Ascension Sacred Heart

Ascension Sacred Heart Bay

Community Health Needs Assessment 2019

Ascension Sacred Heart
Executive Statement

At Ascension Sacred Heart and across Ascension Florida, we are called to provide compassionate, personalized care to everyone, and the information gathered in the Community Health Needs Assessment helps us better understand the evolving needs of those we are so privileged to serve. As healthcare providers, we recognize that we must work together to meet the needs of our community. We must also work in both traditional and innovative ways to increase access to care. This assessment allows us to hear directly from members of our community about what they need most, but we must also demonstrate that we are listening by providing our patients with the care they need, when and where they need it. We look forward to our collaborative work to make this a better, healthier place for all people.

Tom VanOsdol
President and CEO
Ascension Florida

Community Health Needs Assessment

Prepared for
ASCENSION SACRED HEART
BAY

By
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction

Introduction

This community health needs assessment (CHNA) was conducted by Ascension Sacred Heart Bay ("ASHB" or "the hospital") to identify community health needs and to inform development of an implementation strategy to address current needs.

ASHB is a hospital located in Panama City, Florida. It provides hospital care and outpatient services to patients from Bay County and six other counties in Northwest Florida. Nearly 300 physicians are on staff and the hospital's services include the area's only Level II Trauma Center and open heart surgery program. The hospital is part of Ascension, one of the largest non-profit health systems in the U.S.

This CHNA is conducted using widely accepted methodologies to identify the significant health needs of a specific community. The assessment also is conducted to comply with federal and state laws and regulations.

Community Definition

For purposes of this report, ASHB's community is defined as Bay County, Florida. The community was defined by considering the geographic origins of the hospital's discharges in 2017. The total population of ASHB's community in 2017 was 178,953. The following map portrays the community served by ASHB.

Sources: Microsoft MapPoint and Ascension Sacred Heart.

Significant Community Health Needs

Seven significant community health needs were identified through this assessment:

1. Access to Care
2. Basic Needs
3. Behavioral Health
4. Cancer
5. Education, Income, and Physical Environment
6. Healthy Lifestyles
7. Maternal, Child, and Infant Health

These significant health needs in the community served by ASHB were identified based on analyses of secondary data, primary data received through key stakeholder interviews, and assessments produced by public health departments. Details are summarized below.

Access to Care
Access to care is challenging for some residents of the ASHB community, particularly to mental health and substance abuse services. Access barriers are associated with lack of insurance, financial obligations from insurance with high cost-sharing requirements, work demands, lack of child care services, distance to providers, and inadequate transportation. Federally-designated "Medically Underserved Areas" are present in the community.

Basic Needs
Lower-income residents are more likely to encounter difficulty accessing basic needs, including food, safety, and housing. The October 2018 damage to the community by Hurricane Michael significantly increased the number of residents experiencing difficulty accessing basic needs, especially housing.

Behavioral Health
Community residents are more likely to experience poor mental health than residents of Florida overall. Substance abuse is problematic and includes abuse of prescription drugs, illegal drugs, and alcohol, as well as tobacco and nicotine products. These issues are exacerbated by the relative lack of mental health providers, distance to services, and coverage and insurance gaps.

Cancer
Cancer mortality rates are higher in the community than in Florida overall. Cancer incidence rates are also relatively higher in the community than Florida for breast, cervical, colorectal, and melanoma cancers.

Education, Income, and Physical Environment
Educational achievement levels are relatively lower in the community than for Florida overall or similar counties across the country. While employment rates in the community are comparable to rates for Florida and the U.S., many jobs are in the service industry and may lack full-time status with health insurance benefits. Poverty rates are relatively high in the community for Black, Asian, and Hispanic or Latino residents throughout the community, and contribute to severe housing shortages. Geographic distances between residential areas and services lead to challenges within the community, including relatively long commuting times, lack of access to exercise opportunities, and presence of food deserts.

Healthy Lifestyles
Many unhealthy behaviors are prevalent in the community, including poor nutrition, lack of exercise, tobacco/nicotine use, and unsafe sex. In addition to obesity within the community, these behaviors contribute to chronic diseases, as evidenced by relative high rates of diabetes, hypertension, and communicable diseases, including sexually transmitted infections.

Maternal, Child, and Infant Health
Preterm births, multiple births, and births to teens are relatively higher in the community than in Florida overall, and breastfeeding rates are relatively lower. Rates of postneonatal infant deaths are higher than for Florida overall. Children are more likely to live in single-parent households than children in counties comparable to Bay County. The number of pregnant women who smoke and/or abuse substances is reported to be significant.

DATA AND ANALYSIS

Definition of Community Assessed

This section identifies and describes the community assessed by ASHB and how it was determined. The community definition was validated based on the geographic origins of 2017 discharges from ASHB. For purposes of this report, ASHB's community is defined as Bay County, Florida.

Exhibit 1: Community Population by County, 2017, and Inpatient Discharges, 2017

County	2017 Population	2017 Discharges	Percent of Discharges
Bay	178,953	11,018	73.2%
Community Total	**178,953**	**11,018**	**73.2%**
Other		*4,029*	*26.8%*
Total		*15,047*	*100.0%*

Source: Florida Department of Health (FLHealthCharts.com)

Description
Exhibit 1 summarizes the community 2017 population and ASHB discharges by county and the community overall.

Observations
Population estimates help to quantify the community and inform understanding of community needs. Data in *Exhibit 1* indicate the following:

- Over 175,000 residents live in the ASHB community; and
- Nearly 75 percent of ASHB's 15,047 inpatient discharges in 2017 were residents of Bay County.

