3%

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

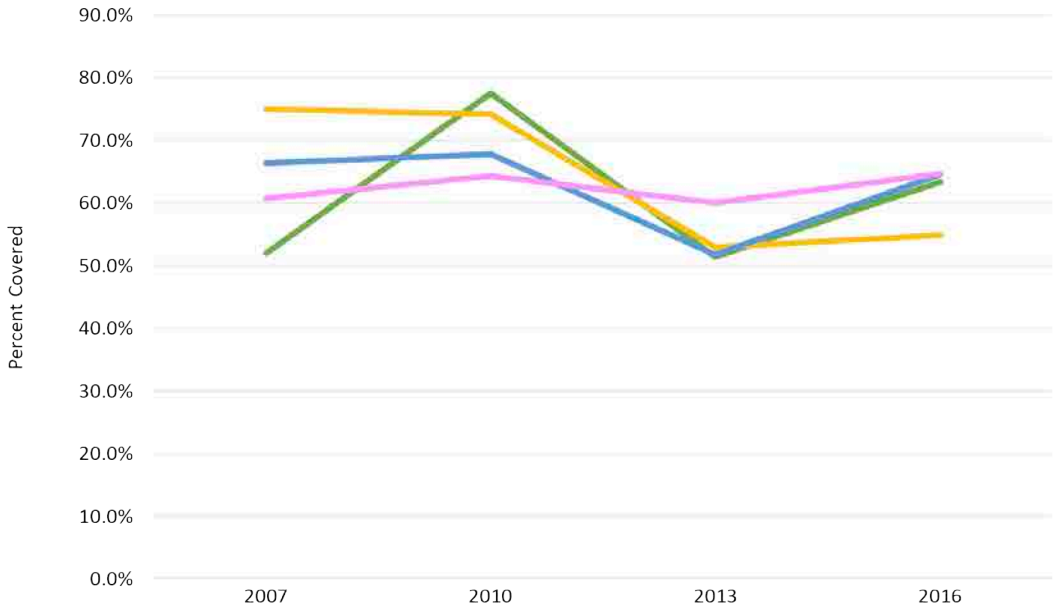
CHART 7.87: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 65 & OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	97.3%	98.4%	98.0%	97.3%
ORANGE	96.9%	97.3%	96.2%	94.7%
OSCEOLA	96.7%	98.2%	97.6%	97.2%
SEMINOLE	100.0%	99.6%	98.2%	99.7%
FLORIDA	97.3%	98.0%	97.5%	98.1%

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

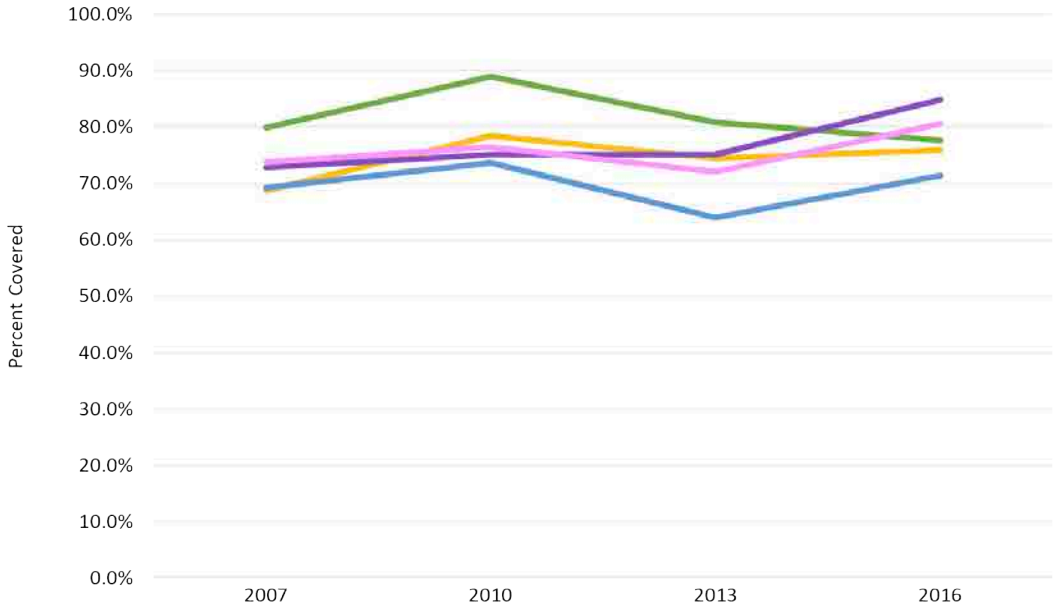
CHART 7.88: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION < HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	52.0%	77.5%	51.5%	63.4%
ORANGE	75.0%	74.2%	53.0%	54.9%
OSCEOLA	66.4%	67.8%	51.8%	64.6%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	60.8%	64.4%	60.1%	64.7%

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

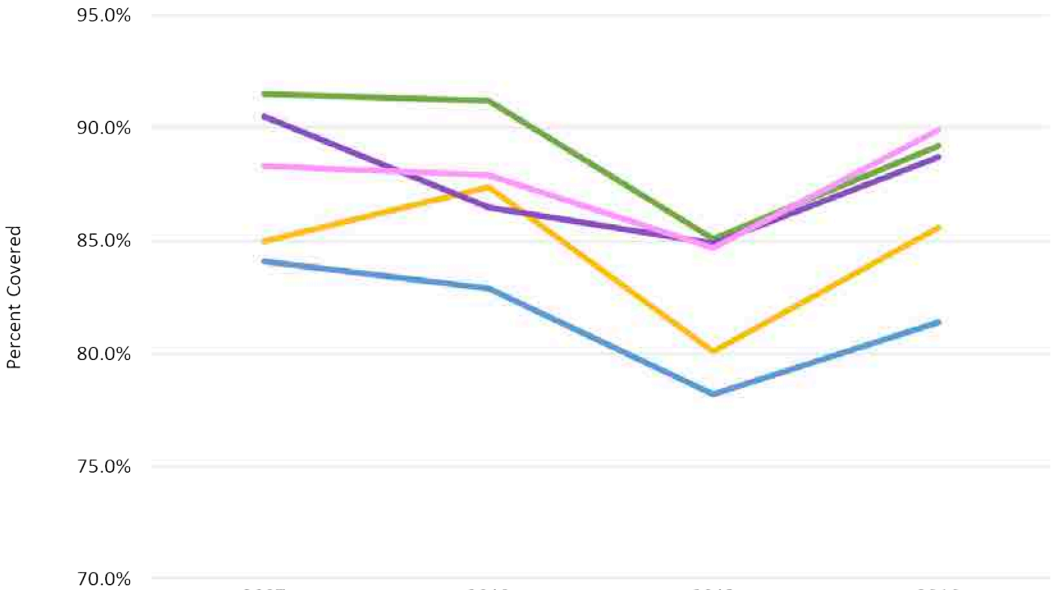
CHART 7.89: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION-HIGH SCHOOL/ GED (2007-2016)



	2007	2010	2013	2016
LAKE	79.9%	89.0%	80.9%	77.6%
ORANGE	68.8%	78.4%	74.4%	75.9%
OSCEOLA	69.3%	73.7%	63.9%	71.4%
SEMINOLE	72.9%	75.1%	75.1%	84.9%
FLORIDA	73.8%	76.5%	72.1%	80.6%

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

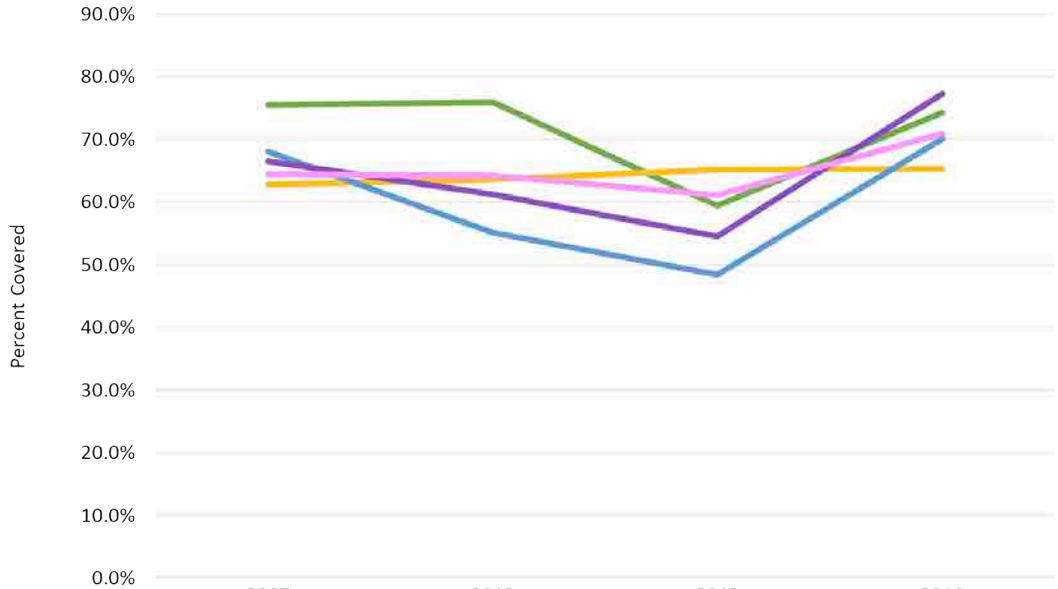
CHART 7.90: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION > HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	91.5%	91.2%	85.1%	89.2%
ORANGE	85.0%	87.4%	80.1%	85.6%
OSCEOLA	84.1%	82.9%	78.2%	81.4%
SEMINOLE	90.5%	86.5%	84.9%	88.7%
FLORIDA	88.3%	87.9%	84.7%	89.9%

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

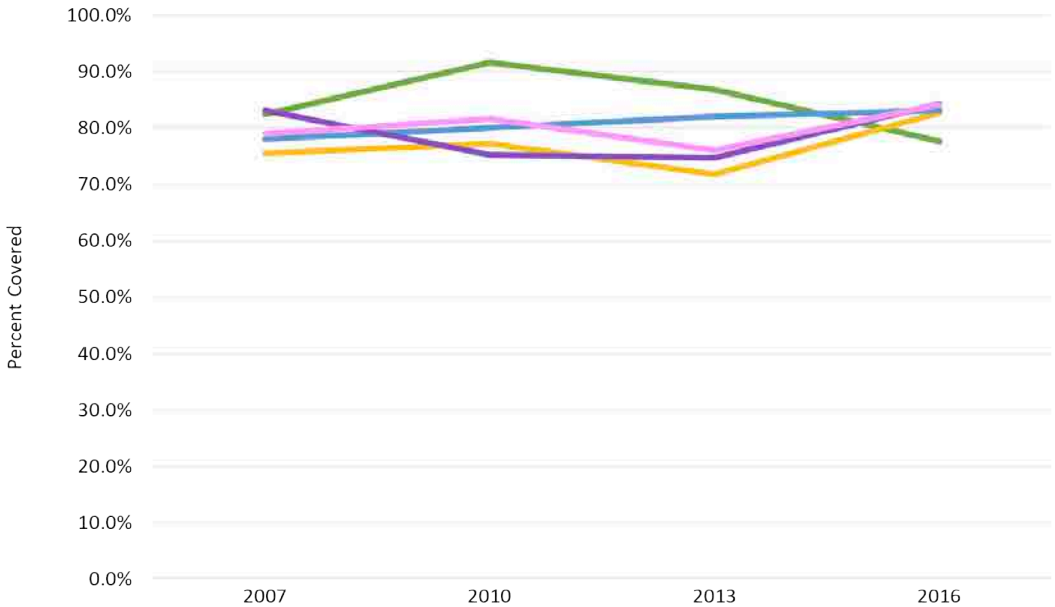
CHART 7.91: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME <$25K (2007-2016)



	2007	2010	2013	2016
LAKE	75.5%	76.0%	59.5%	74.3%
ORANGE	62.8%	63.6%	65.2%	65.3%
OSCEOLA	68.1%	55.1%	48.5%	70.1%
SEMINOLE	66.5%	61.3%	54.5%	77.3%
FLORIDA	64.5%	64.2%	61.2%	71.0%

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

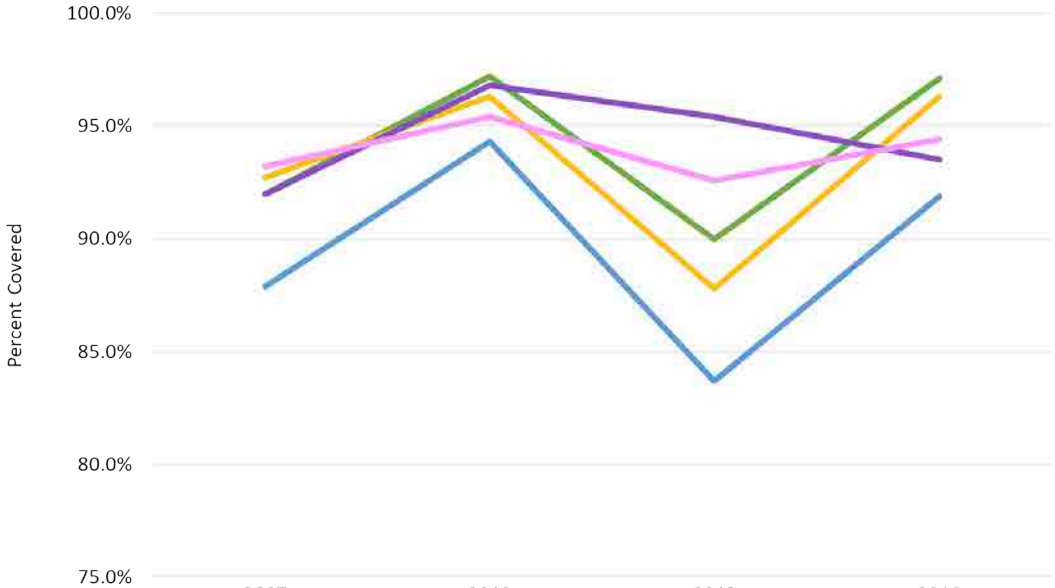
CHART 7.92: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME $25K-$49K (2007-2016)



	2007	2010	2013	2016
LAKE	82.5%	91.6%	86.9%	77.6%
ORANGE	75.5%	77.2%	71.8%	82.7%
OSCEOLA	78.1%	80.0%	82.0%	83.1%
SEMINOLE	83.1%	75.2%	74.7%	84.3%
FLORIDA	79.0%	81.7%	76.0%	84.2%

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

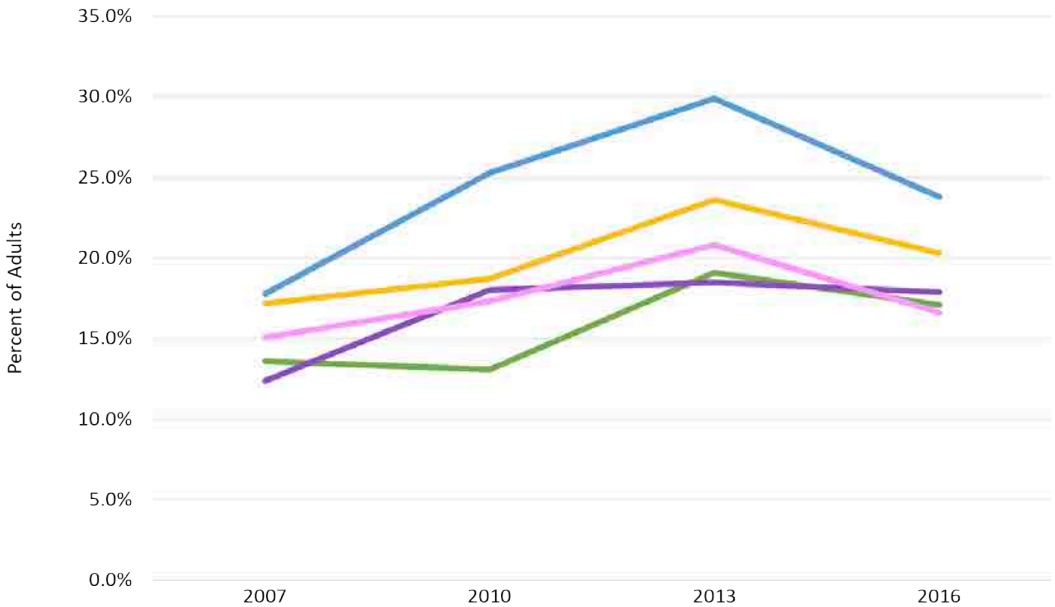
CHART 7.93: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME $50K+ (2007-2016)



	2007	2010	2013	2016
LAKE	92.0%	97.2%	90.0%	97.1%
ORANGE	92.7%	96.3%	87.8%	96.3%
OSCEOLA	87.9%	94.3%	83.7%	91.9%
SEMINOLE	92.0%	96.8%	95.4%	93.5%
FLORIDA	93.2%	95.4%	92.6%	94.4%

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

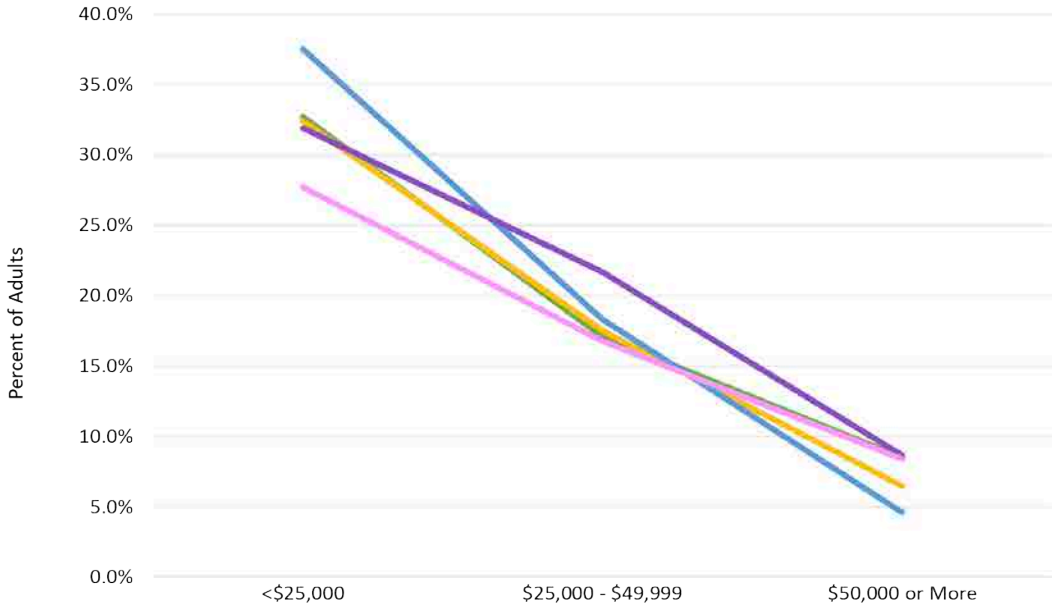
CHART 7.94: ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST (2007-2016)



	2007	2010	2013	2016
LAKE	13.6%	13.1%	19.1%	17.1%
ORANGE	17.2%	18.7%	23.6%	20.3%
OSCEOLA	17.8%	25.3%	29.9%	23.8%
SEMINOLE	12.4%	18.0%	18.5%	17.9%
FLORIDA	15.1%	17.3%	20.8%	16.6%

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

CHART 7.95: ADULTS WHO COULD NOT SEE DOCTOR IN PAST YEAR DUE TO COST, BY ANNUAL INCOME (2016)



	<$25,000	$25,000 - $49,999	$50,000 or More
LAKE	32.7%	17.1%	8.5%
ORANGE	32.4%	17.5%	6.5%
OSCEOLA	37.5%	18.3%	4.6%
SEMINOLE	31.9%	21.7%	8.7%
FLORIDA	27.7%	16.8%	8.4%

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

Healthcare Providers and Facilities

LICENSED HOSPITALS

There are 32 hospitals in the four-county region, 17 of which are not-for-profit and belong to one of the three health systems that are members of the Collaborative: AdventHealth, Aspire Health Partners and Orlando Health. These 17 hospitals contain a total of 5,448 beds, 4,830 of which are acute care beds. The Collaborative member hospitals provide a wide variety of services including acute care, neonatal intensive care, rehabilitation, psychiatric, substance use and Level One Trauma.

Outside of the Collaborative membership, there are five for-profit acute care hospitals in the region, one not-for-profit acute care hospital and a nonprofit children's acute care hospital. There are also four for-profit and two not-for-profit behavioral health hospitals. Additionally, there are two for-profit long-term care hospitals with 99 beds as well as one for-profit rehabilitation hospital with 60 beds. (See Table 7.7)

ADVENTHEALTH

AdventHealth operates 50 hospitals and hundreds of care centers in nine 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 Place℠; 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 1,366-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 299-bed acute-care community hospital located in Lake County, was established in 1938 and has been the cornerstone of health care excellence in Lake County.

Hospital services include: 24-hour emergency department; advanced heart program; including an accredited chest pain center; open heart and thoracic surgery; comprehensive Cancer Institute certified Joint Replacement Center; Community Primary Health Clinic; critical care services; demonstration kitchen with nutritional counseling; diabetes; most advanced imaging services (3D mammography, CT, MRI, ultrasound, nuclear medicine); digestive health care; fitness center; home care services; inpatient and outpatient rehabilitation services; laboratory services; sports medicine; surgical services including minimally invasive and robotic assisted surgeries; urology; Women and Children's Center; wound and hyperbaric medicine and spiritual care.

AdventHealth Winter Park

AdventHealth Winter Park, a 320-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) is a community-based, not-for-profit provider of behavioral health services. Aspire provides a full continuum of prevention, intervention and treatment 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; homelessness; and juvenile delinquency. Service components include community and school-based prevention and intervention services; outpatient and residential treatment for mental health, 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 operates 90 psychiatric acute care hospital beds, 130 crisis stabilization beds for adults and children, 50 detoxification beds for adults and children, 160 mental health/substance abuse residential treatment beds for adults, 36 substance abuse residential beds for adolescents, 30 juvenile justice residential beds and 271 supportive housing beds.

With a team of over 1,400 professionals, more than 50 program sites, serving five Central Florida counties (Orange, Osceola, Seminole, Lake and Brevard), Aspire is able to provide a comprehensive, cost efficient, seamless continuum of behavioral healthcare. In 2018, Aspire provided direct prevention, intervention, treatment, juvenile justice 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).

ORLANDO HEALTH

The Orlando Health health care system is one of Florida's most comprehensive private, not-for-profit healthcare 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 center; and long-standing community hospitals.

With 2,424 hospital beds, facilities include: Orlando Health Orlando Regional Medical Center (ORMC); Orlando Health UF Health Cancer Center; Orlando Health Arnold Palmer Hospital for Children; Orlando Health Winnie Palmer Hospital for Women & Babies; Orlando Health Dr. P. Phillips Hospital; Orlando Health South Seminole Hospital; Orlando Health – Health Central Hospital; and Orlando Health South Lake Hospital. Areas of expertise include heart and vascular, cancer care, neurosciences, surgery, pediatric orthopedics and sports medicine, neonatology and women's health.

Orlando Health Orlando Regional Medical Center

Orlando Health Orlando Regional Medical Center (ORMC), located in Orlando, is Orlando Health's flagship medical center with 866 acute care and comprehensive rehabilitation beds. Orlando Health ORMC specializes in orthopedics, neurosciences, cardiology, trauma and critical care medicine. 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 UF Health Cancer Center

Orlando Health UF Health Cancer Center is a statewide cancer treatment and research program with the University of Florida 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 cancer center'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 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 Winnie Palmer Hospital for Women & Babies

Orlando Health Winnie Palmer Hospital for Women & 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. 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).

Orlando Health Dr. P. Phillips Hospital

Orlando Health Dr. P. Phillips Hospital is a 237-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 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, 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 – Health Central Hospital

Orlando Health – Health Central Hospital, located in West Orange County, is a 211-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 South Lake Hospital

Orlando Heath South Lake Hospital, located in Clermont, Florida is a full-service medical and surgical facility with 140 inpatient beds, along with 30 short-term rehabilitation beds. The hospital serves south Lake County and provides a variety of medical services, including diagnostic, imaging, orthopedics, robotic surgery, urology and cardiac care. 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 areas is Clermont, Minneola, Groveland, Mascotte and Montverde. This makes up the whole of southern Lake County.

LICENSED PHYSICIAN RATE (2012/2013- 2017/2018)

The rate of physicians per 100,000 population licensed in the state remained relatively stable from FY 2012/13 to FY 2017/2018. In Osceola County, the rate of physicians increased in Osceola County from 122.3 in FY 2012/2013 to 143.2 in FY 2017/2018, while the state increased from 264.6 to 310.6. (See Chart 7.96)

TOTAL NUMBER OF LICENSED PHYSICIANS (2013/2014- 2017/2018)

The number of licensed physicians increased by 20.4 percent in the four-county region between 2013 and 2018 from 5,570 in fiscal year 2013/2014 to 6,707 in fiscal year 2017/2018. The number of licensed physicians in Osceola County increased from 462 in fiscal year 2013/2014 to 486 in fiscal year 2017/2018. (See Table 7.8)

LICENSED DENTIST RATE (2012/2013- 2017/2018)

The licensed dentist rate per 100,000 in Osceola County decreased from 23 in FY 2012-2013 to 18.3 in FY 2017-2018. The state rate increased during this time from 54.6 to 55.8. (See Chart 7.97)

TOTAL NUMBER OF LICENSED DENTISTS (2013/2014- 2017/2018)

The number of dentists in the four-county region decreased over the past five years from 1,078 in fiscal year 2013/2014 to 1,029 in fiscal year 2017/2018. Osceola County decreased from 89 to 62 over the five-year period. The state increased from 10,396 to 11,475. (See Table 7.9)

RATIO OF MENTAL HEALTH PROVIDERS TO POPULATION (2015-2018)

In 2018, across the four-county region and the state, the ratio of providers to residents has improved over the past few years. Osceola County (769:1) had a ratio that was higher than the state level (703:1). (See Table 7.10)

EMERGENCY DEPARTMENT SERVICES (2019)

There is a total of 21 dedicated emergency departments throughout the four-county region, 14 of which are part of the Collaborative member hospitals. The region also has one licensed burn unit located at Orlando Health ORMC, although 15 regional hospitals offer burn emergency services. The region also has five Level I cardiovascular and six Level II cardiovascular services facilities. There are also nine primary stroke centers and four comprehensive stroke centers in the four-county region. The four-county region also has one Level I Trauma Center, located at Orlando Health ORMC, and one Level II Trauma Center. (See Table 7.11)

TRANSPLANT SERVICES (2019)

The only hospital (AdventHealth Orlando) in the region for transplants is included in the Collaborative. (See Table 7.12)

TOTAL LICENSED HOSPITAL BEDS (2019)

There are 7,321 total licensed hospital beds in the four-county region. The majority (5,448, 74.4 percent) are operated by Collaborative member hospitals. Of the hospital beds included in the four-county region, there are 1,027 beds in Osceola County. (See Chart 7.98 and Table 7.7)

TOTAL LICENSED ACUTE CARE BEDS (2019)

There are 14 hospital partners in this assessment that operate 4,830 of the 5,980 total licensed acute-care beds. The Collaborative partners represent more than 72 percent of the acute-care beds available in the four-county region. There are 882 acute-care beds (14.7 percent) in Osceola County. (See Chart 7.99 and Table 7.7)

TOTAL NICU II AND III BEDS (2019)

There are 162 NICU II beds and 150 NICU III beds in the four-county region. There are 10 NICU II beds located at AdventHealth Celebration and 10 at Osceola Regional Medical Center. There are also eight NICU III beds located at Osceola Regional Medical Center. (See Table 7.13 and Table 7.7)

TOTAL COMPREHENSIVE REHAB BEDS (2019)

Throughout the four-county region, there are a total of 189 comprehensive rehabilitation beds. There are 28 beds in Osceola County that are associated with a hospital outside the Collaborative membership. (See Table 7.14 and Table 7.7)

TOTAL LICENSED ADULT PSYCHIATRIC BEDS (2019)

There are a total of 521 licensed adult psychiatric beds in the four-county region in 2019. Osceola County has 75 (14.3 percent of the total beds). Of those, 62 beds in Osceola County are affiliated with hospitals outside of the Collaborative member hospitals. (See Chart 7.100 and Tables 7.7 and 7.15)

TOTAL PSYCHIATRIC TREATMENT FACILITY BEDS (2019)

There is a total of 930 adult psychiatric, child and adolescent psychiatric, residential treatment facility and intensive residential treatment facility beds in the four-county region. Osceola County has 90 total beds and they are all affiliated with hospitals outside of the Collaborative member hospitals. (See Table 7.15)

TOTAL ADULT SUBSTANCE ABUSE BEDS (2019)

The four-county region has a total of 45 licensed substance abuse beds. The 14 beds in Osceola County are not affiliated with hospitals within the Collaborative membership. (See Table 7.16)

TABLE 7.7: LICENSED HOSPITAL FACILITIES, CENTRAL FLORIDA FOUR-COUNTY REGION (2019)

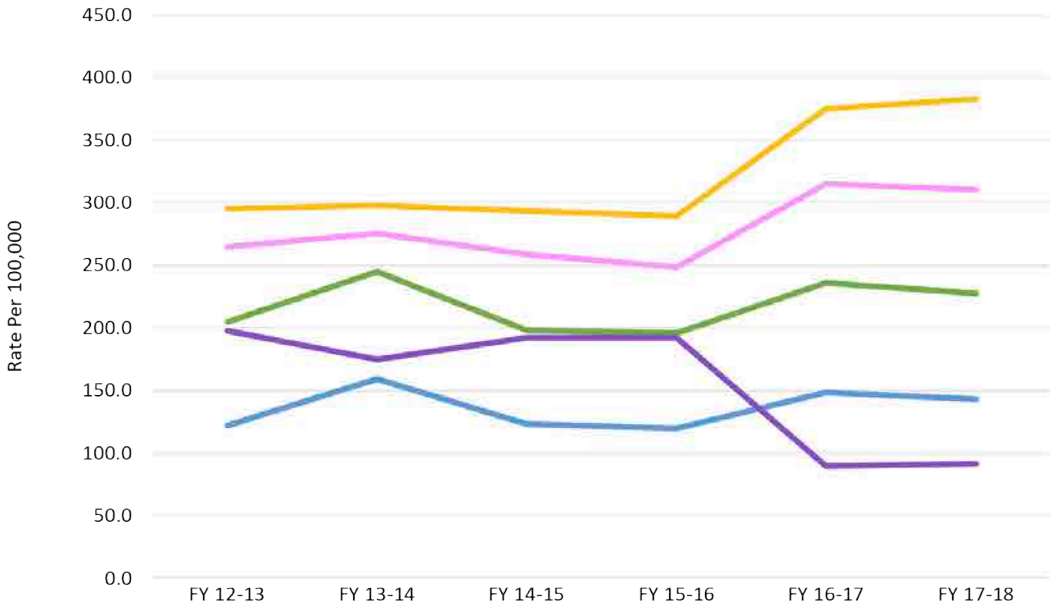
				LICENSED BEDS																
							NICU		Psychiatric			Substance Abuse				Non CON Regulated Services				
ID#	AHCA#	Facility Name	City	Total Beds	Acute Care Beds	LTC Hosp. Beds	Level II	Level III	Adult	Child/ Adol	IRTF	Adult	Child/ Adol	SNU	Rehab	Burn Units	Level II Adult Cardio	Level I Adult Cardio	Comp. Stroke Center	Primary Stroke Center
3053	100057	AdventHealth Waterman	Tavares	269	269												1			1
3077	100084	Leesburg Regional Medical Center	Leesburg	308	308												1			1
3239	104018	Lifestream Behavioral Center	Leesburg	46					41			5								
3077	100214	LRMC Senior Behavioral Health Center	Leesburg	21					21											
3047	100051	Orlando Health South Lake Hospital	Clermont	170	140									30				1		1
		Lake County Total		814	717				62			5		30			2	1		3
3258	120003	AdventHealth Apopka	Apopka	120	120															
3019	100021	AdventHealth East Orlando	Orlando	295	295															1
3258	100007	AdventHealth Orlando	Orlando	1,366	1,195		28	74	59						10		1		1	
31	100162	AdventHealth Winter Park	Winter Park	320	288		12								20					1
3112	100129	Aspire Health Partners, Inc.	Orlando	90					90											
	23960083	Central Florida Behavioral Hospital	Orlando	174					109	65										
3310	110051	La Amistad Residential Treatment Center	Maitland	40							40									
	23960096	Nemours Children's Hospital	Orlando	100	77		2	16							5					
3028	100030	Orlando Health - Health Central	Ocoee	211	211													1		1
3005	120001	Orlando Health Arnold Palmer	Orlando	156	156															
3005	120002	Orlando Health Dr. P. Phillips	Orlando	237	237													1		1
3005	100006	Orlando Health ORMC	Orlando	866	813										53	1	1		1	
3005	120001	Orlando Health Winnie Palmer	Orlando	350	208		90	52												
	23960043	Select Specialty Hospital-Orlando (North Campus)	Orlando	35		35														
	23960068	Select Specialty Hospital-Orlando (South Campus)	Orlando	64		64														
3314	1 10047	University Behavioral Center	Orlando	112					64	32		16								
		Orange County Total		4,536	3,600	99	132	142	322	97	40	16			88	1	2	2	2	4
	23960017	AdventHealth Celebration	Celebration	237	227		10											1		1
3082	100089	AdventHealth Kissimmee	Kissimmee	162	162															1
	23960129	Blackberry Center	St. Cloud	64					50			14								
3096	100110	Osceola Regional Medical Center	Kissimmee	404	333		10	8	25						28		1		1	
	23960111	Poinciana Medical Center	Kissimmee	76	76															
3067	100074	St. Cloud Regional Medical Center	St. Cloud	84	84															
		Osceola County Total		1,027	882		20	8	75			14			28		1	1	1	2
3258	120004	AdventHealth Altamonte Springs	Altamonte Springs	393	383		10											1		1
3138	100161	Central Florida Regional Hospital	Sanford	221	208										13		1			1
	239601[illegible]	Encompass Health Rehabilitation Hospital of Altamonte	Altamonte Springs	60											60					
3266	100263	Orlando Health South Seminole	Longwood	206	126				62	8		10						1		1
	23960121	Oviedo Medical Center (Licensed 1/26/2017)	Oviedo	64	64															
		Seminole County Total (Per Actual Numbers Written)		944	781		10		62	8		10			73		1	2		3
		Total Regional Bed Count		7,321	5,980	99	162	150	521	105	40	45	0	30	189	1	6	6	3	12

*Gray shading denotes collaborative member facilities

Note: Data reported in this chart was the most recent publically available data as of January 2019. Individual hospital narratives reflect internal hospital data.

Sources: Florida Agency for Healthcare Administration; Central Florida Collaborative

CHART 7.96: LICENSED PHYSICIAN RATE (2012/2013-2017/2018)



	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
LAKE	205.1	245.1	198.4	195.7	236.0	227.5
ORANGE	295.6	298.0	293.9	289.5	374.9	382.8
OSCEOLA	122.3	159.3	123.4	119.9	148.6	143.2
SEMINOLE	197.5	175.1	192.2	192.2	89.9	91.5
FLORIDA	264.6	275.7	258.8	248.6	315.5	310.6

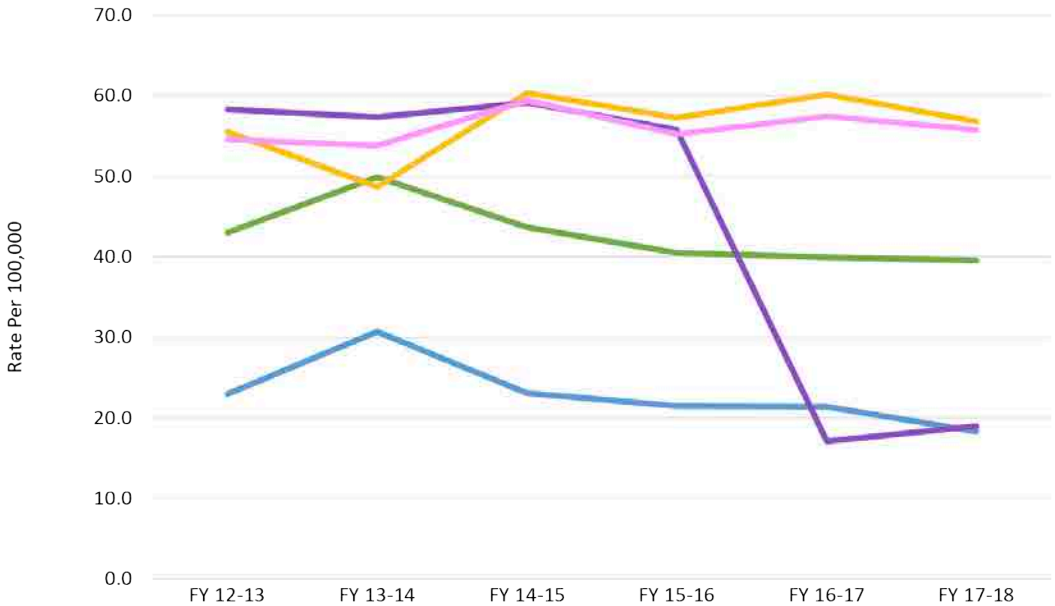
Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.8: TOTAL NUMBER OF LICENSED PHYSICIANS (2013/2014- 2017/2018)

	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Lake	747	618	623	769	759
Orange	3,604	3,626	3,645	4,827	5,044
Osceola	462	368	374	485	486
Seminole	757	843	854	405	418
Region Total	5,570	5,455	5,496	6,486	6,707
Florida	53,259	50,679	49,456	63,825	63,849

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

CHART 7.97: LICENSED DENTIST RATE (2012/2013-2017/2018)



	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
LAKE	43.0	49.9	43.7	40.5	39.9	39.6
ORANGE	55.5	48.7	60.3	57.3	60.2	56.8
OSCEOLA	23.0	30.7	23.1	21.5	21.4	18.3
SEMINOLE	58.3	57.4	59.1	55.8	17.1	19.0
FLORIDA	54.6	53.8	59.4	55.2	57.5	55.8

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.9: TOTAL NUMBER OF LICENSED DENTISTS (2013/2014-2017/2018)

	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Lake	152	136	129	130	132
Orange	589	744	722	775	748
Osceola	89	69	67	70	62
Seminole	248	259	248	77	87
Region Total	1,078	1,208	1,166	1,052	1,029
Florida	10,396	11,635	10,986	11,641	11,475

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.10: RATIO OF MENTAL HEALTH PROVIDERS TO POPULATION (2015-2018)

	2015	2016	2017	2018
Lake	1,318:1	1,283:1	1,375:1	1,285:1
Orange	591:1	544:1	553:1	507:1
Osceola	992:1	884:1	842:1	769:1
Seminole	690:1	627:1	706:1	675:1
Florida	744:1	689:1	747:1	703:1

Source: County Health Rankings and Roadmaps

TABLE 7.11: EMERGENCY DEPARTMENT SERVICES (2019)

County	Facility Name	Collaborative Member	Emergency Department	Burn Services	Cardio	Stroke Center	Trauma
Lake	AdventHealth Waterman	X	X		Level II	Primary	
Lake	Orlando Health South Lake Hospital	X	X	X	Level I		
Lake	Leesburg Regional Medical Center		X			Primary	
Orange	AdventHealth Apopka	X	X	X			
Orange	AdventHealth East Orlando	X	X	X			
Orange	AdventHealth Orlando	X	X	X	Level II	Comp.	
Orange	AdventHealth Winter Park	X	X	X		Primary	
Orange	Orlando Health Arnold Palmer Hospital for Children	X	X	X			
Orange	Orlando Health Winnie Palmer Hospital for Women & Babies	X					
Orange	Orlando Health Dr. P. Phillips Hospital	X	X	Burn Unit	Level II	Comp.	
Orange	Orlando Health Orlando Regional Medical Center	X	X	X	Level II	Comp.	Level I
Orange	Nemours Children's Hospital		X				
Orange	Orlando Health – Health Central Hospital	X	X		Level I	Primary	
Osceola	AdventHealth Celebration	X	X	X	Level I	Primary	
Osceola	AdventHealth Kissimmee	X	X	X		Primary	
Osceola	Osceola Regional Medical Center		X		Level II	Comp.	
Osceola	St. Cloud Regional Medical Center		X				
Osceola	Poinciana Medical Center		X	X			
Seminole	AdventHealth Altamonte Springs	X	X	X	Level I	Primary	
Seminole	Orlando Health South Seminole Hospital	X	X	X	Level I	Primary	
Seminole	Central Florida Regional Hospital		X	X	Level II	Primary	Level II
Seminole	Oviedo Medical Center		X	X			
		15	21	15			

Sources: Florida Agency For Healthcare Administration; Central Florida Collaborative

TABLE 7.12: TRANSPLANT SERVICES (2019)

Program (A=Adult; P=Pediatric)	AdventHealth Orlando	4-County Region	Florida
Transplant	1	1	10
Heart Transplant (A)	1	0	7
Heart Transplant (P)	0	0	4
Kidney Transplant (A)	1	1	10
Kidney Transplant (P)	1	1	4
Liver Transplant (A)	1	1	8
Liver Transplant (P)	0	0	2
Lung Transplant (A)	1	1	5
Lung Transplant (P)	0	0	2
Bone Marrow Transplant (A)	1	1	6
Bone Marrow Transplant (P)	1	1	6
Pancreas/Transplant (A)	1	1	5
Pancreas/Transplant (P)	0	0	1

Source: Florida Agency For Healthcare Administration (AHCA)

CHART 7.98: TOTAL LICENSED HOSPITAL BEDS (2019)

