COMMUNITY HEALTH IMPROVEMENT PLAN

2020-2025

Florida Department of Health in Osceola County

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Governor

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Effective: July 1, 2020 – June 30, 2025

Plan Revised on July 28, 2022

Summary of Revisions

On Thursday, June 2, 2022, the Kissimmee Chamber Foundation Health Leadership Council (KCF HLC) conducted an annual review of the Community Health Improvement Plan (CHIP) and discussed potential revisions to the current plan. Suggested revisions were incorporated into a revised CHIP plan which was created by the Florida Department of Health in Osceola County (FDOH-Osceola) Quality Improvement Liaison, Jeremy Thomas Lanier. On Thursday, July 28, 2022, the revised CHIP plan was reviewed by FDOH-Osceola's Performance Management Council (PMC) and approved for submission to Florida Health Performs.

The table below depicts revisions to objectives from the CHIP plan. Strikethrough indicates deleted text and underline indicates added text.

Objective Number	Revisions	Rationale for Revisions
7/28/2022 Objective H.E 1.0 Pg. 17	Objective H.E. 1.0 was separated into two objectives – H.E. 1.0 and H.E. 2.0. Activities supporting the original objective were removed. A data source for H.E. 1.0 was specified as FLHealthCHARTS BRFSS and a data source for H.E. 2.0 was specified as FLHealthCHARTS School-aged Child and Adolescent Profile. Revised person responsible for H.E. 2.0 to be Jeremy Lanier.	H.E.1.0 was split into two separate objectives for reporting purposes and to make the objectives easier to track. As activities are tracked outside the plan, they were deleted from the plan. Data sources were specified for reporting purposes.
7/28/2022 Objective H.E. 2.0 Pg. 18	Objective H.E. 2.0 was separated into four objectives – H.E. 3.0, H.E. 4.0, H.E. 5.0, and H.E. 6.0. Activities supporting the original objective were removed. A data source for H.E. 3.0 was specified as FLHealthCHARTS County Chronic Disease Profile. A data source for H.E. 4.0 was specified as FLHealthCHARTS County Chronic Disease Profile. A data source for H.E. 5.0 was specified as FLHealthCHARTS County Chronic Disease Profile. A data source for H.E. 6.0 was specified as FLHealthCHARTS County Chronic Disease Profile.	H.E.2.0 was split into four separate objectives for reporting purposes and to make the objectives easier to track. As activities are tracked outside the plan, they were deleted from the plan. Data sources were specified for reporting purposes.
7/28/2022 Behavioral Health Pg. 19	Added introduction to Behavioral Health section of the plan.	Introduction provides context for Behavioral Health objectives.
7/28/2022 Objective B.H. 1.0	Activities supporting the original objective were removed. The	As activities are tracked outside the plan, they were

Pg. 19	data source for this objective was specified as FLHealthCHARTS BRFASS	deleted from the plan. The data source was specified for reporting purposes.
7/28/2022 **Objective B.H. 2.0** **Pg. 20**	Objective B.H. 2.0 was separated into two objectives – B.H. 2.0 and B.H. 3.0. Revised person responsible for Objectives B.H. 2.0 and B.H. 3.0 to be Natalie Mullet.	B.H. 2.0 was split into two separate objectives for reporting purposes and to make the objectives easier to track.
7/28/2022 **Objective S.D. 1.0** **Pg, 21**	The original Objective S.D. 1.0 of "~~By December 31, 2025, reduce the adult and child poverty levels in Osceola County from the current 19.1% to no more than 17.0%~~" was replaced with "By June 30, 2025, reduce the percentage of families below the federal poverty level in Osceola County from the current 10.7% (2020) to no more than 9.7%". Activities supporting the original objective were removed. A data source for the new objective was specified as FLHealthCHARTS County Profile Families Below Poverty Level. Revised person responsible to be Sue Ring.	A data source for the original Objective S.D. 1.0 could not be found for both adult and child poverty levels in Osceola County. The new objective encompasses both adults and children by focusing on families. As activities are tracked outside the plan, they were deleted from the plan. The data source was specified for reporting purposes.
7/28/2022 **Objective S.D. 2.0** **Pg. 22**	The original Objective S.D. 2.0 of "~~By December 31, 2025, reduce the number of individuals and families paying more than 30% of their income for housing from 41.3% to no more than 35.0%~~" was replaced with "June 30, 2025, reduce the number of residential eviction cases per year in Osceola County by 5% from 378 (2021) to no more than 359." The activity supporting the original objective was removed. A data source for the new objective was specified as Osceola County Evictions Case Parties Spreadsheet. The person identified as responsible for the objective is Dr. Elizabeth Rich.	A data source for the original Objective S.D. 2.0 could not be found. The new objective has an existing data source and can be tracked. As the activity supporting the objective is tracked outside the plan, it was deleted from the plan. The data source and person responsible for the objective was specified for reporting purposes.
7/28/2022 **Objective S.D. 3.0** **Pg. 23**	Activities supporting the original objective were removed. The data source for this objective was	As the activities supporting the objective are tracked outside the plan, they were deleted from the plan. The

	specified as Second Harvest Food Bank.	data source was specified for reporting purposes.
7/28/2022 **Objective S.D. 4.0** **Pg. 24**	The activity supporting the original objective was removed. The data source for this objective was specified as FLHealthCHARTS Community Social & Economic Factors 2013-2017.	As the activity supporting the objective is tracked outside the plan, it was deleted from the plan. The data source was specified for reporting purposes.
7/28/2022 **Objective S.D. 5.0** **Pg. 25**	The activity supporting the original objective was removed. The data source for this objective was specified as FLHealthCHARTS Community Social & Economic Factors 2013-2017. Revised person responsible for objective to be Jeremy Lanier.	As the activity supporting the objective is tracked outside the plan, it was deleted from the plan. The data source was specified for reporting purposes.
7/28/2022 **Objective S.D. 6.0** **Pg. 26**	The activity supporting the original objective was removed. The data source for this objective was specified as MetroPlan Osceola Commute Time Spreadsheet and ACS Table SO802 – Means of Transportation.	As the activity supporting the objective is tracked outside the plan, it was deleted from the plan. The data source was specified for reporting purposes.
08/02/2022 **All CHIP Objectives** **Pgs.: 17-26**	Replaced target dates on all CHIP objectives with target date of June 30, 2025 which aligns them with the end of the current plan.	This was done to meet PHAB 1.5 Standard 5.2, Measure 5.2.2L #1, p138-139
08/30/2022 **Pg.: 11**	Under “Top Five Causes of Death” under Key Mapp Findings heading, provided clearer definition of “other causes” and “external causes”.	This was done to provide a clearer definition as requested by Planning Consultant, KC Callison.

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EXECUTIVE SUMMARY

The Florida Department of Health requires county health departments to prepare a Community Health Needs Assessment (CHNA) and a Community Health Improvement Plan (CHIP) to support the integrated public health system's efforts for improving population health. This assessment process is conducted every three to five years to ensure communities are addressing the current needs of the residents. The CHNA identifies key health needs and issues through a systematic and comprehensive data collection and analysis process. The CHIP is a long-term, systematic effort to address public health issues based on the results of community health assessment activities and the community health improvement process.

In 2019, the Florida Department of Health in Osceola County (DOH-Osceola) along with multiple hospitals and community partners came together to assess the overall health of the tri-county region consisting of Orange, Osceola, and Seminole counties. The resulting CHNA presented a broad view of community health indicators that included health behaviors and risks, social determinants, quality of life indicators, and environmental factors that play a role in how health is measured, and care is accessed and delivered. The status of these health indicators define the foundational baseline which is then used to develop strategies for health improvement.