Exhibit 2: ASHB Community
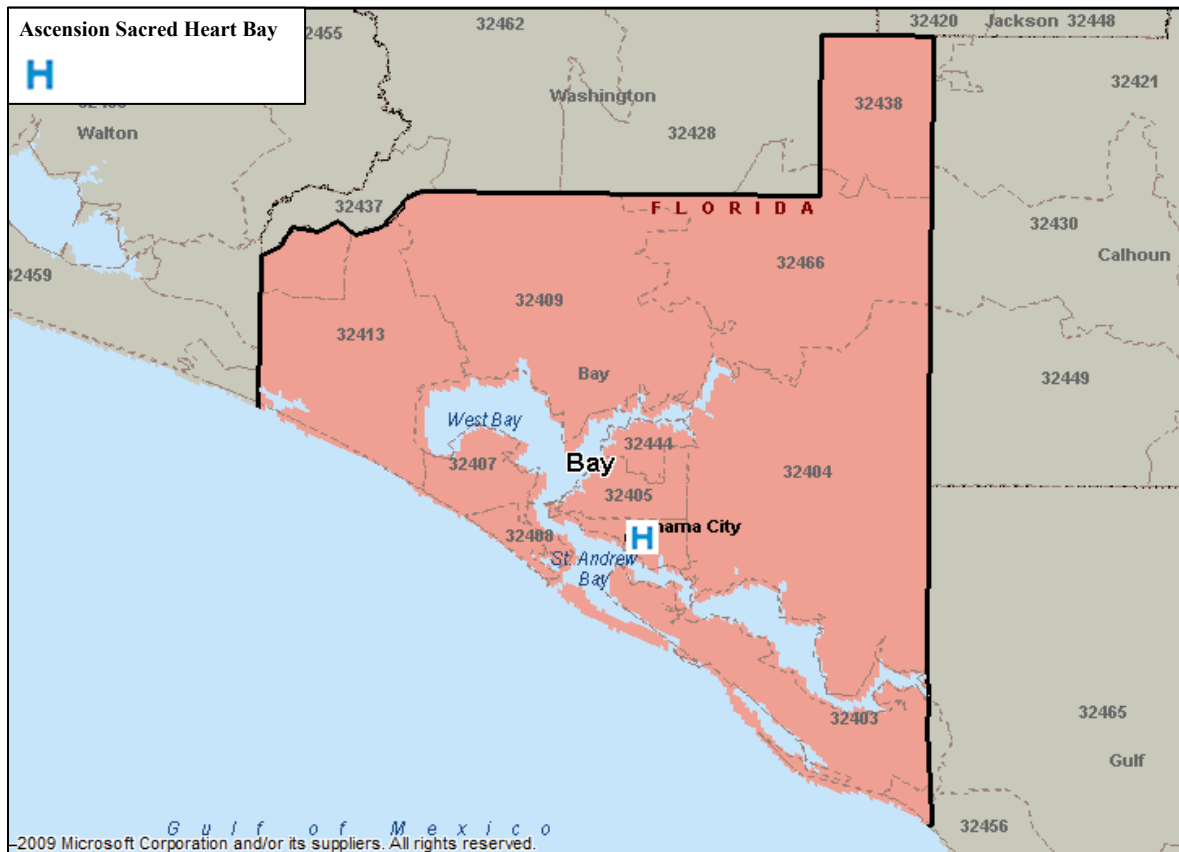
Sources: Microsoft MapPoint and Ascension Sacred Heart.

Description
Exhibit 2 presents a map displaying the county that comprises the ASHB community.

Observations
Identifying the geographic environment of a community can inform identification of community needs and constraints. Data in *Exhibit 2* indicate the following:

- The community is comprised of Bay County, Florida; and
- The community is bounded on the south by the Gulf of Mexico, exposing it to hurricanes and other damaging weather conditions.

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Demographics

Population characteristics and trends directly influence community health needs. The total population in Bay County, the ASHB community, is expected to grow by 5.8 percent from 2017 to 2022.

Economic Indicators

Many health needs have been associated with poverty. According to the U.S. Census, in 2016 approximately 16.1 percent of people in Florida and 15.1 percent of people in the U.S. were living in poverty.

The Bay County poverty rate of 15.6 percent was lower than the Florida average, however it was higher than the U.S. average. Poverty rates also were comparatively high for the county's Black and Hispanic (or Latino) residents.

"Severe housing problems" are experienced by more than one in six residents (17.7 percent) of the county.

In Bay County, overall crime rates were higher than Florida averages. Rates were more than 50 percent higher for domestic violence offenses. Rates were higher overall for larceny, burglary, aggravated assault, motor vehicle theft, rape, murder, and forcible sex offenses.

Local Health Status and Access Indicators

In the 2018 *County Health Rankings* for overall health outcomes, Bay County ranked 46th out of 67 counties, in the bottom half of Florida counties.

Bay County ranked in the bottom 50th percentile among Florida counties for 26 of 42 indicators. Seven of the 26 were in the bottom quartile: length of life, premature death, excessive drinking, diabetes monitoring, high school graduation, violent crime, and air pollution.

Taken as a whole, the following indicators contributed to comparatively low rankings for Bay County:

- Adequate access to locations for physical activity
- Adults age 20 and over reporting no leisure-time physical activity
- Adults ages 25-44 with some post-secondary education
- Adults reporting binge or heavy drinking
- Adults reporting fair or poor health
- Adults that report a BMI of 30 or more
- Adults who are current smokers
- Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)
- Average mentally unhealthy days reported in past 30 days
- Average physically unhealthy days reported in past 30 days

- Births per 1,000 female population ages 15-19
- Children under age 18 in poverty
- Chlamydia cases (newly diagnosed) per 100,000 population
- Deaths due to injury per 100,000 population
- Diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring
- Driving deaths with alcohol involvement
- Female Medicare enrollees ages 67-69 that receive mammography screening
- Healthy Food Environment
- Hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees
- Ninth-grade cohort that graduates in four years
- Population ages 16 and older unemployed but seeking work
- Ratio of population to dentists
- Ratio of population to primary care physicians
- Violent crime
- Workforce that drives alone to work
- Years of potential life lost before age 75

In the 2018 *Community Health Status Indicators*, which compares community health indicators for each county with those for peers across the United States, the following indicators appear to be most problematic for Bay County:

- Years of potential life lost rate
- Fair/poor health
- Physically unhealthy days
- Mentally unhealthy days
- Births - low birth weight
- Smokers
- Obese
- Food environment index
- Physically inactive
- With access to exercise opportunities
- Driving deaths - alcohol-impaired
- Teen birth rate
- Uninsured
- Primary care physicians rate
- Dentist rate
- Mental health professionals rate
- Preventable hospital rate
- Receiving HbA1c screening
- Mammography screening
- High school graduation rate
- Some college
- Unemployed
- Children in poverty

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- Children in single-parent households
- Violent crime rate
- Injury death rate
- Drive alone to work
- Long commute - drives alone

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSCs) are theoretically preventable hospitalizations when timely outpatient care is available and received. Among these conditions are: angina, diabetes, dehydration, kidney/urinary infections, nutritional deficiencies, and pelvic inflammatory disease.

ACSC rates in Bay County exceeded Florida averages for 14 of 20 conditions, with particularly high rates for bacterial pneumonia, congestive heart failure, nutritional deficiencies, and pelvic inflammatory disease.

Community Need Index

Dignity Health, a California-based hospital system, developed and published a *Community Need Index™* (CNI) that measures barriers to health care access. The index is based on five social and economic indicators:

- The percentage of elders, children, and single parents living in poverty
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White
- The percentage of the population without a high school diploma
- The percentage of uninsured and unemployed residents
- The percentage of the population renting houses

A CNI score is calculated for each ZIP Code. Scores range from "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0).

Two of the 11 ZIP Codes with coverage in the ASHB community scored in the "Highest Need" CNI category, ZIP Codes 32401 and 32404. The overall county scored in the "2nd Highest" CNI category.

Food Deserts

The U.S. Department of Agriculture's Economic Research Service identifies census tracts that are considered "food deserts" because they include lower-income persons without supermarkets or large grocery stores nearby. Within the ASHB community, census tracts around Panama City have been designated as food deserts.

Medically Underserved Areas and Populations

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration (HRSA) based on an "Index of Medical Underservice." The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 and over. Areas with a score of 62 or less are considered "medically underserved." Areas within Bay County have been designated as medically underserved.

Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. Low-income populations within Bay County have been designated as primary care and dental care HPSAs. All of Bay County has been designated as a mental health HPSA.

Relevant Findings of Other CHNAs

In recent years, the Florida Department of Health developed a State Health Improvement Plan and a Community Health Improvement Plan ("CHIP") was produced for Bay County. This CHNA also has considered the findings of these works.