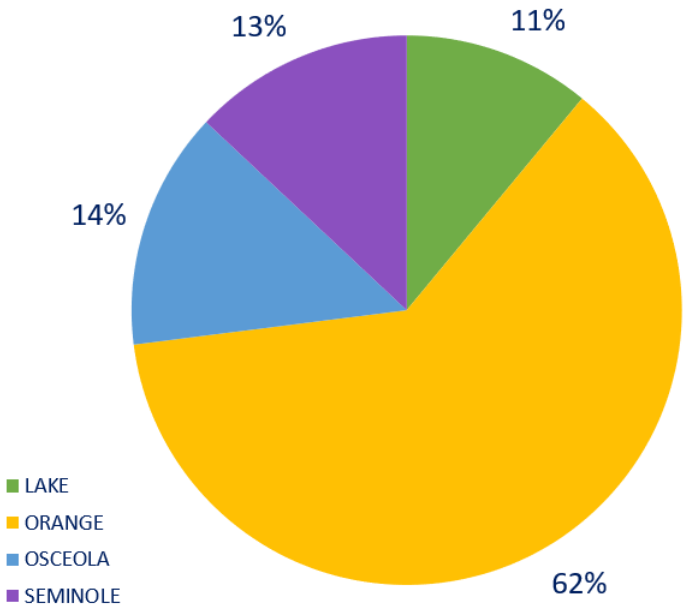
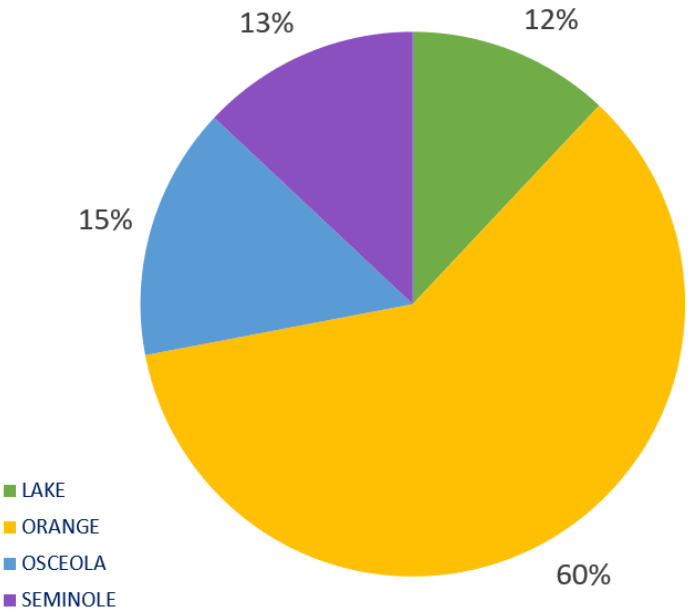


CHART 7.99: TOTAL LICENSED ACUTE CARE BEDS (2019)



Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.13: TOTAL NICU II AND NICU III BEDS (2019)

County	NICU II	NICU III
Orange	132 Beds	142 Beds
	• AdventHealth Winter Park • AdventHealth Orlando	• AdventHealth Orlando
	• Orlando Health Winnie Palmer Hospital for Women & Babies	• Orlando Health Winnie Palmer Hospital for Women & Babies
	• Nemours Children's Hospital	• Nemours Children's Hospital
Osceola	20 Beds	8 Beds
	• AdventHealth Celebration • Osceola Regional Medical Center	• Osceola Regional Medical Center
Seminole	10 Beds	
	• AdventHealth Altamonte Springs	

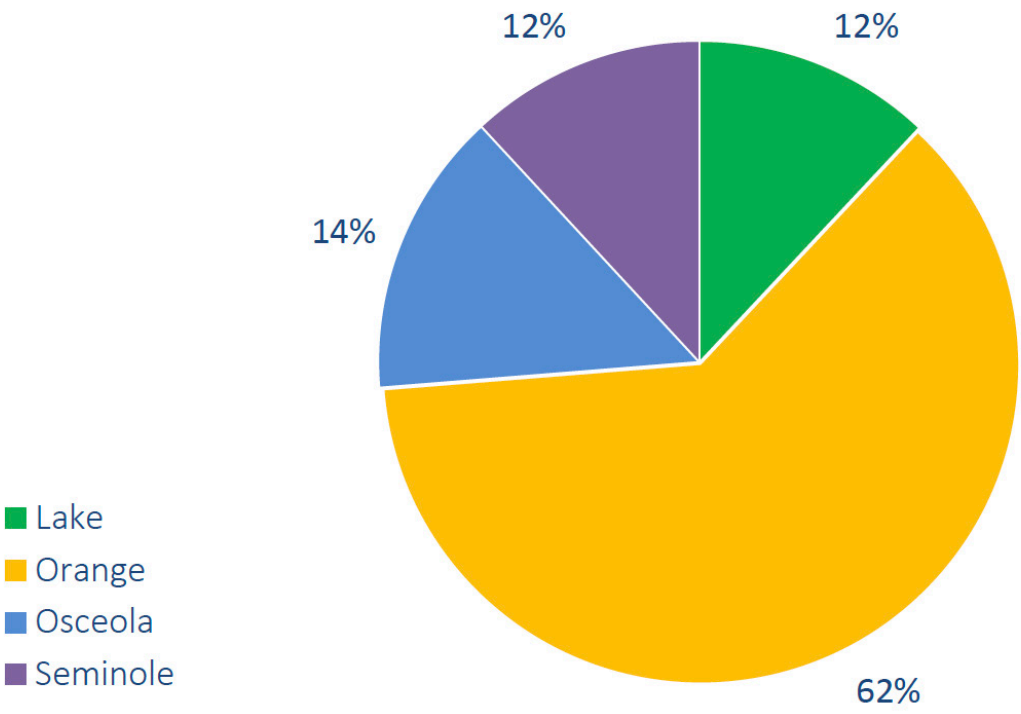
Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.14: TOTAL COMPREHENSIVE REHAB BEDS (2019)

County	Comprehensive Rehabilitation Beds
Orange	83 beds among Collaborative partner hospitals
	• AdventHealth Winter Park • AdventHealth Orlando • Orlando Health Orlando Regional Medical Center
	Beds among non-affiliated organizations
Orange	• Nemours Children's Hospital (5 beds)
Osceola	• Osceola Regional Medical Center (28 beds)
Seminole	• Central Florida Regional Hospital (13 beds) • Encompass Health Rehabilitation Hospital (60 beds)

Source: Florida Agency For Healthcare Administration (AHCA)

CHART 7.100: TOTAL LICENSED ADULT PSYCHIATRIC BEDS (2019)



Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.15: TOTAL PSYCHIATRIC TREATMENT FACILITY BEDS (2019)

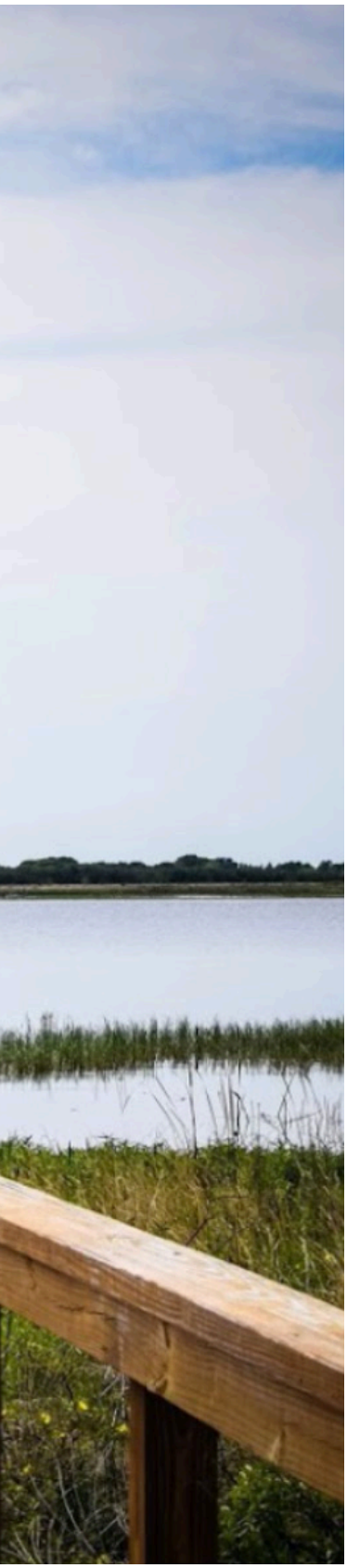
County	Own	Facility Type	Name	Licensed Beds
Lake	NFP	Adult Psychiatric Hospital	Lifestream Behavioral Center	41
	NFP	Residential Treatment Facility	Lifestream Behavioral Center (4 locations)	51
	NFP	Adult Psychiatric Hospital	LRMC Senior Behavioral Center	21
Orange	NFP	Adult Psychiatric Hospital	AdventHealth Orlando	59
	NFP	Adult Psychiatric Hospital	Aspire Health Partners	90
		Residential Treatment Facility	Aspire Health Partners (2 locations)	52
	FP	Adult Psychiatric Hospital	Central Florida Behavioral Hospital	109
	FP	Child/Adolescent Psychiatric Hospital	Central Florida Behavioral Hospital	65
	FP	Intensive Residential Treatment Facility	LaAmistad Residential Treatment Center	40
	FP	Residential Treatment Facility	LaAmistad Behavioral Health Services	45
	FP	Residential Treatment Facility	Pasadena Villa	16
	FP	Residential Treatment Facility	Pasadena Villa at LaSalle	5
	FP	Residential Treatment Facility	Pasadena Village at Lake Highland	5
	FP	Residential Treatment Facility	Pasadena Village at North Shore	3
	FP	Residential Treatment Facility	Pasadena Villa at Summerlin Park	5
	FP	Adult Psychiatric Hospital	University Behavioral Center	64
	FP	Child/Adolescent Psychiatric Hospital	University Behavioral Center	32
Osceola	FP	Adult Psychiatric Hospital	Blackberry Center	50
	FP	Adult Psychiatric Hospital	Osceola Regional Medical Center	25
	NFP	Residential Treatment Facility	Park Place Behavioral Health Care	15
Seminole	NFP	Residential Treatment Facility	Aspire Health Partners	12
	NFP	Residential Treatment Facility	Lakewood Center (2 locations)	55
	NFP	Adult Psychiatric Hospital	Orlando Health South Seminole Hospital	62
	NFP	Child/Adolescent Psychiatric Hospital	Orlando Health South Seminole Hospital	8

Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.16: TOTAL SUBSTANCE ABUSE BEDS (2019)

COUNTY	ADULT SUBSTANCE ABUSE
Lake	5 beds
	• Lifestream Behavioral Center
Orange	16 beds
	• University Behavioral Center
Osceola	14 beds
	• Blackberry Center
Seminole	10 beds
	• Orlando Health South Seminole Hospital

Source: Florida Agency For Healthcare Administration (AHCA)



CHAPTER EIGHT

Health Disparities

Twin Oaks Conservation Area
Kissimmee, FL

Osceola County

Health disparities (differences in health outcomes between groups that reflect social inequalities) related to access, preventative care and food access exist within Orange County and the state. Income, race and education affect lifestyle in addition to access to care rates of preventative testing, chronic diseases, births, infant mortality and mental health. These disparities demonstrate the need for concerted action to achieve health equity and overall health improvement for the entire population. An opportunity for action exists in data collection; consistently in the data sourced for this chapter there are gaps across racial and ethnic groups. These gaps are in the publicly available data and make it difficult to understand the disparities and needs of diverse populations; until the disparities and needs are fully understood it is difficult to successfully address them.

Preventative Care Disparities

MAMMOGRAM AGES 40 AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for women ages 40 and older who have received mammograms is complete for White and Hispanic women in Osceola County from 2007 to 2016 but is unavailable for Black women. The gaps in the available data do not allow a comprehensive snapshot for comparison between all populations at the county level. The percentage of White women ages 40 and over who have received mammograms has decreased in Osceola County from 53.1 percent in 2007 to 40.8 percent in 2016. There was also a decrease at the state level from 65.4 percent to 60.9 percent during this time.

Data was not available for Black women ages 40 and older who have received mammograms at the county level. In the state, the percentage for Black women ages 40 and older who received mammograms decreased from 70.2 percent in 2007 to 61.7 percent in 2016.

In Osceola County, the percentage of Hispanic women ages 40 and older receiving mammograms increased from 54.7 percent in 2007 to 63.3 percent in 2016. The percentage decreased at the state level from 2007 (63.2 percent) to 2016 (60.7 percent), making it the smallest decrease at the state level for all groups. (See Charts 8.1-8.3)

PAP TEST AGES 18 AND OLDER BY RACE/ETHNICITY (2007-2016)

Percentages have decreased from 2007 to 2016 for all racial and ethnic groups across the state in the number of women ages 18 and older who have received a Pap test in the past year. The percentage of White women receiving Pap tests in Osceola County decreased from 58.4 percent in 2007 to 38.6 percent in 2016. For Black women, there is no data available at the county level. There was a decrease during this time as well for Hispanic women from 67 percent to 61.5 percent in the county.

At the state level, the percentage of White women ages 18 and older who received a Pap test in the past year decreased from 64.4 percent in 2007 to 46 percent in 2010, the largest decline across all groups. The percentage for Black women decreased from 70.9 percent to 55.8 percent from 2007 to 2016. The percentage for Hispanic women decreased from 64.5 percent to 51.5 percent in the same time frame. (See Charts 8.4-8.6)

SIGMOIDOSCOPY/COLONOSCOPY AGES 50 AND OLDER BY RACE/ETHNICITY (2007-2016)

The data available for adults ages 50 and older who received a sigmoidoscopy/colonoscopy from 2007 to 2016 by race and ethnicity is limited. Complete data is available for White and Hispanic adults but unavailable for Black adults at the county level from 2007 to 2016. In Osceola County, the percentage of White adults who received a sigmoidoscopy/colonoscopy decreased slightly from 55 percent to 54.3 percent from 2007 to 2016. The percentage of Hispanic adults ages 50 and older who received sigmoidoscopy or colonoscopy in Osceola County increased from 30.5 percent to 50.8 percent from 2007 to 2016.

From 2007 to 2016 at the state level, White adults were the only group with a decrease (56.8 percent to 55.9 percent). Black adults had an increase from 48.9 percent to 51.2 percent and Hispanic adults increased from 39 percent to 49.6 percent within the same time frame. (See Charts 8.7-8.9)

BLOOD STOOL TEST ADULT AGES 50 YEARS AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for adults ages 50 and older who have received a blood stool test in the past year is complete for White and Hispanic adults but is unavailable for Black adults at the county level. There is complete data for all groups at the state level. The county percentage for White adults decreased from 19.2 percent in 2007 to 14.9 percent in 2016. The percentage for Hispanic adults increased from 9.1 percent in 2007 to 29.8 percent in 2016 in the county.

From 2007 to 2016, the state percentage for both White (23.3 percent to 15.7 percent) and Black adults (21.7 percent to 18.6 percent) receiving a blood stool test decreased. The percentage for Hispanic adults nearly doubled from 8.7 percent to 15.4 percent. (See Charts 8.10-8.12)

PSA TEST ADULT AGES 50 YEARS AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for men ages 50 and older who have received a PSA (Prostate Specific Antigen) test in the past two years from 2007 to 2016 is complete for White men at the county level. County level data for Black men is unavailable and there is limited data available for Hispanic men. For White men in Osceola County, the percentage decreased from 62.3 percent in 2007 to 47.4 percent in 2016. The only county-level data available for Hispanic men ages 50 and older who received a PSA test in the past two years was 27.3 percent in 2007.

There has been a decline across all groups at the state level for adult men 50 and older receiving a PSA test from 2007 to 2016. The percentage of White men ages 50 and older receiving the test decreased from 63.1 percent to 58.2 percent from 2007 to 2016. At the state level, the percentage of Black men dropped from 71.5 percent to 48.4 percent in the same time frame. The state percentage for Hispanic men declined the least during these years from 51.8 percent to 47 percent. (See Charts 8.13-8.15)

Chronic Condition Disparities

ADULTS WITH DIABETES BY RACE/ETHNICITY (2002-2016)

There is complete data at the county level for White and Hispanic adults with diagnosed diabetes from 2002 to 2016. However, data for Black adults at the county level is unavailable for 2002. Percentages for White adults in Osceola County increased from 7.6 percent in 2002 to 17 percent in 2016.

There was a decrease of Black adults with diagnosed diabetes in Osceola County from 22.8 percent in 2007 to 3.6 percent in 2016. Osceola County's data for Hispanic adults showed an increase from 2.3 percent in 2002 to 14.7 percent in 2016.

The data available for adults diagnosed with diabetes is complete at the state level for the years 2002 to 2016 for all groups. The percentage of White adults increased the least from 8 percent to 11.5 percent. The percentage for Black adults increased the most from 10.6 percent to 14.5 percent in the same time frame. The percentage for Hispanic adults rose from 7.1 percent to 10.9 percent. (See Charts 8.16-8.18)

HYPERTENSION (HIGH BLOOD PRESSURE) BY RACE/ETHNICITY (2002-2013)

There is complete data for White and Hispanic adults who have been told they have high blood pressure at the county level. However, data for Black adults at the county level is unavailable for 2002. In Osceola County, the percentage for White adults increased from 26.7 percent in 2002 to 33.4 percent in 2013. For Black adults in Osceola County, there was a decrease from 30.7 percent in 2007 to 15.8 percent in 2013. Percentages for Hispanic adults have increased from 2002 to 2013 in Osceola County from 24.7 percent to 35.5 percent.

There has been an increase across all groups at the state level in the percentage of adults who have been told they have high blood pressure from 2002 to 2013. The percentage of White adults increased the most in all groups from 28.7 percent in 2002 to 38.4 percent in 2013. The percentages of Black adults rose the least in the state from 32.2 percent in 2002 to 33.7 percent in 2013. Percentage for Hispanic adults increased from 21.1 percent to 28.3 percent during this time. (See Charts 8.19 – 8.21)

STROKE BY RACE/ETHNICITY (2007-2016)

There is complete data at the county and state level for all adults who have been told they have had a stroke. There has been an overall increase in the percentage of White adults who have been told they had a stroke in Osceola County from 3.7 percent in 2007 to 4.8 percent in 2016. There was a fluctuation in Black adults at the county level with an increase from 1.2 percent in 2007 to a high of 10.7 percent in 2010 before decreasing to 1.4 percent in 2016. The percentage of Hispanic adults increased from 1.5 percent in 2007 to 3.1 percent in 2016.

At the state level, the percentage for White adults increased from 3.5 percent (2007) to 4.2 percent (2016 while the percentage for Black adults increased from 3.7 percent (2007) to 3.9 percent (2016). Hispanic adults increased from 1.4 percent in 2007 to 1.8 percent in 2016. (See Charts 8.22-8.24)

CORONARY HEART DISEASE BY RACE/ETHNICITY (2012-2017)

The age-adjusted coronary heart disease death rates per 100,000 in Osceola County decreased across all groups from 2012 to 2017. In Osceola County, rates decreased for White adults from 150.8 in 2012 to 132 in 2017. During the same time frame, Black adults decreased from 94.5 to 70.4 and Hispanic adults decreased from 127 to 111.9.

At the state level, there has been a decrease across all groups. At the state level, rates for White adults decreased from 103 in 2012 to 92.8 in 2017. The largest decrease was in Black adult rates during the same time frame from 113.4 to 95.1. Rates for Hispanics adults fell from 87.3 to 81.4. (See Charts 8.25-8.27)

COLORECTAL CANCER BY RACE/ETHNICITY (2012-2016)

White adult age-adjusted colorectal cancer incidence rate per 100,000 decreased at the state level from 36.1 in 2012 to 35.5 in 2016. State rates for Black adults declined from 41.5 in 2012 to 38.9 in 2016. Rates for Hispanic adults also declined from 33.9 to 33.3 during this time.

White adult rates increased the most in Osceola County from 37.7 in 2012 to 44.2 in 2016. There were fluctuations in rates for both Black and Hispanic adults. Black adults increased from 22.0 in 2012 to a high of 46.1 in 2013 before decreasing to 28 in 2016. Rates for Hispanic adults increased from 26.8 in 2012 to a high of 44.7 in 2013 before decreasing to 31.8 in 2016. (See Chart 8.28-8.30)

FEMALE BREAST CANCER BY RACE/ETHNICITY (2012-2016)

The rates for female breast cancer incidence per 100,000 in the state rose for all groups between 2012 and 2016. The state rate for White adults rose from 117.4 to 119.7. The rate for Black adults increased from 109.7 to 114.9. The rate for Hispanic adults increased from 88.2 to 92 during this time.

From 2012 to 2016, the female breast cancer incidence for all adults increased in Osceola County. In the county, White adults' rates increased from 91.7 to 121.9. For Black adults, the county rate increased from 91.3 to 137.6. Hispanic adult rates also increased from 81.8 to 101.8 during this same time. (See Charts 8.31-8.33)

LUNG CANCER BY RACE/ETHNICITY (2012-2016)

From 2012 to 2016, lung cancer incidence rates per 100,000 decreased for all racial and ethnic groups in the state. For White adults in the state, the rate per 100,000 decreased from 65.3 in 2012 to 59.1 in 2016. The incidence rate for Black adults in the state fell from 51.7 in 2012 to 43.9 in 2016, the largest decrease among all groups. Rates for Hispanic adults decreased from 35.6 to 35 during this time.

In Osceola County, the incidence rate for White adults decreased from 70.2 in 2012 to 63.3 in 2016. The incidence rate for Black adults in Osceola County increased from 21.6 in 2012 to 25.4 in 2016. The rate for Hispanic adults also increased from 33.5 in 2012 to 37.5 in 2016. (See Charts 8.34-8.36)

ADULTS WITH ASTHMA BY RACE/ETHNICITY (2007-2016)

There is complete data for all groups at the state and county level for adults who have asthma from 2007 to 2016. The percentage of White adults who currently have asthma in Osceola County increased from 7.6 percent in 2007 to 8.7 percent in 2016. There was a decrease in the percentage of Black adults with asthma at the county level from 2007 (4.3 percent) to 2016 (3.3 percent). The percentage of Hispanic adults decreased in the county from 8.4 percent to 7.6 percent during the same time.

At the state level there was an increase from 6.4 percent to 6.9 percent for White adults from 2007 to 2016. The percentage for Black adults with asthma increased from 7.6 percent in 2007 to a high of 8.9 percent in 2013 before decreasing back to 7.6 percent in 2016. For Hispanic adults, the percentage increased from 4.8 percent in 2007 to a high of 9.9 percent in 2010 before decreasing to 5.9 percent in 2016. (See Charts 8.37-8.39)

Leading Causes of Death Disparities

When looking at the leading causes of death disparities, the Florida Department of Health classifies Hispanics as White Hispanics and Black Hispanics. The Black/Other category includes all Non-Hispanic Blacks.

Heart disease was leading cause of death in Osceola County in 2017 for White adults (313.2), Black/ Other adults (147.2), White Hispanic adults (126.9) and Black Hispanic adults (40.8). Cancer was the second leading cause of death for White adults (245.3), Blacks/Others (110.1), White Hispanics (104.8) and Black Hispanics (26.5). Cerebrovascular diseases were the third leading cause of death for White adults (54.5), Blacks/Others (42.2), White Hispanic adults (31.9) and Black Hispanic adults (12.4). (See Table 8.1)

Birth Characteristics Disparities

INFANT MORTALITY BY RACE/ETHNICITY (2012-2017)

Infant mortality rates per 1,000 live births for all groups fluctuated from 2012 to 2017. Rates for White infants in Osceola County decreased from 4.1 in 2012 to 3.7 in 2017. Similarly, the rate declined in the state (4.6 in 2012 to 4.4 in 2017).

In Osceola County, Black infant mortality rates increased from 4.6 in 2012 to a high of 19.7 in 2013 before decreasing to to 7 in 2017. The state rate increased from 10.7 in 2012 to 10.8 in 2017. Rates for Hispanic infant mortality rates decreased in the county from 6 in 2012 to 4.7 in 2017. The state rate increased from 4.4 in 2012 to 5.2 in 2017. (See Charts 8.40-8.42)

BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)

The percentage of births with self-pay for delivery decreased for all groups in both Osceola County and the state from 2004 to 2017. The percentage for White women decreased in the county from 5.7 percent to 5.1 percent and in the state from 8.3 percent to 6.4 percent.

The decrease in percentage was the largest across all groups for Black women at the county level from 2004 to 2017. In Osceola County, the decrease was from 8.2 percent to 3.5 percent and in the state from 4.9 percent to 4.8 percent over this time.

From 2004 to 2017, the percentage of births to Hispanic women with self-pay as a payment source decreased from 6.3 percent to 5.1 percent in the county. In the state, the largest decrease across all groups was the percentage of births to Hispanic women, from 16.6 percent to 10 percent for this time. (See Charts 8.43-8.45)

BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION BY RACE/ETHNICITY (2004-2017)

The number of births to mothers who have less than a high school education decreased in Osceola County and the state for all groups from 2004 to 2017. At the state level the percentages declined the most for Hispanic mothers (31.7 percent to 17.9 percent), followed by Black mothers (25.9 percent to 14.2 percent) and White mothers (19.9 percent to 11.7 percent).

The percentages for White mothers declined in Osceola County from 18.9 percent in 2004 to 8.6 percent in 2017. During this time, the percentages for Black mothers decreased from 16.7 percent to 8.6 percent. Births to Hispanic mothers declined at the county level from 21.8 percent to 9.4 percent during this time. (See Charts 8.46-8.48)

BIRTHS TO UNWED MOTHERS BY RACE/ETHNICITY (2004-2017)

Births to unwed mothers for all women increased at county level from 2004 to 2017. Births to unwed White mothers increased in Osceola County from 42.3 percent to 50.1 percent and in the state, the percentage also increased from 34.6 percent to 41.9 percent from 2004 to 2017.

The percentage of births to unwed Black mothers increased in the county from 53.1 percent to 55.7 percent but decreased in the state from 67.7 percent to 67.6 percent. Births to unwed Hispanic mothers increased in the county from 49.4 percent to 55.4 percent and at the state level from 43 percent to 50.5 percent from 2004 to 2017. (See Charts 8.49-8.51)

BIRTHS TO MOTHERS WHO WERE OBESE DURING PREGNANCY BY RACE/ETHNICITY (2004-2017)

The percentage of births to mothers who were obese during pregnancy rose across all groups in Osceola County and the state from 2004 to 2017. Births to White women who were obese increased in the county from 19.2 percent to 25.9 percent and the state levels rose from 16.8 percent to 22.9 percent in this time.

The percentage of births to Black women who were obese during pregnancy increased from 2004 to 2017 in Osceola County from 23.8 percent to 33.9 percent. During this time, the state percentage increased from 27.5 percent to 34.6 percent. The percentage of births to Hispanic women who were obese during pregnancy increased from 17 percent to 26 percent from 2004 to 2017 in the county. During this same time, percentages of births to Hispanic women who were obese during pregnancy rose at the state level from 16 percent to 23.4 percent. (See Charts 8.52-8.54)

REPEAT BIRTHS TO MOTHERS AGES 15-19 BY RACE/ETHNICITY (2004-2017)

The percentage of repeat births to mothers ages 15 to 19 decreased in Osceola County and the state from 2004 to 2017 for all groups. At the state level, the largest decline was in births to Black mothers (22.4 percent to 15.8 percent), followed by Hispanic mothers (19.5 percent to 15 percent) and White mothers (17.1 percent to 14.8 percent) from 2004 to 2017.

Percentages for repeat births to White mothers decreased in Osceola County (18.9 percent to 11 percent) during this timeframe. The largest decline was for repeat births for Black mothers in Osceola County where the percentages decreased from 19.4 percent in 2004 to 0 percent in 2017. Percentages for repeat births to Hispanic mothers decreased from 21.4 percent in 2004 to 13.1 percent in 2017. (See Charts 8.55-8.57)

PRETERM BIRTH RATE <37 WEEKS BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups in Osceola county and at the state level. The percentages for preterm births decreased for all groups at the state and county level from 2004 to 2017. The largest decline at the state level was in the percentages for White mothers (10.1 percent to 9.1 percent), followed by Black mothers (14.6 percent to 14 percent) and Hispanic mothers (9.4 percent to 9.1 percent).

Preterm births for White mothers decreased in Osceola County from 9.1 percent in 2004 to 8.9 percent in 2017. There was a decrease in the percentage of preterm births for Black mothers from 2004 to 2017 in Osceola County (11.8 percent to 10.7 percent). Preterm births to Hispanic mothers decreased in Osceola County (9.3 percent to 8.8 percent) during this time. (See Charts 8.58-8.60)

LOW BIRTH WEIGHT (<2500 GRAMS) BY RACE/ETHNICITY (2004-2017)

Percentages for low birth weights varied across all groups from 2004 to 2017. In Osceola County, the percentage of low birth weight babies to White mothers increased from 7.3 percent in 2004 to 7.6 percent in 2017. At the state level, the percentage increased from 7.2 percent in 2004 to a high of 7.4 percent from 2005 to 2006 before fluctuating back down to 7.2 percent in 2017.

Low birth weight babies born to Black mothers in Osceola County increased from 11.8 percent to a high of 14.7 percent in 2006 before fluctuating down to 11.4 percent in 2017. The state percentage increased from 13.1 percent in 2004 to 13.8 percent in 2017. The percentage of low birth weight babies to Hispanic mothers increased from 6.8 percent in 2004 to 7.7 percent in 2017. The state percentage increased from 7 percent in 2004 to 7.3 percent in 2017. (See Charts 8.61-8.63)

BIRTHS COVERED BY MEDICAID BY RACE/ETHNICITY (2004-2017)

The percentage of births covered by Medicaid increased from 2004 to 2017 in Osceola County and the state for all groups. The percentage of Medicaid births covered for White mothers increased in Osceola County (36 percent to 60.7 percent) and the state (32.2 percent to 43.8 percent) during the same years. Births to Black mothers covered by Medicaid increased in Osceola County (38.9 percent to 60.1 percent) and the state (53.7 percent to 68.4 percent).

There was a similar increase in the percentage of births to Hispanic women covered by Medicaid in Osceola (42.2 percent to 67.8 percent) and at the state level (37.6 percent to 52.2 percent). (See Charts 8.64-8.66)

Quality of Life/Mental Health Disparities

Please note the data sourced for this chapter is from FLHealthCHARTS, which does not provide the same race and ethnicity options for all indicators. In the section below, White refers to Non-Hispanic White adults, Black refers to Non-Hispanic Black adults and Hispanic refers to all Hispanic adults regardless of race.

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY RACE/ ETHNICITY (2007-2016)

Data was available for adults in all groups who had poor mental health 14 or more days of the past 30 by race/ethnicity at the state and county level. The percentage of White adults with 14 or more poor mental health days in the past 30 days in Osceola County increased from 12.3 percent in 2007 to 13.4 percent in 2016 and also increased in the state from 9.1 percent to 12.2 percent during the same time frame.

The percentage for Black adults with 14 or more mental health days in the past 30 days in Osceola County increased from 8 percent in 2007 to a high of 18.7 percent before decreasing to seven percent in 2016. For the state, the percentage decreased from 2007 (12.8 percent) to 2016 (10.8 percent).

From 2007 to 2016, the percentage of Hispanic adults who had 14 or more poor mental health days in the past 30 in the state increased from 10.2 percent in 2007 to a high of 14.7 percent in 2010 before decreasing to 9.9 percent in 2016. There was an increase in Osceola County for Hispanic adults who had 14 or more poor mental health days from 13.7 percent in 2007 to 19.6 percent in 2016. (See Charts 8.67-8.69)

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY INCOME

Percentages for adults who had poor mental health 14 or more days of the past 30 with income less than $25K increased in Osceola County from 12.6 percent in 2007 to 23.2 percent in 2016. At the state level, the percentage also increased from 16.1 percent to 17.8 percent in the same time frame.

The percentages of adults who had poor mental health 14 or more days in the past 30 with an income between $25K and $49K increased in both the county and the state from 2007 to 2016. Percentages in Osceola County increased (11.6 percent to 19.3 percent) and at the state level, from 11.3 percent to 11.9 percent from 2007 to 2016.

There were variances across the county and the state for adults who had an income above $50K in the percentage of poor mental health days. Osceola County's percentage of adults experiencing more than 14 poor mental health days in the last 30 decreased from 9.1 percent in 2007 to 2.7 percent in 2016. The percentage increased from 5.7 percent in 2007 to 7.6 percent in 2016 at the state level. (See Charts 8.70-8.72)

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY EDUCATION (2007-2016)

Percentages for adults who had poor mental health 14 or more days of the past 30 with less than a high school education decreased from 17.5 percent in 2007 to 14.1 percent in 2016 in the county. At the state level, the percentage decreased from 15.8 percent in 2007 to 15.3 percent in 2016.

Percentages for adults with a high school education or GED increased in Osceola County (11.6 percent to 21.9 percent) and at the state level (11 percent to 12.1 percent) from 2007 to 2016.

Adults reporting poor mental health 14 or more days in the past 30 with more than a high school education followed a similar trend to those with a high school education or equivalent. There was an increase in Osceola County from 10.7 percent in 2007 to 14.7 percent in 2016. The state increased from 2007 to 2016 (8.2 percent to 10.1 percent). (See Charts 8.73-8.75)

Healthcare Access Disparities

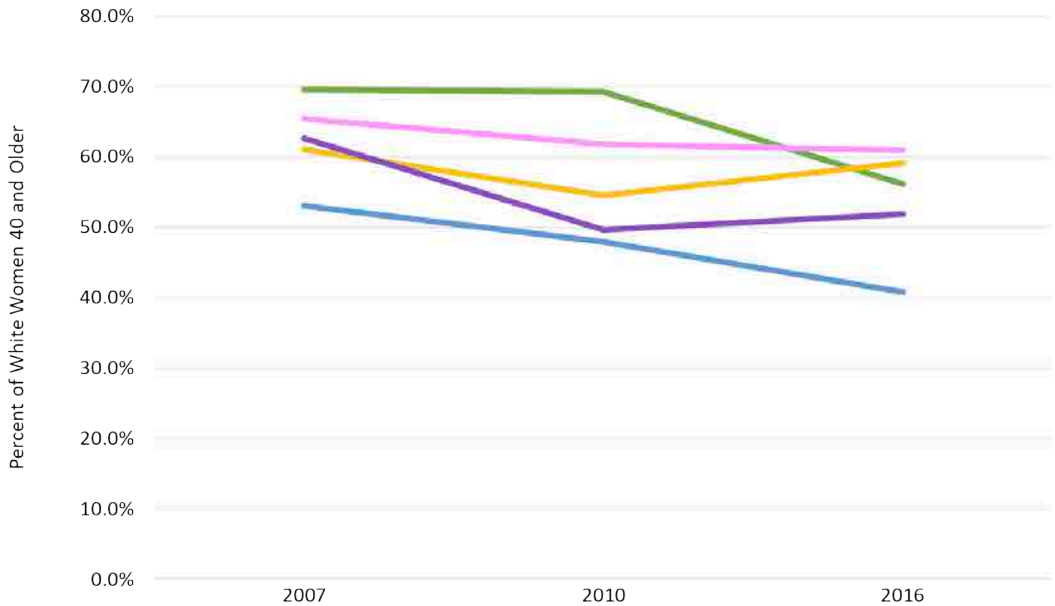
INSURANCE COVERAGE BY RACE/ETHNICITY (2007-2016)

The data for insurance coverage by race and ethnicity is complete for all groups from 2007 to 2016 in both the state and Osceola County. The percentage of White adults with insurance coverage increased in Osceola County (83.1 percent to 84.5 percent) and the state (87.8 percent to 89.5 percent).

Percentages in Osceola County decreased for Black adults from 2007 to 2016 in Osceola County from 80.4 percent to 64.4 percent, with an increase at the state level during this time span from 77.2 percent to 81 percent.

The data varies for insurance coverage for Hispanic adults in Osceola County and the state from 2007 to 2016. In Osceola County, there was an increase from 64.7 percent in 2007 to 73.7 percent in 2016. At the state, percentages increased from 61.4 percent to 71.1 percent during this time. (See Charts 8.76-8.78)

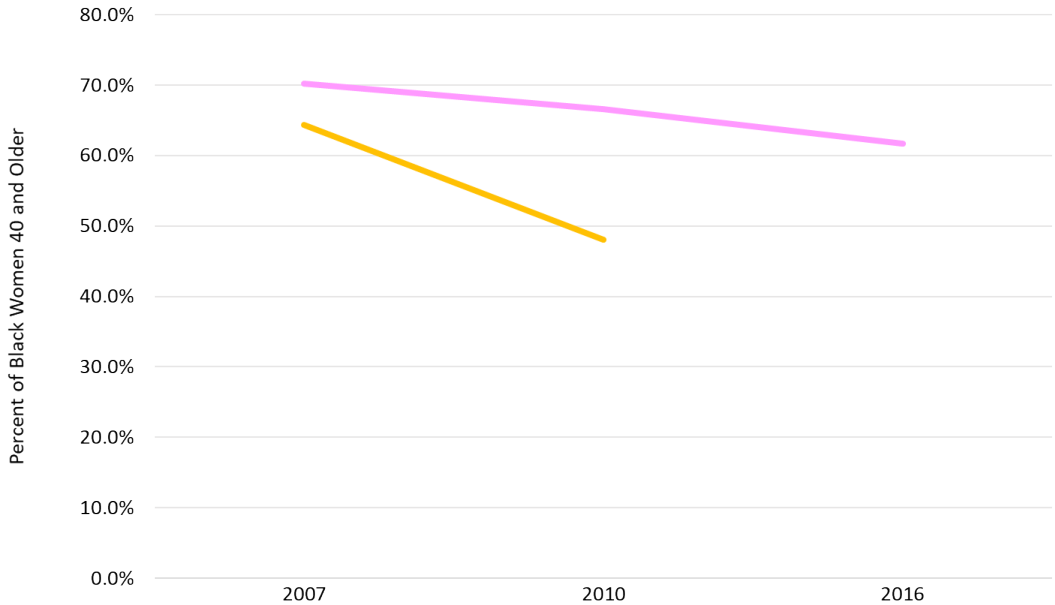
CHART 8.1: PERCENT OF WHITE WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	69.6%	69.3%	56.1%
ORANGE	61.0%	54.5%	59.1%
OSCEOLA	53.1%	47.9%	40.8%
SEMINOLE	62.7%	49.6%	51.9%
FLORIDA	65.4%	61.8%	60.9%

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

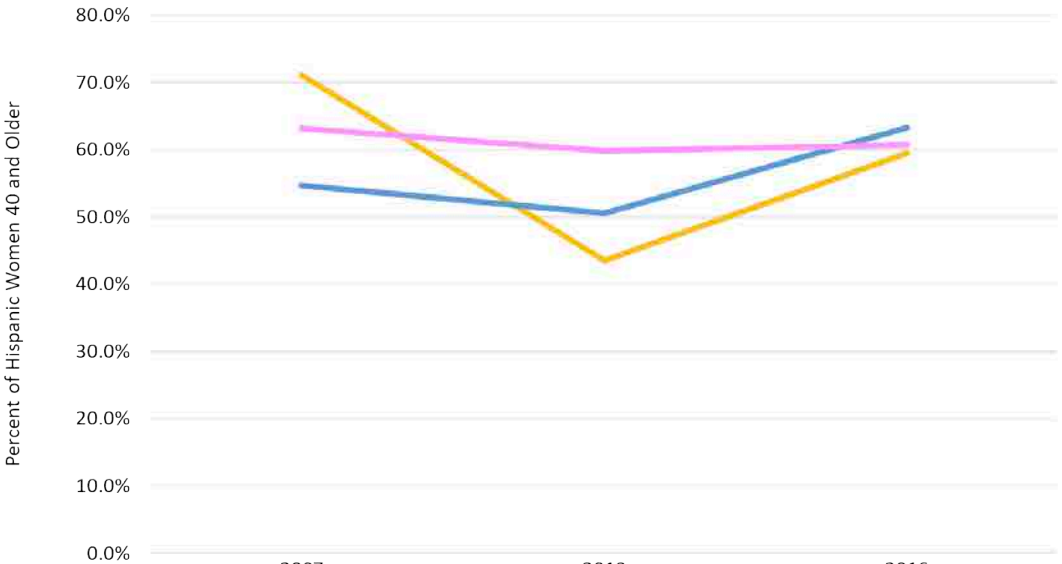
CHART 8.2: PERCENT OF BLACK WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	64.4%	48.0%	N/A
OSCEOLA	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	70.2%	66.6%	61.7%

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

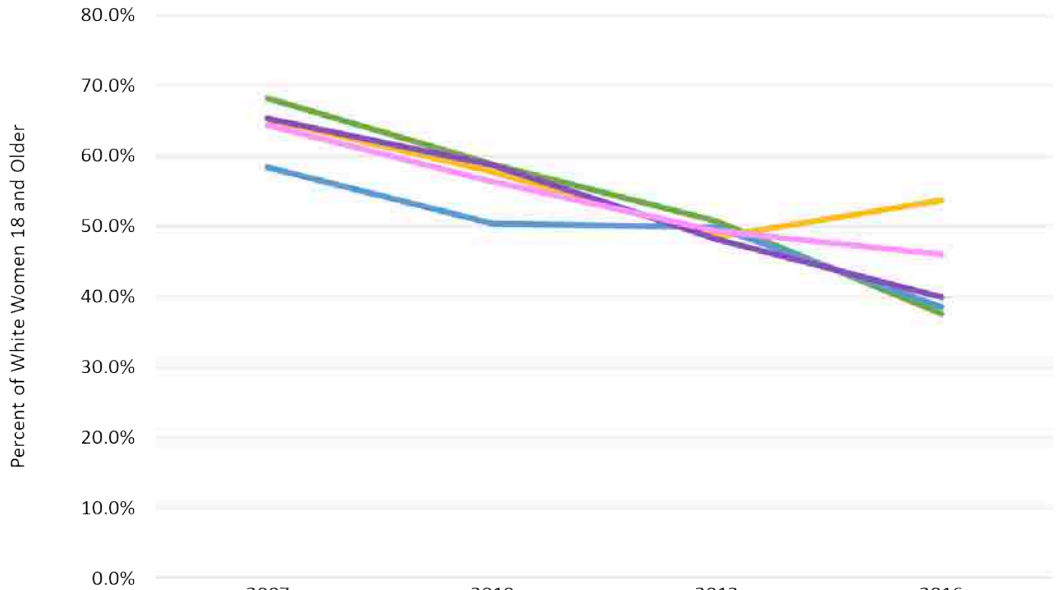
CHART 8.3: PERCENT OF HISPANIC WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	71.1%	43.5%	59.5%
OSCEOLA	54.7%	50.6%	63.3%
SEMINOLE	N/A	N/A	N/A
FLORIDA	63.2%	59.8%	60.7%