In 2020, DOH Osceola working in partnership the with the Kissimmee Chamber Foundation Health Leadership Council (KCF HLC) and Strategic Solutions, Inc., developed the CHIP using the Mobilizing for Action through Planning and Partnership (MAPP) process. This is a community driven strategic planning process developed by the Centers for Disease Control and Prevention (CDC) and the National Association of County and City Health Officials (NACCHO). A detailed description of the MAPP assessments and results can be found in Appendix B.

When the CHIP is finalized, the established goals and objectives are monitored monthly and reported quarterly by the designated groups responsible for the action plan activities. Tracking in this way facilities consistent evaluation of the progress made or the lack thereof. When the desired results are not being attained as planned, the group is provided opportunities early in the improvement process to reassess the activities. Corrective action may require the fostering of new partnerships and/or securing additional resources. The end goals are achieved through this continual process of planning, implementation, and evaluation.

The illustration below depicts the process of the identification of health issues (CHNA) to prioritizing the issues that will be addressed through strategic planning (CHIP).

CHNA Health Concerns

Mammograms • PSA Tests • Colorectal Screenings • Poor Nutrition • Lack of Physical Activity • Unhealthy Weight • Tobacco/Nicotine Use • Access to Healthy Food • Risk Reduction and Education • High Opioid Use • Drug Use Among Teens • HIV/AIDS • Hepatitis • Child and Adult Immunizations • Lack of Services • Suicide • Protecting Children and Teens • Preventing Injuries • Strengthening Families

CHA Health Categories

- **Chronic Disease Screenings**
  - Mammograms
  - PSA Tests
  - Colorectal screening
- **Promoting Healthy Lifestyles**
  - Poor nutrition
  - Lack of physical Activity
  - Unhealthy weight
  - Tobacco/nicotine use
  - Access to healthy food
  - Risk reduction and education
- **Decreasing Drug Use**
  - High opioid use
  - Drug use among teens
- **Communicable Diseases**
  - HIV/AIDS
  - Hepatitis
  - Child and adult immunization
- **Supporting Mental Health**
  - Lack of services
  - Suicide
- **Other Priorities**
  - Protecting children & teens
  - Preventing injuries
  - Strengthening families

CHIP Health Priorities

- **Health Equity**
  - Access to Acute & Chronic Care
  - Access to Dental Care
  - Senior Services
- **Behavioral Health**
  - Mental Health
  - Substance Use
- **Social Determinants**
  - Housing & Food Disparity
  - Employment
  - Education
  - Transportation

COMMUNITY HEALTH IMPROVEMENT PROCESS

FDOH-Osceola embraces five values that guide our organization and services:

Innovation, Collaboration, Accountability, Responsiveness, and Excellence.

These are the driving force behind our mission:

To protect, promote & improve the health of all people in Florida through integrated state, county, & community efforts.

The values and mission of the Florida Department of Health in Osceola County (DOH-Osceola) provide the foundation for building the strategies that will lead the community from where it is to where it wants to be. DOH-Osceola is a partner of the Central Florida Community Collaborative responsible for conducting the comprehensive four-county Community Health Needs Assessment (CHNA). This is a systemic approach to collecting, analyzing, and prioritizing data for health improvement. The framework for improving health is based on an interactive community-wide process that was developed by the National Association of County and City Health Officers (NACCHO). The model, Mobilizing for Action through Planning and Partnerships (MAPP) is a planning process that can improve the efficiency, effectiveness, and performance of the local public health system. The six phases of the MAPP process are facilitated by public health leaders to prioritize health concerns and identify existing or needed resources to address community issues.

Using the data from the CHNA and applying the MAPP model, DOH-Osceola created the community health assessment (CHA) to tell the story of public health in Osceola County. The DOH-Osceola Community Health Improvement team met with the consultant team from Strategy Solutions, Inc. to review the primary and secondary data in the CHA to identify and prioritize needs. In partnership with Kissimmee Chamber Foundation Health Leadership Council (KCF HLC), the community health improvement plan (CHIP) was developed. This plan defines the goals, strategies and actions that will guide the community over the next five years. The CHIP includes the activities, timeframes, responsible parties, and performance measures that must be attained to meet the stated objectives for improved health outcomes.

The final phase of the MAPP process is the Action Cycle. This cycle links the planning, implementation, and evaluation in a continuous and interactive manner. Consistent monitoring of the activities defined in the CHIP will enable the leadership team to monitor progress toward reaching the objectives that will lead to desired health outcomes. Quarterly reviews will provide additional opportunities to coordinate and combine resources, refine strategies, and gather evidence to celebrate successes. Although this is the final MAPP phase, it is far from the end of the process. The action cycle can be the most challenging phase and requires a strong commitment to sustain the process and continue implementation over time.

KEY MAPP FINDINGS

The community health assessment provides a profile of Osceola County's population, health outcomes, behaviors, and access along with socioeconomics and the physical environment.

Major findings from the CHA include:

- The county is expected to grow 9.7 percent over the next five years. The 2019 population was estimated to be 368,559 residents.
- 55.1 percent of the population is Hispanic. This is higher than the state and almost three times the national average.
- The population was slightly younger when compared to the state.
- The median household income was $54,449 and 14.6 percent of families have incomes below the federal poverty level.
- 45.7 percent of households have incomes below $50,000.

The Top Five Causes of Death:

1. Cardiovascular Diseases
2. Malignant Neoplasm (Cancer)
3. Other Causes (Residual which include All Other Diseases that are not specified by FloridahealthCHARTS.gov)
4. External Causes (include drowning and submersion, falls, firearms discharge, homicide by firearms discharge, homicide by other and unspecified means and sequelae, legal intervention, medical and surgical care complications, motor vehicle crashes, other and unspecified event and sequelae, other and unspecified non-transport and sequelae, other land transport accidents, poisoning and noxious substance exposure, smoke, fire flames exposure, suicide by firearms discharge, suicide by other and unspecified means and sequelae, war operations and sequelae, and water/air/space/other unspecified transportation and sequelae.)
5. Respiratory Diseases

Social determinants of health are conditions that affect a wide range of health and quality-of-life outcomes. Where people live, work, learn and play are equally important as to what they eat and how much physical activity they get each day. It is important to continuously work to improve opportunities related to economic stability, education, social and community context, health and health care, and the neighborhood and built environment. This benefits all Osceola County residents so that everyone has the chance for a healthy lifestyle. Some of the most pressing issues in Osceola County were identified by the data gathered from the community survey, focus groups, stakeholder surveys, and key informant interviews. These included:

- The lack of transportation was a barrier to health care access and employment.
- Low incomes highlighted the lack of affordable housing, multiple families living under one roof, the inability to purchase healthy food or even enough food, and increased homelessness.
- Osceola County had the highest percentage of cost-burdened households in the four-county region (Lake, Orange, Osceola, and Seminole).
- Limited access to healthcare for mental illness and substance use were barriers that need to be addressed.
- In some areas there was poor air and water quality along with unstable sidewalks.

- Overall, the infrastructure has not been able to keep pace with the population growth.

Health inequities are defined as differences in health measurements across different population groups. Identifying inequities helps the community target resources to address the systemic causes of poorer health outcomes. Some of the health inequities in Osceola County included:

- The Black infant mortality rate was 1.5 times that of Hispanic babies and almost twice that of White babies.
- The percentage of low-birth weight births was highest among the Black population.
- Pre-term births among Black moms was 17.0 percent higher when compared to White births and 25.0 percent higher when compared to Hispanic births.
- Deaths from heart diseases, cancer, and diabetes were higher among the Black population when compared to White and Hispanic populations.
- The percentage of Black residents who died from stroke was higher when compared to stroke deaths among White residents.
- 80.0 percent of middle and high school students did not get enough physical activity.
- Breast cancer incidence was higher among Black women when compared to White and Hispanic women.
- The Hispanic population experienced a higher death rate for unintentional injuries when compared to the White and Black populations.
- A higher percentage of Hispanic adults reported they had poor mental health when compared to other population groups.