The Florida Department of Health prepared a 2017-2019 State Health Improvement Plan (SHIP), informed by its State Health Assessment. Eight priority areas were identified in the Florida SHIP, which are as follows:

1. Behavioral health (including mental illness and substance abuse);
2. Chronic diseases and conditions (includes tobacco-related illnesses and cancer)
3. Health equity;
4. Healthy weight, nutrition, and physical activity;
5. Immunizations;
6. Injury, safety, and violence;
7. Maternal and child health; and
8. Sexually transmitted disease (includes other infectious diseases).

A Community Health Improvement Plan ("CHIP") was produced by the Bay County Community Health Task Force in collaboration with the Florida Department of Health in Bay County for 2015 - 2018. The Bay County CHIP identified priority areas from key health issues facing the county, which were selected in collaboration with community partners. The three priority areas identified in the Bay County CHIP are as follows:

1. Chronic diseases;
2. Healthy weight / healthy lifestyles; and
3. Mental health/substance abuse.

Primary Data Summary

Primary data were gathered by conducting interviews with key stakeholders (*See* Appendix C for additional information on those providing input). Key informant interviews were conducted face-to-face and by telephone by Verité Healthcare Consulting between November 2018 and January 2019. The interviews were designed to obtain input on health needs from persons who represent the broad interests of the community served by ASHB.

Twenty-five interview sessions were held with 85 individuals representing numerous community organizations. Interviewees included individuals with special knowledge of or expertise in public health, local public health department representatives with information and expertise relevant to the health needs of the community, and individuals and organizations serving or representing medically underserved, low-income, and minority populations.

Interviews were conducted using a structured discussion guide. Informants were asked to discuss community health issues and encouraged to think broadly about social, behavioral, and other determinants of health. The frequency with which specific issues were mentioned and interviewees' perceptions of the severity and scope of concerns were assessed. The health status issues and contributing factors summarized below were reported to be of greatest concern for the ASHB Community.

1. In October 2018, Hurricane Michael, a Category 5 storm, made landfall in Bay County. Many businesses and residences were heavily damaged or destroyed. Infrastructure, including utilities and communications, was also destroyed. Residents who remain in the area have unmet basic needs. Physical and mental health have been negatively impacted.
2. Bay County is geographically large and much of the area is rural. Access to services is challenging for some residents because of distance and lack of transportation. Access to healthy food and exercise opportunities are also challenging for some residents.
3. Specialty care and behavioral health services are limited or not available in the area, but primary care providers have been relatively accessible. Access to all services is limited for some residents because of insurance requirements and regulatory restrictions. Access to services has diminished because of damage from Hurricane Michael. Residents may delay or avoid seeking needed health care services because of access challenges.
4. Poor mental health needs, substance abuse, and high rates of tobacco use are prevalent because residents experience daily stressors and other issues, and have difficulty accessing treatment services. Cultural acceptance contributes to substance and tobacco use. Mental health and substance abuse issues have increased since Hurricane Michael.
5. Lower-income working residents experience many barriers to services, including relatively low-income from hospitality employment, lack of insurance benefits, and inability to qualify for assistance programs.

Details are below.

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1. **In October 2018, Hurricane Michael, a Category 5 storm, made landfall in Bay County. Many businesses and residences were heavily damaged or destroyed. Infrastructure, including utilities and communications, was also destroyed. Residents who remain in the area have unmet basic needs. Physical and mental health have been negatively impacted.**

On October 11, 2018, Hurricane Michael made landfall in Bay County as a Category 5 storm. The severity of the storm was not anticipated, as it strengthened from a Category 2 hurricane in 24 hours. More than 20 individuals in Bay County died from the Hurricane, and many businesses and residences were heavily damaged or destroyed. Infrastructure, including utilities and communications, was also destroyed.

Residents who remain in the area have unmet basic needs, including housing and access to healthy food. As most housing was damaged, residents continue to occupy damaged and substandard units because of demand for rebuilding services and lags in insurance settlements. As many businesses were damaged, some residents have lost jobs.

Physical health has been negatively impacted by reduced access to grocery stores and pharmacies. Loss of trees during the hurricane has diminished external air quality and mold growing in damaged buildings has diminished internal air quality. Damage to medical buildings and senior care facilities has reduced access to care by reduced provider capacity and relocated services. Access to care has been impacted by evacuated staff members who have not returned and lack of communications infrastructure. Access to care has been further reduced by loss of employer-sponsored health insurance.

Mental health also has been negatively affected by trauma from the storm, as evidenced by weather-induced anxiety among some residents. The demand for mental health services exceeded capacity before Hurricane Michael and is anticipated to increase as residents struggle with rebuilding efforts. Post-hurricane trauma may be contributing to behavioral issues among students. Unmet storm-related mental health needs are likely increasing substance abuse and domestic violence.

Time estimates for community rebuilding vary considerably. Accordingly, the environment should be scanned frequently to identify outstanding basic needs, as well physical and mental issues.

2. **Bay County is geographically large and much of the area is rural. Access to services is challenging for some residents because of distance and lack of transportation. Access to healthy food and exercise opportunities are also challenging for some residents.**

Bay County is geographically large. Its size, combined with areas separated by water, road distances, and those areas connected by bridges results in considerably increased travel time to necessary services. Bay County also includes many rural areas whose residents must also commute for many services.

Due to these travel requirements, accessing services requires transportation for most residents. Transportation is challenging for lower-income residents because the cost of vehicles, fuel, and tolls, as well as for residents who cannot drive, such as seniors, children, and individuals with disabilities. Limited public transportation options also contribute to these transportation challenges.

The impacts of these distance and transportation challenges include delays in seeking medical services and pressures between work and family. Individuals also may avoid seeking care from local providers because of personal relationships with these providers, concern that health issues will become known by other members of the small community, and stigma. Providers in other communities may be located too far away to access.

Distance and transportation challenges also impact the ability of residents to access healthy food, and exercise opportunities. Food deserts exist in the community, as do "food swamps," areas with fast food options but no good markets. Lack of sidewalks and other infrastructure limit access to exercise facilities and physical activity programs.

3. **Specialty care and behavioral health services are limited or not available in the area, but primary care providers have been relatively accessible. Access to all services is limited for some residents because of insurance requirements and regulatory restrictions. Access to services has diminished because of damage from Hurricane Michael. Residents may delay or avoid seeking needed health care services because of access challenges.**

Primary care services have been relatively accessible for many residents. Some specialty care and behavioral health services have been limited.

Health insurance requirements, notably participation in insurance coverages by providers, restrict access to services for some residents, especially residents covered by Medicaid. Understanding coverage rules also is challenging for individuals covered by the Veterans Administration, as is coordination of care. Individuals covered by private insurance may also experience access issues from self-rationing for financial reasons due to relatively high cost-sharing deductibles and co-payments.

Furthermore, regulatory restrictions may create obstacles to services that have direct impact on health and well-being. Access to healthy food may be reduced because regulations are too strict

to operate farmers markets. Potential foster parents may fail to apply because the application process is lengthy. Child care services may be limited because mandate requirements are too onerous.

The impact of these insurance requirements and regulatory restrictions is that some patients may delay or avoid seeking needed health care services. Utilization of emergency rooms for primary care, worsening health, and/or avoidable outcomes may result.