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

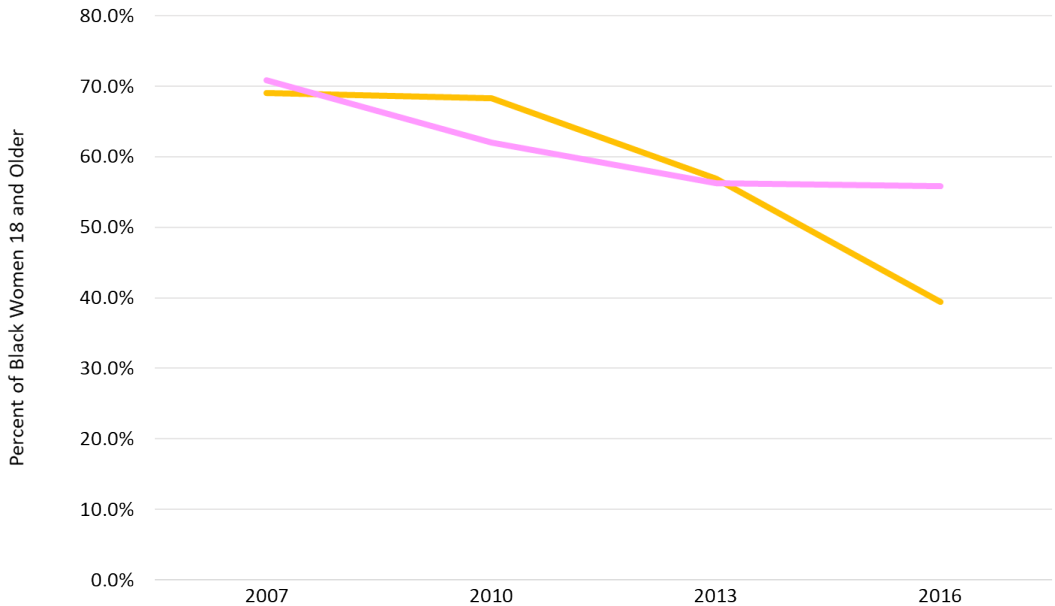
CHART 8.4: WHITE WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	68.2%	58.8%	50.7%	37.6%
ORANGE	65.2%	57.8%	48.5%	53.7%
OSCEOLA	58.4%	50.4%	49.9%	38.6%
SEMINOLE	65.3%	58.7%	48.2%	40.0%
FLORIDA	64.4%	56.4%	49.3%	46.0%

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

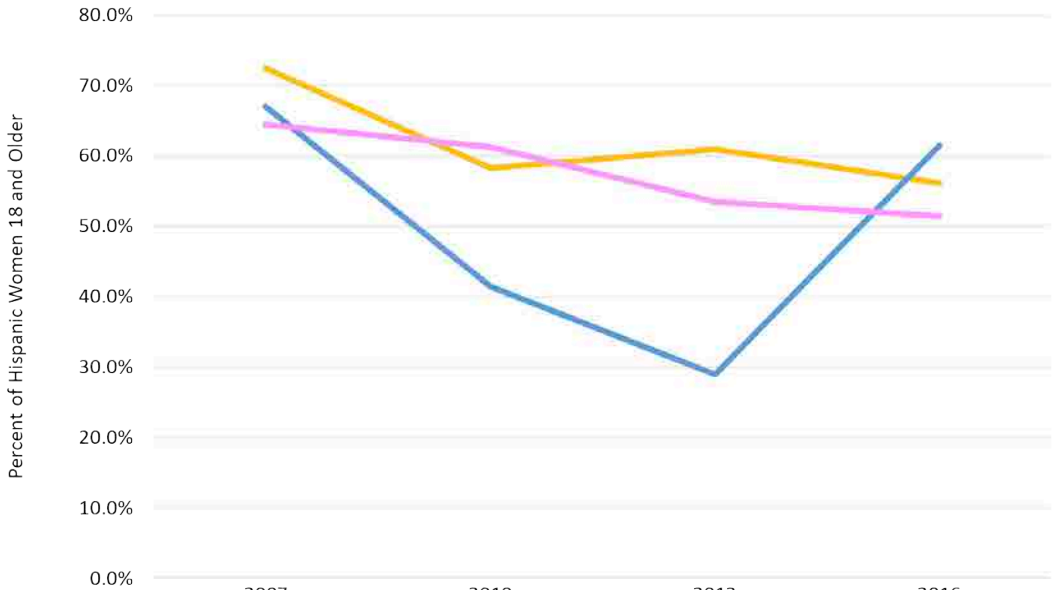
CHART 8.5: BLACK WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	69.0%	68.3%	56.9%	39.4%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	70.9%	62.0%	56.3%	55.8%

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

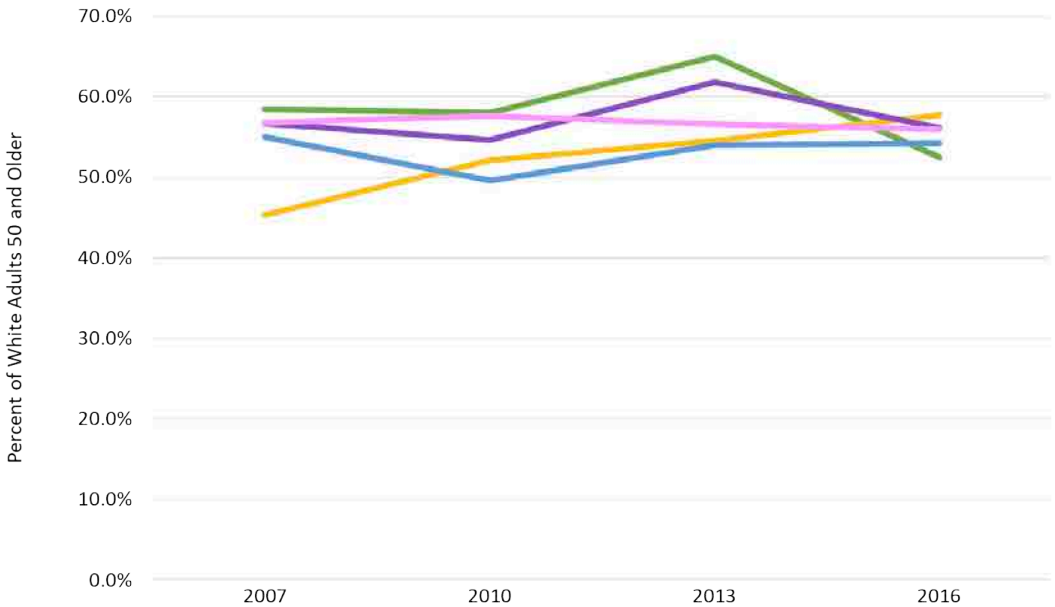
CHART 8.6: HISPANIC WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	72.4%	58.3%	60.9%	56.1%
OSCEOLA	67.0%	41.4%	29.0%	61.5%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	64.5%	61.3%	53.5%	51.5%

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

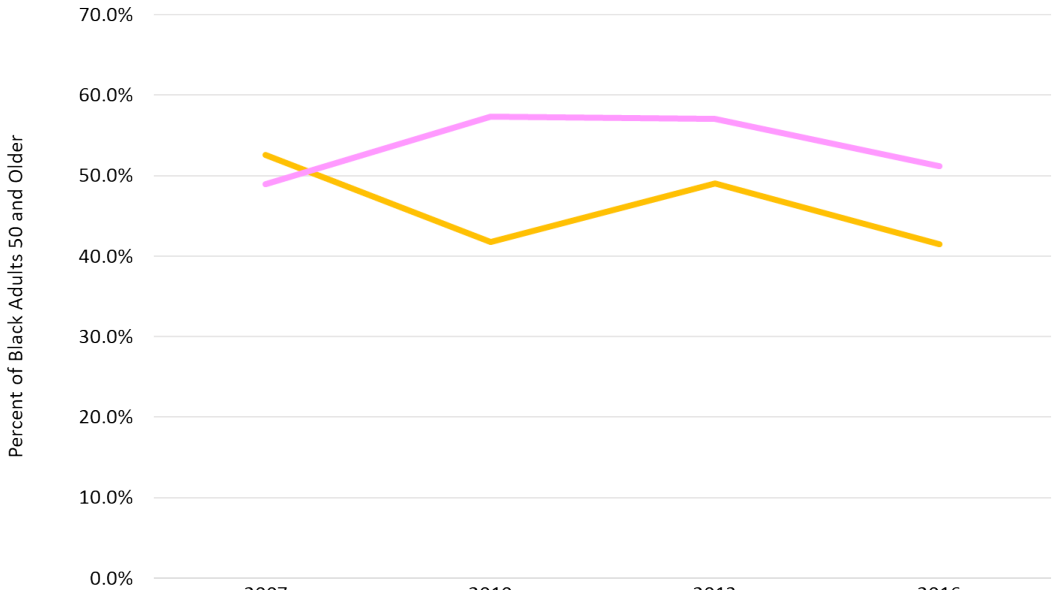
CHART 8.7: WHITE ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	58.5%	58.0%	65.0%	52.5%
ORANGE	45.3%	52.1%	54.5%	57.7%
OSCEOLA	55.0%	49.6%	54.0%	54.3%
SEMINOLE	56.7%	54.6%	61.8%	56.1%
FLORIDA	56.8%	57.6%	56.6%	55.9%

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

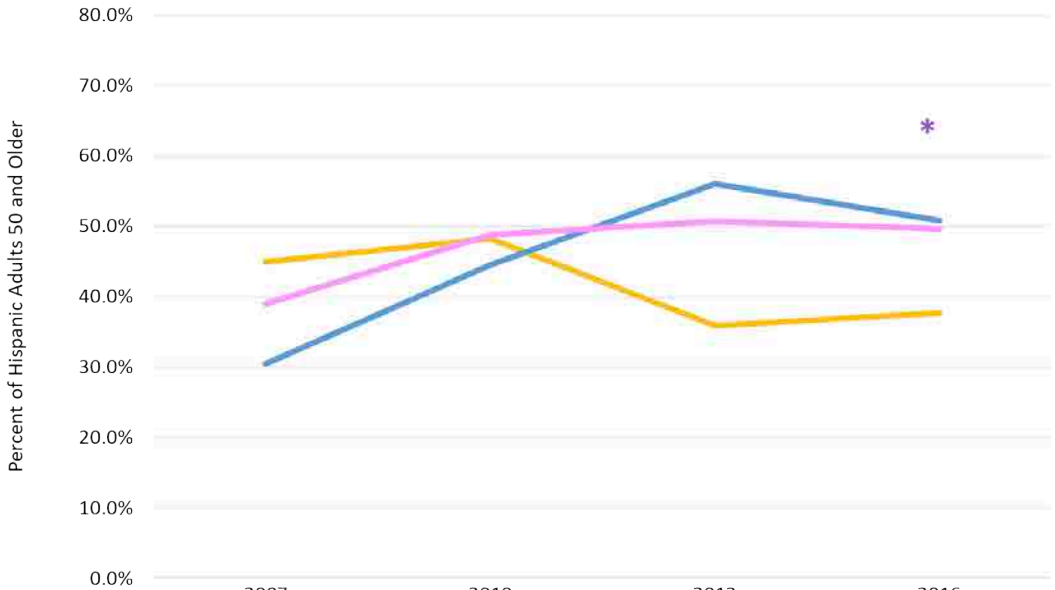
CHART 8.8: BLACK ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	52.6%	41.8%	49.0%	41.5%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	48.9%	57.3%	57.1%	51.2%

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

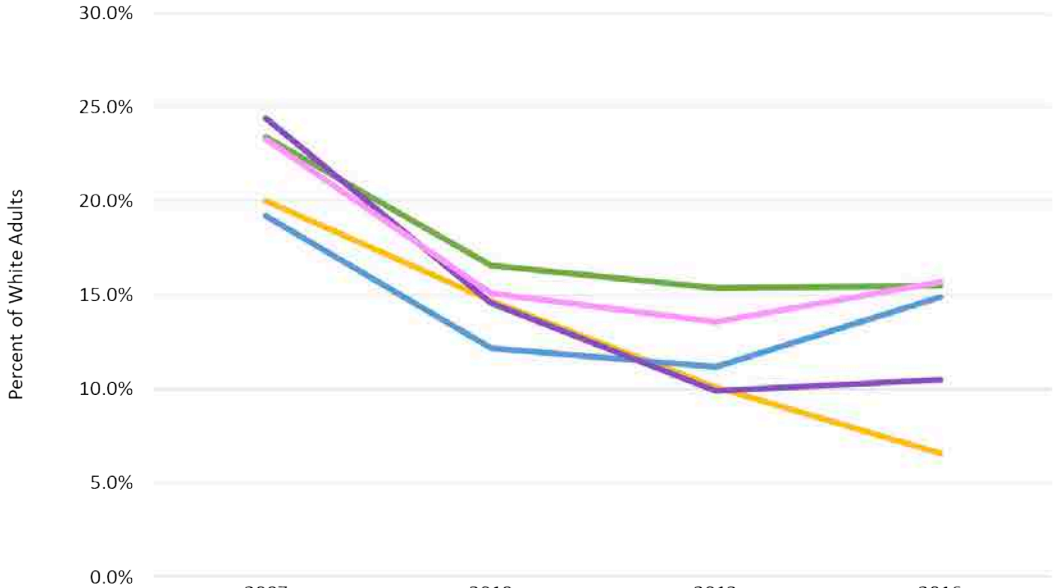
CHART 8.9: HISPANIC ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	45.0%	48.3%	35.9%	37.7%
OSCEOLA	30.5%	44.5%	56.0%	50.8%
SEMINOLE	N/A	N/A	N/A	70.6%
FLORIDA	39.0%	48.8%	50.7%	49.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

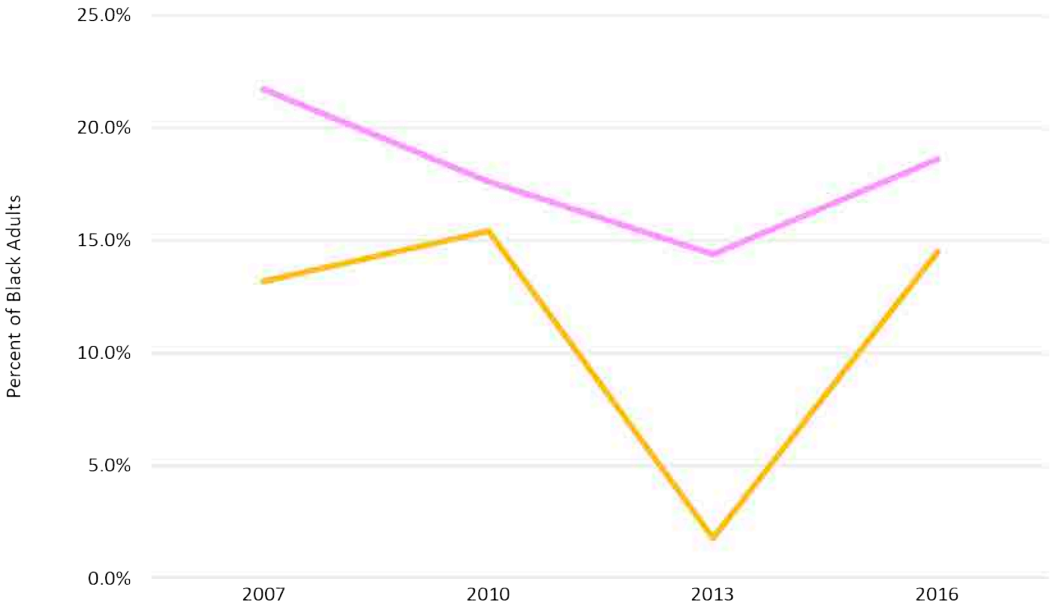
CHART 8.10: WHITE ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	23.4%	16.6%	15.4%	15.5%
ORANGE	20.0%	14.7%	10.1%	6.6%
OSCEOLA	19.2%	12.2%	11.2%	14.9%
SEMINOLE	24.4%	14.6%	9.9%	10.5%
FLORIDA	23.3%	15.1%	13.6%	15.7%

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

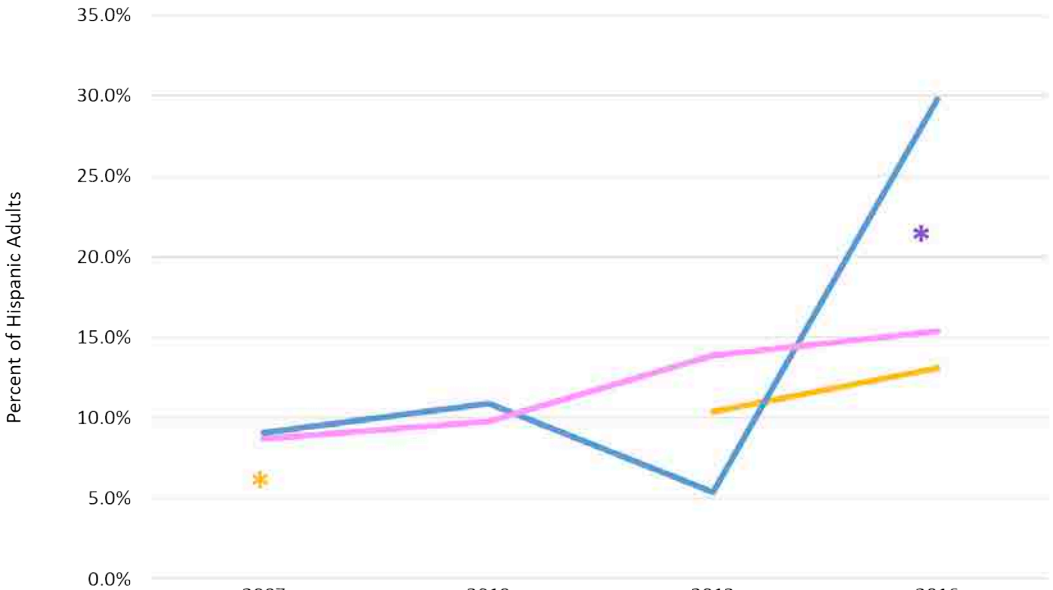
CHART 8.11: BLACK ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	13.2%	15.4%	1.8%	14.5%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	21.7%	17.6%	14.4%	18.6%

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

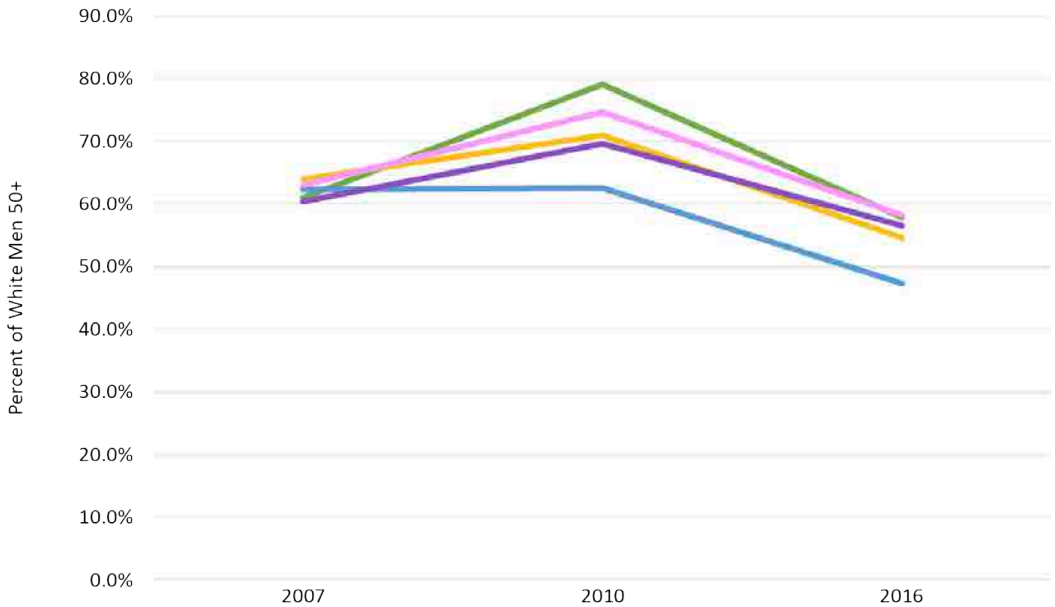
CHART 8.12: HISPANIC ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	8.3%	N/A	10.4%	13.1%
OSCEOLA	9.1%	10.9%	5.4%	29.8%
SEMINOLE	N/A	N/A	N/A	24.6%
FLORIDA	8.7%	9.8%	13.9%	15.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

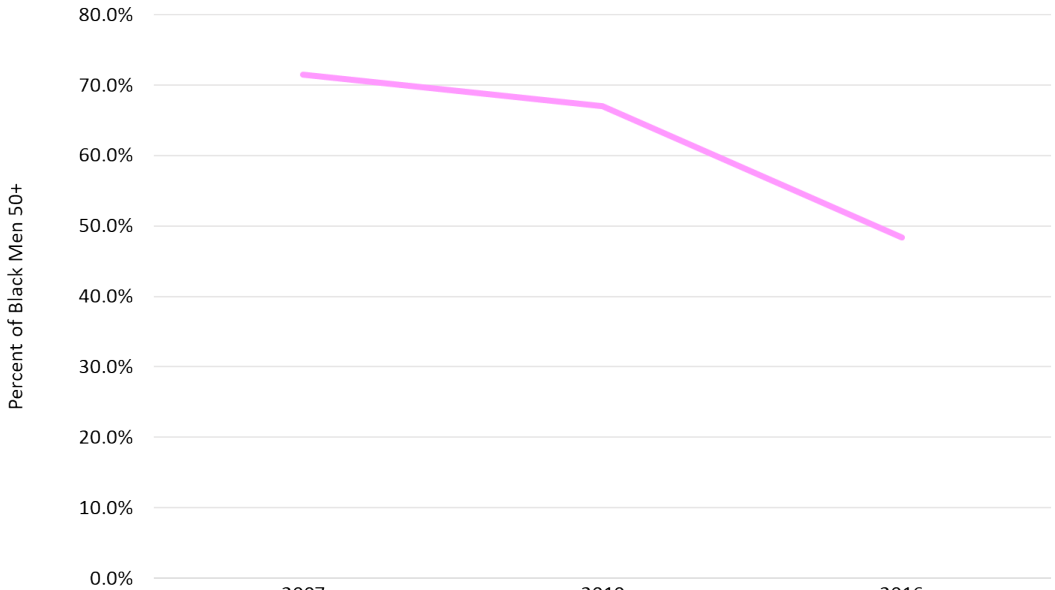
CHART 8.13: WHITE MEN AGES 50 AND OLDER WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	61.0%	79.1%	57.9%
ORANGE	64.0%	70.9%	54.7%
OSCEOLA	62.3%	62.6%	47.4%
SEMINOLE	60.4%	69.6%	56.6%
FLORIDA	63.1%	74.7%	58.2%

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

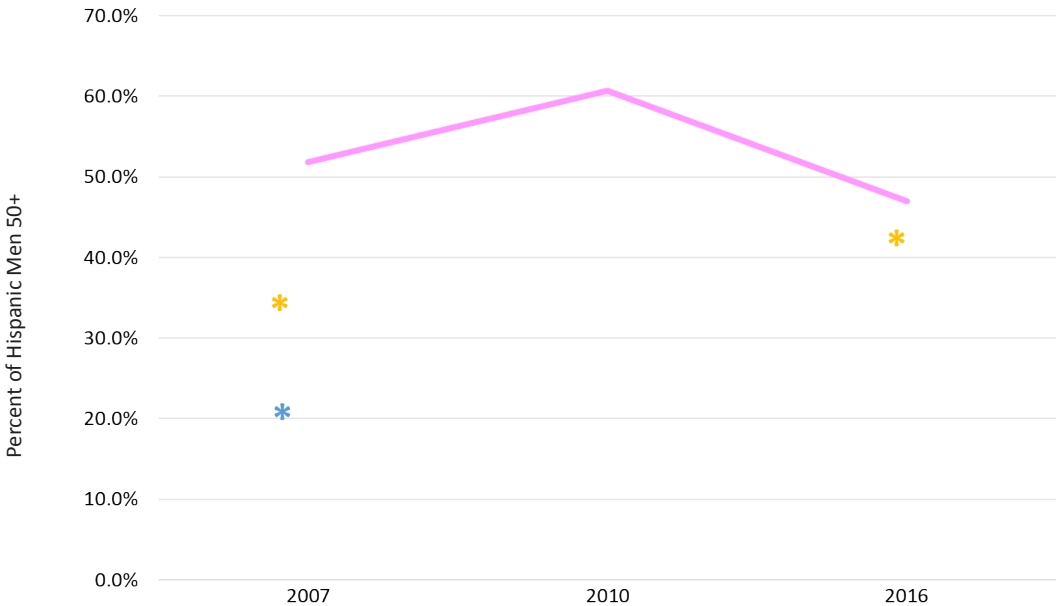
CHART 8.14: BLACK MEN AGES 50 AND OLDER WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	N/A	N/A	N/A
OSCEOLA	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	71.5%	67.0%	48.4%

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

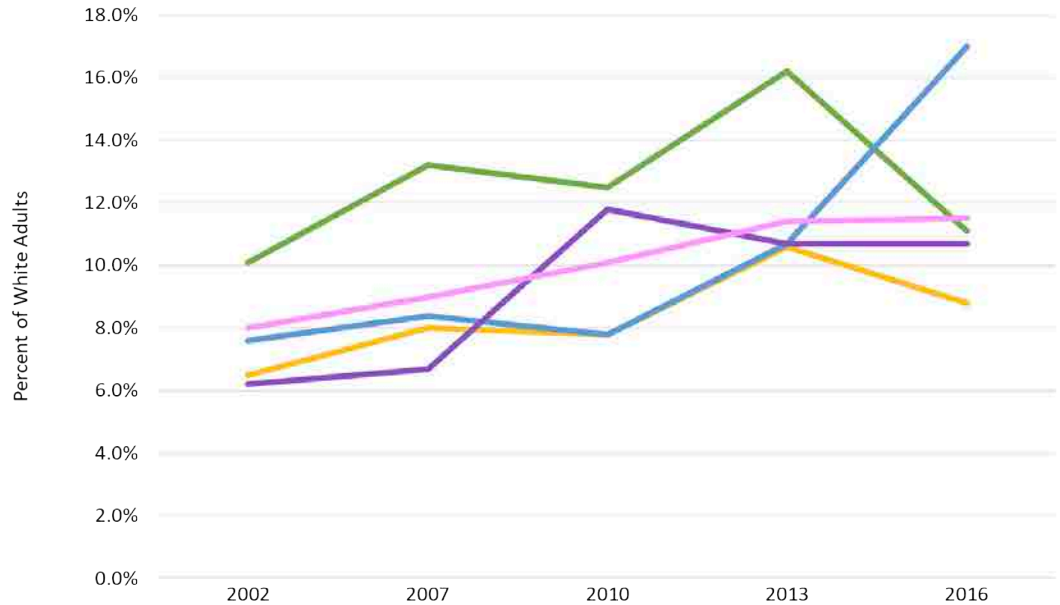
CHART 8.15: HISPANIC MEN AGES 50 AND OLDER WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	39.3%	N/A	48.2%
OSCEOLA	27.3%	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	51.8%	60.7%	47.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.16: WHITE ADULTS WITH DIAGNOSED DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	10.1%	13.2%	12.5%	16.2%	11.1%
ORANGE	6.5%	8.0%	7.8%	10.6%	8.8%
OSCEOLA	7.6%	8.4%	7.8%	10.7%	17.0%
SEMINOLE	6.2%	6.7%	11.8%	10.7%	10.7%
FLORIDA	8.0%	9.0%	10.1%	11.4%	11.5%

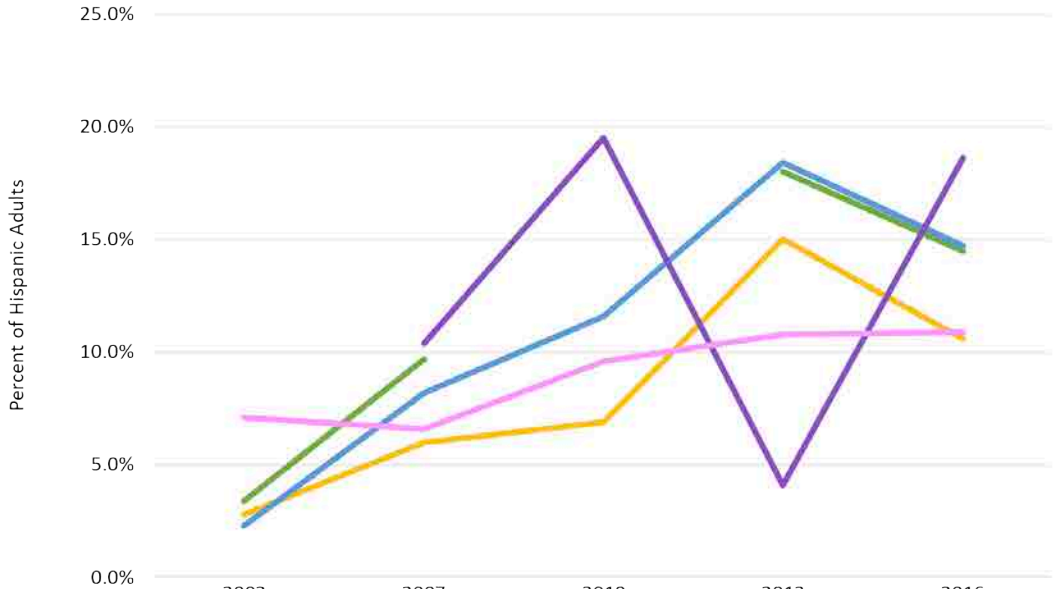
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 8.17: BLACK ADULTS WITH DIAGNOSED DIABETES (2002-2016)

	2002	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A	18.5%
ORANGE	17.1%	13.4%	21.5%	6.4%	10.9%
OSCEOLA	N/A	22.8%	30.1%	8.5%	3.6%
SEMINOLE	3.6%	12.5%	N/A	10.4%	9.4%
FLORIDA	10.6%	12.4%	13.1%	12.3%	14.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

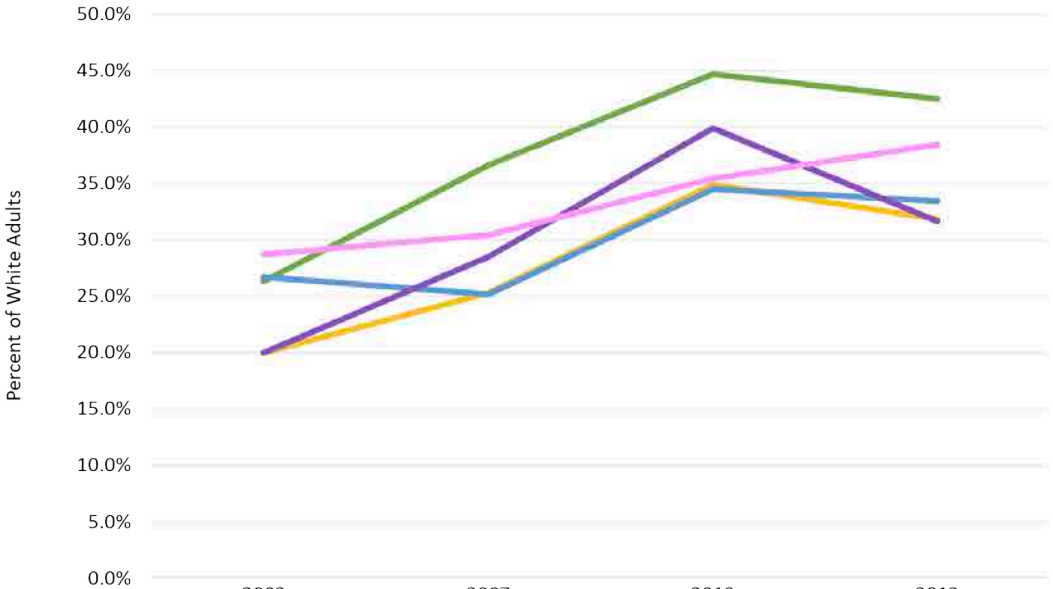
CHART 8.18: HISPANIC ADULTS WITH DIAGNOSED DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	3.4%	9.7%	N/A	18.0%	14.5%
ORANGE	2.8%	6.0%	6.9%	15.0%	10.6%
OSCEOLA	2.3%	8.2%	11.6%	18.4%	14.7%
SEMINOLE	N/A	10.4%	19.5%	4.1%	18.6%
FLORIDA	7.1%	6.6%	9.6%	10.8%	10.9%

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

CHART 8.19: WHITE ADULTS WHO HAVE BEEN TOLD THEY HAVE HYPERTENSION (2002-2013)



	2002	2007	2010	2013
LAKE	26.3%	36.6%	44.7%	42.5%
ORANGE	20.0%	25.3%	34.9%	31.8%
OSCEOLA	26.7%	25.2%	34.5%	33.4%
SEMINOLE	20.0%	28.5%	39.9%	31.6%
FLORIDA	28.7%	30.4%	35.4%	38.4%

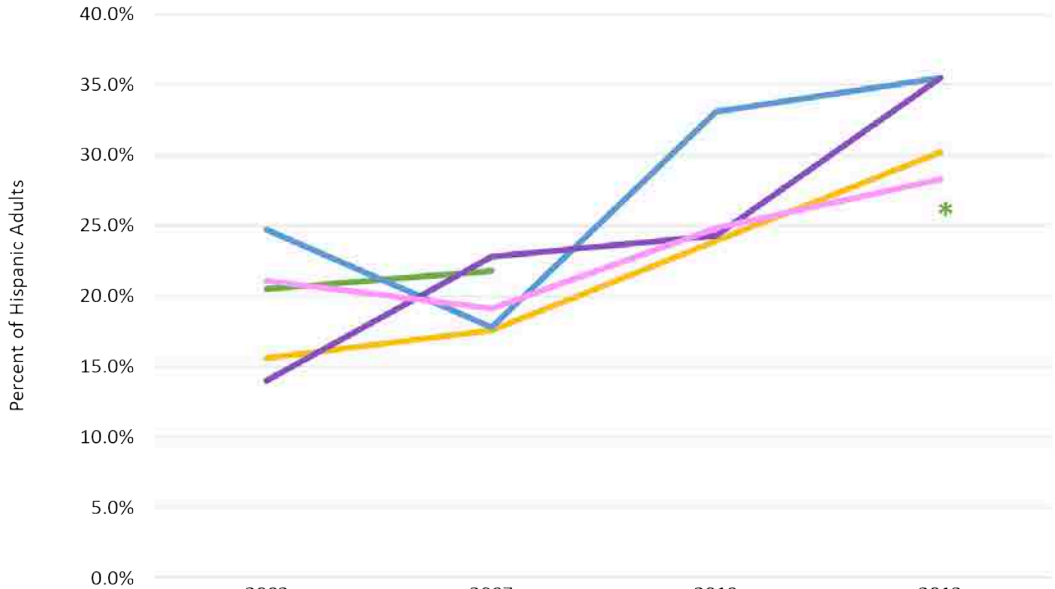
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 8.20: BLACK ADULTS WHO HAVE BEEN TOLD THEY HAVE HAVE HYPERTENSION (2002-2013)

	2002	2007	2010	2013
LAKE	N/A	N/A	N/A	N/A
ORANGE	40.1%	37.5%	45.5%	26.5%
OSCEOLA	N/A	30.7%	42.8%	15.8%
SEMINOLE	N/A	45.7%	N/A	52.0%
FLORIDA	32.2%	32.5%	41.7%	33.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

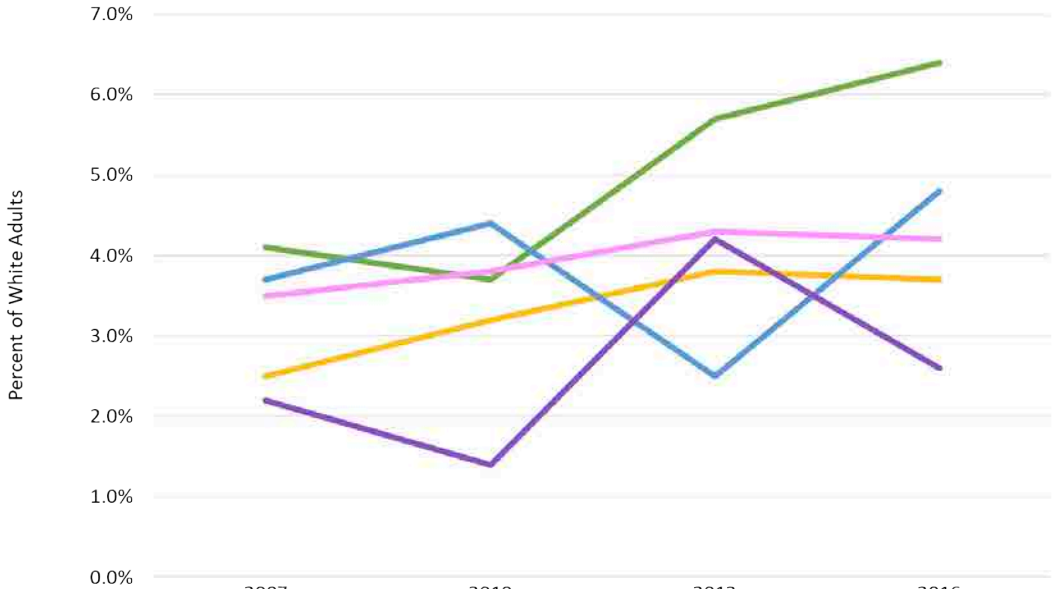
CHART 8.21: HISPANIC ADULTS WHO HAVE BEEN TOLD THEY HAVE HYPERTENSION (2002-2013)



	2002	2007	2010	2013
LAKE	20.5%	21.8%	N/A	27.7%
ORANGE	15.6%	17.6%	23.9%	30.2%
OSCEOLA	24.7%	17.8%	33.1%	35.5%
SEMINOLE	14.0%	22.8%	24.3%	35.5%
FLORIDA	21.1%	19.1%	24.8%	28.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

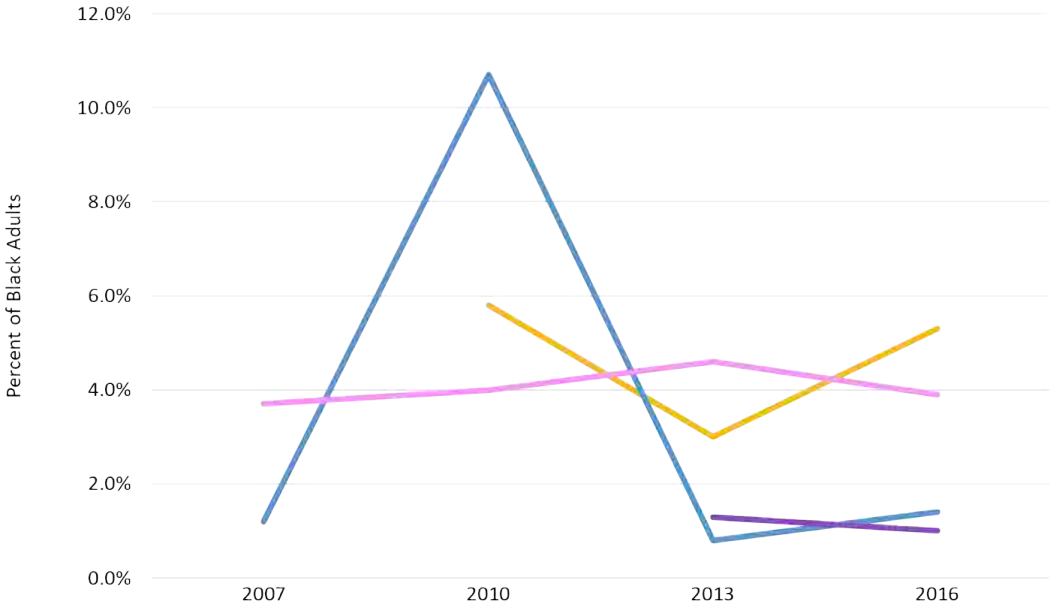
CHART 8.22: WHITE ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	4.1%	3.7%	5.7%	6.4%
ORANGE	2.5%	3.2%	3.8%	3.7%
OSCEOLA	3.7%	4.4%	2.5%	4.8%
SEMINOLE	2.2%	1.4%	4.2%	2.6%
FLORIDA	3.5%	3.8%	4.3%	4.2%

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

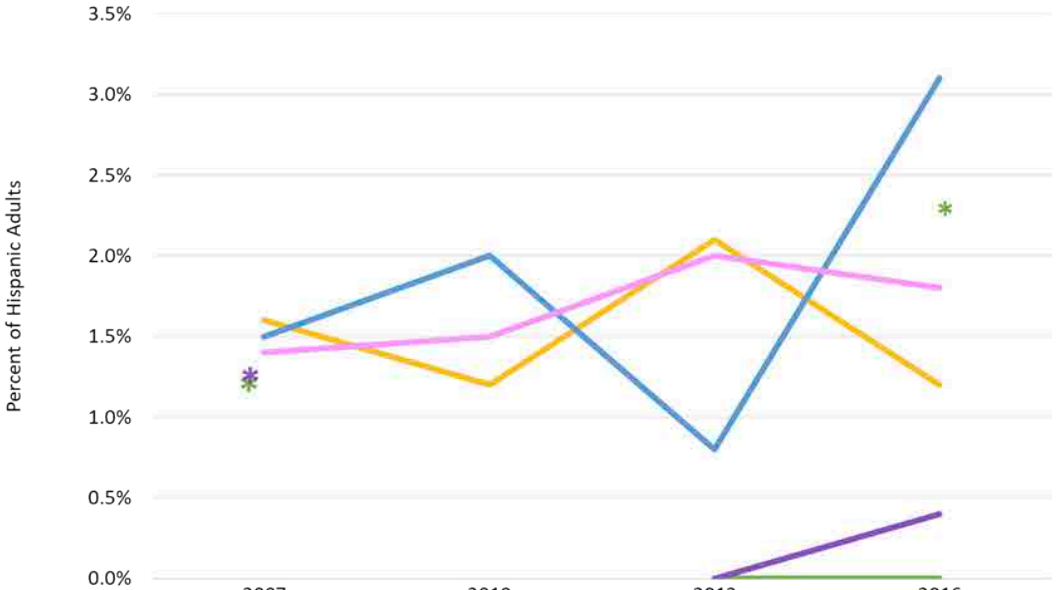
CHART 8.23: BLACK ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	N/A	5.8%	3.0%	5.3%
OSCEOLA	1.2%	10.7%	0.8%	1.4%
SEMINOLE	N/A	N/A	1.3%	1.0%
FLORIDA	3.7%	4.0%	4.6%	3.9%