Detailed Findings

Community Themes Assessment

The following key findings were compiled using data from the community surveys, stakeholder interviews, focus groups, key informant survey and intercept surveys conducted for this CHNA as areas in need of improvement:

- **Access to affordable health care services**
  - Inappropriate use of emergency department
  - Services for seniors
  - Lack of Medicaid expansion
  - Language
  - Culture
- **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**
  - Need more and better bike-and pedestrian-friendly infrastructure

- **Chronic conditions**
  - Diabetes
  - Obesity
  - Heart disease
  - Cardiovascular disease
  - High cholesterol
- **Sexually transmitted infections**
- **HIV**

Community Strengths Assessment

The strengths were compiled using secondary data for this CHNA from indicators that have improved since the previous CHNA:

- **Community Characteristics**
  - Population increased
  - Median household income increased
  - Poverty decreased
  - Unemployment decreased
- **School and Student Characteristics**
  - Number of homeless students decreased
  - High school graduation rates increased
- **Communicable Diseases**
  - Immunization rates for those two years of age increased
  - Rates of influenza vaccinations ages 65+ increased
  - Births to uninsured mothers, mothers with less than a high school education and unwed mothers decreased
  - Repeat births to mothers ages 15-19 decreased
  - Pre-term births decreased
- **Preventative Care**
  - Pap tests for women ages 18+ increased
  - Mammograms for women ages 40+ increased
  - Blood stool tests for adults ages 50+ increased
- **Chronic Conditions**
  - High school obesity decreased
  - Hospitalizations for congestive heart failure decreased
  - Hospitalizations for youth ages 12-18 years with diabetes decreased
  - Lung cancer incidences increased
  - Adults with 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 mortality decreased
  - Low birth weight births decreased
- **Behavioral Risk Factors**
  - Adult smoking decreased

    - Middle school binge drinking decreased
- **Built Environment**
    - 76.0 percent of residents have access to exercise opportunities
- **Access to Quality Health Care**
    - Insurance coverage less than high school education increased
    - Insurance coverage high school degree or GED increased
    - Insurance coverage incomes under $25K
    - Insurance coverage household income level of $25K-$49K
    - Insurance coverage ages 45-64

Community Health Status Assessment

The following key findings were identified using the secondary data gathered for this CHNA from indicators that offer opportunities for improvement:

- **Need for and access to mental health services**
    - Depressive disorder, adults ages 45-64 increased
    - Depressive disorder, income <$25k increased
- **Food insecurity including access to quality, nutritious foods**
- **Poverty**
    - Cost burden of households increased
    - Homeowner cost burden increased
- **Chronic conditions**
    - Colorectal cancer incidence increased
    - Breast cancer incidence increased
    - Adults diagnosed with diabetes increased
    - Obesity increased
- **Preventative**
    - PSA test decreased
    - Colonoscopy/sigmoidoscopy decreased
- **Maternal and child health**
    - Births to mothers who were obese during pregnancy
- **New HIV cases increased**
- **Inactivity**
    - Sedentary adults increased
    - Middle school students without sufficient vigorous physical activity increased
    - High school students without sufficient vigorous physical activity increased

Forces of Change Assessment

The Forces of Change Assessment focuses on identifying forces such as legislation, technology and other impending changes that affect the context in which the community and its public health system operate. This assessment provides insight into what is occurring might occur that affects the health of our community or the local public health system and what specific threats or opportunities are generated by these occurrences.

The Forces of Change Assessment is one of the steps in the Mobilizing for Action through Planning and Partnerships (MAPP) process that the Florida Department of Health in Osceola County follows.

MAPP is a community-driven strategic planning process for improving community health. Based on the Forces of Change Assessment the following key findings were identified using data from the primary and secondary research. Prioritization exercises conducted for this CHNA by leaders representing Osceola County resulted in
these top priorities:

1. Economic conditions: housing, homeless
2. Economic conditions: employment, livable wage
3. Economic conditions: crime, violence
4. Communicable disease: childhood immunizations
5. Student and school: social media risk behaviors
6. Communicable disease: HIV/AIDS
7. Prevention: general preventative care (screenings, well visits, etc.)
8. Chronic disease: obesity
9. Chronic disease: childhood obesity
10. Chronic disease: diabetes (children and adults)

PRIORITY AREAS

DOH-Osceola Community Health Improvement Team in partnership with the Kissimmee Chamber Foundation Health Leadership Council utilized the MAPP process to prioritize health and social determinants of health that need to be addressed over the next five years. A total of nineteen public health concerns were grouped into six health categories based on input from the Community Health Assessment Leadership Team and community feedback from town hall meetings, online surveys and in-person meetings. From these, three priority areas were identified to address eight overarching goals. The table below provides the framework for addressing health and social needs throughout the county.

Health Equity	Behavioral Health	Social Determinants
• Access to acute and chronic care • Access to dental care • Senior Services (chronic care)	• Mental Health • Substance use	• Housing and Food Disparity • Employment • Transportation

Three planning meetings were held to identify the objectives, develop the strategies and activities that would accomplish the goals identified to improve community health. In addition, discussions were held regarding the need for policy or system level changes to accomplish the stated activities for each priority area. It was determined by the group that no policy or system level changes were required to achieve the goals established for the three priority areas. During the planning meetings, those responsible for the stated activities were identified. These community partners are accountable for keeping the smaller working groups on task through the monitoring, measuring and evaluation of the objectives. The monitoring also provides an opportunity to refine activities, seek additional resources, and expand collaborative efforts. The results will be reported quarterly using the progress report template.

The tables below outline the community plan for addressing each of the three priority areas. The alignment and resources can be found in Appendix D: Chip Alignment, and Appendix E: CHIP Assets and Resources.

Health Equity

According to the Centers for Disease Prevention and Control (CDC) ,“Health equity is achieved when every person has the opportunity to attain his or her full health potential and no one is

disadvantaged from achieving this potential because of social position or other socially determined circumstances." To attain this goal, Osceola County is working to address the inequities identified in the CHNA and CHA. Guided by the Healthy People 2020 benchmarks, the table below outlines the community response for reducing health inequities.

GOAL HE1.0: Enable access to quality medical and dental care for all residents.

Strategy HE1.0:	Encourage preventive health for all Osceola County residents.		
Objective		Person Responsible	Data Source
Objective HE 1.0:	By June 30, 2025, increase the number of adults who have had a medical check -up in the past year from 74.8% (2016) to at least 77.0%.	Ken Peach	FLHealthCHARTS BRFSS
Objective HE 2.0:	By June 30, 2025, increase the number of Kindergarten children fully immunized from 92.3% (2019) to at least 95.0%.	Jeremy Lanier	FLHealthCHARTS School-aged Child and Adolescent Profile

Strategy HE2.0:	Reduce chronic disease incidence in the Osceola County population.		
Objective		Person Responsible	Data Source
Objective HE 3.0:	By June 30, 2025, reduce diabetic amputation hospitalizations from 50.5/100k pop (2019) to 35.0/100k pop.	Vicki Santamaria	FLHealthCHARTS County Chronic Disease Profile
Objective HE 4.0:	By June 30, 2025, reduce the cervical cancer death rate from 4.5/100k pop (2019) to 2.5/100k pop.	Ken Peach	FLHealthCHARTS County Chronic Disease Profile
Objective HE 5.0:	By June 30, 2025, reduce congestive heart failure hospitalizations from 1586.5/100k pop (2019) to 1200.0/100k pop.	Ken Peach	FLHealthCHARTS County Chronic Disease Profile
Objective HE 6.0:	By June 30, 2025, reduce the stroke death rate from 51.6/100k pop (2019) to 40.0/100k pop.	Ohme Entin	FLHealthCHARTS County Chronic Disease Profile

Behavioral Health

The CDC defines behavioral health as, “an important part of overall health and well-being. Behavioral health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices.”