Destruction by Hurricane Michal has reduced access to all health care services. Damage to medical buildings has reduced the number and capacity of treatment facilities. The reduction in treatment facilities, as well as damage to personal residences, has led medical professionals to relocate to other areas to practice. While some of the reduced capacity may be temporary, the relocation of some professionals is expected to be permanent.

4. **Poor mental health needs, substance abuse, and high rates of tobacco use are prevalent because residents experience daily stressors and other issues, and have difficulty accessing treatment services. Cultural acceptance contributes to substance and tobacco use. Mental health and substance abuse issues have increased since Hurricane Michael.**

Residents in the community experience poor mental health status due to numerous issues from daily life, including family demands, work pressures, financial challenges, poor housing, and long commutes. Trauma, such as from experiences of Adverse Childhood Experiences, contributes to poor mental health. Poor mental health is experienced by all segments of the community.

Substance abuse is also prevalent and experienced by all community segments. Recreational drug use and some substance abuse are accepted with the community, notably alcohol consumption and tobacco use. Other substance abuse is more recent, such as opioids, heroin, and methamphetamines.

Poor mental health and substance abuse frequently occur in tandem. Individuals with poor mental health status may self-medicate with legal or illegal substances because of cultural norms, stigma in seeking help, insufficient access to medical providers, and inability to afford prescription drugs. Individuals with addiction may initially try substances because of cultural norms and may continue because of the addiction, stigma in seeking help, insufficient access to medical providers, and inability to afford prescription drugs.

Treatment services for mental health and substance abuse are insufficient, restrictive, uncoordinated and, accordingly, frequently ineffective. Lags between initial hospitalizations and follow-up consultations for prescription drugs may result in quick deterioration of mental health or substance abuse relapse. Similarly, gaps between hospitalizations and residential treatment yield poor outcomes, and initial success may be jeopardized when individuals return to the same environment where the problems originated. Distances to services and insufficient transportation compound issues. Furthermore, access to some services, such as inpatient pediatric mental

health services, is challenging for all community segments, but access to all services is especially difficult for Medicaid enrollees and residents without insurance or financial means.

Other issues negatively impact successful treatment, including turnover of mental health professionals, and regulatory requirements. Staff turnover can reduce treatment effectiveness because of diminished continuity of care and changes to the provider-patient relationship that can be instrumental to success. Regulatory requirements, such as emergency mental health treatment mandated by the Baker Act, can be misused by some individuals who are not in crisis and result in diminished resources for other community members. Furthermore, mental illness and substance abuse make it difficult for individuals with these diseases to seek assistance and keep scheduled appointments.

The impact of unmet mental health needs and substance abuse treatment is poor health outcomes and worsening conditions. The impact also includes stress to family members, increased likelihood of domestic violence, deterioration of family and other relationships, and generational continuation of problems. The larger community is also impacted by such issues as impaired driving and increasing incidence of communicable disease, including hepatitis and HIV. The impact is especially problematic to children born of women abusing substances while pregnant.

Hurricane Michael has increased mental health and substance abuse issues. Trauma from the hurricane, weather-induced anxiety, and stress related to rebuilding have negatively impacted the mental health of residents. Unmet storm-related mental health needs are likely increasing abuse of substances.

5. **Lower-income working residents experience many barriers to services, including relatively low wages from hospitality employment, lack of insurance benefits, and inability to qualify for assistance programs.**

While unemployment rates are comparatively low for the community, many jobs are in the service industry and related to tourism. Wages for many residents are modest, but the cost-of-living is relatively high because of the influx of wealth from beach-related visitors and significant income inequality from military contractors and part-year residents with pensions or other retirement income.

For working residents, employment impacts health insurance status, and part-time or seasonal jobs may cause coverage to start and stop throughout the year, depending on the position and hours worked. As many working residents are living paycheck-to-paycheck, a medical crisis can become a financial crisis because cost-sharing requirements of employer-sponsored health insurance, if offered, or premiums for individual insurance may be cost prohibitive. Some residents evaluate these costs and make an economic decision to forego coverage because of too little income to afford insurance and/or cost-sharing amounts, but too much income to qualify for assistance programs. Insurance coverage may be foregone because other items are competing for limited incomes and are more pressing, such as housing, transportation, and child care. Preventive and needed medical, dental, and behavioral health services are ignored, self-treated, or delayed until crisis.

Other residents choose to forego work to continue to qualify for assistance programs, including support for food, housing, and medical assistance. That is, the loss of public benefits that may result from employment can be a disincentive to securing employment.

Contributing to challenges experienced by employers in finding qualified employees is insufficient education, substance use identified during drug tests, and lack of vocation training in the community.

Significant Community Health Needs

Process and Criteria Used to Prioritize Significant Health Needs

The following section highlights why certain community health needs were determined to be "significant." Needs were determined to be significant if they were identified as problematic by at least two of the following three data sources: (1) the most recently available secondary data regarding the community's health, (2) recent assessments developed by other organizations (e.g., local health departments), and (3) the key stakeholders who participated in the interview process.

Access to Care

Access to care is challenging for some residents of the ASHB community, particularly to mental health and substance abuse services. Access barriers are associated with lack of insurance, financial obligations from insurance with high cost-sharing requirements, work demands, lack of child care services, distance to providers, and inadequate transportation. Federally-designated "Medically Underserved Areas" are present in the community.

- The age-adjusted death rates for many leading causes of death are higher in the community than for Florida overall (***Exhibit 11***).
- Death rates for selected causes of death are higher in the community than for Florida overall (***Exhibit 12***).
- Hospitalization rates for selective conditions are higher in the community than for Florida overall (***Exhibit 15***).
- Individuals unable to see a doctor due to cost is higher in the community than in Florida overall (***Exhibit 20***).
- Per capita physicians and dentists are lower in the community than for Florida overall (***Exhibit 21***).
- Rates for preventable hospitalizations are higher in the community for some conditions than in Florida overall (***Exhibit 22***).
- Utilization of several preventive services is lower in the community than for Florida overall (***Exhibit 23***).
- Federally-designated Medically Underserved Areas (MUAs) are present in the community (***Exhibit 41***).
- Federally-designated Health Professional Shortage Areas (HPSAs) for primary care, mental health, and dental care are present in the community (***Exhibit 42***).

Basic Needs

Lower-income residents are more likely to encounter difficulty accessing basic needs, including food, safety, and housing. The October 2018 damage to the community by Hurricane Michael significantly increased the number of residents experiencing difficulty accessing basic needs, especially housing.

- Stakeholders interviewed indicated that Hurricane Michael heavily damaged or destroyed many residences and businesses in October 2018.
- The rate for preventable hospitalizations related to nutritional deficiencies are more than 50 percent higher in the community than for Florida overall (*Exhibit 22*).
- Poverty rates for Asian, Black, and Hispanic or Latino residents were disproportionately high (*Exhibit 29*)).
- Approximately half of households have incomes below $50,000 (*Exhibit 30*).
- Rates for most crimes are higher in the community than rates for Florida (*Exhibit 33*).
- Bay County ranked in the bottom half of Florida counties for the food environment index, and the bottom quartile for violent crime and air pollution (*Exhibit 35*).
- Two ZIP Codes within the community are rated as highest need areas, based on the assessment of The Community Need Index™ (*Exhibit 38*).
- Food deserts exist within the community (*Exhibit 40*).