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

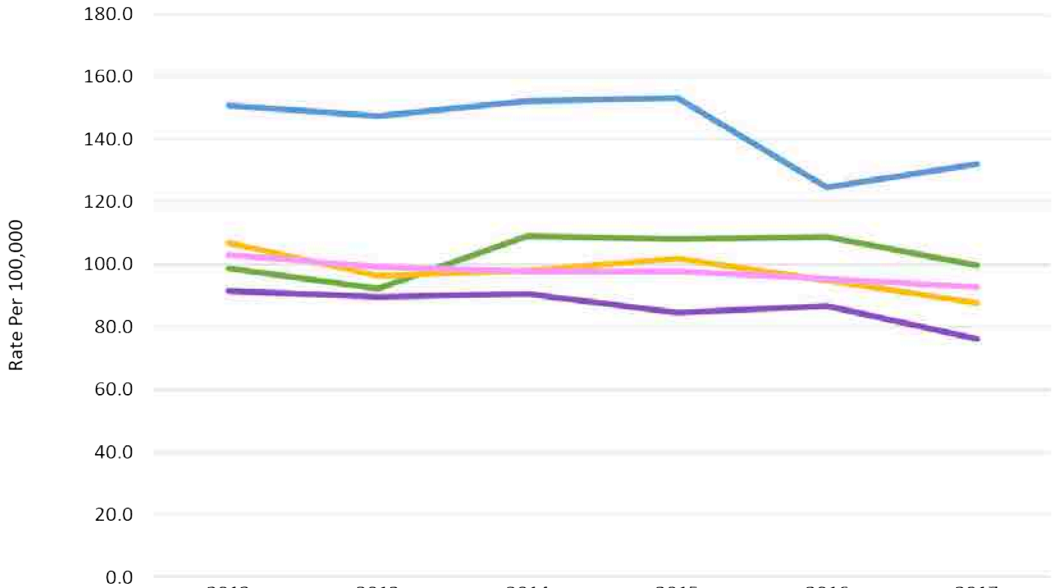
CHART 8.24: HISPANIC ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	1.4%	N/A	0.0%	0.0%
ORANGE	1.6%	1.2%	2.1%	1.2%
OSCEOLA	1.5%	2.0%	0.8%	3.1%
SEMINOLE	1.5%	N/A	0.0%	0.4%
FLORIDA	1.4%	1.5%	2.0%	1.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

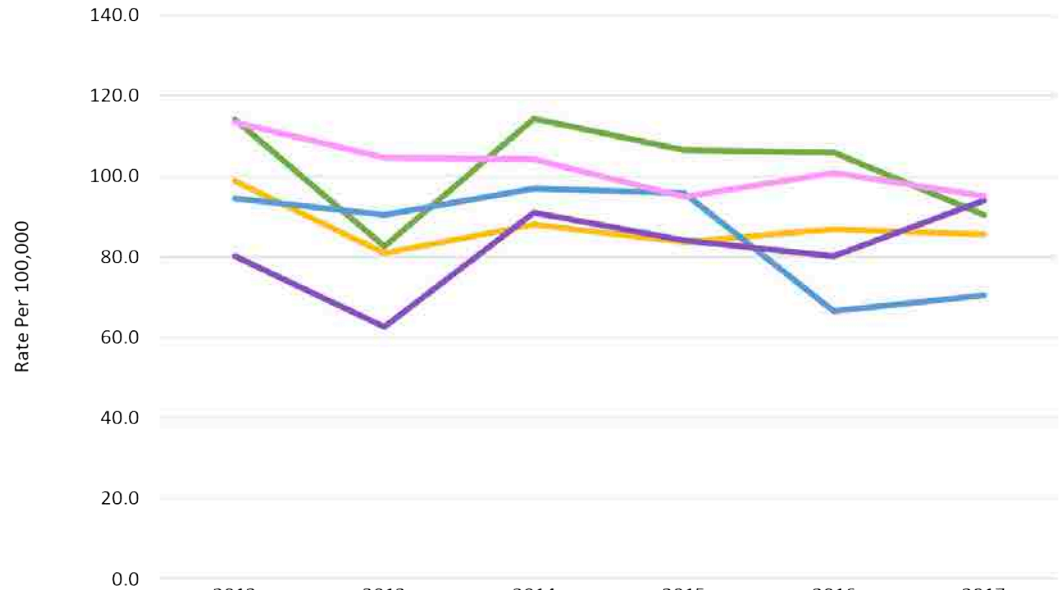
CHART 8.25: WHITE AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	98.7	92.2	109.0	108.1	108.8	99.7
ORANGE	106.8	96.4	98.0	101.9	95.0	87.7
OSCEOLA	150.8	147.5	152.2	153.2	124.7	132.0
SEMINOLE	91.5	89.6	90.6	84.7	86.8	76.3
FLORIDA	103.0	99.3	97.9	97.7	95.3	92.8

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

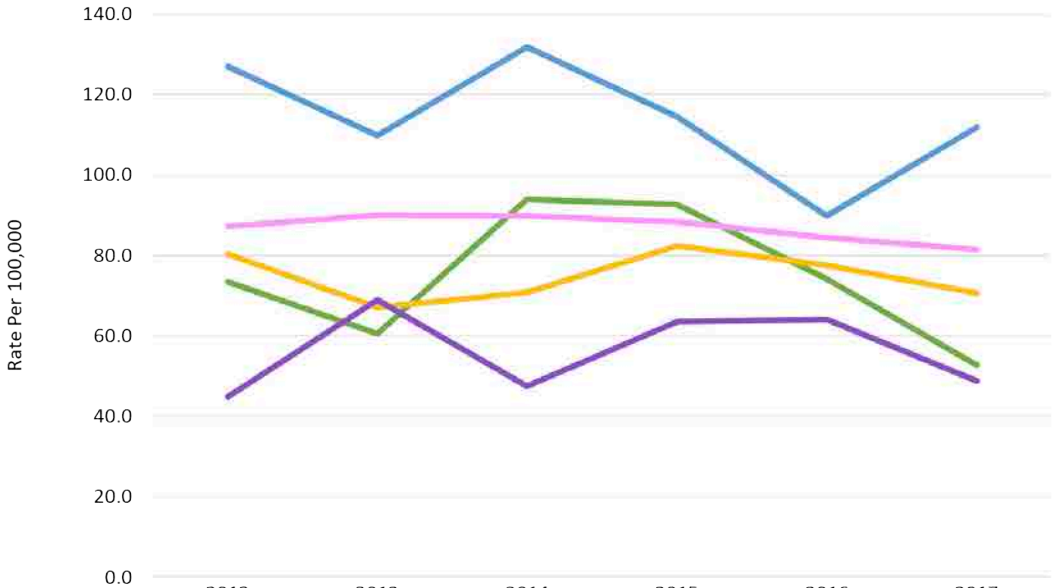
CHART 8.26: BLACK AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	114.2	82.6	114.3	106.5	105.9	90.5
ORANGE	98.8	81.0	88.0	83.7	86.8	85.6
OSCEOLA	94.5	90.4	96.9	95.9	66.5	70.4
SEMINOLE	80.2	62.7	90.9	84.0	80.2	94.0
FLORIDA	113.4	104.6	104.3	94.9	100.9	95.1

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

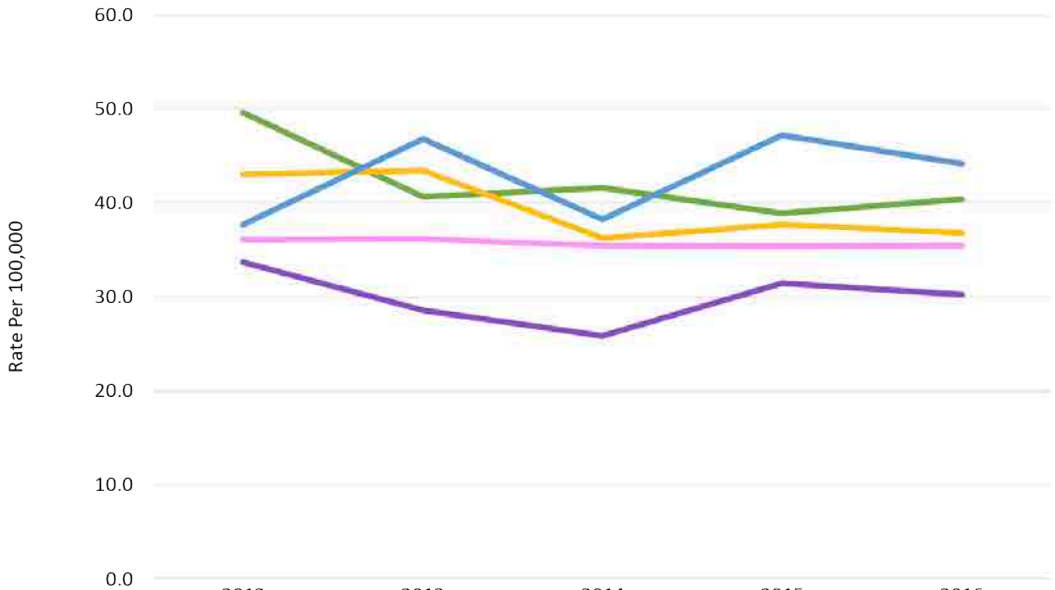
CHART 8.27: HISPANIC AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	73.4	60.6	94.0	92.7	74.3	52.7
ORANGE	80.3	67.2	70.8	82.4	77.6	70.6
OSCEOLA	127.0	109.9	131.9	114.5	89.8	111.9
SEMINOLE	44.9	68.9	47.5	63.5	64.1	48.8
FLORIDA	87.3	90.0	89.9	88.3	84.4	81.4

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

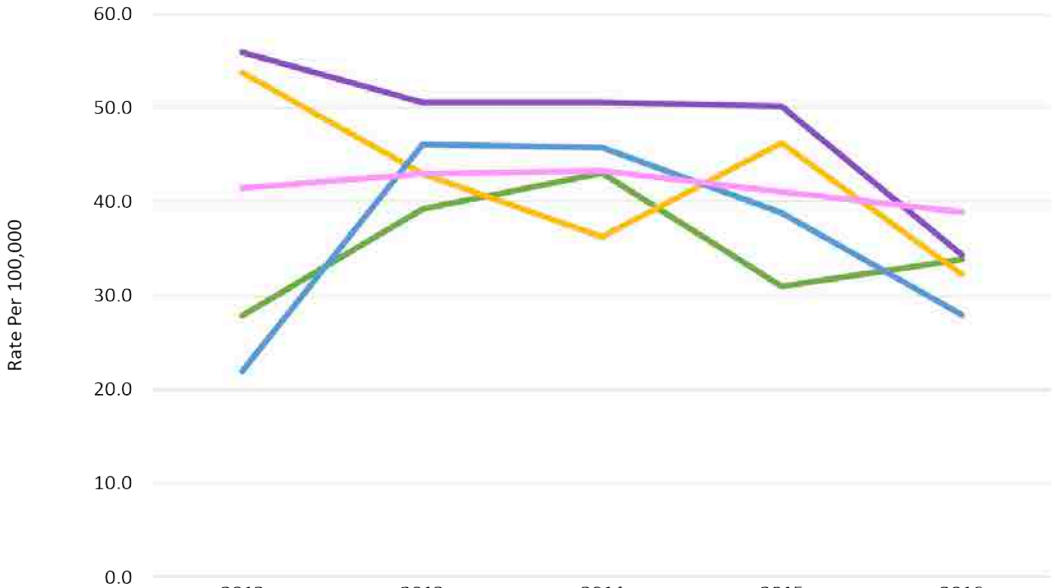
CHART 8.28: WHITE AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	49.6	40.7	41.6	38.9	40.4
ORANGE	43.1	43.5	36.3	37.7	36.8
OSCEOLA	37.7	46.8	38.3	47.2	44.2
SEMINOLE	33.7	28.6	25.9	31.5	30.3
FLORIDA	36.1	36.2	35.5	35.4	35.5

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

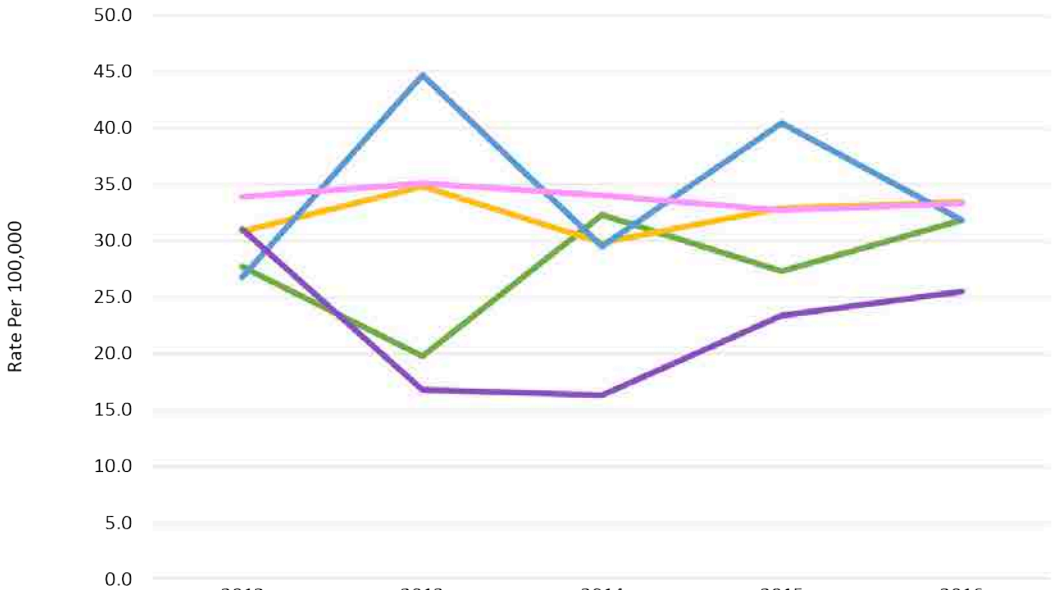
CHART 8.29: BLACK AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	27.9	39.2	43.1	31.0	33.9
ORANGE	53.8	43.0	36.3	46.3	32.3
OSCEOLA	22.0	46.1	45.8	38.8	28.0
SEMINOLE	55.9	50.6	50.6	50.2	34.4
FLORIDA	41.5	43.0	43.3	41.1	38.9

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

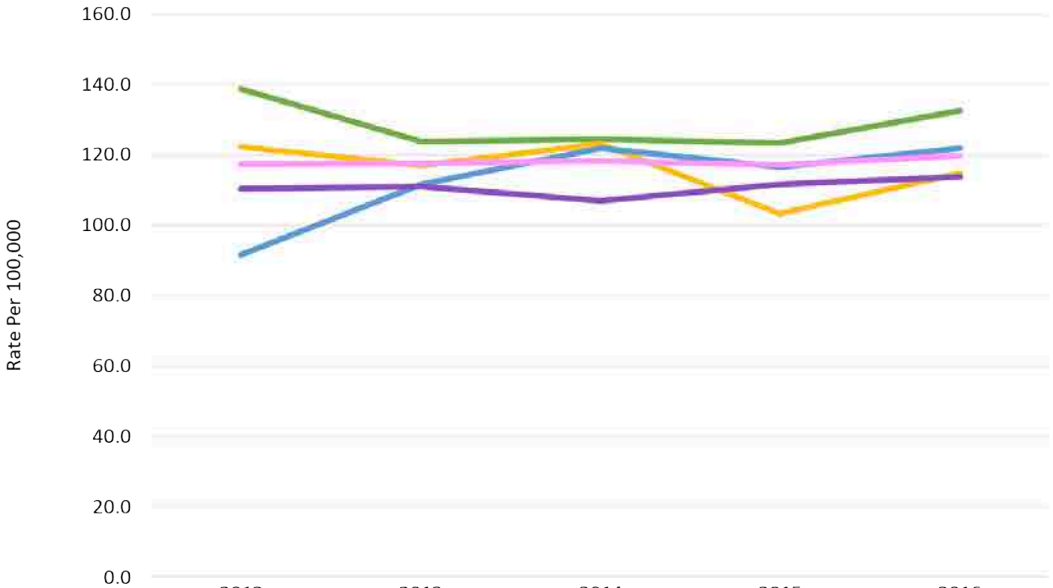
CHART 8.30: HISPANIC AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	27.7	19.8	32.3	27.3	31.8
ORANGE	30.8	34.8	29.8	32.9	33.4
OSCEOLA	26.8	44.7	29.5	40.4	31.8
SEMINOLE	31.0	16.8	16.3	23.4	25.5
FLORIDA	33.9	35.1	34.0	32.7	33.3

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

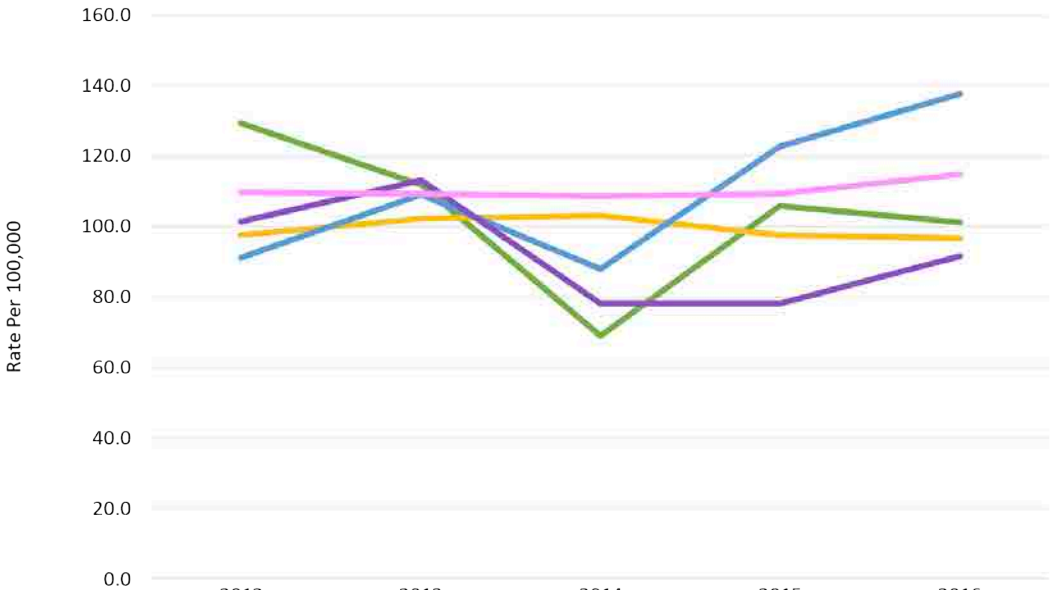
CHART 8.31: WHITE FEMALE BREAST CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	138.7	123.7	124.4	123.4	132.6
ORANGE	122.3	117.0	123.1	103.3	114.9
OSCEOLA	91.7	111.6	121.9	116.6	121.9
SEMINOLE	110.3	111.0	106.9	111.7	113.7
FLORIDA	117.4	117.7	118.3	117.2	119.7

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

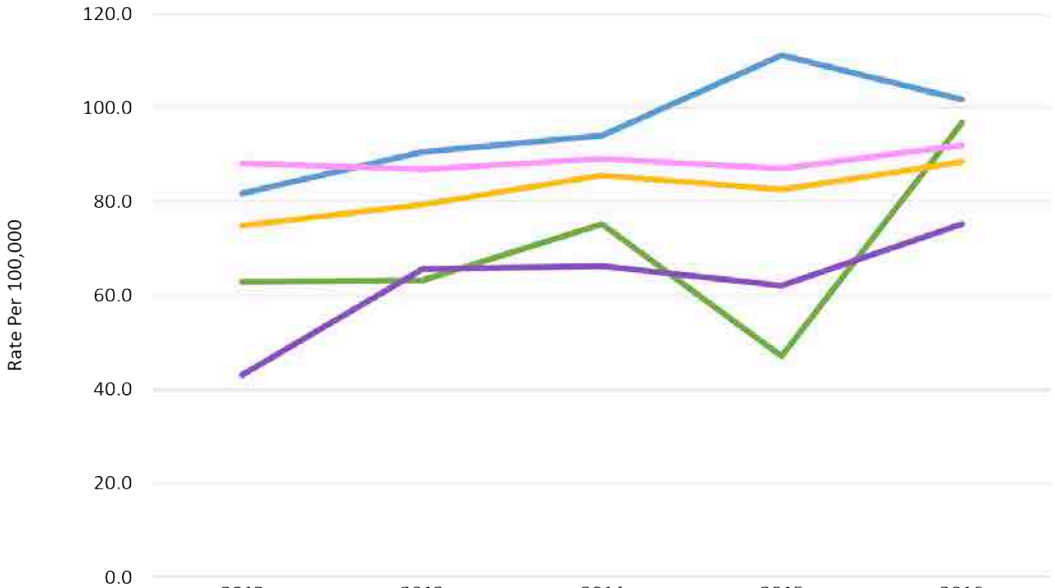
CHART 8.32: BLACK FEMALE BREAST CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	129.3	111.9	69.0	106.0	101.3
ORANGE	97.7	102.3	103.1	97.7	96.7
OSCEOLA	91.3	109.2	88.0	122.8	137.6
SEMINOLE	101.5	113.2	78.2	78.3	91.7
FLORIDA	109.7	109.3	108.7	109.3	114.9

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

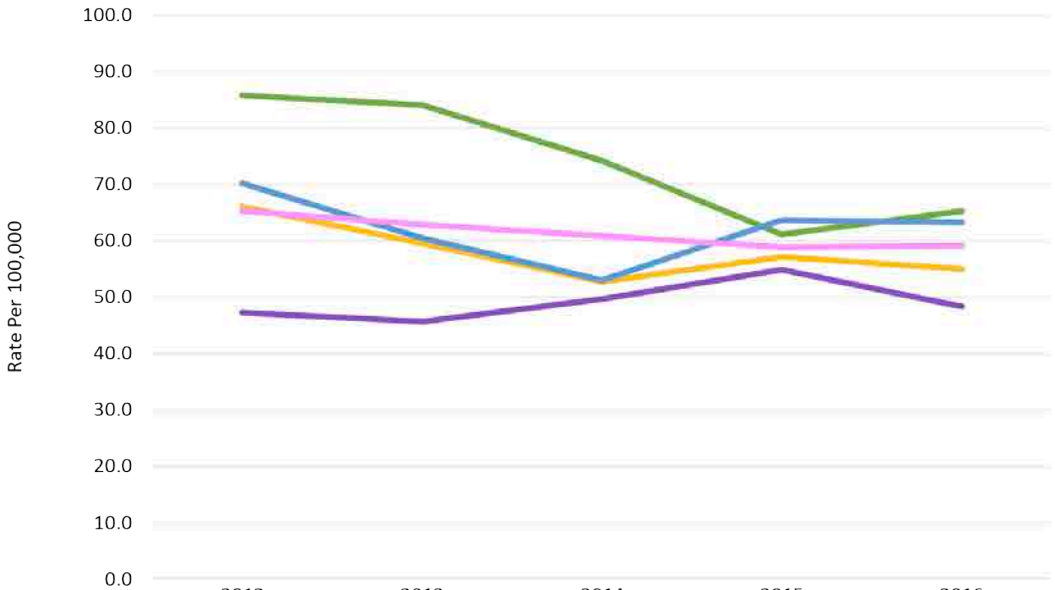
CHART 8.33: HISPANIC FEMALE BREAST CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	62.9	63.3	75.2	47.2	96.8
ORANGE	74.9	79.5	85.6	82.6	88.5
OSCEOLA	81.8	90.6	94.2	111.2	101.8
SEMINOLE	43.2	65.7	66.4	62.2	75.2
FLORIDA	88.2	87.0	89.1	87.1	92.0

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

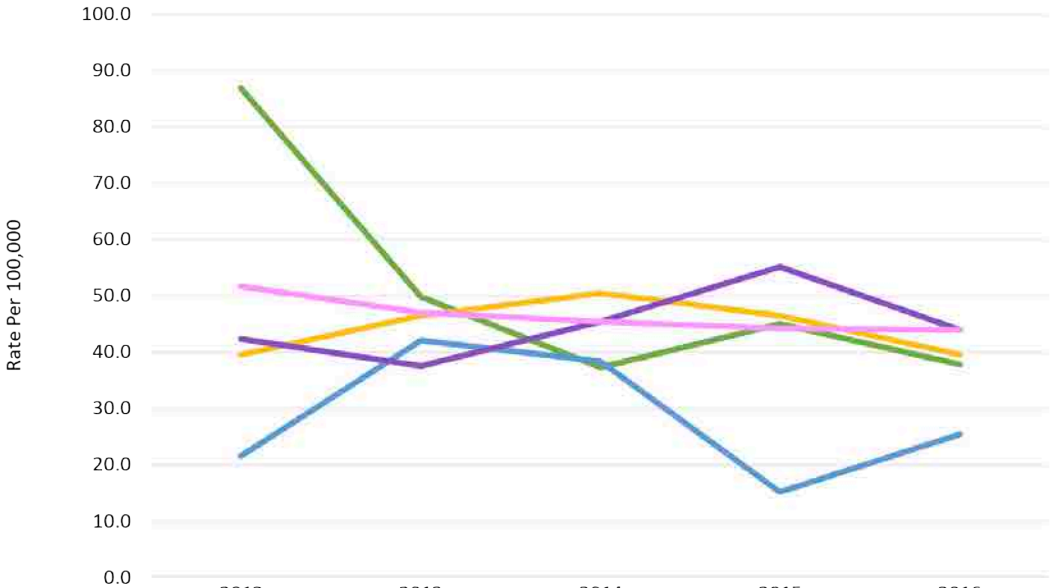
CHART 8.34: WHITE LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	85.8	84.0	74.2	61.1	65.2
ORANGE	66.0	59.5	52.8	57.1	55.0
OSCEOLA	70.2	60.4	53.0	63.6	63.3
SEMINOLE	47.3	45.7	49.7	54.9	48.3
FLORIDA	65.3	62.9	60.9	58.9	59.1

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

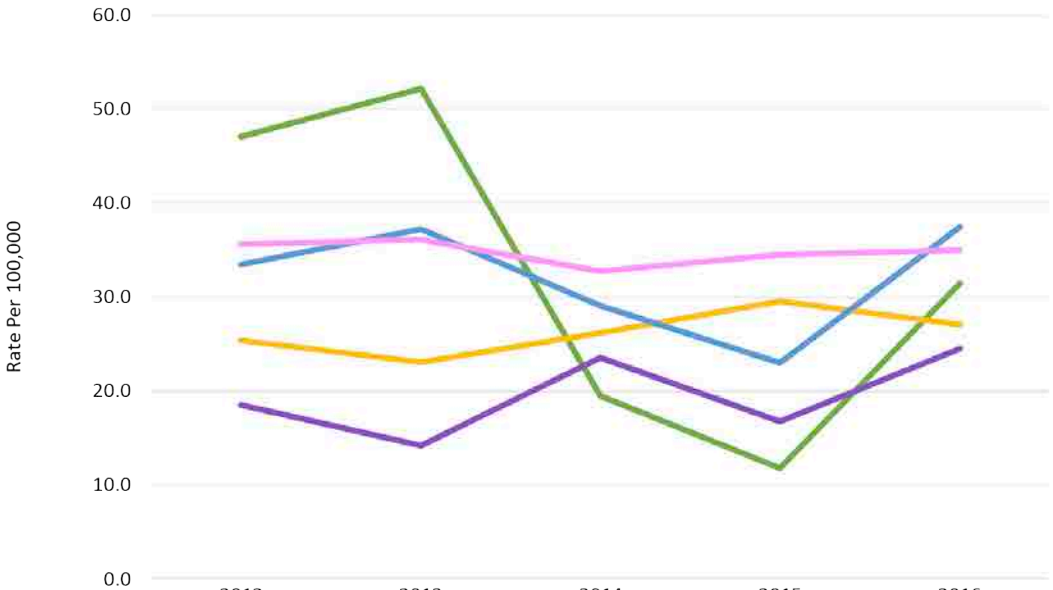
CHART 8.35: BLACK LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	86.8	49.8	37.3	45.0	37.8
ORANGE	39.5	46.5	50.5	46.5	39.6
OSCEOLA	21.6	42.1	38.3	15.2	25.4
SEMINOLE	42.4	37.5	45.4	55.2	44.0
FLORIDA	51.7	47.0	45.4	44.2	43.9

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

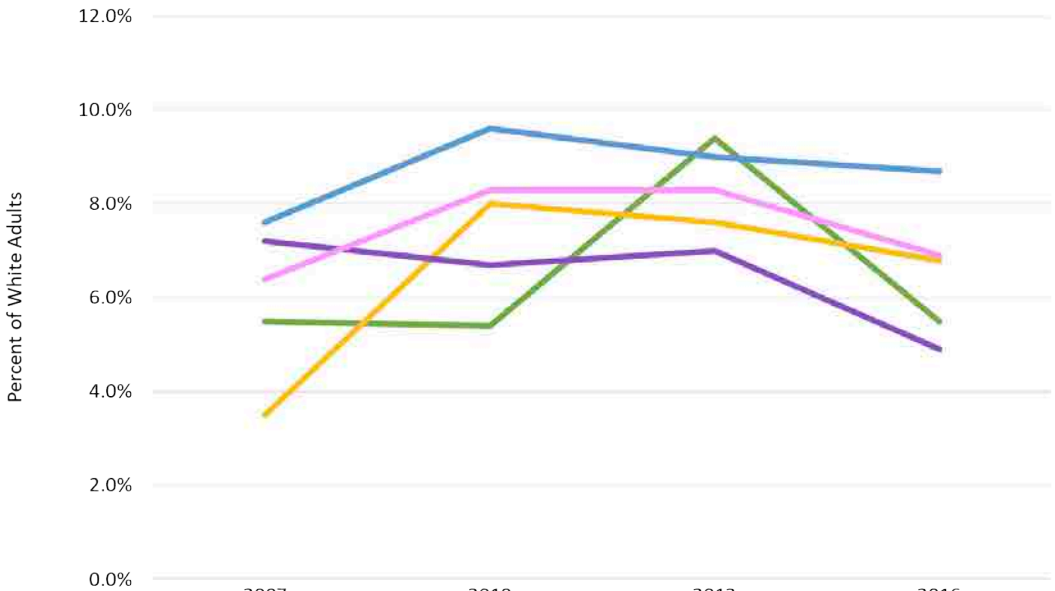
CHART 8.36: HISPANIC LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	47.1	52.2	19.5	11.8	31.5
ORANGE	25.4	23.1	26.2	29.6	27.1
OSCEOLA	33.5	37.2	29.1	23.0	37.5
SEMINOLE	18.5	14.2	23.6	16.8	24.5
FLORIDA	35.6	36.1	32.8	34.5	35.0

Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

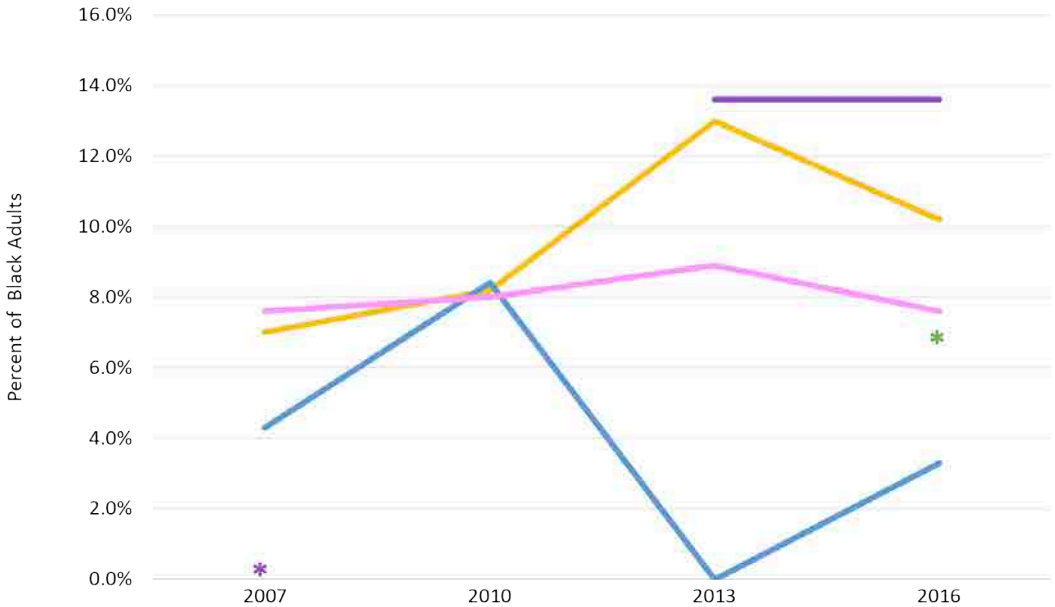
CHART 8.37: WHITE ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	5.5%	5.4%	9.4%	5.5%
ORANGE	3.5%	8.0%	7.6%	6.8%
OSCEOLA	7.6%	9.6%	9.0%	8.7%
SEMINOLE	7.2%	6.7%	7.0%	4.9%
FLORIDA	6.4%	8.3%	8.3%	6.9%

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

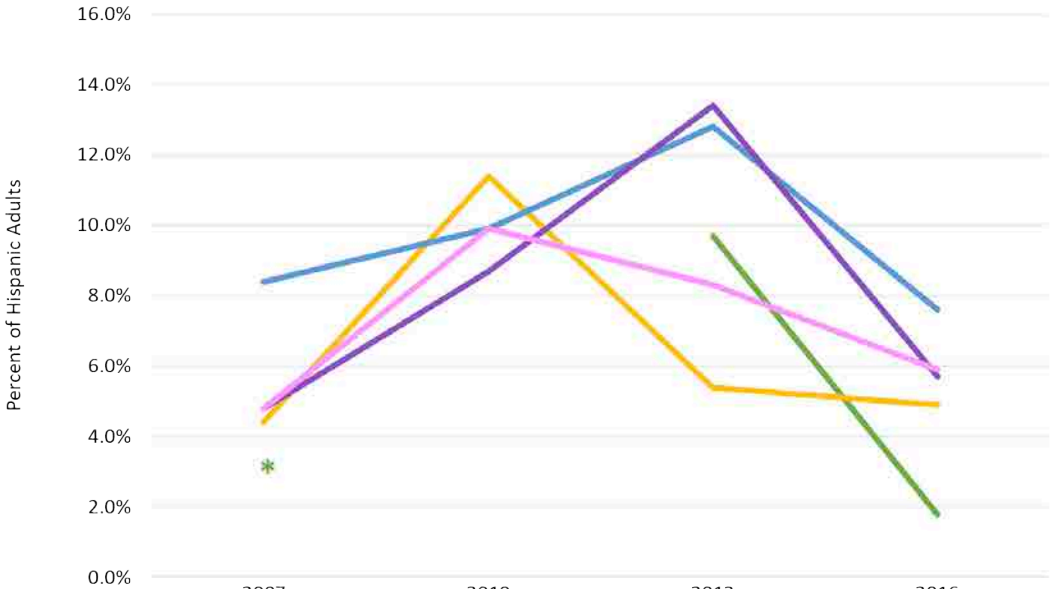
CHART 8.38: BLACK ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	7.4%
ORANGE	7.0%	8.2%	13.0%	10.2%
OSCEOLA	4.3%	8.4%	0.0%	3.3%
SEMINOLE	1.3%	N/A	13.6%	13.6%
FLORIDA	7.6%	8.0%	8.9%	7.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.39: HISPANIC ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	2.7%	N/A	9.7%	1.8%
ORANGE	4.4%	11.4%	5.4%	4.9%
OSCEOLA	8.4%	9.9%	12.8%	7.6%
SEMINOLE	4.8%	8.7%	13.4%	5.7%
FLORIDA	4.8%	9.9%	8.3%	5.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

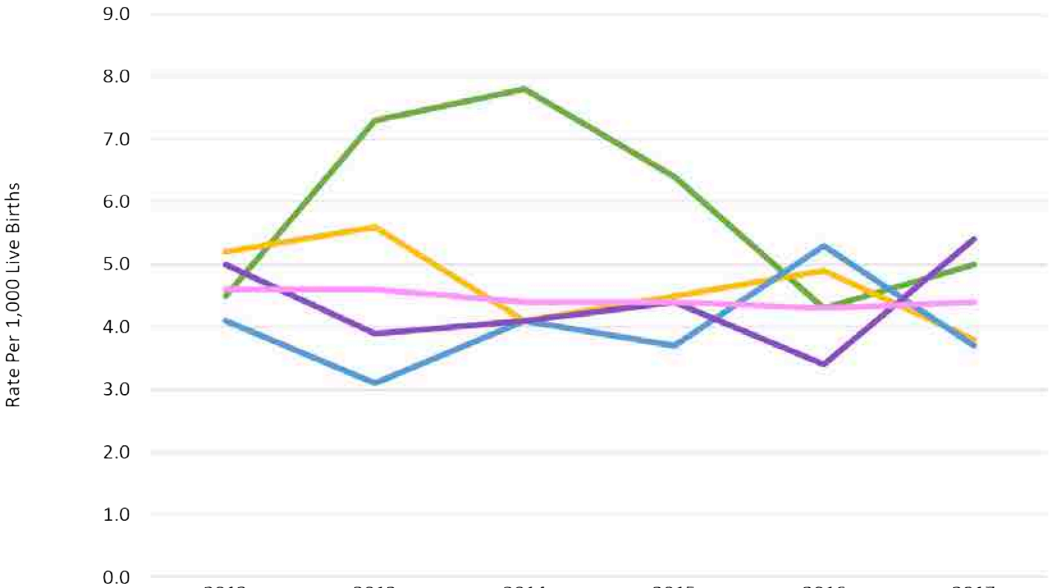
TABLE 8.1: LEADING CAUSES OF DEATH BY RACE/ETHNICITY PER 100,000, OSCEOLA COUNTY (2017)

Highest rates for each condition are highlighted in red.