Osceola County is working to address the behavioral health issues identified in the CHNA and CHA. Guided by the Healthy People 2020 benchmarks, the table below outlines the community response to behavioral health issues. As there is significant overlap between behavioral health and substance abuse, the table includes objectives pertaining to behavioral health as well as alcohol and drug use.

GOAL BH1.0: Support mental health and substance use recovery.

Strategy BH1.0:	Improve the number of Osceola adults who report that they will have good mental health.		
Objective		Person Responsible	Data Source
Objective BH 1.0:	By June 30, 2025, increase the percentage of Osceola County adult residents reporting good mental health from 83.5% (2016) to at least 88.6%.	Jim Shanks	FLHealthCHARTS BRFASS

Strategy BH2.0:	Reduce the use of “entry”’ substances that may lead to use of other substances.		
Objective		Person Responsible	Data Source
Objective BH 2.0:	By June 30, 2025, reduce the percentage of Osceola adults who engage in heavy or binge drinking from 16.1% (2016) to 13.0%.	Natalie Mullet	FLHealthCHARTS County Profile Behavioral Risk Factors
Objective BH 3.0:	By June 30, 2025, reduce the percentage of Osceola adults who have used marijuana or hashish during the past 30 days from 5.3% (2016) to 5.0%.	Natalie Mullet	FLHealthCHARTS County Profile Behavioral Risk Factors

Social Determinants

The CDC defines Social Determinants of Health (SDOH) as ,“conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes.”

GOAL SD1.0: Advance environmental conditions that promote well-being.

Strategy SD1.0:	Reduce adult and child poverty.		
Objective		Person Responsible	Data Source
Objective SD 1.0:	By June 30, 2025, reduce the percentage of families below the federal poverty level in Osceola County from the current 10.7% (2020) to no more than 9.7%.	Sue Ring	FLHealthCharts County Profile Families Below Poverty Level

Strategy SD2.0:	Reduce cost burdened housing.		
Objective		Person Responsible	Data Source
Objective SD 2.0:	By June 30, 2025, reduce the number of residential eviction cases per year in Osceola County by 5% from 378 (2021) to no more than 359.	Dr. Elizabeth Rich	Osceola County Evictions Case Parties Spreadsheet

Strategy SD3.0:	Reduce food insecurity.		
Objective		Person Responsible	Data Source
Objective SD 3.0:	By June 30, 2025, reduce the food insecurity rate percentage from the current 12.1% (2018) to no more than 10.1%.	Karen Broussard	Second Harvest Food Bank

Strategy SD4.0:	Increase the number of K-12 students graduating high school.		
Objective		Person Responsible	Data Source
Objective SD 4.0:	By June 30, 2025, decrease the percentage of grade 9-12 students who don't graduate from 8.5% (2017) to at most 7.5%.	Martha Santoni	FLHealthCHARTS Community Social & Economic Factors 2013-2017

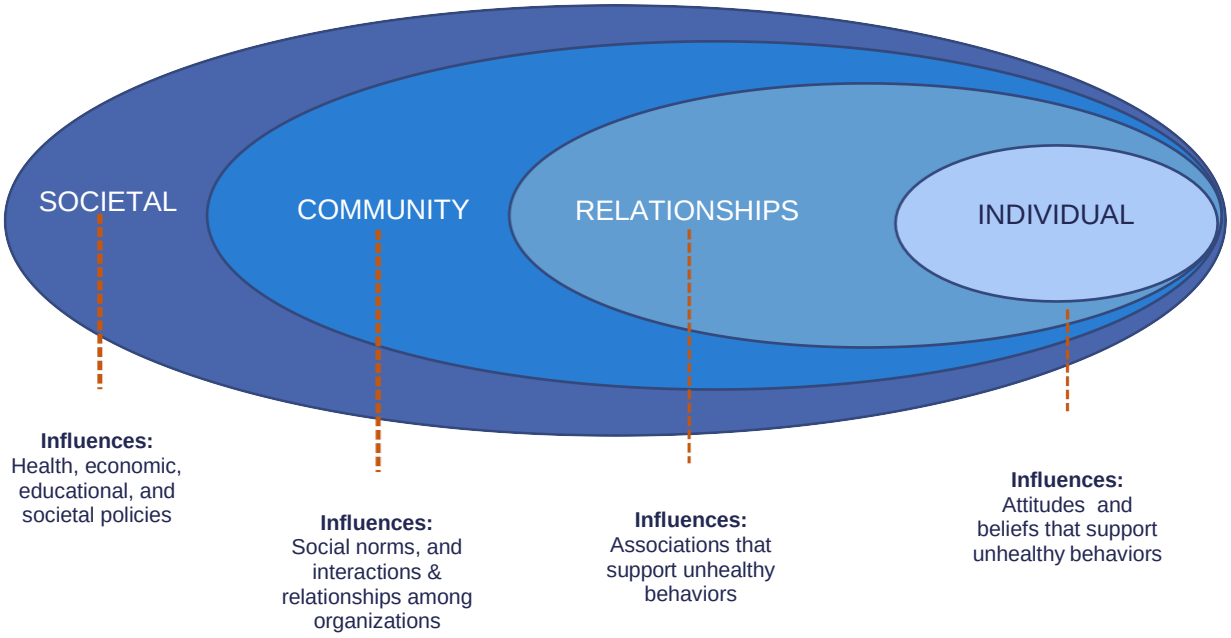
Strategy SD5.0:	Increase the number of county residents obtaining at least a bachelor's degree.		
Objective		Person Responsible	Data Source
Objective SD 5.0:	By June 30, 2025, increase the percentage of county residents aged 25 years+ obtaining a bachelor's degree from 13.3% (2017) to at least 18.0%.	Jeremy Lanier	FLHealthCHARTS Community Social & Economic Factors 2013-2017

Strategy SD6.0:	Improve the time it takes for all users (auto, transit, cycling, pedestrian) to reach their destination. Measure trip commutes by mode (auto, transit, cycling, pedestrian) to ensure access is improving.		
Objective		Person Responsible	Data Source
Objective SD 6.0:	By June 30, 2025, reduce the mean travel time to work from the current baseline of 42.2 minutes (2020) projected for 2025 to at most 39.3 minutes.	Sarah Larsen	MetroPlan Osceola Commute Time Spreadsheet and ACS Table SO802 – Means of Transportation

APPENDIX A: Community Health Needs Assessment

The Public Health Framework

The development of the Tri-County CHNA and Osceola CHA relied on the Socio-ecological Model of Health to illustrate the levels of influence that explains the complex inter-relationships between the individual and the social environment in which they live.



Using this model, the CHNA and CHA present the health and socioeconomic data indicators that enable communities to understand human behavior in the context of their environment. Targeted strategies are developed to support behavioral choices and factors that improve health and wellness. Changing the interactions between these four levels of influence through the development of sustainable interventions will have the broadest impact on overall community health.

The Data

Primary Data Sources:

- Central Florida Community Collaborative Stakeholder Interviews
- Central Florida Community Collaborative Key Informant Survey
- Central Florida Community Collaborative Focus Groups
- Central Florida Community Collaborative Primary Research

Secondary Data Sources:

- Claritas-Pop-Facts Premier 2019 Environics Analytics

- U.S. Census Bureau, American Community Survey
- FLHealthCHARTS
- Central Florida Community Collaborative Health Needs Assessment
- Florida Drug-Related Outcomes Surveillance System (FROST)
- Robert Wood Johnson Foundation, www.countyhealthrankings.org
- Centers for Disease Control and Prevention
- American Heart Association, www.goredforwomen.org
- Florida Council on Homelessness, www.myflfamilies.com
- Florida Behavioral Risk Factor Surveillance System (BRFSS)
- Tobacco Free Florida, www.tobaccofreeflorida.com
- Healthiest Weight Florida, www.healthiestweightflorida.co,
- U.S. Department of Agriculture

The Process

On April 4, 2019, the DOH-Osceola Community Health Improvement Team met with the consultant team from Strategy Solutions, Inc. to review the primary and secondary data. All data was thoroughly reviewed to identify and prioritize overall needs. Nineteen health and socioeconomic issues were defined.