Behavioral Health

Community residents are more likely to experience poor mental health than residents of Florida overall. Substance abuse is problematic and includes abuse of prescription drugs, illegal drugs, and alcohol, as well as tobacco and nicotine products. These issues are exacerbated by the relative lack of mental health providers, distance to services, and coverage and insurance gaps.

- Adults reporting poor mental health and depressive disorders are higher in the community than for Florida overall (*Exhibit 18*).
- Suicide rates in the community are more than 50 percent higher than the Florida rate, and behavioral health hospitalization rates are higher than for Florida overall (*Exhibit 19*).
- Tobacco use rates are higher in the community than for Florida overall (*Exhibit 24*).
- Alcohol-suspected motor vehicle crash rates are higher in the community than for Florida overall (*Exhibit 27*).
- Bay County is a federally-designated Health Professional Shortage Area (HPSA) for mental health (*Exhibit 42*).
- Behavioral health, mental health, and/or substance abuse were cited as problematic in the 2017-2019 State Health Improvement Plan (SHIP) by the Florida Department of Health, and the 2015-2018 Bay County Community Health Improvement Plan by the Florida Department of Health in Bay County.
- Poor mental and substance abuse were cited by many interviewees as significant within the community.

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Cancer

Cancer mortality rates are higher in the community than in Florida overall. Cancer incidence rates are also relatively higher in the community than Florida for breast, cervical, colorectal, and melanoma cancers.

- The age-adjusted female breast cancer death rate is higher in Bay County than in Florida overall (***Exhibit 12***).
- Cancer incidence rates are higher in the community than in Florida overall, including incidence of breast cancer, lung cancer, and colorectal cancer (***Exhibit 14***).
- Cancer was cited as problematic in the 2017-2019 State Health Improvement Plan (SHIP) by the Florida Department of Health.

Education, Income, and Physical Environment

Educational achievement levels are relatively lower in the community than for Florida overall or similar counties across the country. While employment rates in the community are comparable to rates for Florida and the U.S., many jobs are in the service-industry and may lack full-time status with health insurance benefits. Poverty rates are relatively high in the community for Black, Asian, and Hispanic or Latino residents throughout the community, and contribute to severe housing shortages. Geographic distances between residential areas and services lead to challenges within the community, including relatively long commuting times, lack of access to exercise opportunities, and presence of food deserts.

- Poverty rates for Black, Asian and Hispanic or Latino residents were disproportionately high (***Exhibit 29***).
- Approximately half of households (47.7 percent) have incomes below $50,000 (***Exhibit 30***).
- Bay County ranked in the bottom half of Florida counties for high school graduation and air pollution (***Exhibit 35***).
- Bay County ranked in the bottom quarter of similar counties for high school graduation, some college, and children in poverty (***Exhibit 37***).
- Two ZIP Codes within the community are rated as highest need areas, based on the assessment of The Community Need Index™ (***Exhibit 38***).
- Education attainment, well-compensated employment opportunities, and poverty were cited by many interviewees as issues within the community.
- Geographic distance to providers, transportation issues, and lack of insurance was cited by many interviewees as access barriers.

Healthy Lifestyles

Many unhealthy behaviors are prevalent in the community, including poor nutrition, lack of exercise, tobacco/nicotine use, and unsafe sex. In addition to obesity within the community, these behaviors contribute to chronic diseases, as evidenced by relative high rates of diabetes, hypertension, and communicable diseases, including sexually transmitted infections.

- The hospitalization rate for nutritional deficiencies is more than 50 percent higher in the community than for Florida overall (***Exhibit 22***).
- Physical inactivity is higher in the community than in Florida overall (***Exhibit 25***).
- Obesity rates are higher in the community than in Florida overall (***Exhibit 26***).
- Access to exercise opportunities is lower in the community than for Florida overall (***Exhibit 36B***).
- Issues relating to physical activity, nutrition, and healthy weight were priorities in the 2017-2019 State Health Improvement Plan (SHIP) by the Florida Department of Health, and the 2015-2018 Bay County Community Health Improvement Plan by the Florida Department of Health in Bay County.
- Selected hospitalization rates are higher in the community for some conditions than in Florida overall (***Exhibit 15***).
- Selected reportable and infectious disease rates are higher in the community for some diseases than in Florida overall (***Exhibit 16***).
- Adults reporting fair or poor physical health are higher in the community than for Florida overall (***Exhibit 18***).
- Tobacco use rates are higher in the community than for Florida overall (***Exhibit 24***).
- The per capita number of physically unhealthy days was higher in the community than in Florida overall (***Exhibit 36A***).
- Chronic disease was cited as a priority in the 2017-2019 State Health Improvement Plan (SHIP) by the Florida Department of Health.

Maternal, Child, and Infant Health

Preterm births, multiple births, and births to teens are relatively higher in the community than in Florida overall, and breastfeeding rates are relatively lower. Rates of postneonatal infant deaths are higher than for Florida overall. Children are more likely to live in single-parent households than children in counties comparable to Bay County. The number of pregnant women who smoke and/or use substances is reported to be significant.

- The postneonatal infant death rate is higher in the community than in Florida overall (***Exhibit 13***).
- The teen birth rate is more than 50 percent higher in the community than in Florida overall (***Exhibit 17***).
- Rates for early prenatal care and breastfeeding rates are lower in the community than in Florida overall (***Exhibit 17***).
- The percentages of children in poverty are higher than for comparative communities across the country (***Exhibit 37***).

- Maternal and child health was cited as a priority in the 2017-2019 State Health Improvement Plan (SHIP) by the Florida Department of Health.
- Tobacco and drug use by pregnant women were cited by several interviewees as problematic within the community.

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OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

This section identifies other facilities and resources available in the community served by ASHB that are available to address community health needs.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are established to promote access to ambulatory care in areas designated as "medically underserved." These clinics provide primary care, mental health, and dental services for lower-income members of the community. FQHCs receive enhanced reimbursement for Medicaid and Medicare services and most also receive federal grant funds under Section 330 of the Public Health Service Act. As listed in *Exhibit 3*, there currently are four FQHC sites operating in the ASHB community.

Exhibit 3: Federally Qualified Health Centers, 2018

County	ZIP Code	Facility
Bay	32401	C. C. Washington and Rosenwald
Bay	32405	Community Health Center - Bay County
Bay	32401	Community Health Center - Bay County
Bay	32466	PanCare Youngstown

Source: HRSA, 2018.

Hospitals

Exhibit 4 presents information on hospital facilities that operate in the ASHB community.

Exhibit 4: Hospitals, 2018

County	Facility	Type	Beds
Bay	Ascension Sacred Heart Bay	Acute Care	323
Bay	Emerald Coast Behavioral Hospital	Psychiatric	86
Bay	Gulf Coast Regional Medical Center	Acute Care	238
Bay	HealthSouth Emerald Coast Rehab Hospital	Rehabilitation	75
Bay	Select Specialty Hospital-Panama City	Acute Care/LTC	30

Source: Florida Hospital Association, 2018.