	White	Black/ Other	White Hispanic	Black Hispanic
Heart diseases	313.2	147.2	126.9	40.8
Cancer	245.3	110.1	104.8	26.5
Cerebrovascular diseases	54.5	42.2	31.9	12.4
Unintentional injury	65.9	28.6	29.2	6.7
Chronic lower respiratory disease	70.6	16.3	17.5	3.1
Diabetes mellitus	29.3	28.2	18.6	5.3

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

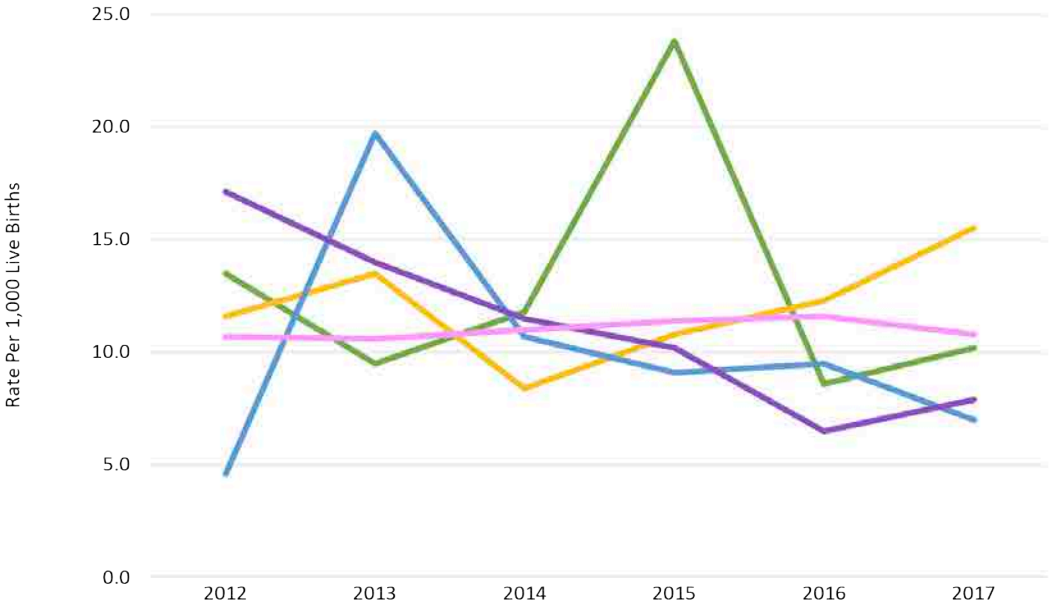
CHART 8.40: WHITE INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	4.5	7.3	7.8	6.4	4.3	5.0
ORANGE	5.2	5.6	4.1	4.5	4.9	3.8
OSCEOLA	4.1	3.1	4.1	3.7	5.3	3.7
SEMINOLE	5.0	3.9	4.1	4.4	3.4	5.4
FLORIDA	4.6	4.6	4.4	4.4	4.3	4.4

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

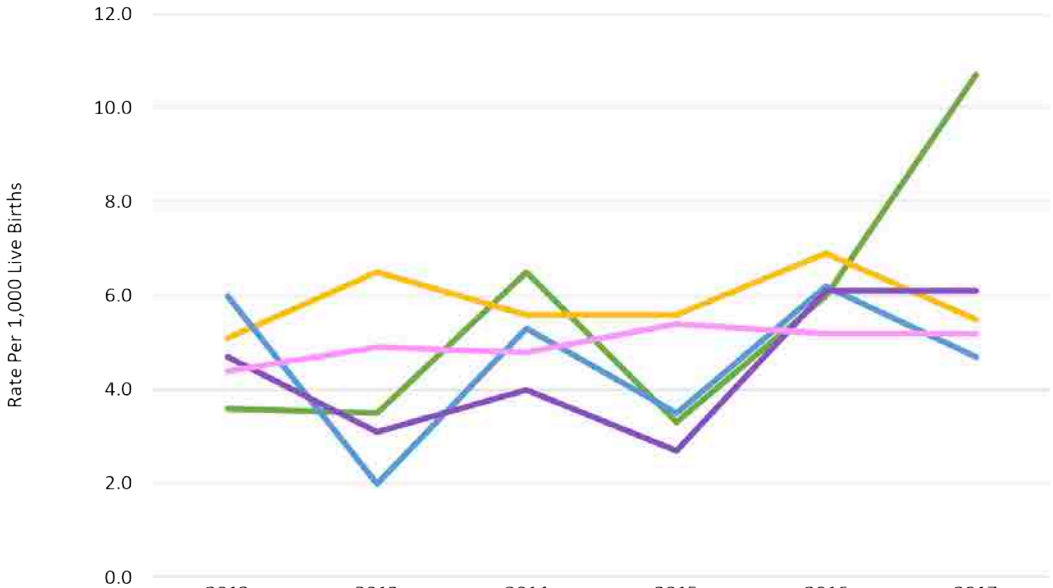
CHART 8.41: BLACK INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	13.5	9.5	11.8	23.8	8.6	10.2
ORANGE	11.6	13.5	8.4	10.8	12.3	15.5
OSCEOLA	4.6	19.7	10.7	9.1	9.5	7.0
SEMINOLE	17.1	14.0	11.5	10.2	6.5	7.9
FLORIDA	10.7	10.6	11.0	11.4	11.6	10.8

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

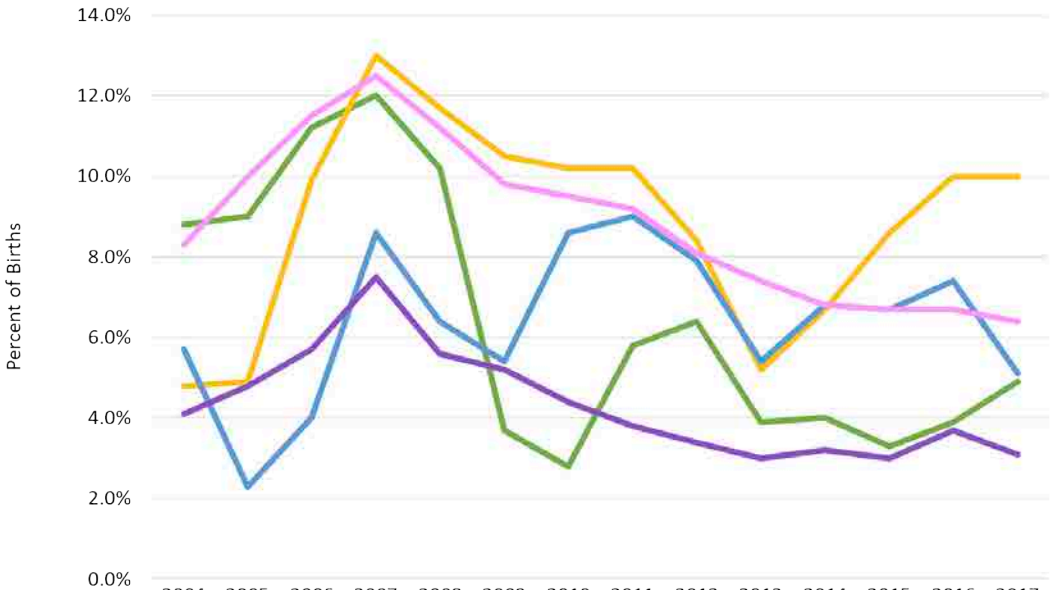
CHART 8.42: HISPANIC INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	3.6	3.5	6.5	3.3	6.0	10.7
ORANGE	5.1	6.5	5.6	5.6	6.9	5.5
OSCEOLA	6.0	2.0	5.3	3.5	6.2	4.7
SEMINOLE	4.7	3.1	4.0	2.7	6.1	6.1
FLORIDA	4.4	4.9	4.8	5.4	5.2	5.2

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

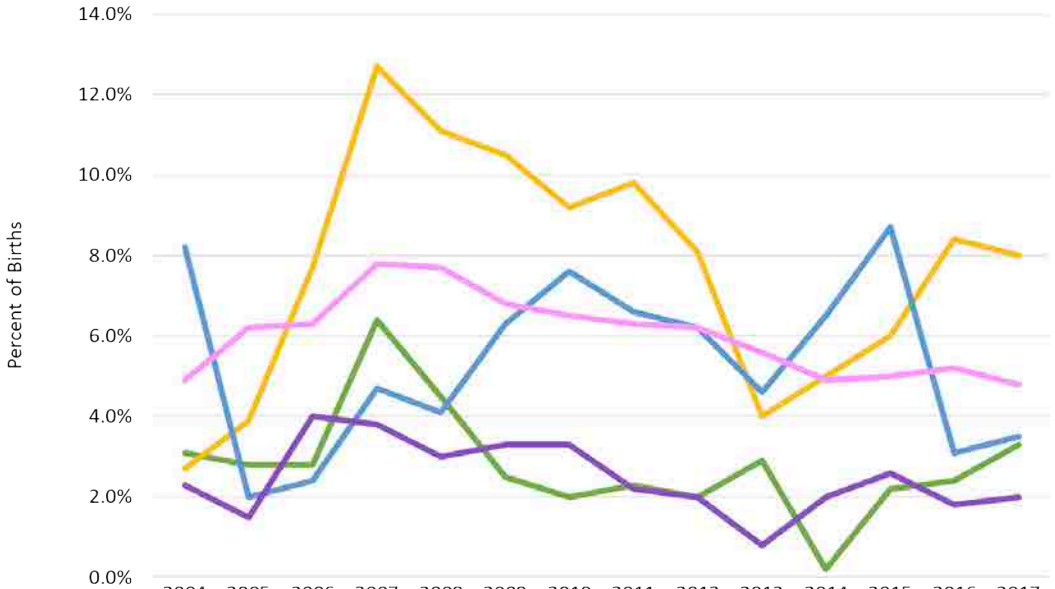
CHART 8.43: BIRTHS TO WHITE WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.8%	9.0%	11.2%	12.0%	10.2%	3.7%	2.8%	5.8%	6.4%	3.9%	4.0%	3.3%	3.9%	4.9%
ORANGE	4.8%	4.9%	9.9%	13.0%	11.7%	10.5%	10.2%	10.2%	8.4%	5.2%	6.7%	8.6%	10.0%	10.0%
OSCEOLA	5.7%	2.3%	4.0%	8.6%	6.4%	5.4%	8.6%	9.0%	7.9%	5.4%	6.8%	6.7%	7.4%	5.1%
SEMINOLE	4.1%	4.8%	5.7%	7.5%	5.6%	5.2%	4.4%	3.8%	3.4%	3.0%	3.2%	3.0%	3.7%	3.1%
FLORIDA	8.3%	10.0%	11.5%	12.5%	11.2%	9.8%	9.5%	9.2%	8.1%	7.4%	6.8%	6.7%	6.7%	6.4%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

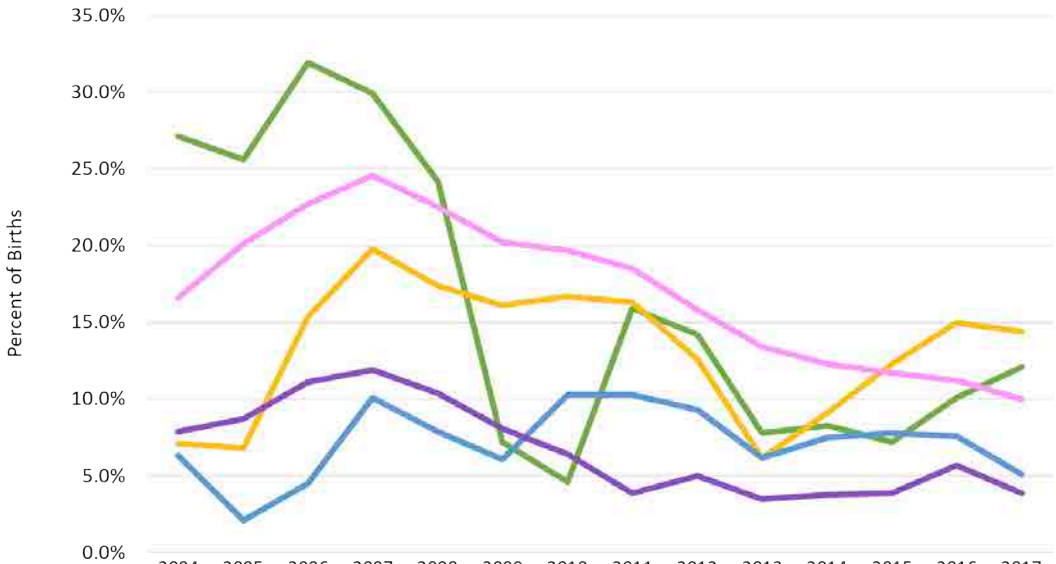
CHART 8.44: BIRTHS TO BLACK WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	3.1%	2.8%	2.8%	6.4%	4.5%	2.5%	2.0%	2.3%	2.0%	2.9%	0.2%	2.2%	2.4%	3.3%
ORANGE	2.7%	3.9%	7.7%	12.7%	11.1%	10.5%	9.2%	9.8%	8.1%	4.0%	5.0%	6.0%	8.4%	8.0%
OSCEOLA	8.2%	2.0%	2.4%	4.7%	4.1%	6.3%	7.6%	6.6%	6.2%	4.6%	6.5%	8.7%	3.1%	3.5%
SEMINOLE	2.3%	1.5%	4.0%	3.8%	3.0%	3.3%	3.3%	2.2%	2.0%	0.8%	2.0%	2.6%	1.8%	2.0%
FLORIDA	4.9%	6.2%	6.3%	7.8%	7.7%	6.8%	6.5%	6.3%	6.2%	5.6%	4.9%	5.0%	5.2%	4.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

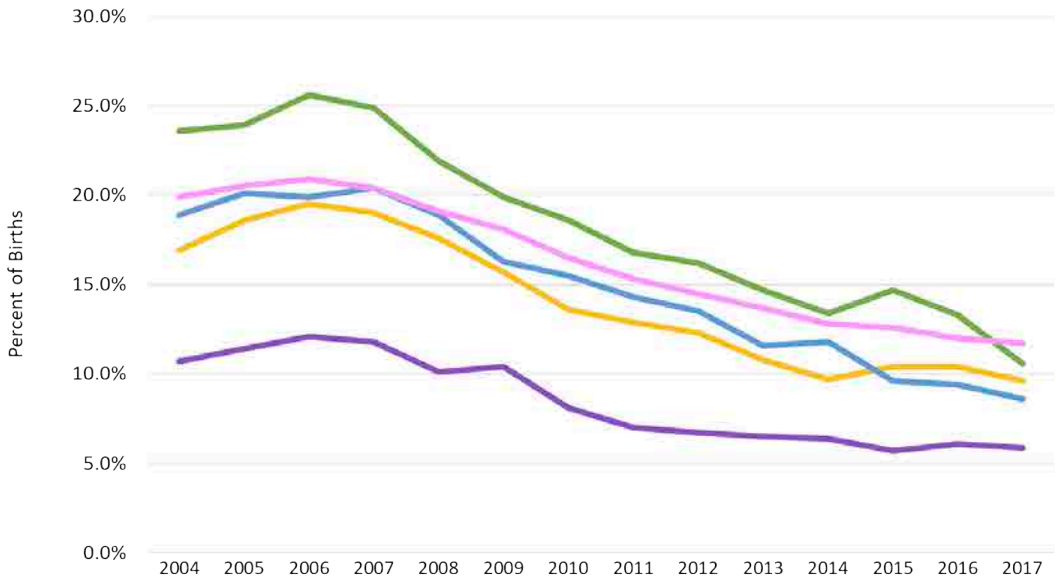
CHART 8.45: BIRTHS TO HISPANIC WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	27.1%	25.6%	31.9%	29.9%	24.2%	7.2%	4.6%	15.9%	14.2%	7.8%	8.3%	7.2%	10.1%	12.1%
ORANGE	7.1%	6.8%	15.4%	19.8%	17.4%	16.1%	16.7%	16.3%	12.6%	6.2%	9.1%	12.3%	15.0%	14.4%
OSCEOLA	6.3%	2.1%	4.5%	10.1%	7.9%	6.1%	10.3%	10.3%	9.3%	6.2%	7.5%	7.8%	7.6%	5.1%
SEMINOLE	7.9%	8.7%	11.1%	11.9%	10.4%	8.1%	6.4%	3.9%	5.0%	3.5%	3.8%	3.9%	5.7%	3.9%
FLORIDA	16.6%	20.1%	22.7%	24.6%	22.5%	20.2%	19.7%	18.5%	15.8%	13.4%	12.3%	11.7%	11.2%	10.0%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

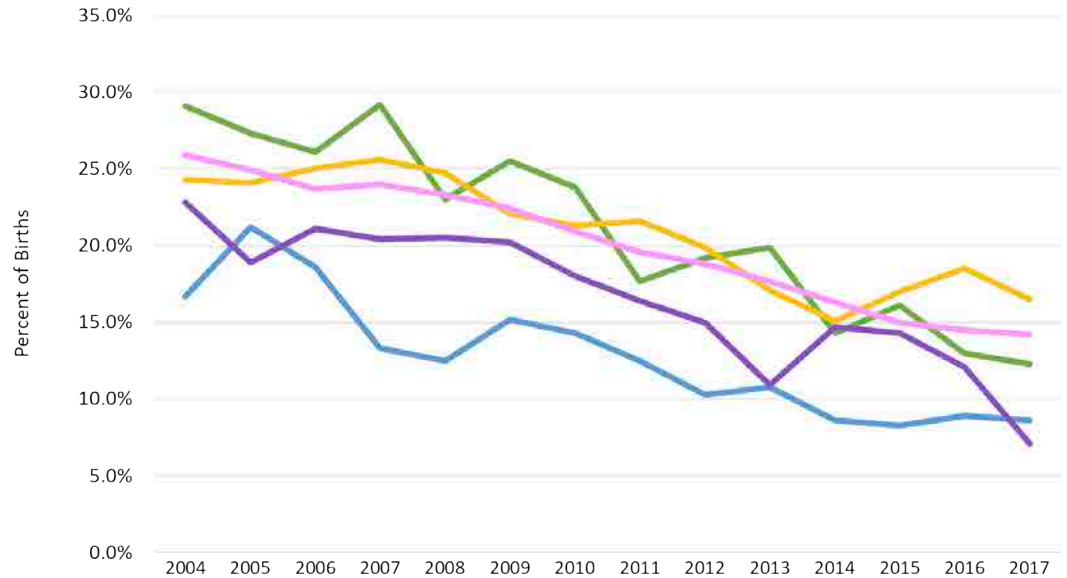
CHART 8.46: WHITE MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	23.6%	23.9%	25.6%	24.9%	21.9%	19.9%	18.6%	16.8%	16.2%	14.7%	13.4%	14.7%	13.3%	10.6%
ORANGE	16.9%	18.6%	19.5%	19.0%	17.6%	15.7%	13.6%	12.9%	12.3%	10.8%	9.7%	10.4%	10.4%	9.6%
OSCEOLA	18.9%	20.1%	19.9%	20.4%	18.9%	16.3%	15.5%	14.3%	13.5%	11.6%	11.8%	9.6%	9.4%	8.6%
SEMINOLE	10.7%	11.4%	12.1%	11.8%	10.1%	10.4%	8.1%	7.0%	6.7%	6.5%	6.4%	5.7%	6.1%	5.9%
FLORIDA	19.9%	20.5%	20.9%	20.4%	19.1%	18.1%	16.5%	15.3%	14.5%	13.7%	12.8%	12.6%	12.0%	11.7%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

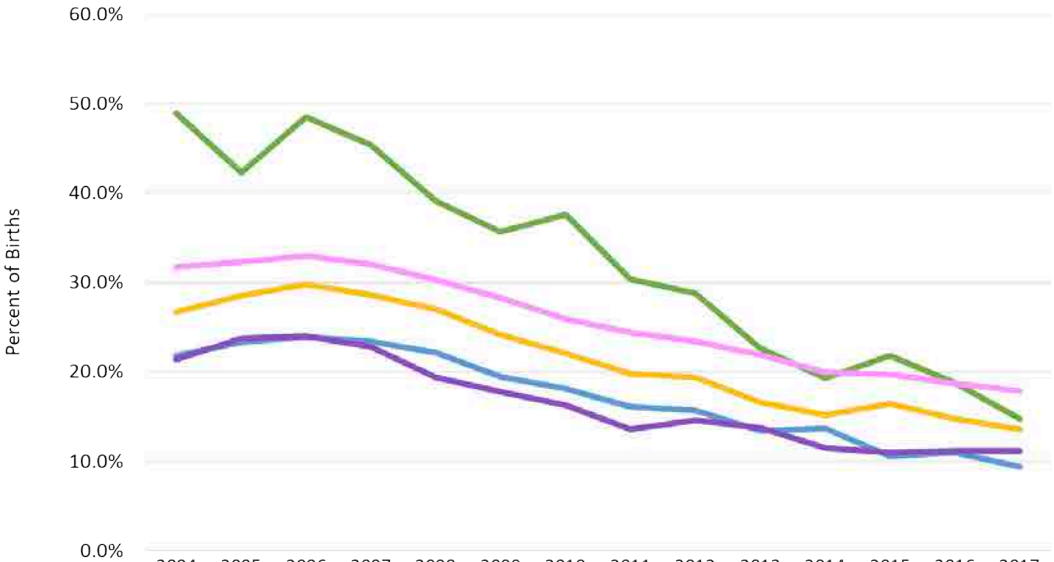
CHART 8.47: BLACK MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	29.1%	27.3%	26.1%	29.2%	23.0%	25.5%	23.8%	17.7%	19.2%	19.9%	14.3%	16.1%	13.0%	12.3%
ORANGE	24.3%	24.1%	25.0%	25.6%	24.7%	22.1%	21.3%	21.6%	19.9%	17.1%	15.1%	17.0%	18.5%	16.5%
OSCEOLA	16.7%	21.2%	18.6%	13.3%	12.5%	15.2%	14.3%	12.5%	10.3%	10.8%	8.6%	8.3%	8.9%	8.6%
SEMINOLE	22.8%	18.9%	21.1%	20.4%	20.5%	20.2%	18.0%	16.4%	15.0%	10.9%	14.7%	14.3%	12.1%	7.1%
FLORIDA	25.9%	24.9%	23.7%	24.0%	23.3%	22.4%	20.9%	19.6%	18.8%	17.7%	16.3%	15.0%	14.5%	14.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

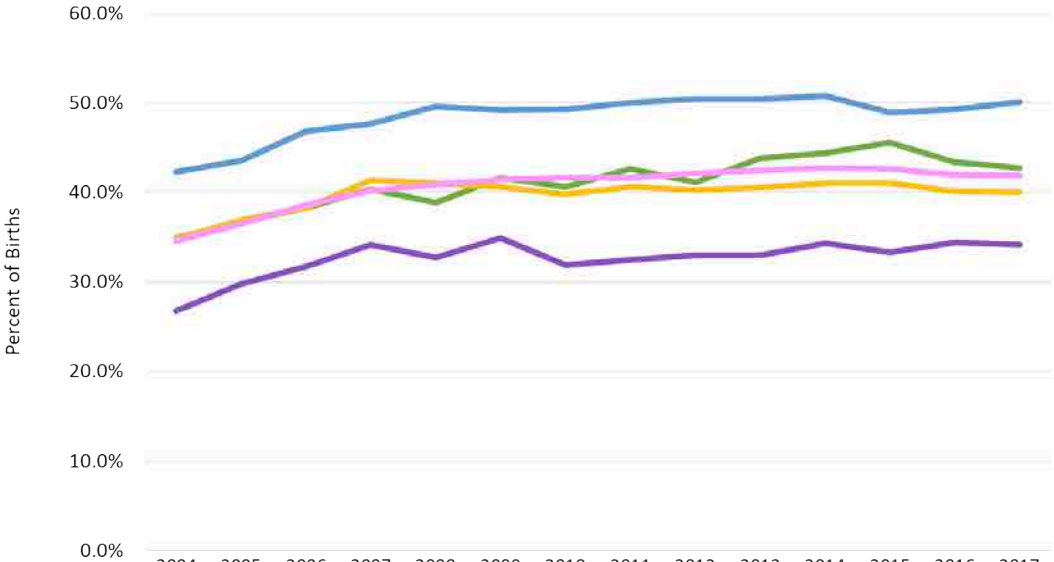
CHART 8.48: HISPANIC MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	48.9%	42.3%	48.5%	45.4%	39.1%	35.7%	37.6%	30.4%	28.8%	22.7%	19.3%	21.8%	18.8%	14.8%
ORANGE	26.7%	28.5%	29.8%	28.6%	27.0%	24.2%	22.1%	19.8%	19.4%	16.6%	15.2%	16.5%	14.8%	13.6%
OSCEOLA	21.8%	23.3%	23.9%	23.4%	22.2%	19.5%	18.1%	16.1%	15.7%	13.4%	13.7%	10.6%	11.0%	9.4%
SEMINOLE	21.4%	23.8%	24.0%	22.8%	19.4%	17.8%	16.3%	13.6%	14.6%	13.8%	11.5%	11.0%	11.2%	11.2%
FLORIDA	31.7%	32.3%	33.0%	32.1%	30.3%	28.3%	25.9%	24.4%	23.4%	21.9%	20.0%	19.7%	18.7%	17.9%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

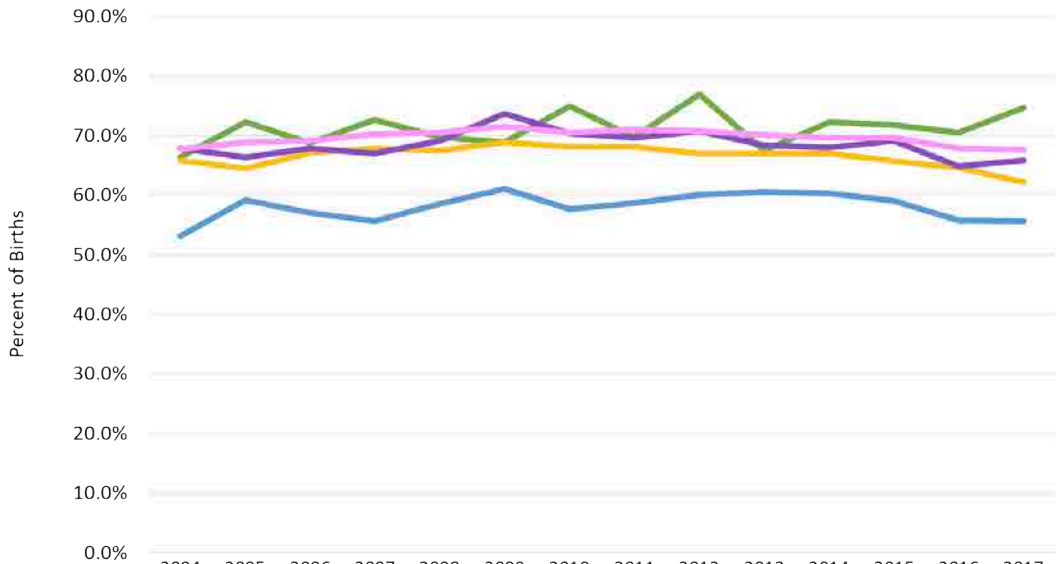
CHART 8.49: BIRTHS TO UNWED WHITE MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	34.9%	36.8%	38.3%	40.4%	38.9%	41.6%	40.6%	42.6%	41.1%	43.8%	44.4%	45.6%	43.4%	42.7%
ORANGE	34.8%	36.9%	38.3%	41.4%	41.0%	40.6%	39.8%	40.6%	40.3%	40.5%	41.0%	41.0%	40.1%	40.0%
OSCEOLA	42.3%	43.6%	46.8%	47.7%	49.6%	49.2%	49.3%	50.0%	50.4%	50.4%	50.8%	48.9%	49.3%	50.1%
SEMINOLE	26.8%	29.8%	31.7%	34.2%	32.7%	34.9%	31.9%	32.5%	33.0%	33.0%	34.3%	33.3%	34.4%	34.2%
FLORIDA	34.6%	36.5%	38.6%	40.2%	40.9%	41.5%	41.6%	41.6%	42.1%	42.5%	42.7%	42.6%	42.0%	41.9%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

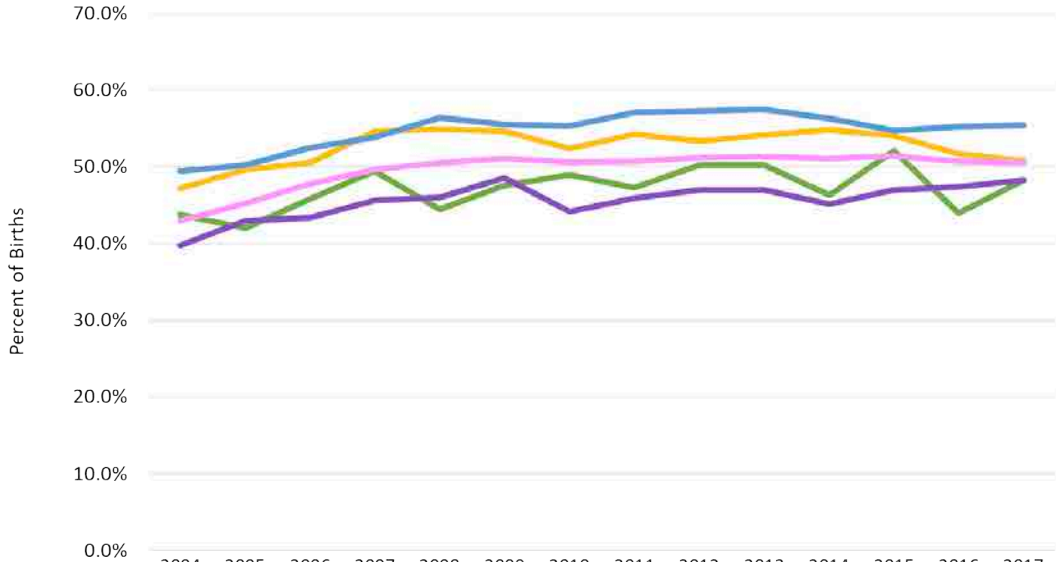
CHART 8.50: BIRTHS TO UNWED BLACK MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	66.4%	72.2%	68.7%	72.6%	69.8%	68.9%	74.9%	69.8%	76.9%	67.5%	72.3%	71.7%	70.5%	74.7%
ORANGE	65.8%	64.5%	67.1%	67.8%	67.5%	68.9%	68.1%	68.1%	67.0%	67.0%	67.0%	65.7%	64.6%	62.2%
OSCEOLA	53.1%	59.2%	57.0%	55.7%	58.6%	61.0%	57.7%	58.7%	60.0%	60.5%	60.3%	59.1%	55.8%	55.7%
SEMINOLE	67.9%	66.3%	67.9%	67.0%	69.1%	73.7%	70.4%	69.6%	70.7%	68.3%	68.0%	69.1%	64.8%	65.8%
FLORIDA	67.7%	68.8%	69.1%	70.2%	70.5%	71.5%	70.5%	71.0%	70.7%	70.1%	69.6%	69.6%	67.9%	67.6%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

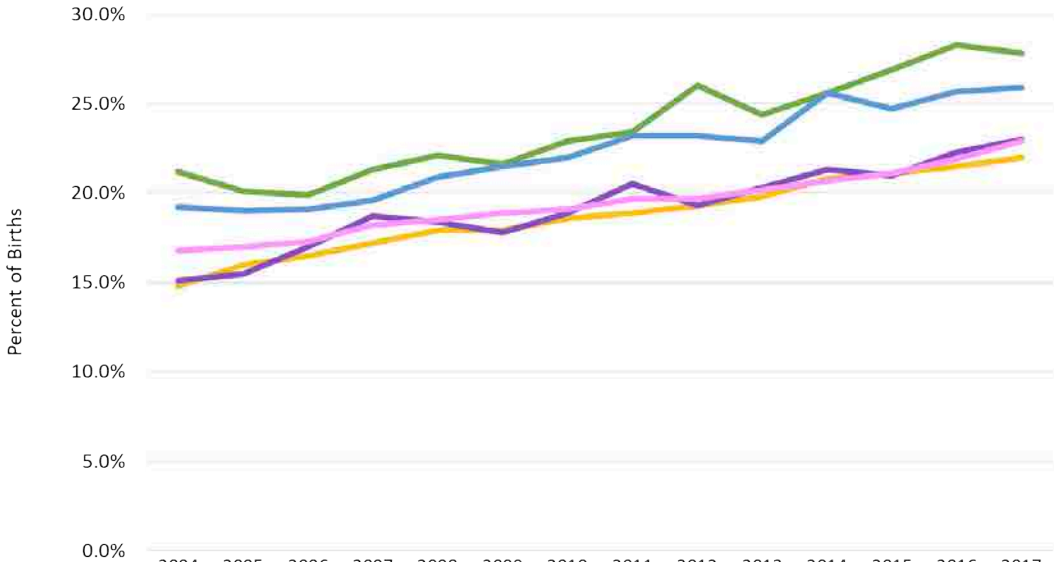
CHART 8.51: BIRTHS TO UNWED HISPANIC MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	43.8%	42.0%	45.8%	49.4%	44.5%	47.6%	49.0%	47.3%	50.2%	50.2%	46.3%	52.1%	44.0%	48.3%
ORANGE	47.2%	49.6%	50.5%	54.6%	54.9%	54.6%	52.4%	54.2%	53.4%	54.1%	54.8%	54.0%	51.7%	50.8%
OSCEOLA	49.4%	50.2%	52.5%	53.9%	56.4%	55.5%	55.3%	57.1%	57.3%	57.5%	56.3%	54.7%	55.2%	55.4%
SEMINOLE	39.8%	43.0%	43.4%	45.6%	46.0%	48.6%	44.2%	45.9%	47.0%	47.0%	45.1%	47.0%	47.4%	48.3%
FLORIDA	43.0%	45.2%	47.8%	49.6%	50.5%	51.1%	50.6%	50.7%	51.2%	51.3%	51.1%	51.4%	50.7%	50.5%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

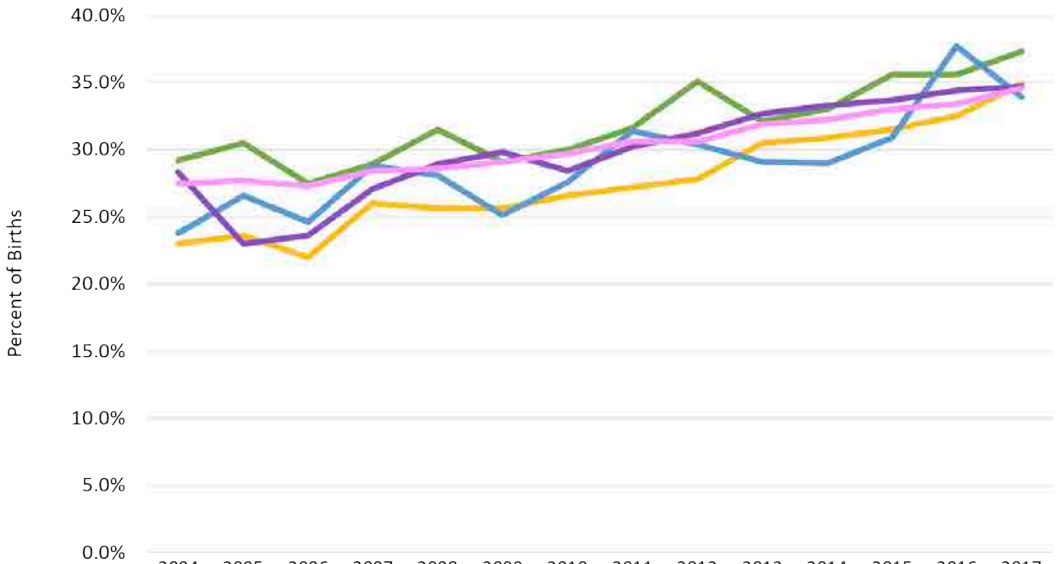
CHART 8.52: BIRTHS TO WHITE WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.2%	20.1%	19.9%	21.3%	22.1%	21.6%	22.9%	23.4%	26.0%	24.4%	25.6%	26.9%	28.3%	27.8%
ORANGE	14.8%	16.0%	16.5%	17.2%	17.9%	17.9%	18.6%	18.9%	19.3%	19.8%	20.8%	21.1%	21.5%	22.0%
OSCEOLA	19.2%	19.0%	19.1%	19.6%	20.9%	21.5%	22.0%	23.2%	23.2%	22.9%	25.6%	24.7%	25.7%	25.9%
SEMINOLE	15.1%	15.5%	17.0%	18.7%	18.4%	17.8%	18.9%	20.5%	19.3%	20.3%	21.3%	21.0%	22.3%	23.0%
FLORIDA	16.8%	17.0%	17.3%	18.2%	18.5%	18.9%	19.1%	19.7%	19.7%	20.2%	20.7%	21.1%	21.9%	22.9%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

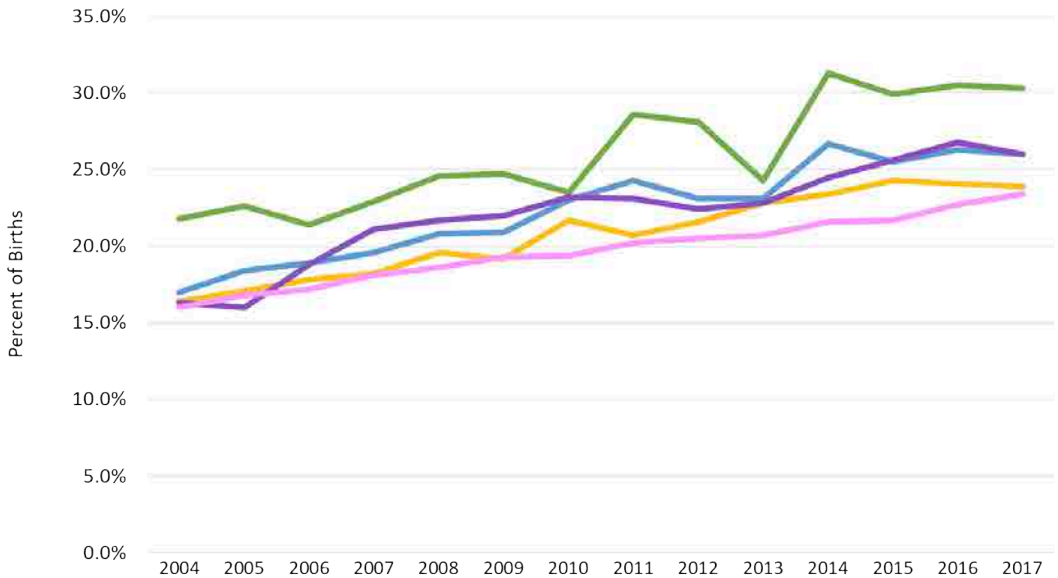
CHART 8.53: BIRTHS TO BLACK WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	29.2%	30.5%	27.5%	28.9%	31.5%	29.1%	30.0%	31.6%	35.1%	32.1%	33.0%	35.6%	35.6%	37.3%
ORANGE	23.0%	23.6%	22.0%	26.0%	25.6%	25.6%	26.6%	27.2%	27.8%	30.5%	30.9%	31.5%	32.5%	34.9%
OSCEOLA	23.8%	26.6%	24.6%	28.8%	28.1%	25.1%	27.6%	31.4%	30.4%	29.1%	29.0%	30.9%	37.7%	33.9%
SEMINOLE	28.3%	23.0%	23.6%	27.1%	28.9%	29.8%	28.4%	30.2%	31.2%	32.7%	33.3%	33.7%	34.4%	34.7%
FLORIDA	27.5%	27.7%	27.3%	28.4%	28.6%	29.1%	29.7%	30.6%	30.6%	31.9%	32.2%	33.0%	33.4%	34.6%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

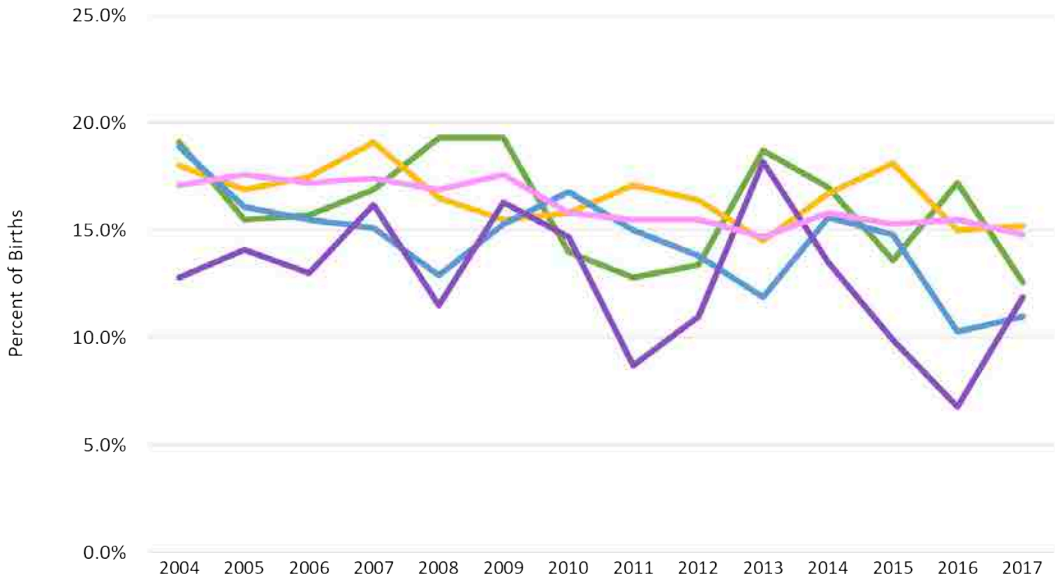
CHART 8.54: BIRTHS TO HISPANIC WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.8%	22.6%	21.4%	22.9%	24.6%	24.7%	23.5%	28.6%	28.1%	24.3%	31.3%	29.9%	30.5%	30.3%
ORANGE	16.4%	17.1%	17.8%	18.2%	19.6%	19.2%	21.7%	20.7%	21.6%	22.8%	23.4%	24.3%	24.1%	23.9%
OSCEOLA	17.0%	18.4%	18.9%	19.6%	20.8%	20.9%	23.0%	24.3%	23.1%	23.1%	26.7%	25.5%	26.3%	26.0%
SEMINOLE	16.3%	16.0%	18.8%	21.1%	21.7%	22.0%	23.2%	23.1%	22.4%	22.8%	24.5%	25.6%	26.8%	26.0%
FLORIDA	16.0%	16.8%	17.2%	18.1%	18.6%	19.3%	19.4%	20.2%	20.5%	20.7%	21.6%	21.7%	22.7%	23.4%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

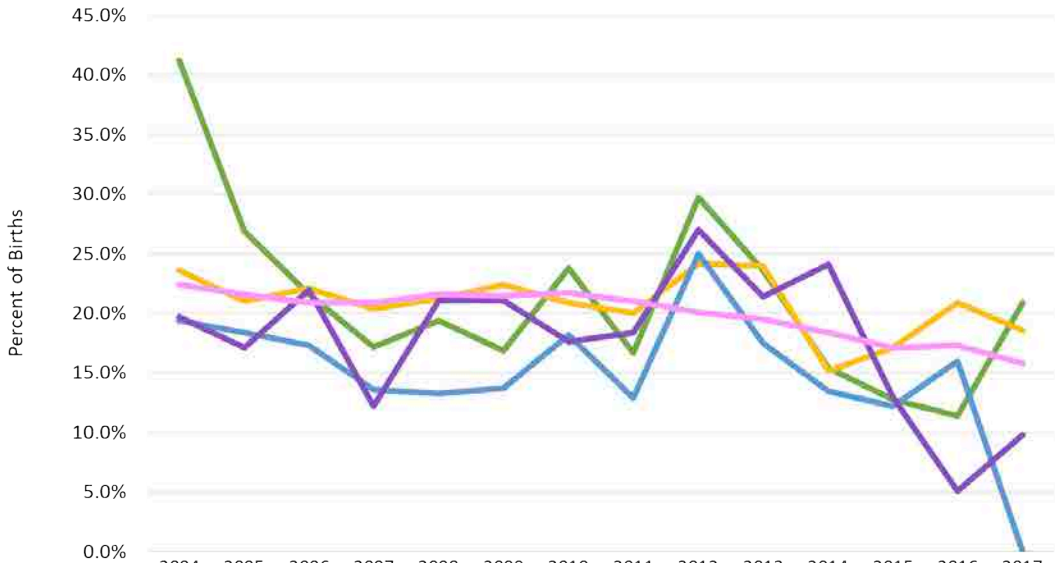
CHART 8.55: REPEAT BIRTHS TO WHITE MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	19.1%	15.5%	15.7%	16.9%	19.3%	19.3%	14.0%	12.8%	13.4%	18.7%	17.0%	13.6%	17.2%	12.6%
ORANGE	18.0%	16.9%	17.5%	19.1%	16.5%	15.5%	15.8%	17.1%	16.4%	14.5%	16.7%	18.1%	15.0%	15.2%
OSCEOLA	18.9%	16.1%	15.5%	15.1%	12.9%	15.3%	16.8%	15.0%	13.8%	11.9%	15.6%	14.8%	10.3%	11.0%
SEMINOLE	12.8%	14.1%	13.0%	16.2%	11.5%	16.3%	14.7%	8.7%	11.0%	18.2%	13.5%	9.9%	6.8%	11.9%
FLORIDA	17.1%	17.6%	17.2%	17.4%	16.9%	17.6%	15.8%	15.5%	15.5%	14.7%	15.8%	15.3%	15.5%	14.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