CHRONIC DISEASE SCREENINGS	PROMOTING HEALTHY LIFESTYLES	COMMUNICABLE DISEASES
• Mammograms • Prostate-Specific Antigen Test • Colorectal Screenings	• Poor nutrition • Lack of physical activity • Unhealthy Weight • Tobacco/nicotine use • Access to healthy food • Risk reduction and education	• HIV/AIDS • Hepatitis • Child and adult immunizations

DECREASING DRUG USE	SUPPORTING MENTAL HEALTH	OTHER PRIORITIES
• High opioid use • Drug use among teens	• Lack of service • Suicide	• Protecting children & teens • Preventing injuries • Strengthening families

As it is unrealistic for any community to address all nineteen issues successfully, the KCF HLC met to identify the most critical issues that could be improved effectively and efficiently during the five-year period. The community stakeholder group compared the data indicators to the outcomes at the state level, the benchmarks defined by the Healthy People 2020 goals and objectives, and the county's standing among the County Health Rankings. These analyses lead the group to categorize the needs

into three broad priority areas with the objectives focused on the related health or social issues within each priority area. The results were as follows:

Health Equity	Behavioral Health	Social Determinants
• Access to acute and chronic care • Access to dental care • Senior Services (chronic care)	• Mental Health • Substance use	• Housing and Food Disparity • Employment • Transportation

County Health Rankings

County Health Rankings & Roadmaps model, a collaboration between the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, is rooted in the belief of health equity; the idea that everyone has a fair and just opportunity to be as healthy as possible, regardless of race, ethnicity, gender, income, location, or any other factor.

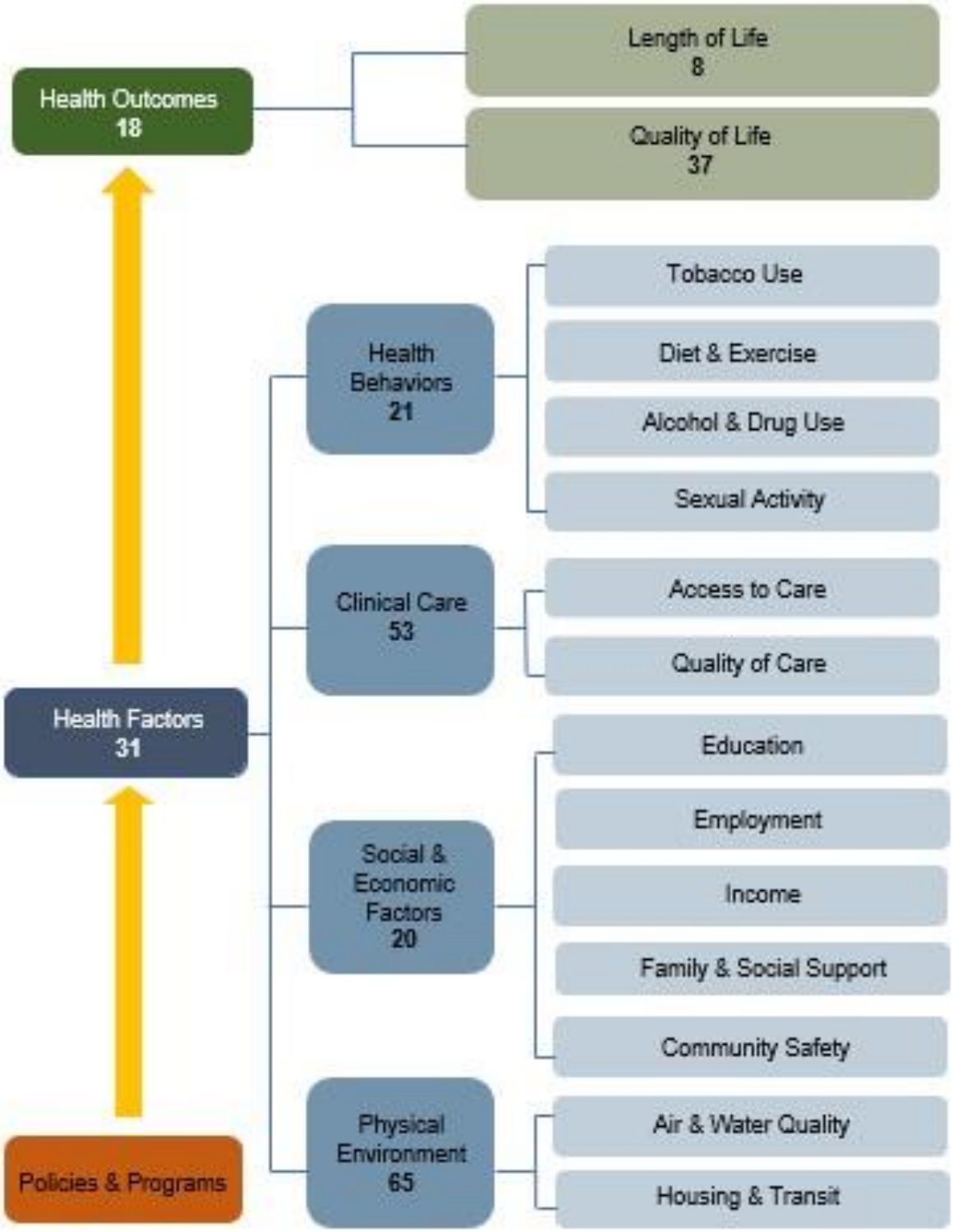
The County Health Rankings are based on a conceptual model of population health that includes both **Health Outcomes** (length and quality of life) and **Health Factors** (determinants of health). These outcomes and factors are broken down into components that are broken down further into focus areas.

The major goal of the rankings is to raise awareness about the many factors that influence health. Health factors represent things we can change to improve health for all. Providing opportunities for quality education, jobs, access to health care, healthy foods and secure and affordable housing improves the measures for the four health factor areas of **Health Behaviors**, **Clinical Care**, **Social & Economic Factors**, and the **Physical Environment**.

Counties within each state are ordered by the outcome rank for the seven components in the County Health Rankings model. A ranking of 1-17 indicates that the county is in the top range, while rankings of 51-67 would be in the bottom range. This scoring enables communities to identify the health factor components that need to be addressed for community health improvement. Using these data component rankings along with results from the Tri-County CHNA, Osceola County CHA, and MAPP Assessments, provided community partners with a comprehensive understanding of the health and social factors associated with the overall health of county residents.

Osceola County ranked 18th in overall Health Outcomes, 31st in Health Factors, 21st in Health Behaviors, and 20th in Social & Economic factors in 2020. The represented an improvement from rankings in 2016 where Health Outcomes ranked 32nd, Health Factors ranked 40th, Health Behaviors ranked 30th and Social & Economic Factors ranked 32nd. Health Behavior and Social & Economic rankings also improved over the past five years. The county still struggles to improve its rankings for Clinical Care and the Physical Environment.

The Osceola County rankings for the health outcomes and factors can be found in the graphic below.