Other Community Resources

A wide range of agencies, coalitions, and organizations that provide health and social services, is available in the region served by the hospital. 2-1-1 Northwest Florida, a program of the United Way of Escambia County, provides 2-1-1 information and referral service to callers from seven counties, including Bay. By calling 2-1-1 or (850) 595-5905, referrals to service providers are available. Individuals can also search for services using the organization's website, https://escambia.communityos.org/cms/. Organizations providing assistance and available resources include the categories below.

- **Basic Needs** - Survival level resources including food, housing, material goods, transportation, and utilities;
- **Consumer Services** - Education and protection of individuals who buy products and services for personal use;
- **Criminal Justice and Legal Services** - Promotion and preservation of a safe and peaceful environment through the enforcement of laws;
- **Education** - Opportunities to acquire knowledge, skills, desirable qualities of behavior, character, wisdom, and general competence;
- **Environment and Public Health/Safety** - Protection and conservation of natural resources, prevention or reduction in environmental pollution, and promotion of environmental and public health;
- **Health Care** - Help to achieve and maintain physical well-being through the study, prevention, screening, evaluation, and treatment of people who have illnesses, injuries or disabilities, as well as family planning and maternity services;
- **Income Support and Employment** - Help with employment, support for those who are eligible, assistance with social insurance benefits, and temporary financial assistance;
- **Individual and Family Life** - Promotion of personal, social, and spiritual development of people in the community;
- **Mental Health and Substance Abuse Disorder Services** - Provision of preventive, diagnostic, and treatment services to help people cope with everyday demands, as well as assistance for individuals who have a substance use disorder; and
- **Organizational/Community/International Services** - A spectrum of services that benefit entire communities, including artistic, cultural, philanthropic, and disaster-relief activities.[1]

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[1] http://escambia.communityos.org/cms//contact and http://211bigbend.bowmansystems.com/index.php/component/cpx/?task=services.

APPENDIX A - OBJECTIVES AND METHODOLOGY

Regulatory Requirements

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.[2] Each tax-exempt hospital facility must conduct a CHNA that identifies the most significant health needs in the hospital's community. The regulations require that each hospital:

- Take into account input from persons representing the broad interests of the community, including those knowledgeable about public health issues, and
- Make the CHNA widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined,
- A description of the methodology used to determine the community health needs, and
- A prioritized list of the community's health needs.

Tax-exempt hospital organizations also are required to report information about the CHNA process and about community benefits they provide on IRS Form 990, Schedule H. As described in the instructions to Schedule H, community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. To be reported, community need for the activity or program must be established. Need can be established by conducting a Community Health Needs Assessment. Community benefit activities and programs also seek to achieve objectives, including:

- Improving access to health services,
- Enhancing public health,
- Advancing increased general knowledge, and
- Relieving government burden to improve health.[3]

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- *Who* in the community is most vulnerable in terms of health status or access to care?
- *What* are the unique health status and/or access needs for these populations?
- *Where* do these people live in the community?
- *Why* are these problems present?

The question of *how* each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

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[2] Internal Revenue Code, Section 501(r).
[3] Instructions for IRS form 990 Schedule H, 2015.

Methodology

Federal regulations that govern the CHNA process allow hospital facilities to define the community they serve based on "all of the relevant facts and circumstances," including the "geographic location" served by the hospital facility, "target populations served" (e.g., children, women, or the aged), and/or the hospital facility's principal functions (e.g., focus on a particular specialty area or targeted disease)."[4] The community defined by ASHB accounts for 73 percent of the hospital's 2017 inpatient discharges.

Secondary data from multiple sources were gathered and assessed. Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.[5]

Input from 85 individuals was received through key informant interviews. These informants represented the broad interests of the community and included individuals with special knowledge of or expertise in public health.

In addition, data were gathered to evaluate the impact of various services and programs identified in the previous CHNA process.

Certain community health needs were determined to be "significant" if they were identified as problematic in at least two of the following three data sources: (1) the most recently available secondary data regarding the community's health, (2) recent assessments developed by other organizations, and (3) input from the key informants who participated in the interview process.

Collaborating Organizations

For this assessment, ASHB collaborated with the Ascension Sacred Heart Pensacola ("ASHP"), and the Florida Department of Health. ASHB also collaborated with Ascension Sacred Heart Gulf ("ASHG") and Ascension Sacred Heart Emerald Coast ("ASHEC"), and CHNAs for these hospitals were developed alongside the ASHB CHNA.

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[4] 501(r) Final Rule, 2014.

[5] Note that some data sources present data by borough and others present data by county. As boroughs correspond to counties, data are consistently presented throughout the report as boroughs to simplify presentation. Specifically, Bronx County corresponds to the borough of Bronx, Kings County corresponds to the borough of Brooklyn, New York County corresponds to the borough of Manhattan, Queens County corresponds to the borough of Queens, and Richmond County corresponds to the borough of Staten Island.

Information Gaps

This CHNA relies on multiple data sources and community input gathered between November 2018 and January 2019. A number of data limitations should be recognized when interpreting results. For example, some data, such as County Health Rankings, exist only at a county-wide level of detail. Those data sources do not allow assessment of health needs at a more granular level of detail, such as by ZIP Code or census tract.

Secondary data upon which this assessment relies measure community health in prior years. For example, the most recent mortality rates available for the region were data collected for years 2015-2017. The impacts of the most recent public policy developments, changes in the economy, and other community developments are not yet reflected in those data sets. For the ASHB community, short-term and longer-term impacts from the October 2018 damage by Hurricane Michael are not reflected in secondary data.

The findings of this CHNA may differ from those of others conducted in the community. Differences in data sources, communities assessed (such as hospital service areas versus counties or cities), and prioritization processes can contribute to differences in findings.

Input on Previous CHNA

No written comments were received regarding the previous CHNA.

Consultant Qualifications

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Arlington, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 60 needs assessments for hospitals, health systems, and community partnerships nationally since 2010.

The firm also helps hospitals, hospital associations, and policy makers with community benefit reporting, program infrastructure, compliance, and community benefit-related policy and guidelines development. Verité is a recognized national thought leader in community benefit and Community Health Needs Assessments.

APPENDIX B – SECONDARY DATA ASSESSMENT

This section presents secondary data regarding demographics, health status, health access, economic indicators, and findings of other assessments.

Demographics

Population characteristics and changes influence health issues in and services needed by communities.

Exhibit 5: Estimated 2017 Population, 2022 Projected Population, and Projected Change

County	2017 Estimated Population	2022 Projected Population	Percent Change
Bay County	178,953	189,266	5.8%
Florida	20,555,728	22,137,883	7.7%

Source: Florida Health Charts, 2018

Description
Exhibit 5 summarizes the estimated 2017 population and projected 2022 population for Bay County and the state of Florida. Note that the projected changes in population were consistent across all age cohorts.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Data in *Exhibit 5* indicate the following:

- Between 2017 and 2022, the Bay County population is projected to increase by 5.8 percent; and
- The projected population growth rate of 5.8 percent is lower than the projected Florida growth rate of 7.7 percent.