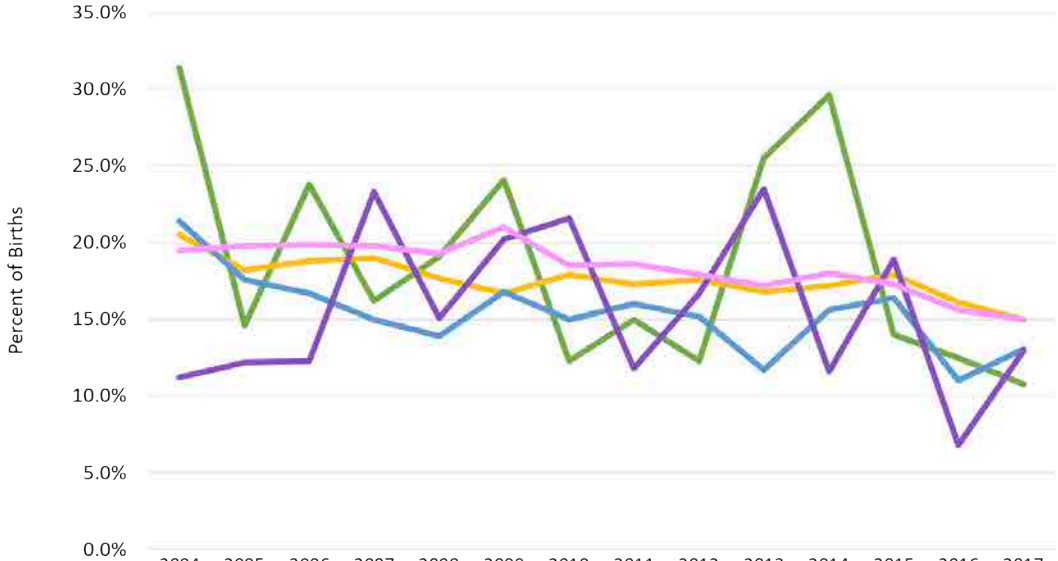
CHART 8.56: REPEAT BIRTHS TO BLACK MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	41.2%	26.9%	21.6%	17.2%	19.4%	16.9%	23.8%	16.7%	29.7%	23.6%	15.4%	12.8%	11.4%	20.9%
ORANGE	23.6%	21.0%	22.1%	20.4%	21.2%	22.4%	20.9%	20.0%	24.2%	24.0%	15.2%	17.1%	20.9%	18.6%
OSCEOLA	19.4%	18.4%	17.3%	13.6%	13.3%	13.7%	18.2%	12.9%	25.0%	17.5%	13.5%	12.2%	16.0%	0.0%
SEMINOLE	19.7%	17.1%	22.0%	12.2%	21.1%	21.1%	17.6%	18.4%	27.0%	21.4%	24.1%	13.0%	5.1%	9.8%
FLORIDA	22.4%	21.6%	20.9%	20.9%	21.6%	21.5%	21.7%	21.0%	20.1%	19.5%	18.4%	17.1%	17.3%	15.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

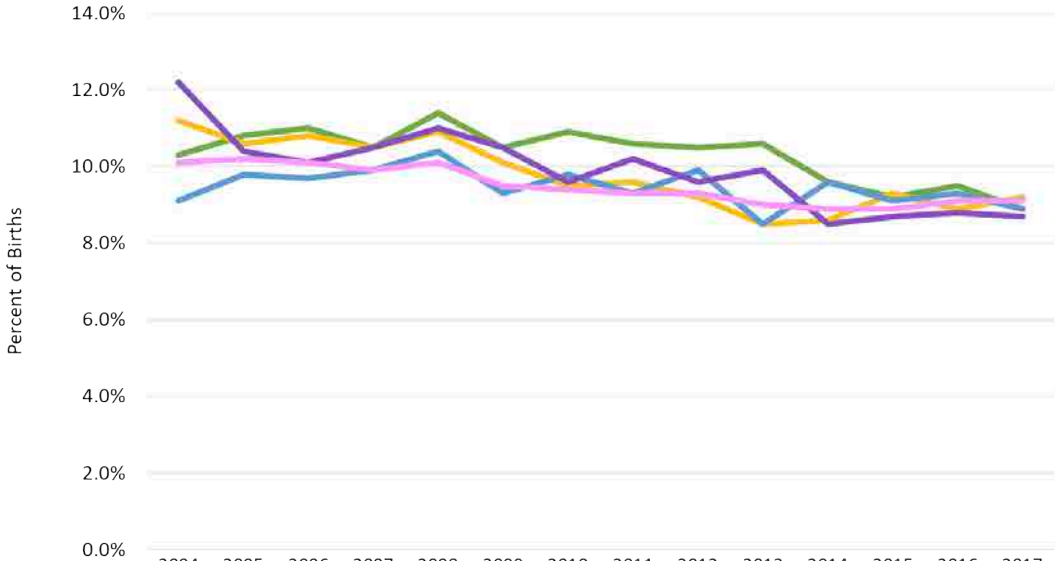
CHART 8.57: REPEAT BIRTHS TO HISPANIC MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	31.4%	14.6%	23.8%	16.2%	19.1%	24.1%	12.3%	15.0%	12.3%	25.5%	29.6%	14.0%	12.5%	10.8%
ORANGE	20.5%	18.2%	18.8%	19.0%	17.7%	16.7%	17.9%	17.3%	17.6%	16.8%	17.2%	17.9%	16.1%	15.0%
OSCEOLA	21.4%	17.6%	16.7%	15.0%	13.9%	16.8%	15.0%	16.0%	15.2%	11.7%	15.6%	16.4%	11.0%	13.1%
SEMINOLE	11.2%	12.2%	12.3%	23.3%	15.1%	20.2%	21.6%	11.8%	16.7%	23.5%	11.6%	18.9%	6.8%	13.0%
FLORIDA	19.5%	19.8%	19.9%	19.8%	19.3%	21.0%	18.5%	18.6%	17.9%	17.2%	18.0%	17.3%	15.6%	15.0%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

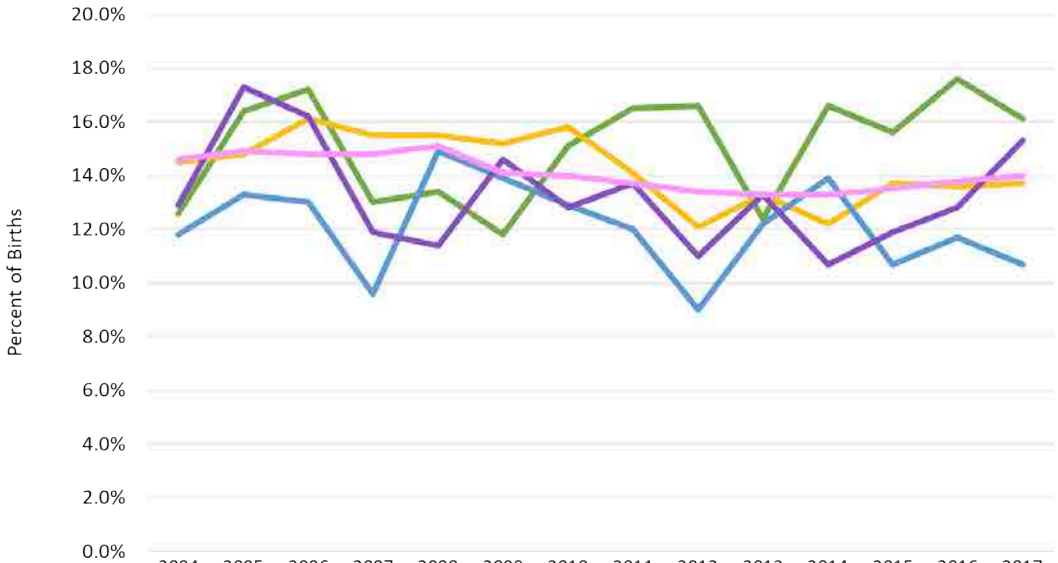
CHART 8.58: WHITE PRETERM BIRTH RATE <37 WEEKS (2004-2007)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.3%	10.8%	11.0%	10.5%	11.4%	10.5%	10.9%	10.6%	10.5%	10.6%	9.6%	9.2%	9.5%	8.9%
ORANGE	11.2%	10.6%	10.8%	10.5%	10.9%	10.1%	9.5%	9.6%	9.2%	8.5%	8.6%	9.3%	8.9%	9.2%
OSCEOLA	9.1%	9.8%	9.7%	9.9%	10.4%	9.3%	9.8%	9.3%	9.9%	8.5%	9.6%	9.1%	9.3%	8.9%
SEMINOLE	12.2%	10.4%	10.1%	10.5%	11.0%	10.5%	9.6%	10.2%	9.6%	9.9%	8.5%	8.7%	8.8%	8.7%
FLORIDA	10.1%	10.2%	10.1%	9.9%	10.1%	9.5%	9.4%	9.3%	9.3%	9.0%	8.9%	8.9%	9.1%	9.1%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

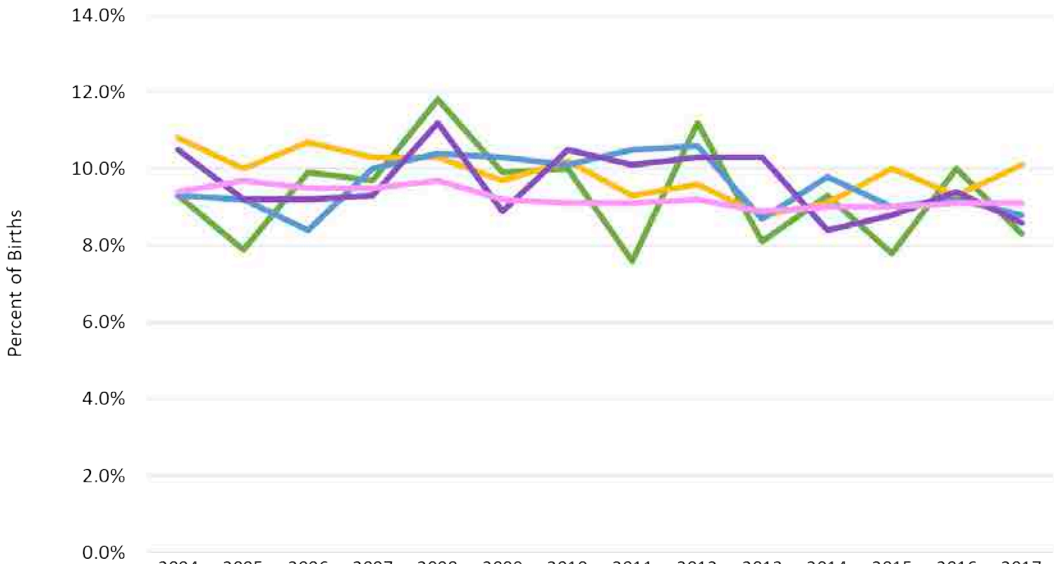
CHART 8.59: BLACK PRETERM BIRTH RATE <37 WEEKS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	12.6%	16.4%	17.2%	13.0%	13.4%	11.8%	15.1%	16.5%	16.6%	12.4%	16.6%	15.6%	17.6%	16.1%
ORANGE	14.5%	14.8%	16.1%	15.5%	15.5%	15.2%	15.8%	14.1%	12.1%	13.3%	12.2%	13.7%	13.6%	13.7%
OSCEOLA	11.8%	13.3%	13.0%	9.6%	14.9%	13.9%	12.9%	12.0%	9.0%	12.2%	13.9%	10.7%	11.7%	10.7%
SEMINOLE	12.9%	17.3%	16.2%	11.9%	11.4%	14.6%	12.8%	13.7%	11.0%	13.3%	10.7%	11.9%	12.8%	15.3%
FLORIDA	14.6%	14.9%	14.8%	14.8%	15.1%	14.1%	14.0%	13.7%	13.4%	13.3%	13.3%	13.5%	13.8%	14.0%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

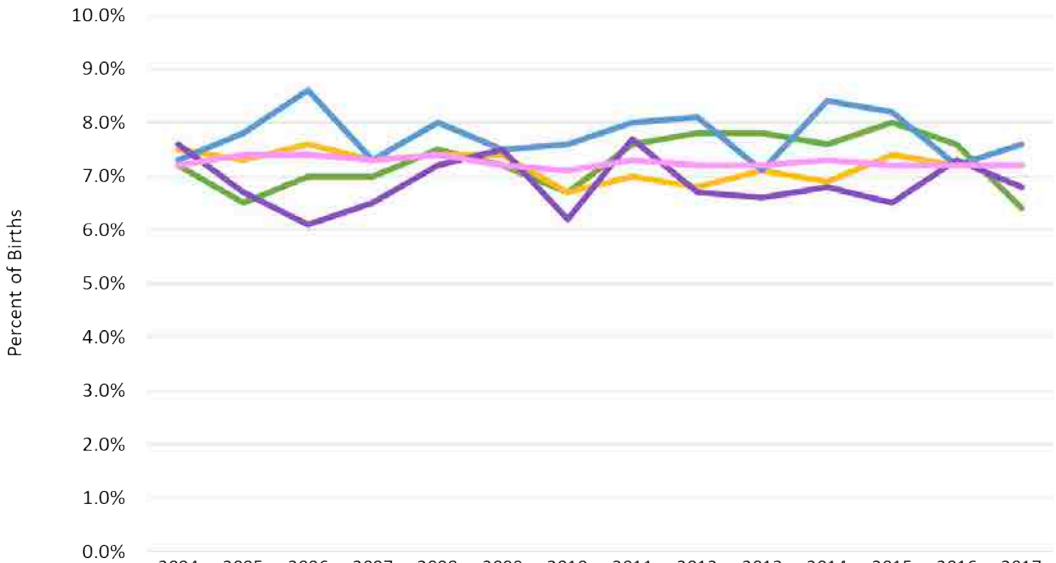
CHART 8.60: HISPANIC PRETERM BIRTH RATE <37 WEEKS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.3%	7.9%	9.9%	9.7%	11.8%	9.9%	10.0%	7.6%	11.2%	8.1%	9.3%	7.8%	10.0%	8.3%
ORANGE	10.8%	10.0%	10.7%	10.3%	10.3%	9.7%	10.2%	9.3%	9.6%	8.8%	9.1%	10.0%	9.3%	10.1%
OSCEOLA	9.3%	9.2%	8.4%	10.0%	10.4%	10.3%	10.1%	10.5%	10.6%	8.7%	9.8%	9.0%	9.2%	8.8%
SEMINOLE	10.5%	9.2%	9.2%	9.3%	11.2%	8.9%	10.5%	10.1%	10.3%	10.3%	8.4%	8.8%	9.4%	8.6%
FLORIDA	9.4%	9.7%	9.5%	9.5%	9.7%	9.2%	9.1%	9.1%	9.2%	8.9%	9.0%	9.0%	9.1%	9.1%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

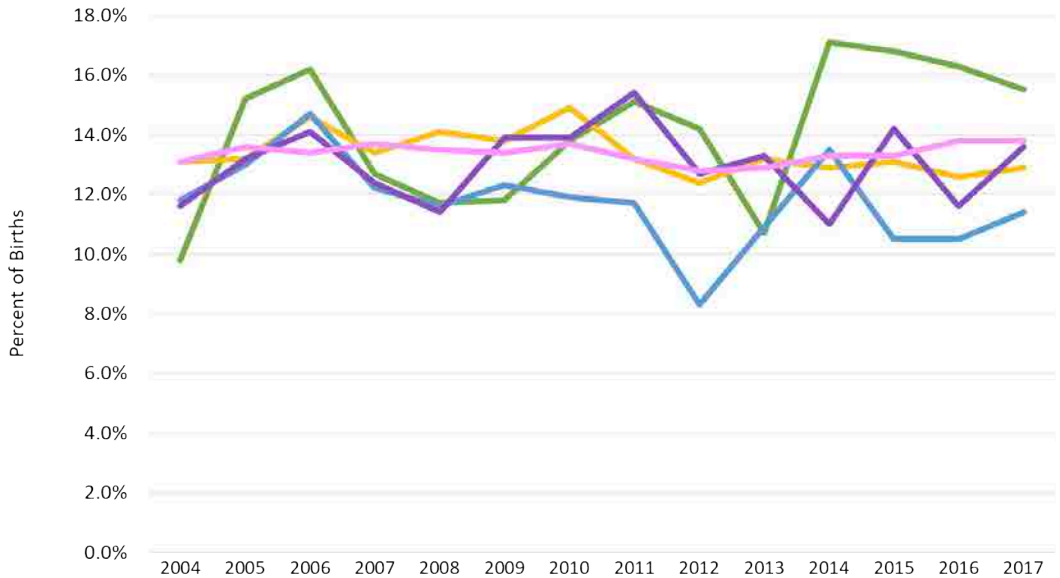
CHART 8.61: WHITE LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.2%	6.5%	7.0%	7.0%	7.5%	7.2%	6.7%	7.6%	7.8%	7.8%	7.6%	8.0%	7.6%	6.4%
ORANGE	7.5%	7.3%	7.6%	7.3%	7.4%	7.4%	6.7%	7.0%	6.8%	7.1%	6.9%	7.4%	7.2%	7.2%
OSCEOLA	7.3%	7.8%	8.6%	7.3%	8.0%	7.5%	7.6%	8.0%	8.1%	7.1%	8.4%	8.2%	7.2%	7.6%
SEMINOLE	7.6%	6.7%	6.1%	6.5%	7.2%	7.5%	6.2%	7.7%	6.7%	6.6%	6.8%	6.5%	7.3%	6.8%
FLORIDA	7.2%	7.4%	7.4%	7.3%	7.4%	7.2%	7.1%	7.3%	7.2%	7.2%	7.3%	7.2%	7.2%	7.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

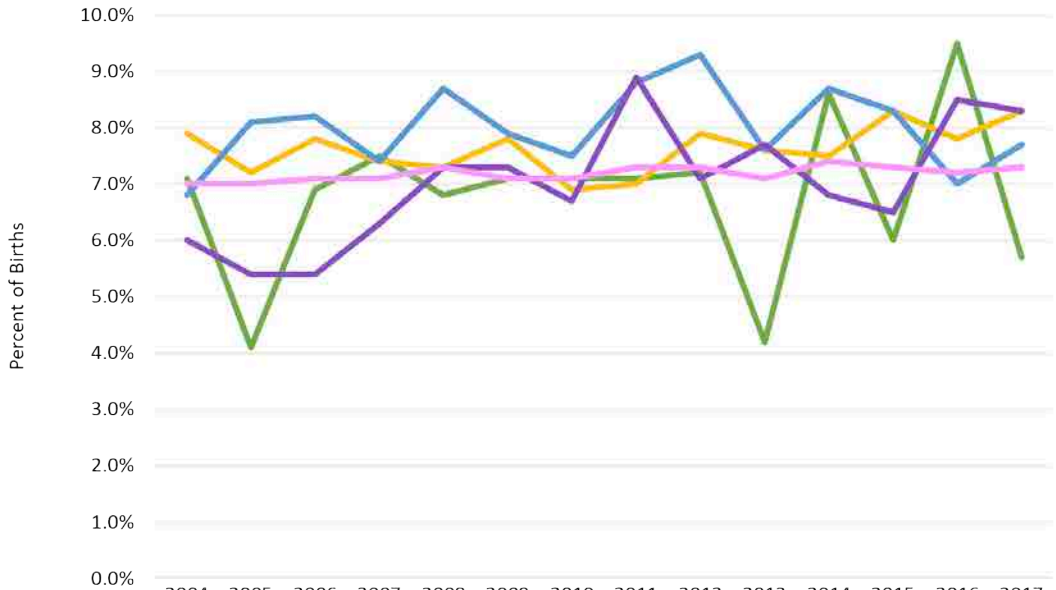
CHART 8.62: BLACK LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.8%	15.2%	16.2%	12.7%	11.7%	11.8%	13.8%	15.1%	14.2%	10.7%	17.1%	16.8%	16.3%	15.5%
ORANGE	13.1%	13.2%	14.6%	13.4%	14.1%	13.8%	14.9%	13.2%	12.4%	13.2%	12.9%	13.1%	12.6%	12.9%
OSCEOLA	11.8%	13.0%	14.7%	12.2%	11.6%	12.3%	11.9%	11.7%	8.3%	10.9%	13.5%	10.5%	10.5%	11.4%
SEMINOLE	11.6%	13.2%	14.1%	12.4%	11.4%	13.9%	13.9%	15.4%	12.7%	13.3%	11.0%	14.2%	11.6%	13.6%
FLORIDA	13.1%	13.6%	13.4%	13.7%	13.5%	13.4%	13.7%	13.2%	12.8%	12.9%	13.3%	13.3%	13.8%	13.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

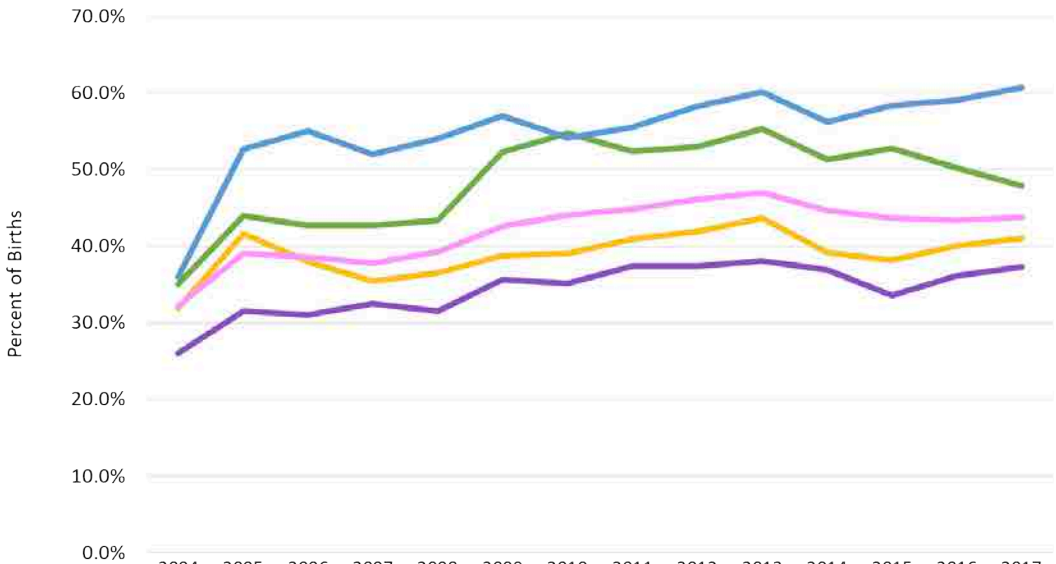
CHART 8.63: HISPANIC LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.1%	4.1%	6.9%	7.5%	6.8%	7.1%	7.1%	7.1%	7.2%	4.2%	8.6%	6.0%	9.5%	5.7%
ORANGE	7.9%	7.2%	7.8%	7.4%	7.3%	7.8%	6.9%	7.0%	7.9%	7.6%	7.5%	8.3%	7.8%	8.3%
OSCEOLA	6.8%	8.1%	8.2%	7.4%	8.7%	7.9%	7.5%	8.8%	9.3%	7.6%	8.7%	8.3%	7.0%	7.7%
SEMINOLE	6.0%	5.4%	5.4%	6.3%	7.3%	7.3%	6.7%	8.9%	7.1%	7.7%	6.8%	6.5%	8.5%	8.3%
FLORIDA	7.0%	7.0%	7.1%	7.1%	7.3%	7.1%	7.1%	7.3%	7.3%	7.1%	7.4%	7.3%	7.2%	7.3%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

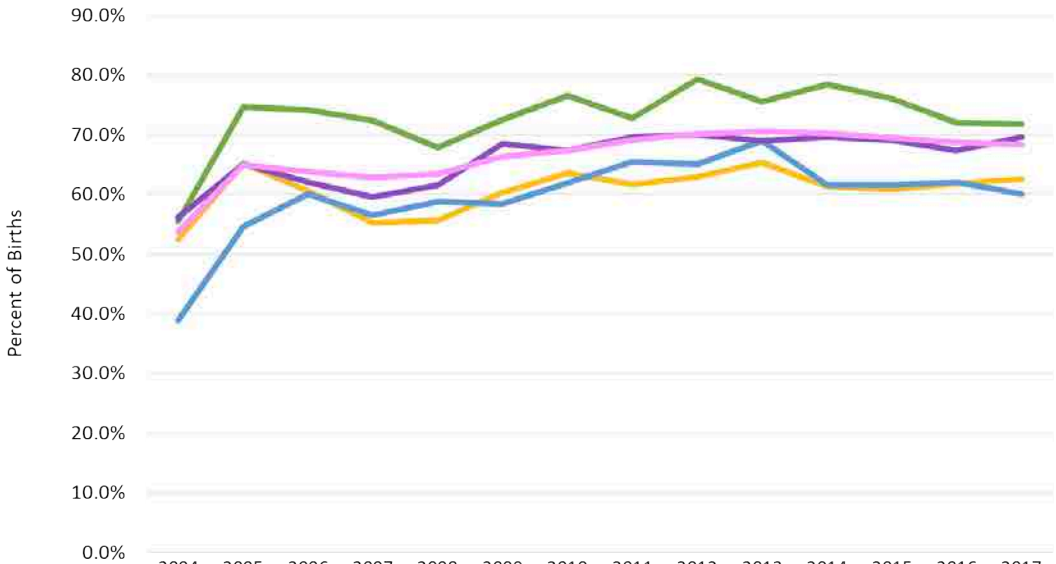
CHART 8.64: WHITE BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	35.1%	44.0%	42.7%	42.7%	43.4%	52.3%	54.7%	52.4%	53.0%	55.3%	51.3%	52.8%	50.2%	47.9%
ORANGE	31.9%	41.6%	38.0%	35.5%	36.5%	38.8%	39.1%	40.9%	41.9%	43.7%	39.2%	38.2%	40.1%	41.0%
OSCEOLA	36.0%	52.7%	55.0%	52.0%	54.0%	57.0%	54.1%	55.5%	58.3%	60.1%	56.2%	58.4%	59.0%	60.7%
SEMINOLE	26.1%	31.5%	31.0%	32.5%	31.5%	35.6%	35.2%	37.4%	37.4%	38.1%	36.9%	33.6%	36.1%	37.3%
FLORIDA	32.2%	39.1%	38.6%	37.8%	39.3%	42.6%	44.1%	44.8%	46.1%	47.0%	44.7%	43.7%	43.4%	43.8%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

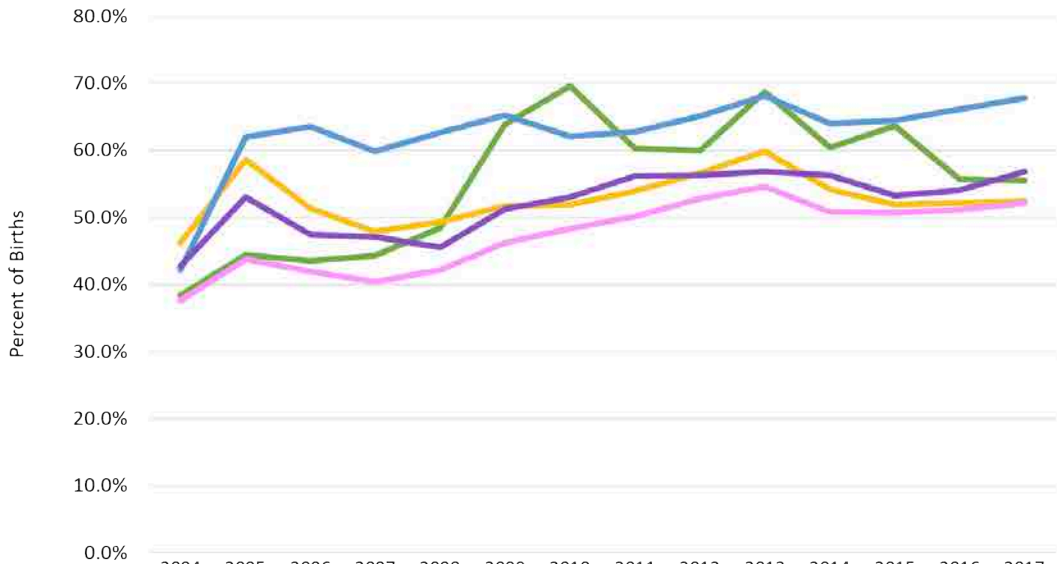
CHART 8.65: BLACK BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	55.5%	74.7%	74.2%	72.4%	67.9%	72.5%	76.5%	72.8%	79.3%	75.5%	78.4%	76.0%	72.0%	71.8%
ORANGE	52.5%	65.2%	60.6%	55.3%	55.7%	60.3%	63.6%	61.7%	63.0%	65.4%	61.3%	60.8%	61.8%	62.6%
OSCEOLA	38.9%	54.7%	60.1%	56.5%	58.8%	58.4%	62.0%	65.5%	65.1%	69.0%	61.6%	61.6%	62.1%	60.1%
SEMINOLE	56.1%	65.1%	62.1%	59.5%	61.6%	68.5%	67.4%	69.6%	70.0%	69.0%	69.6%	69.1%	67.4%	69.6%
FLORIDA	53.7%	64.9%	63.8%	62.8%	63.5%	66.3%	67.3%	69.1%	70.1%	70.6%	70.2%	69.5%	68.7%	68.4%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

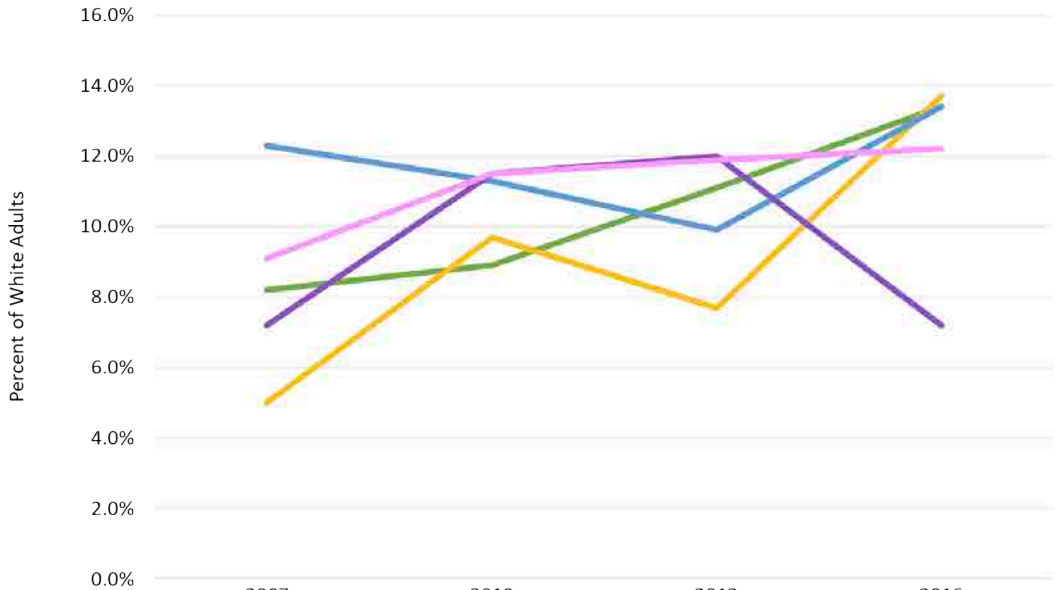
CHART 8.66: HISPANIC BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	38.4%	44.4%	43.5%	44.3%	48.5%	63.9%	69.6%	60.3%	60.0%	68.7%	60.4%	63.7%	55.7%	55.5%
ORANGE	46.2%	58.6%	51.4%	47.9%	49.4%	51.7%	51.9%	53.9%	56.6%	59.9%	54.2%	51.9%	52.2%	52.5%
OSCEOLA	42.2%	62.0%	63.6%	59.9%	62.7%	65.2%	62.1%	62.8%	65.1%	68.2%	64.0%	64.5%	66.1%	67.8%
SEMINOLE	42.8%	53.1%	47.4%	47.1%	45.6%	51.3%	53.1%	56.2%	56.3%	56.8%	56.3%	53.3%	54.1%	56.9%
FLORIDA	37.6%	43.8%	42.0%	40.4%	42.2%	46.2%	48.3%	50.1%	52.8%	54.6%	50.8%	50.7%	51.1%	52.2%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Vital Statistics

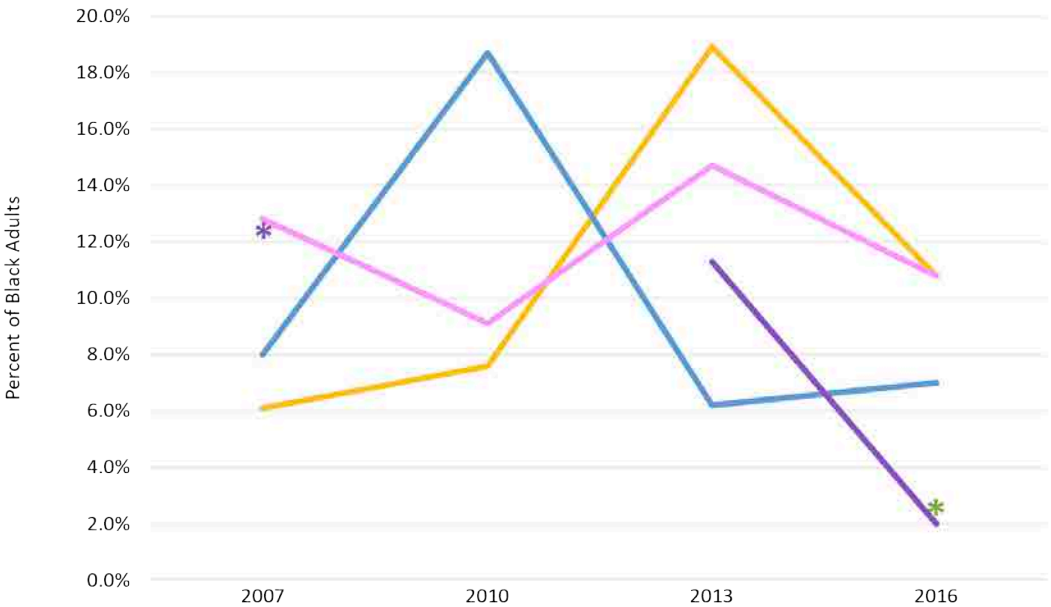
CHART 8.67: WHITE ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	8.2%	8.9%	11.1%	13.4%
ORANGE	5.0%	9.7%	7.7%	13.7%
OSCEOLA	12.3%	11.3%	9.9%	13.4%
SEMINOLE	7.2%	11.5%	12.0%	7.2%
FLORIDA	9.1%	11.5%	11.9%	12.2%

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

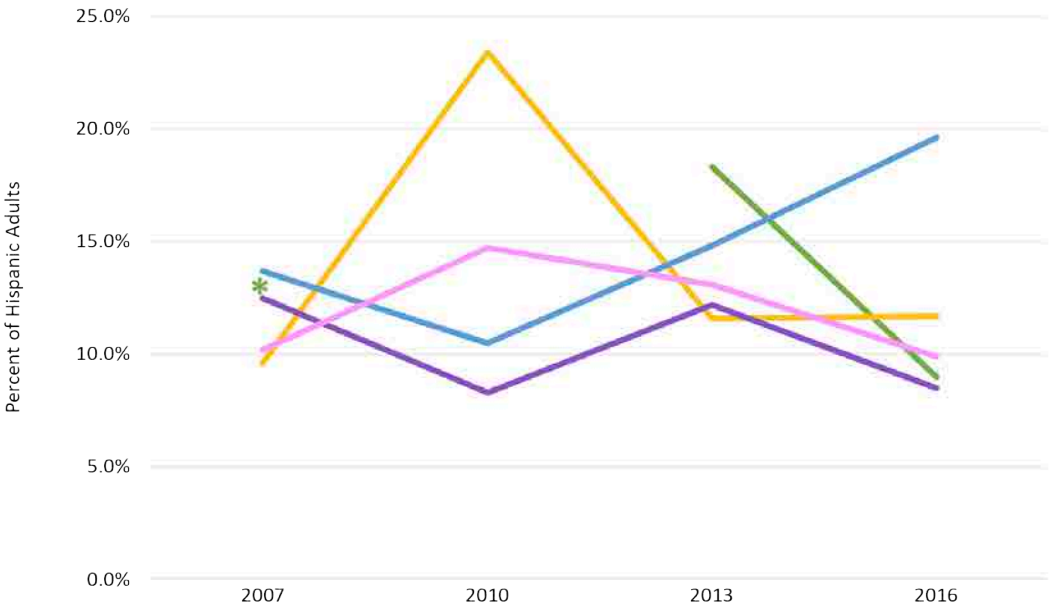
CHART 8.68: BLACK ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	2.6%
ORANGE	6.1%	7.6%	18.9%	10.8%
OSCEOLA	8.0%	18.7%	6.2%	7.0%
SEMINOLE	12.4%	N/A	11.3%	2.0%
FLORIDA	12.8%	9.1%	14.7%	10.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

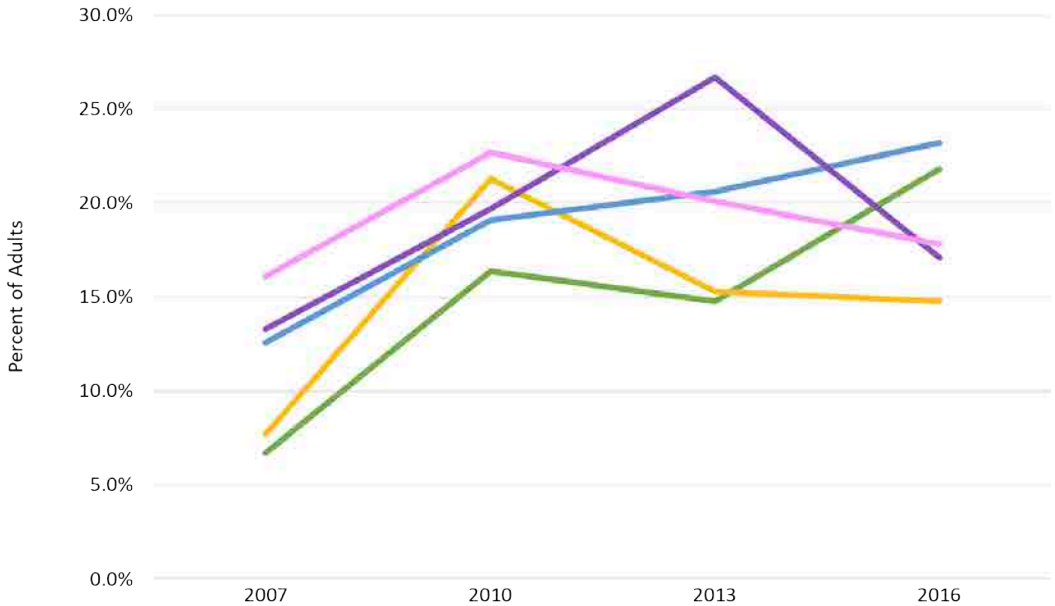
CHART 8.69: HISPANIC ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	13.2%	N/A	18.3%	9.0%
ORANGE	9.6%	23.4%	11.6%	11.7%
OSCEOLA	13.7%	10.5%	14.8%	19.6%
SEMINOLE	12.5%	8.3%	12.2%	8.5%
FLORIDA	10.2%	14.7%	13.1%	9.9%

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

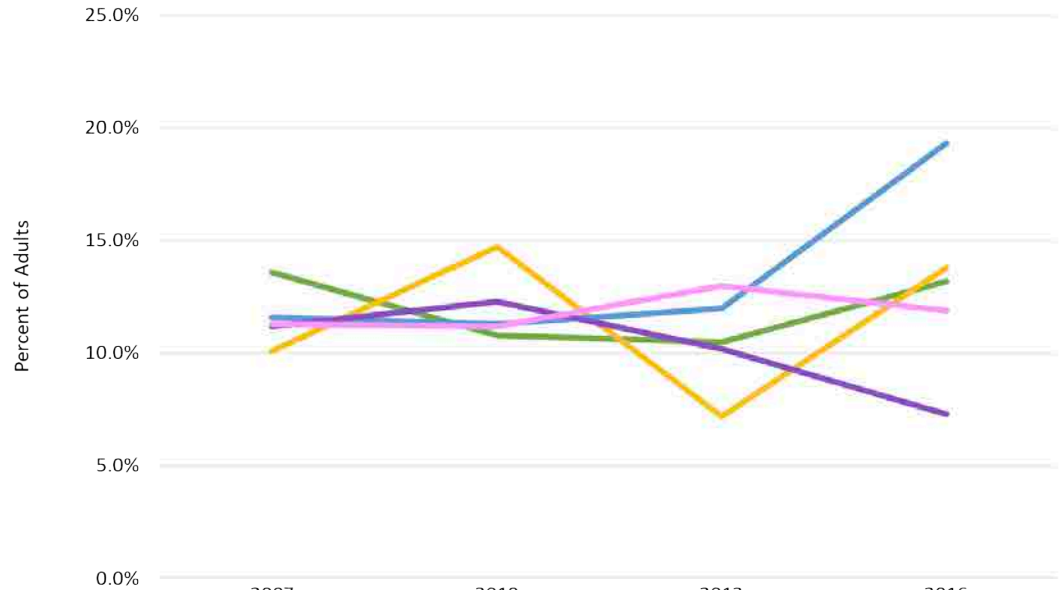
CHART 8.70: POOR MENTAL HEALTH, INCOME <$25K (2007-2016)



	2007	2010	2013	2016
LAKE	6.7%	16.4%	14.8%	21.8%
ORANGE	7.7%	21.3%	15.3%	14.8%
OSCEOLA	12.6%	19.1%	20.6%	23.2%
SEMINOLE	13.3%	19.7%	26.7%	17.1%
FLORIDA	16.1%	22.7%	20.1%	17.8%

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

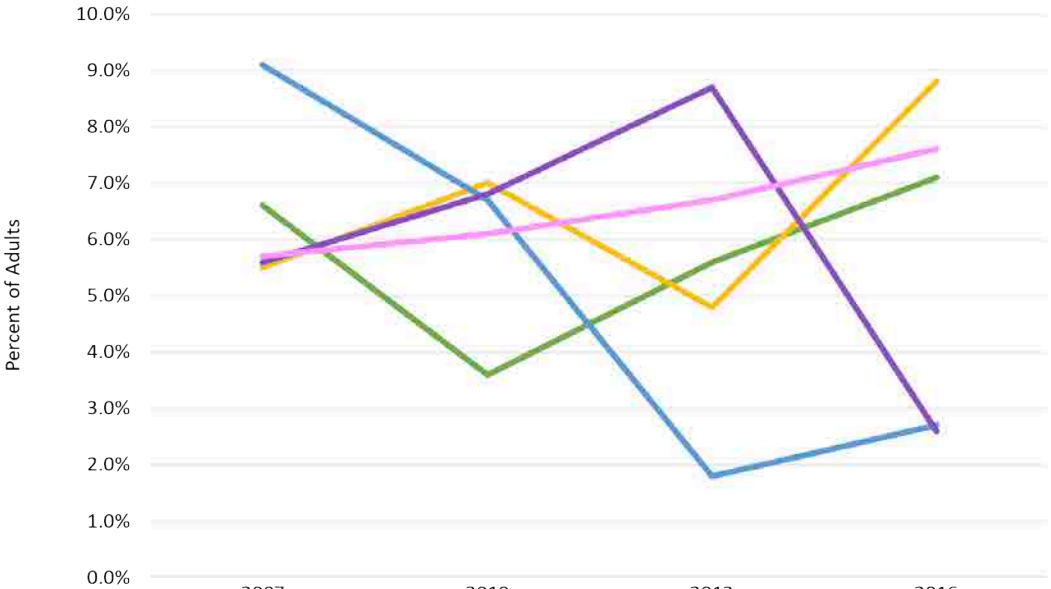
CHART 8.71: POOR MENTAL HEALTH, INCOME $25K-$49K (2007-2016)