Health Outcomes
18
Length of Life
8
Quality of Life
37
Health Factors
31
Health Behaviors
21
Tobacco Use
Diet & Exercise
Alcohol & Drug Use
Sexual Activity
Clinical Care
53
Access to Care
Quality of Care
Social & Economic Factors
20
Education
Employment
Income
Family & Social Support
Community Safety
Physical Environment
65
Air & Water Quality
Housing & Transit
Policies & Programs

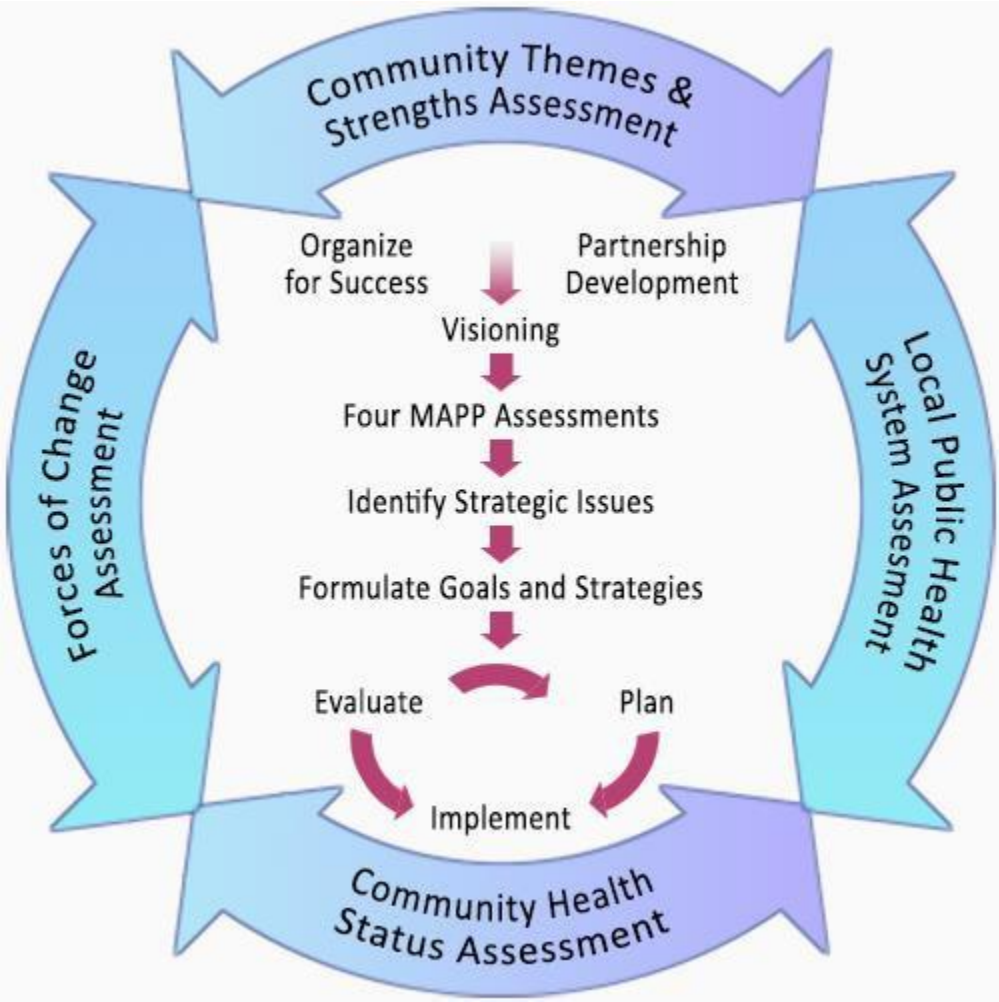
Like the state and nation, the leading causes of death for Osceola County residents were cardiovascular diseases and malignant neoplasms (cancer). The table below shows the rates for the leading causes of death (2012-2017).

CAUSE OF DEATH	2012	2013	2014	2015	2016	2017
Cardiovascular diseases	239.4	235.3	242.3	249.7	227.1	243.6
Cancer	163.2	161.3	147.6	146.0	146.0	154.2
Other causes (residual)	71.7	86.9	64.2	67.9	58.9	80.4
Respiratory diseases	68.9	64.0	68.7	67.2	68.7	54.6
External causes	50.6	56.0	59.9	51.8	66.6	66.5
Nervous system diseases	22.1	21.3	29.4	25.1	27.0	30.4
Infectious disease	12.8	23.8	20.2	25.6	23.2	21.3
Nutritional & Metabolic diseases	18.8	24.1	22.6	16.6	19.3	27.1
Urinary tract diseases	18.3	15.4	15.2	20.1	15.1	15.4
Digestive diseases	12.4	15.2	12.0	10.9	11.8	8.8

In addition to providing the community with death rates, the CHNA included data indicators to track chronic diseases prevalence, construct a demographic profile, assess social and economic status, define barriers to health and behavioral services, evaluate the quality of life, and map community resources. The CHNA and CHA are excellent documents that provided a snapshot of the county, the health of its residents and the resources available to serve all community members. To keep residents informed and educated, The DOH–Osceola relies on an intelligence platform called ***My Sidewalk***. Serving a wide range of neighborhoods and communities, the dashboard provides key data points to help in addressing the challenges while promoting the opportunities for improved health. ***My Sidewalk*** defines the community in terms of social context, healthy beginnings, lifelong health, living better and mortality. The CHIP progress will be monitored using the ***My Sidewalk*** dashboard.

APPENDIX B: MAPP PROCESS

Designed by the National Association of County and City Health Officials, the Mobilizing for Action through Planning and Partnership (MAPP) is an interactive process that can improve the efficiency, effectiveness, and performance of the local public health system.



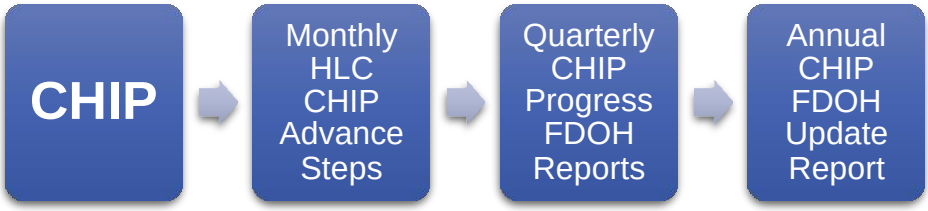
The MAPP process includes all community stakeholders to ensure concerns and ideas are shared from multiple perspectives. When the community takes ownership in driving the plan, the likelihood of success increases. This is due do the many benefits of using a collaborative approach as listed below:

- Reduces duplication of efforts.
- Builds on interventions that have a proven track record.
- The four MAPP assessments gather information to guide actions that will lead to desired results.

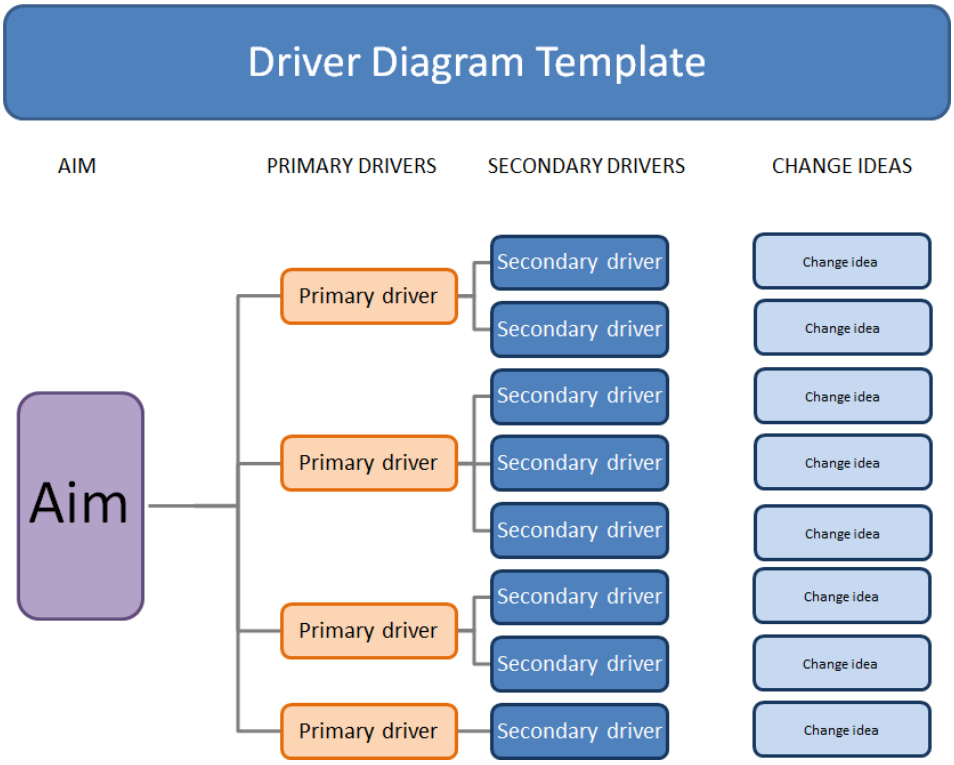
- Enables the identification of forces that could reduce outcomes and provides opportunities to develop proactive remedies.
- Creates a stronger public health system that leads to more effective coordination and collaboration.