Exhibit 6: Percent Change in Population by Age/Sex Cohort, 2017-2020-2025

Age/Sex	Estimated Population 2017	Projected Population 2020	Projected Population 2025	Percent Change 2017-2020	Percent Change 2017-2025
Bay County					
0-17	38,568	40,329	42,854	4.6%	11.1%
Female 18-44	30,309	31,342	33,180	3.4%	9.5%
Male 18-44	31,717	32,789	34,157	3.4%	7.7%
45-64	48,293	48,751	47,570	0.9%	-1.5%
65+	29,933	32,753	38,468	9.4%	28.5%
Total	178,820	185,964	196,229	4.0%	9.7%

Source: Florida Demographic Estimating Conference, December 2017 and the University of Florida, Bureau of Economic and Business Research, Florida Population Studies, Bulletin 181, June 2018

Description
Exhibit 6 summarizes the community's estimated population for certain age and sex cohorts in 2017, with projections to 2020 and 2025.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Data in *Exhibit 6A* indicate the following:

- The number of persons aged 65 years and older in Bay County is projected to increase by 28.5 percent between 2017 and 2025;
- The growth of older populations is likely to lead to growing needs for health services, since on an overall per-capita basis, older individuals typically need and use more services than other segments of the population;
- The number of persons aged 0-17 is expected to increase in Bay County by nearly 11 percent between 2017 and 2025; and
- The growth of children and youth is likely to lead to increase education needs and the demand for pediatric services.

Exhibit 7A: Residents Aged 0-17, 2016

Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 7A maps estimated 2016 community residents aged 0-17 by ZIP Code.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Estimating pediatric residents (infants, children, and youth) can have unique health needs that should be considered separately from other age groups. Data in *Exhibit 7A* indicate the following:

- ZIP Codes 32401 and 32437 have proportions of population aged 0-17 of 25 percent or more.

Exhibit 7B: Residents Aged 65+, 2016

Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 7B maps estimated 2016 residents aged 65 and older by ZIP Code.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Estimating residents aged 65 and older is relevant because members of this population can have unique health needs that should be considered separately from other age groups. Additionally, older individuals typically need and use more services than younger persons. Data in *Exhibit 7B* indicate the following:

- ZIP Codes 32410 and 32413 have proportions of population aged 65 and older of 20 percent or more.

Exhibit 8A: 2016 Population by Race and Ethnicity

Race/Ethnicity	Bay County
White	82.1%
Black or African American	10.8%
Asian	2.3%
Other	4.9%
Total	**100.0%**
Hispanic or Latino	*5.7%*

Source: U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.

Description
Exhibit 8A summarizes the estimated 2016 population by race and ethnicity.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Consideration of the population by race and ethnicity is relevant because "[h]istorically, people in racial/ethnic minority groups are more likely than non-Hispanic whites to be poor, to lack a high school education, and to experience disparities in health and health care services."[6] Data in *Exhibit 8A* indicate the following:

- In Bay County, over one in ten residents (10.8 percent) are Black or African American and nearly one in twenty residents (4.9 percent) is Other (including multiracial residents); and
- In Bay County, more than one in twenty residents (5.7 percent) identify as Hispanic or Latino.

[6] Program Brief: AHRQ Activities to Reduce Racial and Ethnic Disparities in Health Care," Agency for Healthcare Research and Quality, December 2009. See http://www.ahrq.gov/sites/default/files/publications/files/disparities.pdf. AHRQ is an agency of the U.S. Department of Health and Human Services.

Exhibit 8B: Percent Change in Population by Race and Ethnicity, 2017-2020-2025

Race/Ethnicity	Estimated Population 2017	Projected Population 2020	Projected Population 2025	Percent Change 2017-2020	Percent Change 2017-2025
Bay County					
White	150,706	156,094	163,778	3.6%	8.7%
Non-White	28,114	29,870	32,451	6.2%	15.4%
Total	178,820	185,964	196,229	4.0%	9.7%
Black	21,701	23,035	25,021	6.1%	15.3%
Hispanic or Latino	12,113	14,227	17,280	17.5%	42.7%

Source: Florida Demographic Estimating Conference, December 2017 and the University of Florida, Bureau of Economic and Business Research, Florida Population Studies, Bulletin 181, June 2018

Description

Exhibit 8B summarizes the community's estimated population for racial and ethnic cohorts in 2017, with projections to 2020 and 2025.

Observations

Population characteristics directly influence community health needs as different segments of the population can have different characteristics, including race and ethnicity. Consideration of the population by race and ethnicity is relevant because "[h]istorically, people in racial/ethnic minority groups are more likely than non-Hispanic whites to be poor, to lack a high school education, and to experience disparities in health and health care services."[7] Data in *Exhibit 8B* indicate the following:

- In Bay County, the Hispanic or Latino population is projected to grow at over four times that projected rate for the community as a whole.

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[7] Program Brief: AHRQ Activities to Reduce Racial and Ethnic Disparities in Health Care," Agency for Healthcare Research and Quality, December 2009. See http://www.ahrq.gov/sites/default/files/publications/files/disparities.pdf. AHRQ is an agency of the U.S. Department of Health and Human Services.

Exhibit 9A: Percent of Population – Black or African American, 2016

Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 9A maps estimated 2016 Black or African American residents by ZIP Code.

Observations
Consideration of the population by race and ethnicity is relevant because "[h]istorically, people in racial/ethnic minority groups are more likely than non-Hispanic whites to be poor, to lack a high school education, and to experience disparities in health and health care services."[8] Data in *Exhibit 9A* indicate the following:

- The proportion of the Black or African American population varies by ZIP Code. ZIP Codes 32401, 32403, 32404, 32405, and 32437 have proportions of population of 10 percent or more.

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[8] Program Brief: AHRQ Activities to Reduce Racial and Ethnic Disparities in Health Care," Agency for Healthcare Research and Quality, December 2009. See http://www.ahrq.gov/sites/default/files/publications/files/disparities.pdf. AHRQ is an agency of the U.S. Department of Health and Human Services.

Exhibit 9B: Percent of Population – Asian, 2016

Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 9B maps estimated 2016 Asian residents by ZIP Code.

Observations
Consideration of the population by race and ethnicity is relevant because "[h]istorically, people in racial/ethnic minority groups are more likely than non-Hispanic whites to be poor, to lack a high school education, and to experience disparities in health and health care services."[9] Data in *Exhibit 9B* indicate the following:

- While the proportion of the Asian population varies by ZIP Code, no ZIP Code has a proportion of population of 10 percent or more.

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[9] Program Brief: AHRQ Activities to Reduce Racial and Ethnic Disparities in Health Care," Agency for Healthcare Research and Quality, December 2009. See http://www.ahrq.gov/sites/default/files/publications/files/disparities.pdf. AHRQ is an agency of the U.S. Department of Health and Human Services.

Exhibit 9C: Percent of Population – Hispanic (or Latino), 2016

Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 9C maps estimated 2016 Hispanic or Latino residents by ZIP Code.

Observations
Consideration of the population by race and ethnicity is relevant because "[h]istorically, people in racial/ethnic minority groups are more likely than non-Hispanic whites to be poor, to lack a high school education, and to experience disparities in health and health care services."[10] Data in *Exhibit 9C* indicate the following:

- ZIP Code 32403 has a proportion of Hispanic or Latino population of more than 10 percent.