	2007	2010	2013	2016
LAKE	13.6%	10.8%	10.5%	13.2%
ORANGE	10.1%	14.7%	7.2%	13.8%
OSCEOLA	11.6%	11.3%	12.0%	19.3%
SEMINOLE	11.2%	12.3%	10.2%	7.3%
FLORIDA	11.3%	11.2%	13.0%	11.9%

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

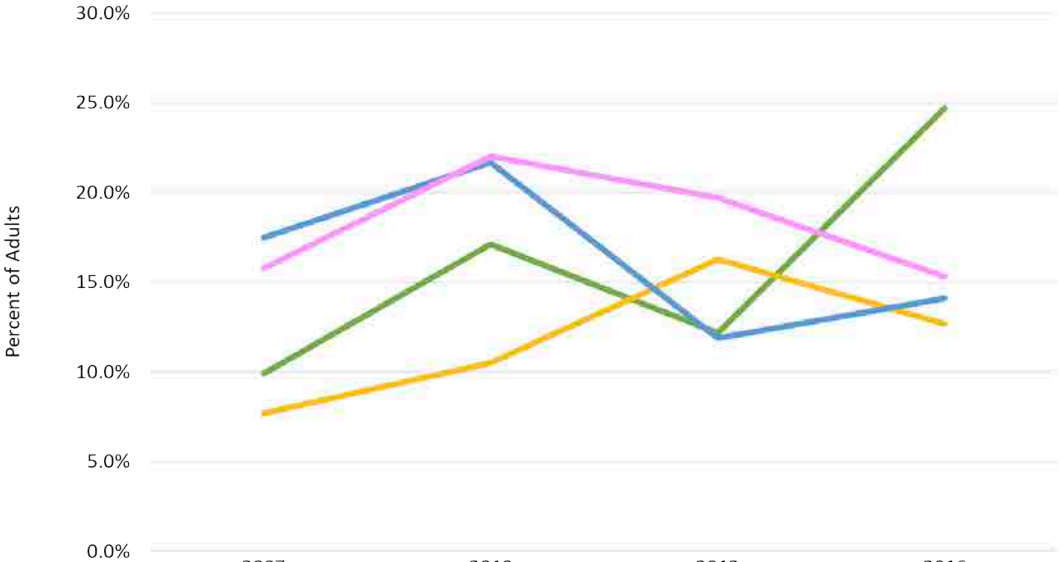
CHART 8.72: POOR MENTAL HEALTH, INCOME $50K+ (2007-2016)



	2007	2010	2013	2016
LAKE	6.6%	3.6%	5.6%	7.1%
ORANGE	5.5%	7.0%	4.8%	8.8%
OSCEOLA	9.1%	6.7%	1.8%	2.7%
SEMINOLE	5.6%	6.8%	8.7%	2.6%
FLORIDA	5.7%	6.1%	6.7%	7.6%

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

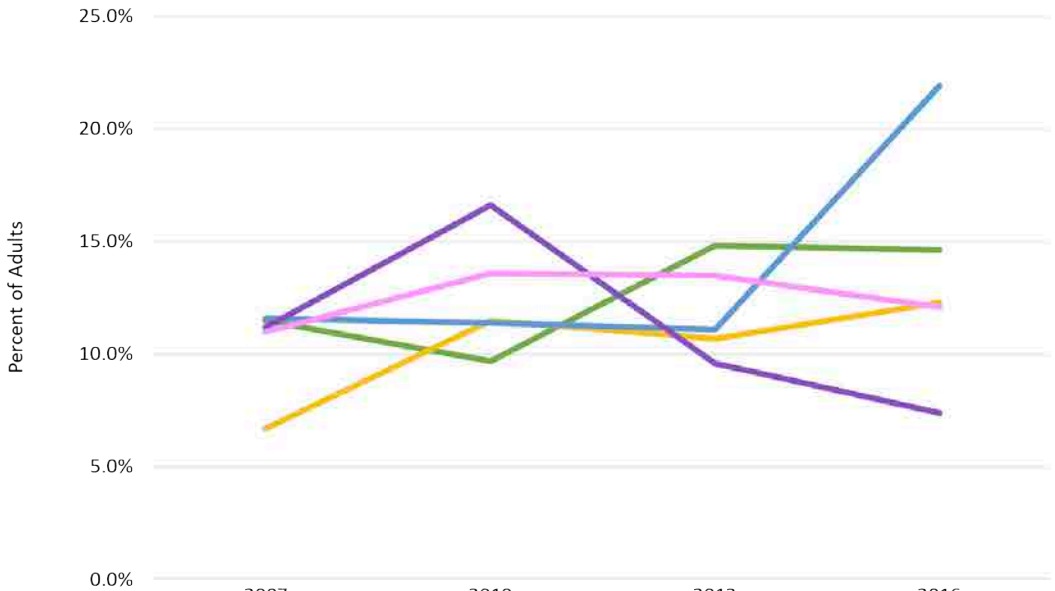
CHART 8.73: POOR MENTAL HEALTH, EDUCATION <HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	9.9%	17.1%	12.2%	24.7%
ORANGE	7.7%	10.5%	16.3%	12.7%
OSCEOLA	17.5%	21.7%	11.9%	14.1%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	15.8%	22.0%	19.7%	15.3%

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

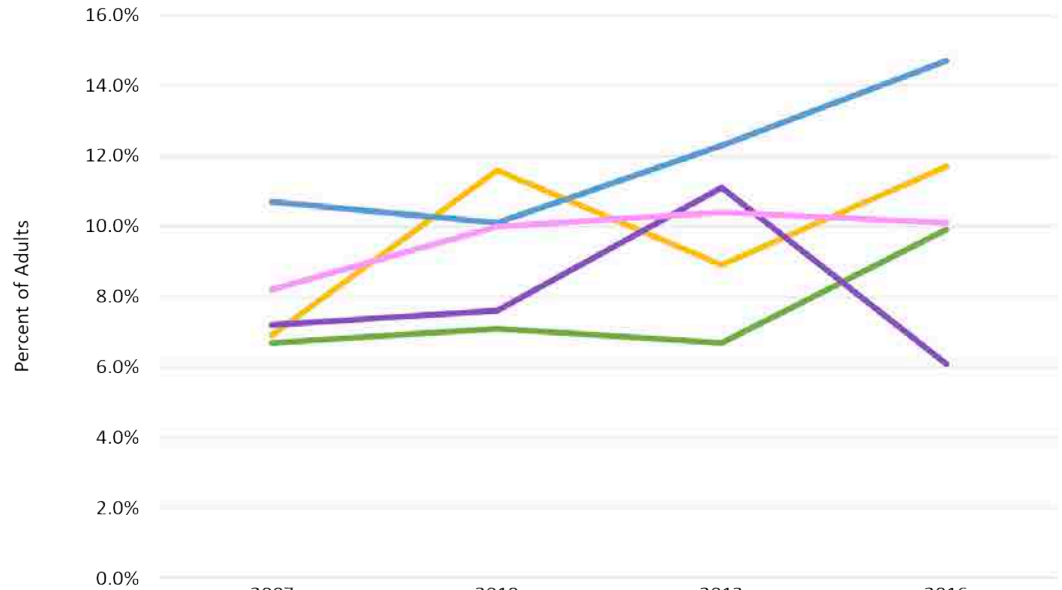
CHART 8.74: POOR MENTAL HEALTH, EDUCATION HIGH SCHOOL-GED (2007-2016)



	2007	2010	2013	2016
LAKE	11.5%	9.7%	14.8%	14.6%
ORANGE	6.7%	11.5%	10.7%	12.3%
OSCEOLA	11.6%	11.4%	11.1%	21.9%
SEMINOLE	11.2%	16.6%	9.6%	7.4%
FLORIDA	11.0%	13.6%	13.5%	12.1%

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

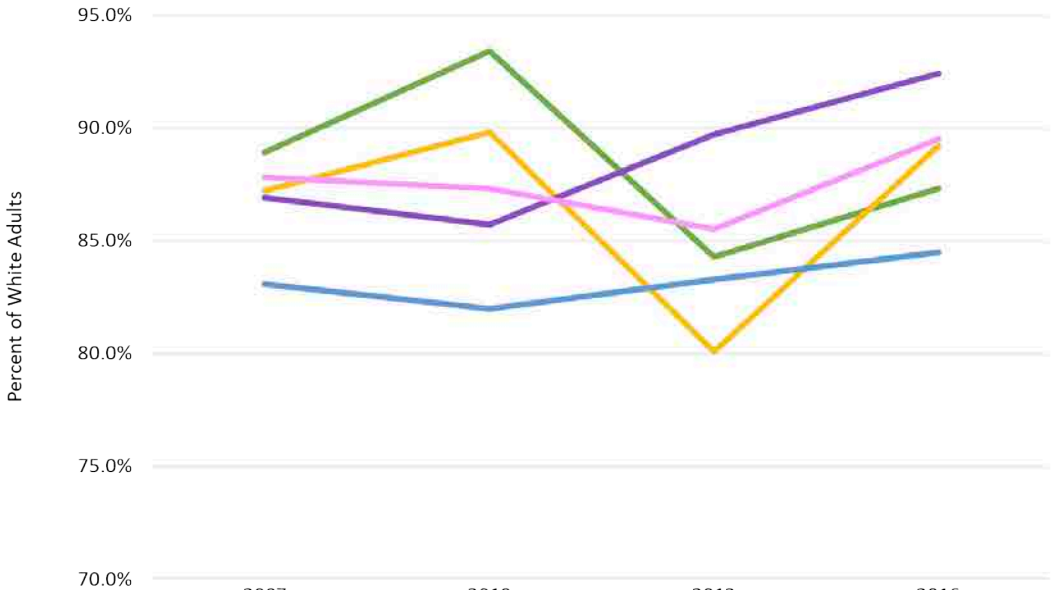
CHART 8.75: POOR MENTAL HEALTH, EDUCATION >HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	6.7%	7.1%	6.7%	9.9%
ORANGE	6.9%	11.6%	8.9%	11.7%
OSCEOLA	10.7%	10.1%	12.3%	14.7%
SEMINOLE	7.2%	7.6%	11.1%	6.1%
FLORIDA	8.2%	10.0%	10.4%	10.1%

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

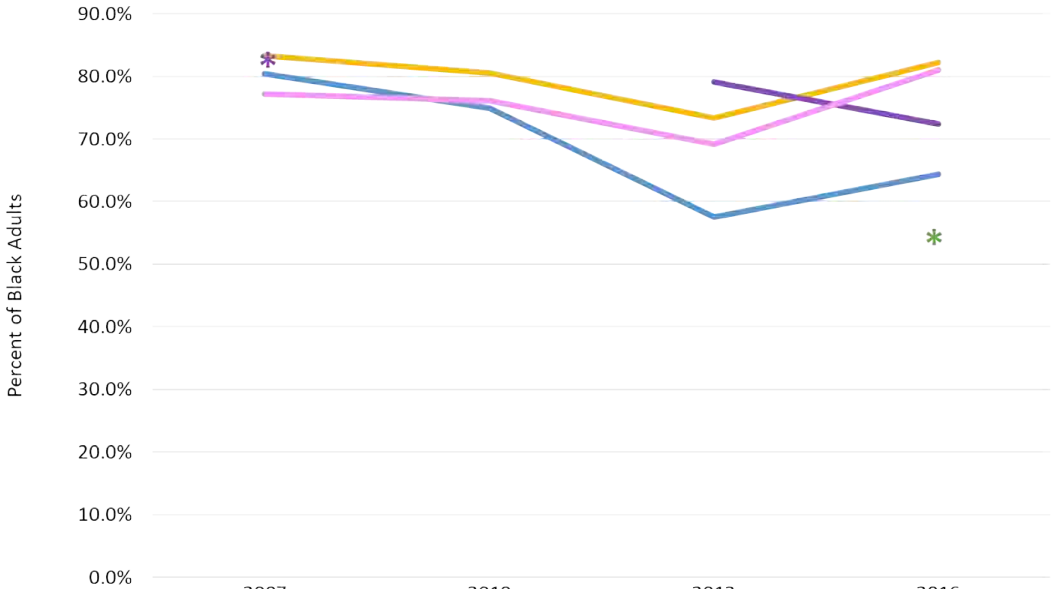
CHART 8.76: WHITE INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	88.9%	93.4%	84.3%	87.3%
ORANGE	87.2%	89.8%	80.1%	89.2%
OSCEOLA	83.1%	82.0%	83.3%	84.5%
SEMINOLE	86.9%	85.7%	89.7%	92.4%
FLORIDA	87.8%	87.3%	85.5%	89.5%

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

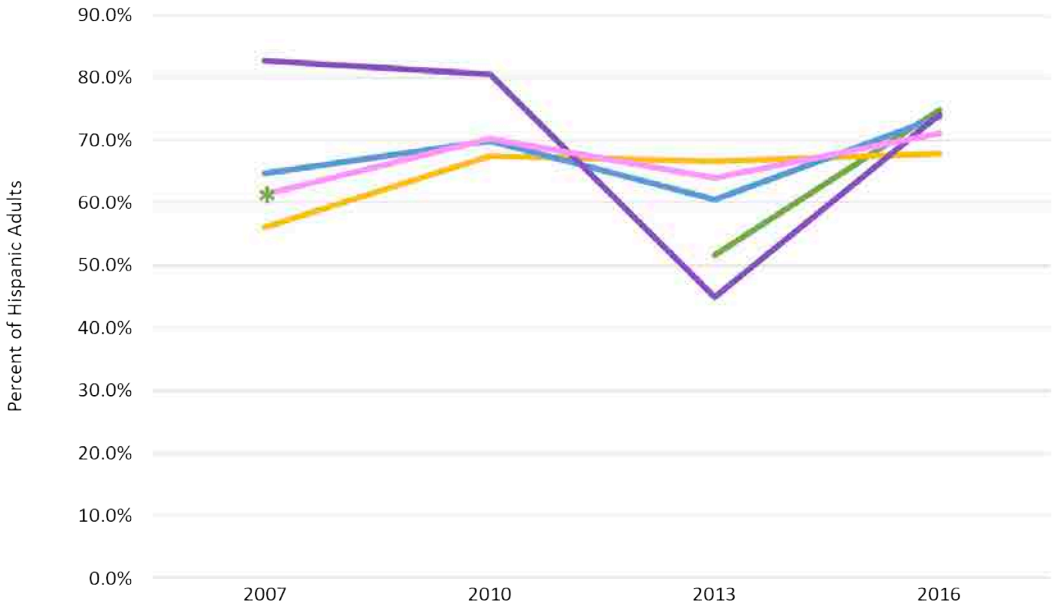
CHART 8.77: BLACK INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	54.7%
ORANGE	83.3%	80.5%	73.4%	82.2%
OSCEOLA	80.4%	74.9%	57.5%	64.4%
SEMINOLE	82.8%	N/A	79.1%	72.4%
FLORIDA	77.2%	76.1%	69.2%	81.0%

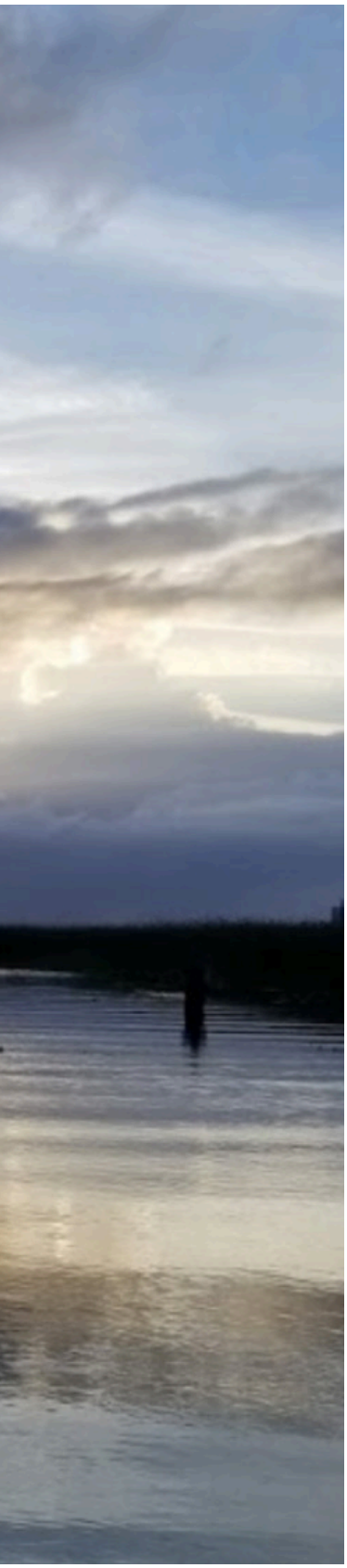
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.78: HISPANIC INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	61.6%	N/A	51.7%	74.8%
ORANGE	56.1%	67.5%	66.7%	67.9%
OSCEOLA	64.7%	69.9%	60.5%	73.7%
SEMINOLE	82.7%	80.5%	45.0%	74.1%
FLORIDA	61.4%	70.3%	64.0%	71.1%

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



CHAPTER NINE

Hot Spotting Summary

Ralph V. Chisholm Regional Park
St. Cloud, FL

Osceola County

Hospital Utilization: Hot Spotting

Hot spotting, a geographical analysis method, generates a color-coded map that illustrates a geographic area where there is a concentration of indicators being studied; for this report, it is uninsured patient visits. The hot spot maps will guide and support strategic program deployment to meet the needs identified in this process.

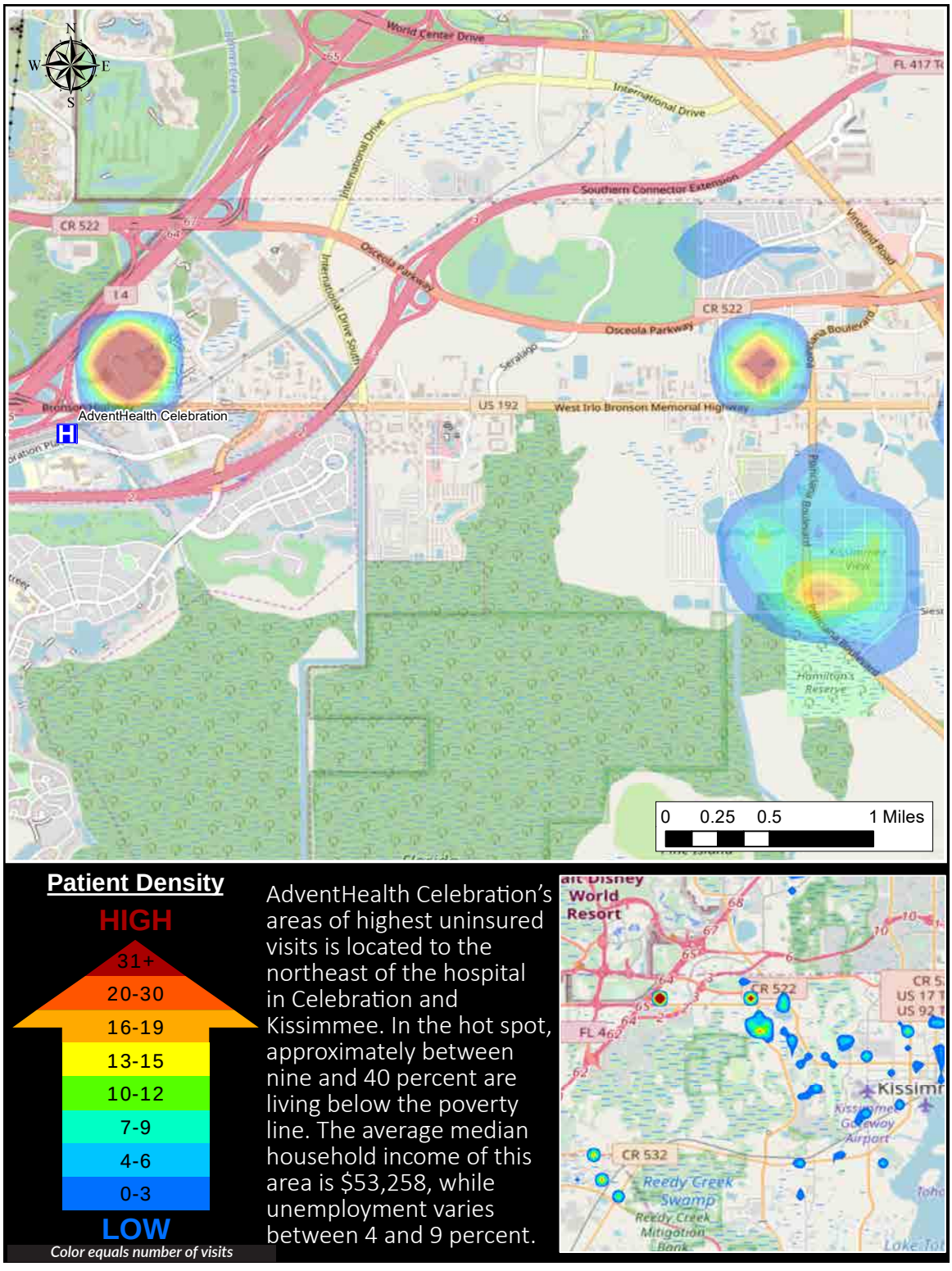
This method was applied to analyze de-identified, uninsured inpatient and outpatient (emergency department) hospital utilization data from AdventHealth Celebration. The color-coded maps (Figures 9.1 and 9.2) were created from the addresses of uninsured patient visits and represent high-density areas of utilization across the service area. Please note that the patient density color bar on each map shows the number of visits that correspond to each hot spot color, with red indicating the highest patient density and blue the lowest.

For this report, the hot spot is defined as the top five census tracts with the most uninsured patient visits overall. These census tracts may not be adjacent to one another; therefore, the hot spot analysis is reflective of the top five census tracts and not necessarily the areas of high-density utilization shown on the maps (Figures 9.1 and 9.2).

Inpatient and outpatient data for uninsured patients from the Hospital for fiscal years 2016, 2017 and 2018 were used in this analysis. In addition to the standard hospital uninsured patient data in most hot spotting projects, this hot spotting analysis includes economic variables and conditions of the area to analyze the correlation between health care utilization and the socioeconomic conditions in which people live.

Figure 9.1 illustrates the uninsured inpatient hot spot analysis for AdventHealth Celebration.

FIGURE 9.1: ADVENTHEALTH CELEBRATION UNINSURED INPATIENT HOT SPOT ANALYSIS



Tables 9.1 through 9.6 outline the uninsured inpatient specific hot spot analysis for AdventHealth Celebration. The analysis includes all uninsured inpatient visits (Table 9.1) and focuses on those visits within the hot spot for fiscal years 2016 through 2018 (Tables 9.2 through 9.5). Table 9.6 displays the census tracts, what zip code(s) they are in and the economic conditions for the hot spot. In the top five census tracts (the hot spot) from which the most frequent uninsured inpatient visits are generated, the average unemployment rate is about six percent; approximately 21 percent of the population is living below the federal poverty level. The average annual median household income is $53,258. The 452 uninsured inpatient visits from within the hot spot cost more than $17.5 million and accounted for 49.1 percent of all uninsured inpatient visits between 2016 and 2018 (Table 9.1). More than three-fourths (77.2 percent) of uninsured inpatient visits were made by White patients. Additionally, patients aged 40-49 accounted for 27.2 percent of uninsured outpatient visits.

Sepsis, unspecified organism, was the most frequent primary diagnosis code and had the highest total and average costs from uninsured inpatient visits within this hot spot at 5.5 percent with a total cost of more than $1.8 million and an average cost of $72,323. Essential (primary) hypertension was the most frequent secondary diagnosis from uninsured inpatient visits at 8.4 percent with a total cost of more than $1.3 million. To protect patient privacy, any analysis that resulted in fewer than five visits or if a certain diagnosis had less than 200,000 new cases per year is not included, except for total cost per diagnosis.

TABLE 9.1: ADVENTHEALTH CELEBRATION UNINSURED INPATIENT VISIT COMPARISON (2016-2018)

Criteria*	Data Snapshot
Total uninsured inpatient visits	920
Total uninsured inpatient visits in hot spot	452
Total uninsured inpatient cost	$36,193,224
Total uninsured inpatient cost in hot spot	$17,561,826
Percent of uninsured inpatient visits in hot spot	49.1%
Total homeless uninsured inpatient visits	116
Homeless visits as a percent of all uninsured inpatient visits	12.6%
Total cost for uninsured inpatient homeless visits	$3,589,922

*Note: Includes individuals listed as homeless, unknown or homeless shelter/service facility for each of the total uninsured rows above; however, these individuals are not included in hot spot specific rows.
Source: AdventHealth Celebration Uninsured Inpatient Data

TABLE 9.2: ADVENTHEALTH CELEBRATION TOP 5 MOST FREQUENT UNINSURED INPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
A41.9 Sepsis, unspecified organism	25	$1,808,065	5.5%	$72,323
Z38.00 Single liveborn infant, delivered vaginally	19	$93,644	4.2%	$4,929
K35.80 Unspecified acute appendicitis	12	$512,162	2.7%	$42,680
J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation	11	$417,398	2.4%	$37,945
F10.229 Alcohol dependence with intoxication, unspecified	10	$201,717	2.2%	$20,172

Source: AdventHealth Celebration Uninsured Inpatient Data

TABLE 9.3: ADVENTHEALTH CELEBRATION TOP 5 MOST FREQUENT UNINSURED INPATIENT SECONDARY DIAGNOSIS CODES (2016-2018)

Top 5 Secondary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
I10 Essential (primary) hypertension	38	$1,365,101	8.4%	$35,924
E87.1 Hypo-osmolality and hyponatremia	36	$1,306,867	8.0%	$36,302
N17.9 Acute kidney failure, unspecified	26	$1,337,526	5.8%	$51,443
N39.0 Urinary tract infection, site not specified	20	$986,719	4.4%	$49,336
Z37.0 Single Live Birth	19	$420,157	4.2%	$22,114

Source: AdventHealth Celebration Uninsured Inpatient Data

TABLE 9.4: ADVENTHEALTH CELEBRATION TOP 5 HIGHEST COST UNINSURED INPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Highest Cost Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
A41.9 Sepsis, unspecified organism	25	$1,808,065	5.5%	$72,323
K35.80 Unspecified acute appendicitis	12	$512,162	2.7%	$42,680
J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation	11	$417,398	2.4%	$37,945
I13.0 Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease*		$331,687		
I21.4 Non-ST elevation myocardial infarction (NSTEMI)*		$316,453		

*To protect patient privacy, any analysis that resulted in fewer than five visits or if a certain diagnosis had less than 200,000 new cases per year is not included, except for total cost per diagnosis.
Source: AdventHealth Celebration Uninsured Inpatient Data

TABLE 9.5: ADVENTHEALTH CELEBRATION UNINSURED INPATIENT VISITS BY RACE, ETHNICITY AND AGE (2016-2018)

Race	Number	%	Ethnic Group	Number	%	Age	Number	%
American Indian or Alaskan Native	0	0.0%	Hispanic or Latino	197	34.7%	0-18	28	6.3%
Asian	6	1.3%	Multiple	0	0.0%	19-29	75	16.6%
Black or African American	25	5.5%	Non-Hispanic or non-Latino	292	64.6%	30-39	101	22.3%
Multiple	12	2.7%	Unknown	3	0.7%	40-49	123	27.2%
Native Hawaiian or Pacific Islander	0	0.0%				50-59	103	22.8%
Other	55	12.2%				60-69	16	3.5%
Unknown	5	1.1%				70-79	4	0.9%
White	349	77.2%				80+	2	0.4%

Source: AdventHealth Celebration Uninsured Inpatient Data

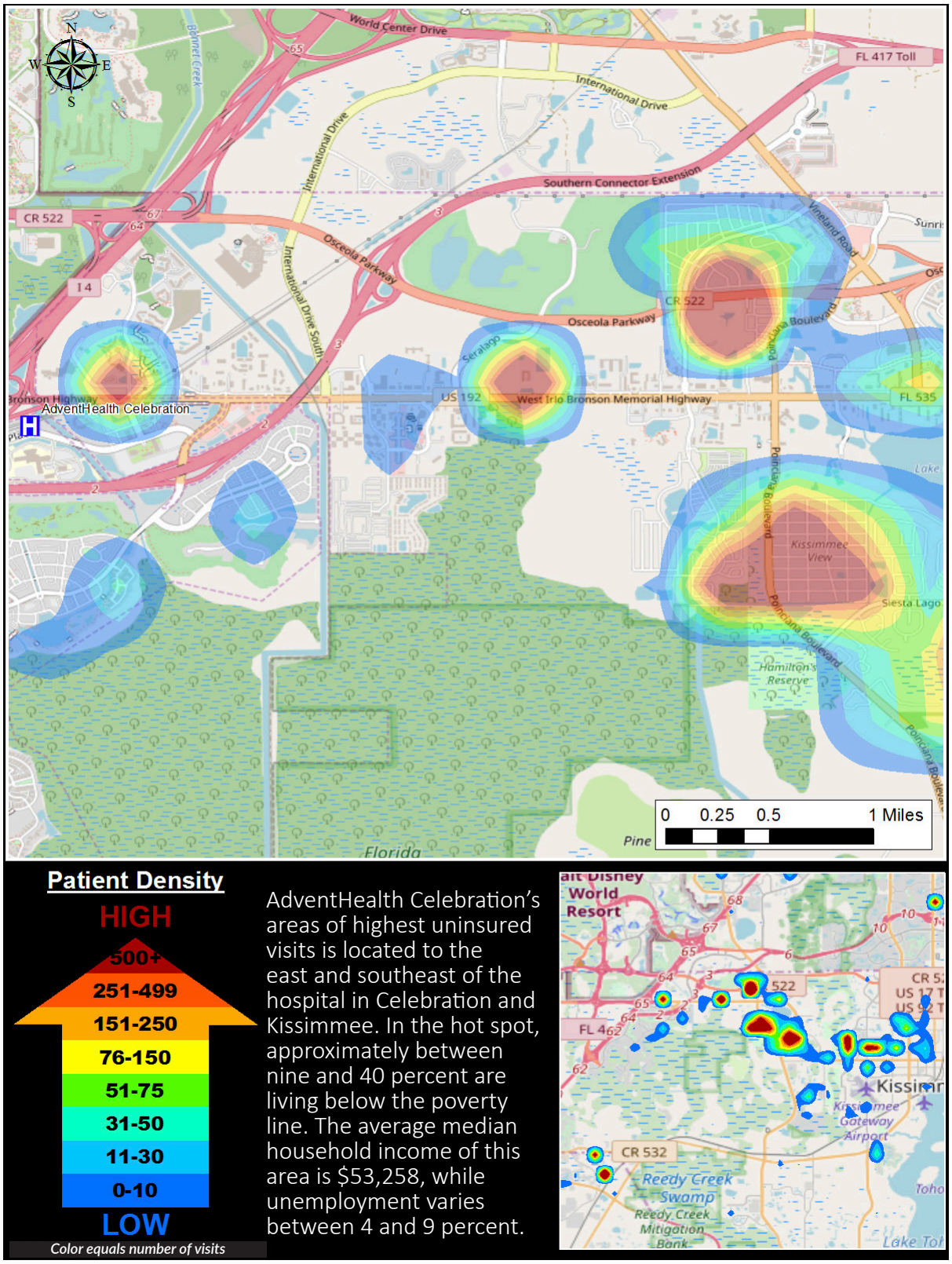
TABLE 9.6: ADVENTHEALTH CELEBRATION ECONOMIC CHARACTERISTICS OF TOP 5 CENSUS TRACTS (2012-2019)

Census Tract	Census Tract within Zip Code(s)	% Unemployed	Median HH Income	% Below Poverty
12-097-40902	34746	9.3%	$41,266	39.9%
12-097-40802	34747	4.0%	$56,732	17.3%
12-097-40804	33848, 33896, 34746	5.8%	$44,075	20.1%
12-097-40803	34747	4.8%	$76,512	8.8%
12-097-41002	33848, 33896, 34746, 34758	4.2%	$47,705	16.4%
Average		5.6%	$53,258	20.5%

Source: ProximityOne
Source: U.S. Census Bureau

Figure 9.2 illustrates the uninsured outpatient hot spot analysis for AdventHealth Celebration.

FIGURE 9.2: ADVENTHEALTH CELEBRATION UNINSURED OUTPATIENT HOT SPOT ANALYSIS



Tables 9.7 through 9.12 outline the uninsured outpatient specific hot spot analysis for AdventHealth Celebration. The analysis includes all uninsured outpatient visits (Table 9.7) and focuses on those visits within the hot spot for fiscal years 2016 through 2018 (Tables 9.8 through 9.11). Table 9.12 displays the census tracts, what zip code(s) they are in and the economic conditions for the hot spot. In the top five census tracts (the hot spot) from which the most frequent uninsured outpatient visits are generated, the average unemployment rate is about six percent; approximately 21 percent of the population is living below the federal poverty level. The average annual median household income is $53,258. The 4,765 uninsured outpatient visits from within the hot spot cost more than $20.6 million and accounted for 49.9 percent of all uninsured outpatient visits between 2016 and 2018 (Table 9.7). Almost three-fourths (72.7 percent) of uninsured outpatient visits were made by White patients. Additionally, patients aged 19-29 accounted for 30.3 percent of uninsured outpatient visits.

Chest pain, unspecified, was the most frequent primary diagnosis code and had the highest total and average costs from uninsured outpatient visits within this hot spot at three percent and with a total cost of more than $1.8 million and an average cost of $13,373 between 2016 and 2018. Essential (primary) hypertension was the most frequent secondary diagnosis from uninsured outpatient visits within this hot spot at 3.2 percent and with a total cost of more than $900,000 for the same time period.

TABLE 9.7: ADVENTHEALTH CELEBRATION UNINSURED OUTPATIENT VISIT COMPARISON (2016-2018)

Criteria*	Data Snapshot
Total uninsured outpatient visits	9,556
Total uninsured outpatient visits in hot spot	4,765
Total uninsured outpatient cost	$43,546,635
Total uninsured outpatient cost in hot spot	$20,651,064
Percent of uninsured outpatient visits in hot spot	49.9%
Total homeless uninsured outpatient visits	981
Homeless visits as a percent of all uninsured outpatient visits	10.3%
Total cost for uninsured outpatient homeless visits	$4,083,310

*Note: Includes individuals listed as homeless, unknown or homeless shelter/service facility for each of the total uninsured rows above; however, these individuals are not included in hot spot specific rows.
Source: AdventHealth Celebration Uninsured Outpatient Data

TABLE 9.8: ADVENTHEALTH CELEBRATION TOP 5 MOST FREQUENT UNINSURED OUTPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
R07.9 Chest pain, unspecified	141	$1,885,533	3.0%	$13,373
R10.9 Unspecified abdominal pain	114	$917,001	2.4%	$8,044
N39.0 Urinary tract infection, site not specified	104	$583,286	2.2%	$5,609
Z12.31 Encounter for screening mammogram for malignant neoplasm of breast	103	$46,762	2.2%	$454
R51 Headache	96	$653,835	2.0%	$6,811

Source: AdventHealth Celebration Uninsured Outpatient Data

TABLE 9.9: ADVENTHEALTH CELEBRATION TOP 5 MOST FREQUENT UNINSURED OUTPATIENT SECONDARY DIAGNOSIS CODES (2016-2018)

Top 5 Secondary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
I10 Essential (primary) hypertension	154	$934,670	3.2%	$6,069
R10.9 Unspecified abdominal pain	74	$667,847	1.6%	$9,025
R50.9 Fever, unspecified	66	$212,461	1.4%	$3,219
R11.2 Nausea with vomiting, unspecified	64	$458,724	1.3%	$7,168
X58.XXXA Exposure to other specified factors, initial encounter	60	$117,106	1.3%	$1,952

Source: AdventHealth Celebration Uninsured Outpatient Data

TABLE 9.10: ADVENTHEALTH CELEBRATION TOP 5 HIGHEST COST UNINSURED OUTPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Highest Cost Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
R07.9 Chest pain, unspecified	141	$1,885,533	3.0%	$13,373
R10.9 Unspecified abdominal pain	114	$917,001	2.4%	$8,044
R07.89 Other chest pain	76	$847,721	1.6%	$11,154
R51 Headache	96	$653,835	2.0%	$6,811
N39.0 Urinary tract infection, site not specified	104	$583,286	2.2%	$5,609

Source: AdventHealth Celebration Uninsured Outpatient Data

TABLE 9.11: ADVENTHEALTH CELEBRATION UNINSURED OUTPATIENT VISITS BY RACE, ETHNICITY AND AGE (2016-2018)

Race	Number	%	Ethnic Group	Number	%	Age	Number	%
American Indian or Alaskan Native	7	0.2%	Hispanic or Latino	2,177	45.7%	0-18	509	10.7%
Asian	73	1.6%	Multiple	1	0.0%	19-29	1,446	30.3%
Black or African American	484	10.2%	Non-Hispanic or non-Latino	2,521	52.9%	30-39	955	20.0%
Multiple	79	1.7%	Unknown	66	1.4%	40-49	913	19.2%
Native Hawaiian or Pacific Islander	0	0.0%				50-59	650	13.6%
Other	610	12.8%				60-69	176	3.7%
Unknown	31	0.8%				70-79	79	1.7%
White	3,466	72.7%				80+	37	0.8%

Source: AdventHealth Celebration Uninsured Outpatient Data

TABLE 9.12: ADVENTHEALTH CELEBRATION ECONOMIC CHARACTERISTICS OF TOP 5 CENSUS TRACTS (2012-2019)

Census Tract	Census Tract within Zip Code(s)	% Unemployed	Median HH Income	% Below Poverty
12-097-40902	34746	9.3%	$41,266	39.9%
12-097-40802	34747	4.0%	$56,732	17.3%
12-097-40804	33848, 33896, 34746	5.8%	$44,075	20.1%
12-097-40803	34747	4.8%	$76,512	8.8%
12-097-41002	33848, 33896, 34746, 34758	4.2%	$47,705	16.4%
Average		5.6%	$53,258	20.5%

Source: ProximityOne
Source: U.S. Census Bureau

CHAPTER TEN

Compliance and Priorities

Lake Kissimmee State Park
Kissimmee, FL

Osceola County

Compliance

From June 2018 to December 2019, the Central Florida Division-South Region (CFD-South) engaged in a robust CHNA process through both an external collaboration with the Collaborative—comprised of representation from AdventHealth CFD-South; Aspire Health Partners; Orlando Health; Departments of Health in Lake, Orange, Osceola and Seminole Counties; Community Health Centers; Orange Blossom Family Health; Osceola Health Services and True Health (see Chapter 4 for a description of the Collaborative)—and an internal process through the local CHNAC. Utilizing IRS guidelines to outline the CHNA approach, the goal of CFD-South was to create an informative, engaging and meaningful process that would create a healthier community through:

- Building and expanding on existing community relationships to identify and prioritize community needs through a shared initiative.
- Sharing data and resources to inform and expand the understanding of community needs.
- A better understanding of the resources available in the Central Florida region. Through this understanding, the goal is to align and streamline future strategies where possible to decrease redundancies, collaborate collectively and improve the impact of programming through a shared vision.

The synergies of the Collaborative created a network that expanded beyond individual organizations, increasing the reach and information available to support the process. The membership in the Collaborative was a primary component in accomplishing this as described below:

- The two largest health care systems in the four-county region shared data to identify the top causes of utilization in their systems and to more thoroughly understand the diverse needs of the community.
- A dedicated mental and behavioral health system to gain insight into the complex needs of the community.
- The departments of health in four counties informed the process through an understanding of the public health needs and trends in the four-county region.
- The addition of four Federally Qualified Healthcare Clinic organizations with more than 25 locations in the four-county region ensured the voices of those most in need would be included. These needs were heard not only from the inclusion of the providers who work in the clinics, but also by using the clinics as a site for primary data collection.

CFD-South built on the Collaborative's synergies and network in the development of their own internal process and prioritization. First, by utilizing the same criteria used by the Collaborative to prioritize the identified needs and second, by including the Collaborative members in the local CHNAC committees. Additional details are provided below.

The Collaborative Process

Data Collection

To create the most comprehensive snapshot of the needs and issues faced by those in the four-county region as possible, the Collaborative collected the following primary data to inform the process:

- 2,708 community surveys: through an online platform and through strategic placement of paper copies in local FQHCs
- 15 focus groups with 235 participants: with representation from: community organizations focusing on homelessness, mental and behavioral health, senior care, underserved and underrepresented populations; emergency personnel; individuals accessing crisis care and employment services, food and household subsidies, and case management assistance; the Seminole County Jail
- 34 stakeholder interviews: participants were chosen based on the populations they serve and needs their organizations address
- 172 key informant surveys: participants were chosen based on the populations they serve and needs their organizations address
- 135 intercept surveys: surveys were conducted at local FQHCs; an organization providing a daily lunch for the homeless; an organization providing food and grocery subsidies

Secondary data was sourced from more than 19 sources including the following:

- Utilization data from the hospital systems
- FLHealthCHARTS (a community health assessment resource tool set, providing health statistics on more than 3000 indicators at the county level)
- Centers for Disease Control and Prevention
- Healthy People 2020
- US Census Bureau

This compilation of data was collected and analyzed from September 2018 to May 2019. By utilizing a data triangulation method (outlined in Chapter 2), common themes and trends were identified to inform a data presentation given by SSI on April 2, 2019 to the Collaborative. The presentation was used to by the Collaborative (referred to as the regional CHNAC) to prioritize an aggregate list of needs (Table 10.1). Individual member organizations could use the Collaborative's aggregate list during their own prioritization exercises as a reference. The Collaborative and the local CHNAC followed the same methodology for prioritization (data review and a collective voting session). The same criteria were used for the Collaborative and local CHNAC prioritization exercise, these criteria are included below in the explanation of CFD-South's prioritization process.

The top priorities for the Collaborative are in rank order listed in Table 10.1.