The Action Cycle

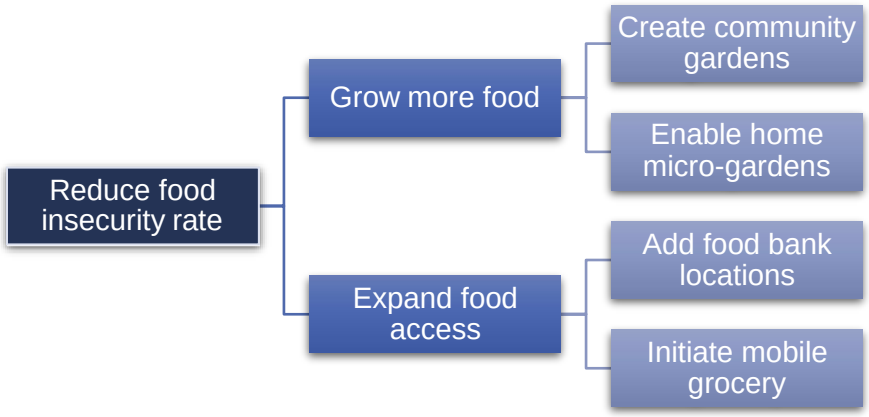
When the CHIP is finalized, progress on the established goals and objectives is monitored monthly and reported out quarterly by the designated groups responsible for the action plan activities. Quarterly reports are rolled into the annual CHIP report.



Using Driver Diagrams provides a clear picture of the team's shared view. The driver diagram shows the relationship between the overall aim of the project, the primary and secondary drivers, and specific change ideas to test for each secondary driver.

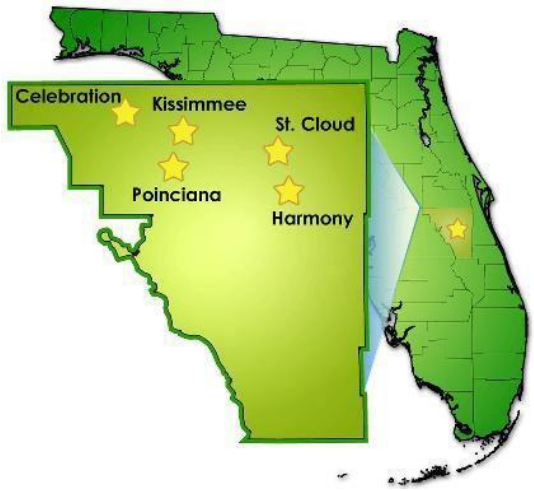


Tracking in this way facilities consistent evaluation of the progress made or the lack thereof. When the desired results are not being attained as planned, the group is provided opportunities early in the improvement process to reassess the activities. Below is an example of driver diagram.



When objectives are not being met as planned, corrective action may require the fostering of new partnerships and/or securing additional resources. The end goals are achieved through this continual process of planning, implementation, and evaluation.

APPENDIX C: OSCEOLA COUNTY, FLORIDA PROFILE



Demographics

Over the next 5-years, Osceola County is expected to grow by almost ten percent. The total population is projected to expand from 368,559 residents in 2019 to 404,326 in 2024. This is above Florida's expected growth rate at 6.8 percent. The county had slightly more females, at 50.8 percent when compared to males at 49.2 percent. The population was racially predominantly White (67.8%) and ethically predominately Hispanic (55.1%). The Hispanic population in Osceola County was much higher when compared to the state at 25.9 percent and nationally at 18.3 percent.

The 2019 median age for residents was 36.8 years, slightly lower than the state of Florida at 42.5 years. The median age is expected to increase slightly to 38.1years by 2024. The percentage of residents living in Osceola County with an education beyond high school at 54.5 percent, is higher than the state of Florida at 49.3 percent and the nation at 39.0 percent. The median household income in 2019 was $54,449, with 14.6 percent of the families having incomes below the federal poverty level and 45.7 percent of households having incomes under $50,000.

Health is influenced by conditions where we live and the ability and means to access healthy food, good schools, affordable housing, and good-paying jobs. High rates of poverty make it very difficult for residents to thrive. The highest rates of poverty in the county were found in the Kenansville neighborhood (ZIP Code 34739) and ZIP Codes 34741 and 34743 in Kissimmee. Rates of poverty in these areas exceeded twenty percent and unemployment was above 23.0 percent.

Health Inequities

The largest health disparities in the county were related to race, income, and education.

- The highest rate of colorectal cancer incidence, at 44.2 per 100,000 population, was among the White population, while the rate among the Black population was 28.0 per 100,000 population and 31.8 per 100,000 population for Hispanic residents.
- The Black population had the highest rate of breast cancer incidence, at 137.6 per 100,000 population, when compared to the White population at 121.9 per 100,000 and the Hispanic population at 101.8 per 100,000 population.

- The highest rate of lung cancer in Osceola County was among the White population at 63.3 per 100,000 population, when compared to the Black population at 25.4 per 100,000 and the Hispanic population at 37.5 per 100,000 population.
- The White and Hispanic populations had higher rates of asthma at 8.7 percent and 7.6 percent, respectively, when compared to the Black population at 3.3 percent.
- While Whites and Hispanic populations had higher rates of diabetes incidence, the Black and White populations had higher diabetes death rates when compared to the Hispanic population.
- Infant mortality was highest among the Black population at 7.0 deaths per 1,000 births when compared to the White population at 3.7 deaths per 1,000 live births and the Hispanic population with 4.7 deaths per 1,000 live births.
- Births to mothers with less than a high school education was highest among Hispanics at 9.4 percent when compared to the White and Black populations at 8.6 percent.
- Adults with incomes less than $25k (23.2 percent) were more likely to have poor mental health compared to those with incomes between $25 and 49k (19.3 percent) and those with incomes 50k and above (2.7 percent).

Health-related Issues

HIV and Hepatitis C were identified as the top three community issues. The increase of STDs in the county was attributed to substance use. There is a community perception that AIDS has been solved. However, the stigma regarding HIV/AIDS still exists. New HIV cases increased from 14.9 per 100,000 population in 2012 to 26.8 per 100,000 in 2016.

Health literacy was lacking within the community which hampered the understanding of health conditions. Inappropriate use of the emergency room was due to the lack of residents who have a primary doctor and/or an established medical home. Another issue that came to light was a distrust of doctors by the senior population. They feared being placed in a nursing home, possibly unnecessarily.

Residents lacking access to care and health insurance coverage could play a role in increasing death rates as patients sought care too late in the disease process. This also may have increased the rate of those referred to hospice care.

Poor birth outcomes have long term consequences for the general health of the community. It is essential for people to have access to high quality affordable pre-natal care. Adopting a healthy lifestyle while pregnant can mitigate the rates of infant mortality, and premature and low birth weight births caused by obesity or substance use. Access to social and housing services can improve overall birth outcomes.