TABLE 10.1: THE CENTRAL FLORIDA COMMUNITY COLLABORATIVE AGGREGATE PRIORITIES

Identified Needs	Accountability	Magnitude	Impact	Capacity	Total A+M+I+C
Communicable Disease: Childhood Immunizations	7.6	7.8	8.4	8.3	32.1
Chronic Disease: Obesity	6.9	8.6	9.3	6.6	31.4
Chronic Disease: Diabetes	7.3	8.3	9.1	6.7	31.4
Chronic Disease: Cardiovascular Disease	8.2	8.0	8.1	7.1	31.4
Chronic Disease: Childhood Obesity	7.4	8.6	9.1	5.9	31.
Communicable Disease: HIV/AIDS	7.3	7.8	7.8	7.6	30.5
Behavioral Risks: Substance Abuse (Drugs, Alcohol, Nicotine)	5.2	8.6	8.9	5.5	28.2
Birth Characteristics: Infant Mortality	6.8	8.0	7.4	6.9	29.1
Chronic Disease: Hypertension	7.4	7.1	7.7	7.1	29.3
Birth Characteristics: Low Birth Weight	6.9	7.4	7.9	6.7	28.9

Central Florida Division South Region Prioritization

In order to ensure broad community input throughout the CHNA process, representatives from AdventHealth Central Florida Division participated in regional and local CHNACs to help guide and inform the prioritization process. Participation in the regional CHNAC took place through our membership in the Collaborative outlined above. The local CHNAC was comprised of representatives from all AdventHealth hospitals in CFD-South: AdventHealth Altamonte Springs; AdventHealth Apopka; AdventHealth Celebration; AdventHealth East Orlando; AdventHealth Kissimmee; AdventHealth Orlando; and AdventHealth Winter Park; as well as from AdventHealth Corporate Services. Both CHNACs included representatives from departments of health and local community organizations. Additional information is provided below.

The Regional CHNAC (the Collaborative)

The Central Florida Community Collaborative Steering Committee (the Collaborative) was comprised of representation from all member organizations. The Steering Committee met 22 times throughout 2018 and 2019, either in person or via bi-weekly conference calls, and included representation from the hospital systems, public health experts and the broad community. This included intentional representation from organizations that serve minorities, low-income and underrepresented populations. The Collaborative participants reviewed the primary and secondary data to identify a list of priorities (See Table 10.1).

The Local CHNAC

Representatives from Central Florida Division-South Region and Corporate Services participated in a meeting, which included individuals from community organizations serving underrepresented, low income and minority populations; all AdventHealth hospitals in the CFD-South Region, as well as public health experts. The 120 participants reviewed the primary and secondary data, as well as the Collaborative's CHNAC priorities, to help define the needs to be addressed by CFD-South.

Prioritization Criteria

Specific criteria were used to aid in the prioritization process to identify and select the top needs that would be addressed. Members of the local CHNAC were asked to rank the criteria on a scale of 1 to 10 for each of the needs that had been identified during the data reviews and discussions. OptionFinder, an electronic polling platform that enables operators to build lists that can be voted on anonymously by audience participants, was used to rate all of the criteria. The criteria used is outlined below:

1. Accountable organization: The extent to which the organization is positioned in the community to lead the planning or deployment of programming to address the need.
2. Magnitude of the problem: The degree to which the need leads to death, disability or impaired quality of life and/or could be an epidemic based on the rate or percentage of the population that is impacted by the issue.
3. Impact on health outcomes: The extent to which the issue impacts health outcomes and/or is the driver of other conditions.
4. Capacity/resources: The extent to which CFD-South has the systems and resources in place or available to implement evidence-based solutions.

These criteria were used to generate an aggregated number for each identified need, in order to develop a ranking to determine potential impact in addressing the needs.

AdventHealth CFD-South Prioritization Process

On April 3, 2019 AdventHealth CFD-South's local CHNAC met to review and discuss the primary and secondary data, as well as the priorities identified by the Collaborative. The local CHNAC then ranked the identified needs to select a priority. The meeting was attended by 120 representatives from AdventHealth, local departments of health and community organizations.

The following outlines the steps taken by the local CHNAC to identify the health priorities of the community.

Step 1: Data Review

Meeting attendees reviewed the primary and secondary data, as well as the any trends that had been identified in the data. The data was looked at on a county specific level to ensure it was relevant for all campuses.

Step 2: Campus Specific Breakouts

AdventHealth representatives from each hospital campus engaged in a campus specific breakout session for further discussion. When a campus had a shared service area or leadership structure, breakout sessions were combined to ensure a unified strategic vision. Community and public health representation attended the breakout sessions that aligned with the community they serve from a geographic perspective. For example, public health representation for the Altamonte Springs campus was from the Department of Health in Seminole County, which is in the Hospital's service area. Here, campus breakouts selected the top identified top health priorities for their campus' primary service areas. For a list of the AdventHealth Celebration specific breakout session attendees see Tables 4.1 and 4.2.

During the breakout sessions, attendees discussed the data and the unique needs of their campus and the communities they serve to create a list of 10-12 potential priorities. Through data review and discussion, each individual completed a grid with the identified needs they viewed as top priorities, which was then returned to CFD-South community health staff. The CFD-South community health staff entered the identified needs from the breakout sessions into the OptionFinder system. These identified needs were used to create a master list; any need that appeared on a grid submitted from more than one breakout session is designated by a "D" on the CFD-South aggregated needs table.

Step 3: CFD-South Prioritization Exercise

At the conclusion of the breakout sessions, the local CHNAC reconvened to vote on the overarching CFD-South priority. Using the OptionFinder system and criteria previously described, the group ranked the identified needs from the master list that had been created with input from the breakout sessions. (See Table 10.2) Top ranked health priorities were used to identify an overarching priority for CFD-South: "Increasing Access for Vulnerable Populations."

The decision to have one overarching priority was done with the community and AdventHealth team members in mind. The singular priority encompasses the intentionality and focus of the work CFD-South will target in the coming years, while providing something that is clear to articulate. This aids in communicating the intention to the community and strengthens the ability of team members to remember, understand and rally behind the priority.

TABLE 10.2: CFD-SOUTH AGGREGATE PRIORITIES

Identified Need (D= Duplicate)	Accountability	Magnitude	Impact	Capacity	Total A+M+I+C
Access to Primary Care	7.5	8.1	8.8	6.4	30.8
Chronic Disease Management	7.2	8.3	8.5	6.2	30.2
Mental Health (D)	6.9	8.8	9.0	4.3	29.0
Access to Preventative Care	7.3	7.5	8.3	5.5	28.6
Care Coordination (D)	7.8	7.3	7.9	5.6	28.6
Access to Specialty Care (D)	8.1	6.9	7.4	6.1	28.5
Substance Abuse (D)	5.9	7.9	8.6	4.3	26.7
Food Security (Food Deserts, Chronic Health, and Affordability)	4.4	7.5	8.4	5.5	25.8
Opioid Epidemic	5.4	7.9	8.2	4.1	25.6
Prenatal Care/Early Childhood	6.1	7.1	7.3	5.1	25.6
Access to Healthcare/Health Literacy (D)	6.2	6.6	7.3	5.3	25.4
Palliative/End-of-Life Care	7.9	6.3	5.7	5.5	25.4
Childhood Obesity	4.9	7.6	7.7	4.9	25.1
Access to Medication and Medication Management in Senior Populations	6.3	6.7	7.2	4.6	24.8
Outpatient/Post-Care for Homeless Populations	5.8	6.9	7.1	4.0	23.8
Housing/Homelessness (D)	3.4	7.5	8.4	4.0	23.3
Poverty	3.3	7.7	8.6	3.5	23.1
Information on Available Resources	5.4	5.6	6.2	5.8	23.0
Employment (D)	2.9	6.5	7.4	4.3	21.1
Immunization for Senior Populations	5.6	5.4	5.2	4.8	21.0
Access to Transportation (D)	3.5	5.8	6.7	4.5	20.5
Affordable Housing (D)	3.1	6.9	6.7	3.4	20.1
Caregiver Burden	4.8	5.7	5.8	3.4	19.7
Adverse Childhood Experiences	3.7	5.9	6.8	3.2	19.6
Domestic Abuse	3.2	5.6	6.0	3.9	18.7
Community Resource Groups/Community Support	2.8	4.9	5.5	5.1	18.3
Injuries	5.8	3.5	3.9	4.5	17.7
Undocumented Individuals	3.0	4.4	4.5	3.3	15.2
Mentorship	2.9	4.0	4.1	3.8	14.8

Step 4: Identifying Campus Specific Needs

Following the April 3, 2019 meeting, CFD-South community health staff reviewed the grids collected from all participants in each breakout session. CFD-South community health staff created aggregate lists of needs for each campus breakout group. The aggregate list from the AdventHealth Celebration breakout session is below. (See Table 10.3)

TABLE 10.3: ADVENTHEALTH CELEBRATION AGGREGATE PRIORITIES

	Accountability	Magnitude	Impact	Capacity	Total A+M+I+C
Preventative Care/Health Screenings	8.5	8.3	9.6	8.9	35.3
Mental Health/Substance Abuse	7.0	8.0	8.9	7.2	31.1
Access to Care (Affordable, Uninsured, Transportation, Awareness of Services)	6.7	8.3	8.8	7.0	30.8
Care Navigation/Coordination	6.3	7.9	7.9	8.1	30.3
Affordable Housing	3.9	8.7	8.9	5.3	26.7
Pediatric and Women's Health (Including Prenatal)	8.4	5.0	5.5	7.8	26.7
Poverty (Livable Wages, Self-Sufficiency)	4.2	8.6	9.1	4.7	26.6
Nutrition/Food Security	4.0	7.2	7.9	6.4	25.5
Education	3.3	7.0	7.0	5.2	22.5

Step 5: Selecting Priority Targeted Areas

After reviewing the aggregate campus specific needs, common trends were identified that were compiled into four targeted areas of focus as follows. These targeted areas of focus represent a further refinement of the overarching priority of "Increasing Access for Vulnerable Populations."

- Care coordination
- Mental and behavioral health
- Community development
- Food security

The targeted areas were selected due to the overlap between the needs identified at each campus and the ability to address multiple issues under the focus area.

Step 6: Finalizing the CFD-South Priority and Campus Alignments

The CFD-South priority— "Increasing Access for Vulnerable Populations"—will be addressed through regional initiatives encompassing all CFD-South campuses. Additionally, campus-specific programming will be designed to address the four targeted areas. Each campus' unique initiatives will be reflective of the needs of their own communities. This will help to align and streamline resources across all seven campuses. For example, under the targeted areas of focus community development, one campus identified a need for youth development or mentorship programs, while another campus saw a need for programs addressing affordable housing.

Leadership from each of the campus breakout sessions met with CFD-South community health staff to approve the priority, Increasing Access for Vulnerable Populations, and to ensure the targeted areas were reflective of the needs of their communities and discussions.

Priority Issues to be Addressed

Table 10.4 outlines the priorities to be addressed by AdventHealth Celebration. CFD-South community health staff aligned the campus specific health priorities with the identified targeted areas noted above. The table provides an analysis of the rationale used to make the decision.

TABLE 10.4 RATIONALE FOR PRIORITY ISSUES THAT THE HOSPITAL WILL ADDRESS

	Identified Need	Magnitude	Impact & Accountability	Capacity
Care Coordination	Preventative Care/Health Screenings	Osceola County primary data respondents were less likely to indicate that they accessed preventative care services such as PSA test, lab work and Pap tests.	As a large health care system in a community where many residents are struggling with comorbidity, access to a preventative care can improve health outcomes, disease management, and improve the quality of life.	CFD-South has several internal and external care navigator programs that help patients establish permanent medical homes with local FQHCs, increasing their access to preventative care.
	Access to Care (Affordable, Uninsured, Transportation, Awareness of services)	In 2016, 23.6 percent of Osceola County adults could not see a doctor due to cost. Primary data respondents from the county also identified transportation as a needed service in many areas.	By providing more access to care, it increases the likelihood of patients receiving appropriate care and lowers mortality from all causes.	The Hospital currently partners with local organizations and Osceola Council of Aging to provide access to affordable services to the underserved, uninsured and underinsured.
	Care Navigation/ Coordination	Primary care respondents in Osceola County identified the lack of care coordination as a barrier to care in relation to chronic conditions when seeking care.	With care navigation, patients are able to access more resources and address their ailments in a timely manner.	CFD-South has several internal and external care navigator programs that help patients establish primary medical homes at local FQHCs and help patients get connected to affordable care.
	Pediatric and Women's Health (Including Prenatal)	A little more than 10 percent of Osceola County community survey respondents indicated that they have difficulty accessing prenatal care.	The Hospital understands that addressing pediatric and women's health is imperative to the overall health of a human being.	CFD-South has several internal and external programs that help patients establish permanent medical homes and therefore access prenatal care.

TABLE 10.4 RATIONALE FOR PRIORITY ISSUES THAT THE HOSPITAL WILL ADDRESS, CONTINUED

	Identified Need	Magnitude	Impact & Accountability	Capacity
Mental and Behavioral Health	Mental Health/Substance Use	Less than 10 percent of community survey respondents from Osceola County believe there is a sufficient number of mental health providers and nearly 60 percent of Osceola County community survey respondents indicated they feel depressed or hopeless.	When discussing with primary research participants, it was stated that the high level of stress people were experiencing can make it difficult to cope with mental illness which may be caused by lack of community support and supported services to manage mental health.	CFD-South has several care options for mental health services. These include the Outlook Clinic and connections to FQHCs. CFD-South is funding several mental and behavioral health services in the community, including an eye movement desensitization and reprocessing (EMDR) psychotherapy treatment at a local FQHC and a music therapy program.
Community Development	Affordable Housing	Osceola County has the highest percentage of renter households who were cost burdened (24.4 percent) and severely cost burdened (25.1 percent). Osceola County also had 21.1 percent of homeowner residents who are severely cost burdened.	Affordable housing has a large impact on other health outcomes and wellbeing. It enables families to have the opportunity to meet their respective health, education, and employment needs.	CFD-South is heavily invested in addressing homelessness and is involved with partners such as: Coalition for the Homeless of Central Florida, Family Promise of Greater Orlando, Homeless Services Network of Central Florida and others.
Food Security	Nutrition/Food Security	More than 40 percent of community survey respondents from Osceola County indicated that they do not have access to healthy, affordable food. Food security was also identified as a need related to chronic conditions.	Having access to proper nutrition is necessary for a healthy life. Proper nutrition can also reduce the risk of or complications from certain diseases, such as diabetes.	CFD-South does work relating to food security with multiple partners, including Second Harvest Food Bank. CFD-South also helps establish food pantries at houses of faith through the Faith Activation Network.

Priority Issues That Will Not Be Addressed

All of the issues from the AdventHealth Celebration breakout session will be addressed, with the exception of poverty (livable wages, self-sufficiency) and education. When comparing Osceola County to the other counties in the Collaborative, they had one of the lowest levels of income inequality. The local CHNAC understands that poverty has a large impact on health and wellbeing, but as an organization, recognizes that the scale of this need is beyond one that can be addressed with the resources available.

Education will not be addressed due to Osceola County having the second highest rate of high school graduates when compared to the other counties in the overall region. The local CHNAC discussed education, health education and literacy. Health literacy is being addressed under care coordination. It was determined that education was better addressed by existing organizations and resources in the community.

Community Asset Inventory

As part of the IRS regulatory requirement AdventHealth Central Florida Division South Region (CFD-South) completed a Community Asset Inventory (CAI). Traditionally the CAI is used as a resource when selecting a priority to:

- Identify existing resources
- Limit duplication of services

CFD-South saw this as an opportunity to create a resource that went beyond the aforementioned goals. Our CAI provided the necessary information to understand the resources available for potential priorities and was also used to:

- Identify gaps in resources by services provided or location
- Identify potential opportunities for alignment
- Provide a publicly available resource guide that would be accessible to and for underrepresented populations to utilize when needed
- Provide an internal resource that can be used by care management teams to refer patients to appropriate services that are geographically convenient

The information included in this inventory was compiled from publicly available resources. The organizations included offer free and reduced cost services or target underrepresented populations. Organizations were contacted during the process to ensure that they had the bandwidth to provide services for new clients/patients. At the time of this publication all organizations listed had the bandwidth and resources necessary to serve additional community members. Several organizations included in the inventory have multiple locations; each location may provide different services.

The Community Asset Inventory for CFD-South is available here:
https://www.adventhealth.com/community-benefit/central-florida/community-health

Approvals

On December 19, 2019 the AdventHealth Orlando Board of Directors, the governing body for all of AdventHealth Orlando's seven hospital campuses, approved the Community Health Needs Assessment findings, priority and final report. A link to the 2019 Community Health Needs Assessment was posted on the Hospital's website prior to December 31, 2019.

Next Steps

The local CHNAC will work with AdventHealth Celebration to develop a measurable implementation strategy to address the priority issue. The 2020-2022 Community Health Plan will be completed and posted on the Hospital's website prior to May 15, 2020.

Written Comments Regarding 2016 Needs Assessment

There were no substantive written comments received regarding the 2016 AdventHealth Celebration Community Health Needs Assessment.

Review of Strategies Undertaken in the 2016 Community Health Plan

The 2016 AdventHealth Celebration Community Health Needs Assessment was posted on AdventHealth Celebration's website. Note that asterisks (*) refer to implementation strategies that span across all AdventHealth campuses in Orange, Osceola and Seminole Counties.

Activities and accomplishments from AdventHealth Celebration's Implementation Plan include the following:

Increasing access accomplishments relating to preventative care through issues involving food security, chronic disease and child health.

- Provided three years of grant funding to a local non-profit to establish a healthy food co-op, which provides fresh, nutritionally dense foods for local food pantries located in food deserts in the tri-county area, as well as connecting clients with case management services if needed. To date the program has fed more than 400,000 people, has provided 2,100 health screenings, conducted six nutrition classes and seen 3,700 people for referrals to additional wrap around services. *
- Provided funding to the Celebration Foundation for the Learning without Hunger Program, partnering with local schools to provide children who suffer from food insecurity with food in their backpacks for the weekend.
- Created the Second Helpings program where unused food from our nutritional services department is given to the local food bank to provide meals for individuals in need, to date Celebration has provided 378 meals.
- Collaborated and funded local non-profit to provide the evidence-based Sanford Chronic Disease Self-Management Program (CDSMP) throughout our service areas. *
- The Mission: FIT POSSIBLE program is a comprehensive wellness program, which brings health and wellness education to schools, churches and community centers. Health and wellness educators provide education during regular visits, as well as supplemental education for teachers and staff to engage kids in activities that teach them how to be physically and emotionally healthy. The second Regional strategy was to provide Nutrition Wellness classes to community members which would help with increasing access to knowledge around nutrition. This program was updated during 2018 and will be deployed in 2019. *
- Established Faith Activation Network as a pilot program, an initiative designed to connect with targeted populations through established community churches located in geographic areas identified as high need. This initiative is now being extended to remainder of service areas in targeted zip codes, at local churches to provide or increase bandwidth of food pantries, create gardens to supplement food pantries with healthier options, provide programming (CDSMP and Mission: FIT POSSIBLE). From 2017-2019, 3,539 individuals have been served by the food pantry efforts alone. *
- Sponsor American Heart Association to promote knowledge of chronic diseases in high need areas. *

Review of Strategies Undertaken in the 2016 Community Health Plan (Continued)

Increasing access accomplishments relating to primary and specialty health care.

- Partnered with and funded Osceola Council on Aging for three years to provide primary and secondary care services to underserved residents that would have otherwise not have access. This program serves both our campuses in Osceola County and to date has provided care for 666 people.
- Established the Community Care program, * focusing on root causes of utilization for high utilizers who are uninsured and complex patients; at the Celebration campus 10 patients have been enrolled.
- Created a referral program* for uninsured patients to connect them with locally Federally Qualified Healthcare Clinics to establish permanent medical homes; from Celebration there have been 7,812 referrals with 430 appointments secured.
- Fund and staff the AdventHealth Transitions Clinic (also known as the Trina Hidalgo Heart Care Center), which provides specialty cardiac care for the uninsured in our community, the clinic provides care for all patients referred from our campuses in our tri-county service area and has served more than 1,000 people between 2017-2019. *
- Fund and staff the AdventHealth Transitions Lung Clinic, which provides specialty pulmonary care for the uninsured in our community, the clinic provides care for all patients referred from our campuses in our tri-county service area and has had more than 2,500 visits between 2017 and 2019, resulting in more than $2.8M in medications provided at no cost and a decrease in 44.8 percent in patient ED visits since initial clinic visit.*

Increasing access accomplishments relating to mental and behavioral health.

- Sponsor Aspire Health Partners, providing funding for 12 Crisis Stabilization Unit Beds that are utilized for uninsured/underinsured patients who do not have access otherwise; these beds are available for our patients throughout our tri-county service area. *
- Partnered with Aspire Health Partners to provide intensive psychosocial rehabilitation services to help prevent individuals with severe and persistent mental health disorders from becoming high utilizers of deep end services.*
- Sponsor Park Place Behavioral Health, which provides behavioral health resources for the uninsured in Osceola County.

APPENDIX A

Primary Data Collection Tools

Primary Data Collection Tools

The appendix includes all the primary data collection tools used during the Community Health Needs Assessment.

Community Survey

1. What is your Zip Code?_____

2. How would you rate your (personal) overall health?
   ❑ Excellent ❑ Very Good ❑Good ❑ Fair ❑ Poor

3. How would you rate the health status of your community?
   ❑ Excellent ❑ Very Good ❑Good ❑ Fair ❑ Poor

4. How do you pay for your Health Care? (Check all that apply)
   ❑ I have Health Insurance through my employer
   ❑ I have Medicare
   ❑ I have Medicaid
   ❑I am covered by the VA
   ❑I purchased health insurance through FL Department of Health
   ❑ I pay cash
   ❑ I currently do not have health care coverage

5. What stops you from seeking medical care for yourself and/or your family? (Check all that apply)
   ❑ I can't get time off from work
   ❑ I don't have transportation
   ❑ Cost of medical care
   ❑ Cost of copay
   ❑ Cost of medications
   ❑ Hours – They weren't open when I could get there
   ❑ I had no one to watch my children
   ❑ I couldn't get an appointment for a long time
   ❑ The medical staff didn't speak my language
   ❑ I didn't know where to get the care I needed
   ❑ Lack of health care providers
   ❑ Lack of local specialists
   ❑ I decided not to go because I don't like going to doctors
   ❑ I do not have any barriers that keep me from seeking medical care for myself and/or my family
   ❑ Other, Please Specify_____

6. How often do you see a doctor or other healthcare provider? (Mark only one)
   ❑ Once per year
   ❑ A few times per year
   ❑ Only when I am sick
   ❑ I don't go to the doctor
   ❑ Other, Please Specify _____

7. Have you had any of the following tests in the last two years? (Please check all that apply)
   ❑ Annual Exam
   ❑ Sigmoidoscopy
   ❑ Colonoscopy
   ❑ Pap Test
   ❑ Mammogram
   ❑ Prostate Specific Antigen Test (PSA Test)
   ❑ Lab Screenings or Lab Work
   ❑ Blood Pressure Screening
   ❑ Diabetic Screening
   ❑ Cholesterol Screening
   ❑ Dental Exam
   ❑ Eye Exam
   ❑ Other, Please Specify _____

8. Where do you usually seek medical care? (Mark only one)
   ❑ At my doctor's office
   ❑ I go to the emergency room
   ❑ I use urgent care
   ❑ At a free clinic/sliding scale clinic
   ❑ I do not seek medical care
   ❑ Other, Please Specify _____

Access to Care

9. Have the following directly affected **<u>you or your family</u>** in the last 2 years? (Consider things like coverage under your health benefit plan, cost of service, location, transportation, knowledge of providers, etc.)

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Access to Adult Immunizations	□	□	□	□	□	□
Access to Childhood Immunizations	□	□	□	□	□	□

9. Have the following directly affected **you or your family** in the last 2 years? (Consider things like coverage under your health benefit plan, cost of service, location, transportation, knowledge of providers, etc.)

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Access to General Health Screenings (including blood pressure, cholesterol, colorectal cancer and diabetes)	□	□	□	□	□	□
Access to Mental Health Care Services	□	□	□	□	□	□
Access to Prenatal Care	□	□	□	□	□	□
Access to Transportation to Medical Care Providers and Services	□	□	□	□	□	□
Access to Women's Health Services	□	□	□	□	□	□
Access to Primary Medical Care Providers	□	□	□	□	□	□
Availability of Specialists/Specialty Medical Care	□	□	□	□	□	□
Access to Affordable Health Care (related to copays and deductibles)	□	□	□	□	□	□
Access to Dementia Care Services	□	□	□	□	□	□
Access to Dental Care	□	□	□	□	□	□
Access to Emergency Shelter in the Area	□	□	□	□	□	□

Health Problems

10. Have any of the following affected **your or your family** in the last 2 years?

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Asthma/COPD Related Issues	□	□	□	□	□	□
Cancer	□	□	□	□	□	□
Diabetes	□	□	□	□	□	□
Influenza and Pneumonia	□	□	□	□	□	□
Heart Disease	□	□	□	□	□	□
Obesity and Overweight	□	□	□	□	□	□
Childhood Obesity	□	□	□	□	□	□
Cardiovascular Disease	□	□	□	□	□	□
Stroke	□	□	□	□	□	□
High Cholesterol	□	□	□	□	□	□
Hypertension/High Blood Pressure	□	□	□	□	□	□
Dental Hygiene/Dental Problems	□	□	□	□	□	□
Allergies	□	□	□	□	□	□
Mental Health	□	□	□	□	□	□
Chronic Depression	□	□	□	□	□	□
Hepatitis C	□	□	□	□	□	□
Sexually Transmitted Diseases	□	□	□	□	□	□

11. How would you determine your personal weight?

□ Underweight □ Normal Weight □Overweight

Social and Environmental Factors

12. Have any of the following affected **you or your family** in the last 2 years?

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Affordable and Adequate Housing	☐	☐	☐	☐	☐	☐
Homelessness	☐	☐	☐	☐	☐	☐
Employment Opportunities/ Lack of Jobs	☐	☐	☐	☐	☐	☐
Poverty	☐	☐	☐	☐	☐	☐
Lack of Recreational Opportunities	☐	☐	☐	☐	☐	☐
Lack of Safe Roads and Sidewalks	☐	☐	☐	☐	☐	☐
Lack of Early Childhood Development/Child Care	☐	☐	☐	☐	☐	☐
Access to High Quality Affordable Healthy Foods	☐	☐	☐	☐	☐	☐
Access to Fresh, Available Drinking Water	☐	☐	☐	☐	☐	☐

13. Have the following directly affected **you or your family**?

	Yes	No	Don't Know
Within in the past 12 months, we worried whether our food would run out before we got money to buy more.	☐	☐	☐
Within the past 12 months, the food we bought just didn't last and we didn't have money to buy more.	☐	☐	☐
In the past 12 months, has your utility company shut off your service for not paying your bills?	☐	☐	☐
Are you worried or concerned that in the next 2 months, you may not have stable housing that you own, rent, or stay in as part of a household?	☐	☐	☐
Are you afraid you may be hurt in your apartment building or house?	☐	☐	☐
Do problems getting child care make it difficult for you to work or study?			

Lifestyle

14. Have any of the following affected **you or your family** in the last 2 years?

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Alcohol Abuse	☐	☐	☐	☐	☐	☐
Prescription Drug Abuse	☐	☐	☐	☐	☐	☐
Illegal Drug Use	☐	☐	☐	☐	☐	☐
Crime	☐	☐	☐	☐	☐	☐
Delinquency/Youth Crime	☐	☐	☐	☐	☐	☐
Domestic Violence	☐	☐	☐	☐	☐	☐
Sexual Abuse	☐	☐	☐	☐	☐	☐
Child Physical Abuse	☐	☐	☐	☐	☐	☐
Child Sexual Abuse	☐	☐	☐	☐	☐	☐
Child Emotional Abuse	☐	☐	☐	☐	☐	☐
Child Neglect	☐	☐	☐	☐	☐	☐
Violence	☐	☐	☐	☐	☐	☐
Gun Violence	☐	☐	☐	☐	☐	☐
Lack of Exercise/Physical Activity	☐	☐	☐	☐	☐	☐

14. Have any of the following affected **you or your family** in the last 2 years?

	Very Serious Affect	Serious Affect	Somewhat of an Affect	Small Affect	No Affect	Not Applicable
Sexual Behaviors (unprotected, irresponsible/risky)	□	□	□	□	□	□
Teenage Pregnancy	□	□	□	□	□	□
Tobacco Use	□	□	□	□	□	□
Tobacco Use in Pregnancy	□	□	□	□	□	□
Driving Under the Influence of Drugs or Alcohol	□	□	□	□	□	□
Texting and Driving	□	□	□	□	□	□
Motor Vehicle Crash Deaths	□	□	□	□	□	□
Gambling	□	□	□	□	□	□

15. How often do you use tobacco products? (Mark only one)
- ❑ Multiple times a day
- ❑ Once a day
- ❑ Several times a week
- ❑ I do not use any tobacco or vapor/e-cig products
- ❑ Other, Please Specify _____

16. How often do you use vapor/e-cig products? (Mark only one)
- ❑ Multiple times a day
- ❑ Once a day
- ❑ Several times a week
- ❑ I do not use any tobacco or vapor/e-cig products
- ❑ Other, Please Specify _____

17. How often are you physically active for 30 minutes or more? (Mark only one)
- ❑ 1-2 times per week
- ❑ 3-5 times per week
- ❑ 6-7 times per week
- ❑ I try to add physical activity when possible (taking the stairs, parking farther away, etc.)
- ❑ None beyond regular daily activity

18. Which, if any, of the following would help you become more active? (Please check all that apply)
- Transportation
- Walking or Exercise Groups
- Workshops or Classes
- Discounts for exercise programs or gym
- Low cost sneakers, sweat suites, or other equipment
- ❑ A friend to exercise with
- Safe place to walk or exercise
- Information about programs in your community
- Activities you can do with your children
- Not applicable, I am physically active!
- Other, Please Specify _____

19. What keeps you from eating fresh fruits and vegetables every day? (Mark only one)
- Time it takes to prepare
- Cost
- ❑ The stores near me don't sell fresh fruits and vegetables
- ❑ I do not like to eat healthy food
- My family does not like to eat healthy
- I am not sure how to cook/prepare fresh fruits and vegetables
- ❑ I DO eat fresh fruits and vegetables
- ❑ Other, Please Specify _____

20. What do you drink more often?
- Water
- Pop or Soda
- 100% Juice
- Beer, Wine, Liquor
- Other, Please Specify _____

Mental Health/Substance Use Disorder

21. Do you feel our community has/is:

	Yes	No	Don't Know
There is a sufficient number and range of mental health services in the area	❑	❑	❑
Community members know how to access local mental health services			
There is sufficient number and range of substance abuse resources in the area	❑	❑	❑
The local community is doing well in managing the nationwide opioid epidemic			

22. How has any of the following affected you in the past two weeks?

	Often	Some of the Time	Hardly Ever	Never
How often do you have trouble falling asleep, staying asleep, or sleeping too much?	❑	❑	❑	❑
How often do you feel that you lack companionship?				
How often do you feel left out?	❑	❑	❑	❑
How often do you feel isolated from others?				
How often have you been bothered by feeling down, depressed, or hopeless?	❑	❑	❑	❑
How often have you been bothered by little or no interest or pleasure in doing things?	❑	❑	❑	❑

Community Needs

23. What do you feel are the top three **health problems** in the community you live in? (For example: cancer, diabetes, obesity, etc.). Your response does not need to be listed to topics in previous questions.
    Problem 1: _____
    Problem 2: _____
    Problem 3: _____

24. What do you feel are the top three **social or environmental problems** in the community you live in? (For example: high rates of drug use, language, lack of jobs, etc.) Your response does not need to be listed to topics in previous questions.
    Problem 1: _____
    Problem 2: _____
    Problem 3: _____

25. What additional health care services do you feel are needed in your community?

_____

_____

Getting to Know You

26. Sex:
    ❑ Male ❑ Female

27. Gender: (Mark only one)
    ❑ Male ❑ Female ❑Transgender ❑ Do not identify

28. Age: (Mark only one)
    ❑ Under 18 ❑ 40-49 ❑ 70 and over
    ❑ 18-29 ❑ 50 - 59
    ❑ 30-39 ❑ 60 - 69

29. Number of children under the age of 18 in your household? _____

30. Ethnicity: Hispanic?
    ❑ Yes ❑ No

31. Race: (Please check all that apply)
    ❑ White/Caucasian
    ❑ Black/African American
    ❑ Native American
    ❑ Latino/a
    ❑ Asian or Pacific Islander
    ❑ Prefer not to answer
    ❑ Other, Please Specify _____

32. Marital Status: (Mark only one)
    ❑ Single, Never Married
    ❑ Married
    ❑ Divorced
    ❑ Widowed
    ❑ Separated
    ❑ Member of an Unmarried Couple

33. Highest Grade Level of School Completed: (Mark only one)
    ❑ Less than 9th Grade
    ❑ Some High School, No Diploma
    ❑ High School Graduate (or GED)
    ❑ Some College, No Degree
    ❑ Associates Degree
    ❑ Bachelor's Degree
    ❑ Master's Degree
    ❑ Professional School Degree
    ❑ Doctorate Degree

34. Household Income: (Mark only one)
    ❑ $0 to $24,999
    ❑ $25,000 to $34,999
    ❑ $35,000 to $49,999
    ❑ $50,000 to $74,999
    ❑ $75,000 to $99,999
    ❑ $100,000 to $149,999
    ❑ $150,000 to $199,999
    ❑ $200,000 or more

35. Languages Spoken at Home _____

36. Current Employment Status: (Mark only one)
    ❑ Employed full time (40+ hours)
    ❑ Employed part time (up to 39 hours/week)
    ❑ I work multiple jobs
    ❑ Unemployed/currently look for work
    ❑ Unemployed/not currently looking for work
    ❑ Student
    ❑ Retired
    ❑ Homemaker
    ❑ Self - Employed
    ❑ Unable to Work

37. Immigration Status: (Mark only one)
    ❑ US Citizen
    ❑ Lawful Permanent Resident (green card holder)
    ❑ Other/Non-LPR
    ❑ Lawful Immigration Status
    ❑ Undocumented/no lawful status
    ❑ Unknown

Thank You for Completing the Central Florida Collaborative Community Health Survey!

To thank you for your participation ***ten*** participants will be selected to win one of the following:

(10) $50 American Express Gift Card

The information provided below is not connected to the survey you just completed. This information will only be used for the drawing and will not be used for later marketing efforts, nor will it be shared with any other groups.

By providing your contact information below you will be entered into a drawing for one of the ten prizes noted above. The winner will be notified by the end of February 2019.

Once you have completed the survey and entry form please separate the two and drop them in the appropriate box or envelope.

Name: _

Address: _

City, State, Zip: _

Phone: _

Email: _

Thank you again for your participation!

Key Informant Survey

Thank you to our valued community partners for taking the time to respond to the Central Florida Collaborative Key Informant Survey. Your input is vital to helping us identify the needs within the communities we serve as part of our Community Health Needs Assessment. The survey should take you no more than 10 minutes to complete. We ask that you please take a few minutes to complete this survey by January 4, 2019.

Thank you in advance for your participation!

1. Please select your **primary** community affiliation:
   - ☐ Nonprofit/social service
   - ☐ For profit/business
   - ☐ Government
2. Please provide additional information on the type of community affiliation:
   - ☐ Healthcare/Public Health
   - ☐ Education/Youth Services
   - ☐ Transportation
   - ☐ Housing
   - ☐ Mental/Behavioral Health
   - ☐ Faith-Based Organization
   - ☐ Cultural Organization
   - ☐ Community Organization
   - ☐ Other (Please specify)
3. What groups does your company/agency service? (Please mark all that apply)
   - ☐ Homeless
   - ☐ Low Income
   - ☐ Elderly
   - ☐ Veterans
   - ☐ Children
   - ☐ General Public
   - ☐ Women
   - ☐ Other (Please specific)
4. What demographic(s) are most supported by your services? (Please mark all that apply)
   - ☐ Black/African American
   - ☐ White
   - ☐ Hispanic/Latino
   - ☐ Haitian
   - ☐ Native American/American Indian
   - ☐ Asian/Pacific Islander
   - ☐ All of the Above
   - ☐ Other (Please Specify)
5. What county/counties do you serve? (Please mark all that apply)
   - ☐ Lake
   - ☐ Seminole
   - ☐ Orange
   - ☐ Osceola

6. Overall, how would you rate the health status of the community?
   - ☐ Excellent
   - ☐ Very Good
   - ☐ Good
   - ☐ Fair
   - ☐ Poor
7. Why did you rate the health status of the community the way you did?
8. How would you rate our community's overall quality of life?
   - ☐ Excellent
   - ☐ Very Good
   - ☐ Good
   - ☐ Fair
   - ☐ Poor

9. What do you think would help improve the overall quality of life in our community?

Prevention Institute defines four basic elements of community health: 1) Equitable opportunity including racial justice, jobs and education; 2) Place including parks and open space, transportation, housing, air, water and safety; 3) People including social networks and willingness to act for the common good, and; 4) Health Care Services including preventive services, treatment services, access, cultural competency, and emergency response.

10. Considering this overall look at what it takes to have a healthy community, what do you view as the major issues and barriers impacting the health of the following populations?
    - Children
    - Adults
    - Workforce
    - Seniors (Age 65+)
    - Individuals Without Health Insurance
    - Individuals with Mental Health Issues
    - Individuals with Substance Use/Abuse Issues
    - Individuals with Transportation Issues
    - Individuals with English as their Second Language
    - Individuals who have Experience Trauma
    - Individuals Living in Poverty
    - Individuals Experiencing Homelessness
    - Individuals Living with Chronic Condition
    - Individuals Living with HIV/AIDS
    - Pregnant Women
    - Undocumented Individuals

Central Florida Collaborative Key Informant Survey *Continued*

11. In the populations your agency serves, what issues do your clientele struggle with? (Please mark all that apply for the counties you serve)

	Lake County	Orange County	Osceola County	Seminole County
Affordability of Healthcare	☐	☐	☐	☐
Access to primary care	☐	☐	☐	☐
Access to secondary care	☐	☐	☐	☐
Access to dental care	☐	☐	☐	☐
Access to mental health care	☐	☐	☐	☐
Access to health insurance	☐	☐	☐	☐
Lack of Medicaid expansion	☐	☐	☐	☐
Food Security (accessibility to nutritious food)	☐	☐	☐	☐
Mental Health/Illness	☐	☐	☐	☐
Diabetes	☐	☐	☐	☐
Heart Disease	☐	☐	☐	☐
Obesity	☐	☐	☐	☐
Substance Abuse	☐	☐	☐	☐
Asthma	☐	☐	☐	☐
Cancer	☐	☐	☐	☐
STIs & HIV	☐	☐	☐	☐
Injury prevention/falls	☐	☐	☐	☐
Older adult safety/mobility	☐	☐	☐	☐
Living with disability	☐	☐	☐	☐
Rise in vapes and e-cigarettes	☐	☐	☐	☐
Maternal and child health	☐	☐	☐	☐
Poor birth outcomes	☐	☐	☐	☐
Inappropriate ER use	☐	☐	☐	☐
Poverty/low wages	☐	☐	☐	☐
Housing security (affordable housing)	☐	☐	☐	☐
Homelessness	☐	☐	☐	☐
Stressed infrastructure due to increased population	☐	☐	☐	☐
Transportation	☐	☐	☐	☐
Human Trafficking	☐	☐	☐	☐

Central Florida Collaborative Key Informant Survey *Continued*

12. Does your agency provide services to address these issues? (Please mark all that apply for the counties you serve)

	Lake County	Orange County	Osceola County	Seminole County
Affordability of Healthcare	☐	☐	☐	☐
Access to primary care	☐	☐	☐	☐
Access to secondary care	☐	☐	☐	☐
Access to dental care	☐	☐	☐	☐
Access to mental health care	☐	☐	☐	☐
Access to health insurance	☐	☐	☐	☐
Lack of Medicaid expansion	☐	☐	☐	☐
Food Security (accessibility to nutritious food)	☐	☐	☐	☐
Mental Health/Illness	☐	☐	☐	☐
Diabetes	☐	☐	☐	☐
Heart Disease	☐	☐	☐	☐
Obesity	☐	☐	☐	☐
Substance Abuse	☐	☐	☐	☐
Asthma	☐	☐	☐	☐
Cancer	☐	☐	☐	☐
STIs & HIV	☐	☐	☐	☐
Injury prevention/falls	☐	☐	☐	☐
Older adult safety/mobility	☐	☐	☐	☐
Living with disability	☐	☐	☐	☐
Rise in vapes and e-cigarettes	☐	☐	☐	☐
Maternal and child health	☐	☐	☐	☐
Poor birth outcomes	☐	☐	☐	☐
Inappropriate ER use	☐	☐	☐	☐
Poverty/low wages	☐	☐	☐	☐
Housing security (affordable housing)	☐	☐	☐	☐
Homelessness	☐	☐	☐	☐
Stressed infrastructure due to increased population	☐	☐	☐	☐
Transportation	☐	☐	☐	☐
Human Trafficking	☐	☐	☐	☐

Central Florida Collaborative Key Informant Survey *Continued*

13. What other vulnerable populations exist in your community?
14. What are the major issues/barriers impacting these populations?
15. In general, where do you think people in the community go to receive health care?
16. In general, what barriers do you think people in the community experience accessing health care?
17. Overall, how well do you think existing programs and services are doing to promote good health in the community?
    - ☐ Excellent
    - ☐ Very Good
    - ☐ Good
    - ☐ Fair
    - ☐ Poor
18. Who in our community does a good job of promoting health?
19. Who in our community does not promote good health?
20. What more could be done to promote good health in the community?

Central Florida Collaborative Intercept Survey

1. What would you say are the top 3 health needs of the community? Why do you say that?
2. Based on the 3 needs you just listed, what, if anything are the hospitals, Departments of Health or the community doing to address it?
3. What additional services are needed in the community that you feel are missing?
4. What, if any, barriers are you or your family experiencing related to health care?
5. How would you rate the health of the community? Would you say it is excellent, very good, good, fair, or poor? Why do you say that?
6. How would you rate your personal health? Would you say it is excellent, very good, good, fair, or poor? Why do you say that?