The rate of fentanyl-related deaths in Osceola County increased from 1.3 per 100,000 population in 2013 to 11.1 per 100,000 population in 2017. Substance use is a key community issue which is related to homelessness. There was an increase in crystal meth use within the

community. In addition, teens were said to be acting out and choosing to self-medicate with synthetic drugs.

Needed services in Osceola County include:

- Distribution of information on available services
- Access to affordable care
- More Federally Qualified Health Centers
- Extended physician office hours
- Expanded transportation
- Incentives to attract good physicians
- Education for navigating the health care system
- Additional services for the LBGTQ community
- Increased services for immigrants
- More affordable medications

APPENDIX D: CHIP ALIGNMENT

Both National and State health improvement priorities were considered during the development of the 2020-2025 Osceola County Community Health Improvement Plan (CHIP). The following diagram provides a visual representation of these alignments.

<table>
<tr><th>2020-2025 Osceola CHIP</th><th>2020-2025 FDOH-Osceola Strategic Plan</th><th>2017-2021 DOH Agency SHIP</th><th>2016-2020 DOH Agency Strategic Plan</th><th>Healthy People 2020</th></tr>
<tr><td>Health Equity

Goal: Improve access to care for identified Osceola County residents who are less likely to receive quality and affordable services.</td><td rowspan="3">Priority Area 1

Health Equity

Priority Area 2

Long Healthy Life</td><td>SHIP Priority 1

Health Equity</td><td>Strategic Priority Health Equity

Goal: Ensure Floridians in all communities will have opportunities to achieve healthier outcomes.</td><td>LHI 1 Access to Health Services

AHS-3 Increase the proportion of persons with a usual primary care provider.</td></tr>
<tr><td>Behavioral Health
(Includes Mental Illness and Substance Abuse)

Goal: Improve community awareness and engagement in mental health and substance abuse services.</td><td>SHIP Priority 6

Behavioral Health
(Includes Mental Illness & Substance Abuse)</td><td rowspan="2">Strategic Priority Health Equity

Goal: Ensure Floridians in all communities will have opportunities to achieve healthier outcomes.

Strategic Priority Long, Healthy Life

Goal: Increase healthy life expectancy, including the reduction of health disparities to improve the health of all groups.</td><td>MHMD-1
Reduce the suicide rate.

MHMD-4.1
Reduce the proportion of adolescent aged 12-17 years who experience major depressive episodes (MDEs).</td></tr>
<tr><td>Social Determinants

Goal: Strengthen factors that affect a wide-range of health and quality-of outcomes.</td><td>SHIP Priority 1

Health Equity

SHIP Priority 8

Chronic Diseases & Conditions
(Includes Tobacco-Related Illnesses & Cancer)</td><td>LHI 10 Social Determinants

AHS-3 Increase the proportion of persons with a usual primary care provider.

LHI 12 Tobacco
Reduce adults who currently smoke and adolescents who smoked in the past 30 days.</td></tr>
</table>

APPENDIX E: ASSETS & RESOURCES

Osceola County Community Health Assets & Resources	
• County Commissioners, leaders, employees (workforce of agency), students, diverse population. • Chamber of Commerce. • Central Florida Partnerships (public, private and independent businesses). • Public and College Libraries: Osceola County, computers, books, presentations, workshops, college research labs. • Money: banks, affordable housing, subsidized breakfast/lunch at schools, service fees. • Government Agencies: Osceola County, five districts, fourteen municipalities/cities, FDOH-Osceola. • Healthcare providers: hospitals, primary care, urgent care, veteran affairs. • Osceola County Public Schools. • Community Parks and trails. • Boys & Girls Club. • Publix, Aldi's, Walgreens, CVS, Save-A-Lot, Salvation Army, various independent markets/eateries. • Affordable Care Act (AHCA), Medicaid, Medicare.	• Churches/Faith-based Organizations: Catholic Charities, Methodist, Baptist, Lutheran, Jewish, Muslim, Buddhist, etc., health ministries of local churches. • Technology: cell phone, computer, apps, GPS. • Council on Aging. • Meals on Wheels. • Health Leadership Council. • Valencia College, University of Central Florida (UCF), Osceola College. • Food trucks. • Farmer's market. • Public transportation: Lync, SunRail, taxi, Uber, Lyft, Access Florida. • Second Harvest Food bank. • Emergency Management (EMS). • Community Vision. • Law Enforcement: state, Kissimmee, Osceola. • Red Cross.

APPENDIX F: ANNUAL EVALUATION REPORT

FDOH-Osceola – Community Health Improvement Plan (CHIP) Progress Reporting Tool

FDOH-Osceola utilizes the Performance Dashboard, which is a file within a local summary folder to assist public health departments in the development, implementation, and performance management of the Strategic and Operational Planning process from beginning to end. Priority areas, goals, strategies, objectives, and action items are entered into the file, following extensive community input, and task leaders are assigned to maintain documentation towards progression.

Example:
Strategic Issue Area: _____
Goal: _____
Strategy: _____

Objective: SMART Objective which includes the baseline value, baseline year, target value and target date.

Objective % - Done 0% - Activities sum = 0

Status	Number	Activity Team	Activity	Performance Metric and Data Source	Status/Progress
	2.1.1.1				
	2.1.1.3				
	2.1.1.4				

Strategic Issue Area: _____
Goal: _____
Strategy: _____

Objective: SMART Objective which includes the baseline value, baseline year, target value and target date.

Objective % - Done 0% - Activities sum = 0

Status	Number	Activity Team	Activity	Performance Metric and Data Source	Status/Progress
	2.1.1.1				
	2.1.1.3				
	2.1.1.4				

APPENDIX G: DATA SOURCES AND REFERENCES

1. 2019 Population Estimates, Claritas-Pop-Facts Premier 2018, Environics Analytics

2. Poverty Rate as of 11/15/18: US Census Bureau, 2012-2016 American Community Survey, retrieved from

https://www.census.gov/topicsincomepoverty/poverty/data/tables/acs.html

3. FLHealthCHARTS, Florida Department of Health (2002-2018), retrieved from www.flhealthcharts.org

4. Central Florida Collaborative Community Health Needs Assessment, Strategy Solutions, 2019

5. Florida Drug-Related Outcomes Surveillance System (FROST), retrieved from https://frost.med.ufl.edu/frost/

6. Robert Wood Johnson Foundation (2016-2017), retrieved from www.countyhealthrankings.org

7. Centers for Disease Control and Prevention (2014-2017), Retrieved from www.cdc.gov

8. County Health Rankings and Roadmaps, retrieved from www.countyhealthrankings.com

9. FLHealthCHARTS, Florida Department of Health (2002-2018), retrieved from www.flhealthcharts.org

10. Central Florida Community Benefit Collaborative Community Survey, Strategy Solutions, 2019

11. American Heart Association (2017), retrieved from www.goredforwomen.org.

12. Florida Council on Homelessness (2016-2017), retrieved from www.myflfamilies.com.

13. Central Florida Community Collaborative Stakeholder Interviews, Strategy Solutions, 2019

14. Central Florida Community Collaborative Key Informant Survey, Strategy Solutions, 2019

15. Central Florida Community Collaborative Focus Groups, Strategy Solutions, 2019

16. Central Florida Community Collaborative Primary Research, Strategy Solutions, 2019

17. Florida Behavioral Risk Factor Surveillance System (BRFSS; 2000-2016), FLHealthCHARTS, Florida Department of Health, retrieved from www.flhealthcharts.org

18. Tobacco Free Florida (2017), retrieved from www.tobaccofreeflorida.com

19. Healthiest Weight Florida (2017), retrieved from www.healthiestweightflorida.com

20. US Department of Agriculture Food Deserts, retrieved from

https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-theatlas.aspx

21. American Community Survey (2017), retrieved from https://www.census.gov/programs-surveys/acs/

22. US Census Bureau, County Business Patterns, retrieved from https://www.census.gov/data/datasets/2016/econ/cbp/2016-cbp.html