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[10] Program Brief: AHRQ Activities to Reduce Racial and Ethnic Disparities in Health Care," Agency for Healthcare Research and Quality, December 2009. See http://www.ahrq.gov/sites/default/files/publications/files/disparities.pdf. AHRQ is an agency of the U.S. Department of Health and Human Services.

Exhibit 10A: 2016 Adult Population by Military Veteran Status

Zip Code/Area	City	Civilian population 18 years and over
32401	Panama City	13.8%
32403	Panama City	26.8%
32404	Panama City	19.5%
32405	Panama City	14.7%
32407	Panama City Beach	17.4%
32408	Panama City	14.1%
32409	Panama City	12.4%
32410	Mexico Beach	17.0%
32413	Panama City Beach	13.9%
32437	Ebro	1.7%
32438	Fountain	20.7%
32444	Lynn Haven	17.7%
32466	Youngstown	20.2%
	Bay County	16.3%
	Florida	9.4%
	United States	8.0%

Source: U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.

Description
Exhibit 10A summarizes the estimated 2016 population by military veteran status.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Military veterans may have unique health needs and health care services may need coordination with the United States Department of Veterans Affairs (the VA). Data in *Exhibit 10A* indicate the following:

- In Bay County, nearly one in six (16.3 percent) residents is a military veteran, about approximately the rate of Florida and the U.S. as a whole.

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Exhibit 10B: Map of 2016 Adult Population by Military Veteran Status by ZIP Code
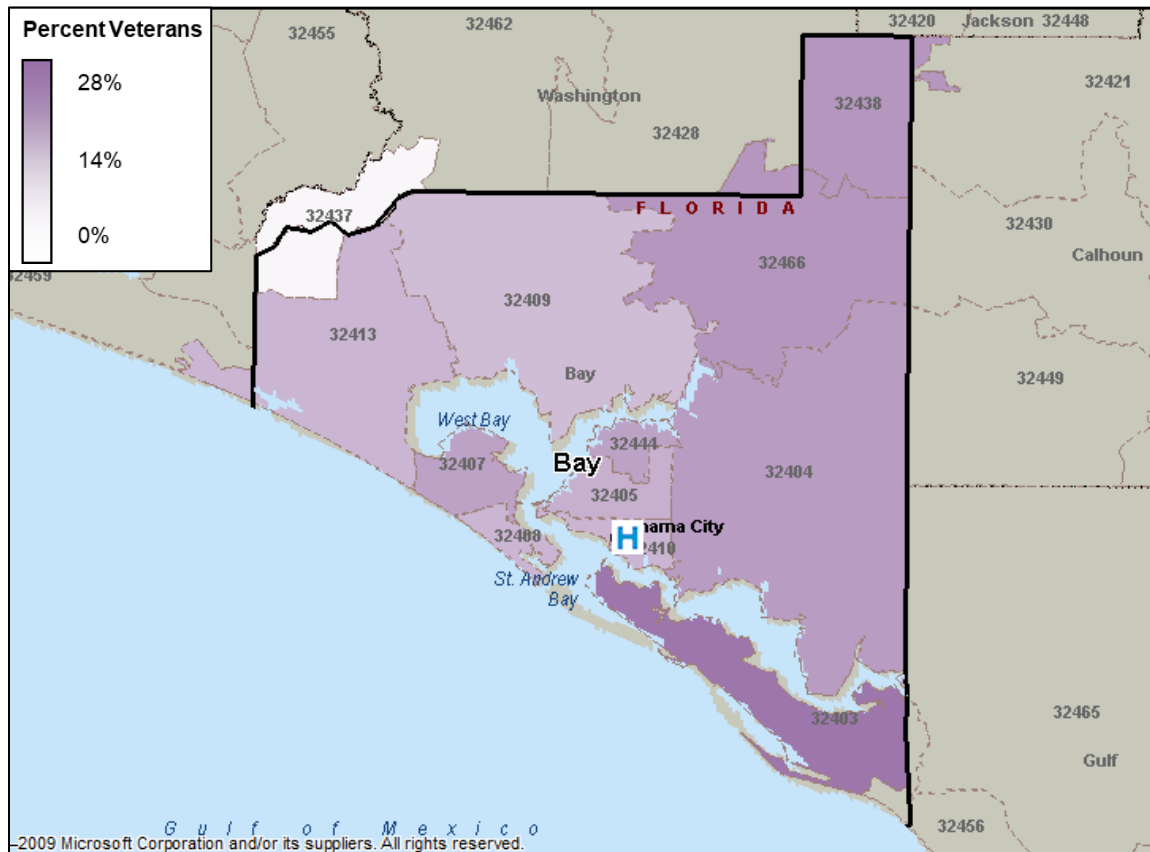
Sources: Microsoft MapPoint and U.S. Census Bureau, 2016 ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 10B maps the estimated percent of adults with military veteran status by ZIP Code.

Observations
Population characteristics directly influence community health needs as different segments of the population can have different characteristics. Military veterans may have unique health needs and health care services may need coordination with the United States Department of Veterans Affairs (the VA). Data in *Exhibit 10B* indicate the following:

- ZIP Codes 32403, 32438, and 32466 have proportions of adults with military veteran status of 20 percent or more.

Health Outcomes

Exhibit 11: Leading Causes of Death, Rates per 100,000, 2015-17

Indicator	2015-17 3-Year Age-Adjusted Death Rate Per 100,000	
	Bay County	**Florida**
All causes	895.8	**685.2**
Cancer	146.5	**151.9**
Heart disease	192.5	**150.8**
Unintentional injury	58.9	**52.6**
Chronic lower respiratory disease	74.3	**39.6**
Stroke	39.1	**38.7**
Alzheimer's disease	40.8	**21.9**
Diabetes	36.9	**20.0**
Suicide	22.7	**14.2**
Chronic liver disease & cirrhosis	16.2	**11.9**
Nephritis, nephrotic syndrome & nephrosis	14.5	**10.6**
Influenza & pneumonia	17.7	**9.5**
Septicemia	15.1	**8.4**
Hypertension	16.0	**8.0**
Parkinson's disease	5.9	**7.7**
Homicide	5.1	**6.5**
Benign neoplasm	42.2	**4.6**
Perinatal period conditions	3.4	**4.5**
HIV/AIDS	2.7	**3.7**
Pneumonitis	6.6	**3.6**
Congenital malformations	3.0	**3.0**
Aortic aneurysm & dissection	2.5	**2.3**
Viral hepatitis	5.7	**1.8**
Atherosclerosis	0.4	**1.5**
Anemias	1.2	**1.4**
Nutritional deficiencies	1.6	**1.2**
Medical & surgical care complications	1.2	**1.0**
Cholelithiasis & other gallbladder disorders	0.5	**0.7**
Peptic ulcer	0.8	**0.7**
Hernia	-	**0.4**
Pregnancy, childbirth & the puerperium	0.4	**0.3**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 11 summarizes 2015-17 leading causes of death rates, per 100,000, for Bay County and the state of Florida.

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Observations

The health of populations can be measured by mortality indictors, which identify life spans and causes of death. Data in *Exhibit 11* indicate the following:

- Age-adjusted death rates for residents of Bay County were higher than the Florida rate for most of the leading causes of death;
- Age-adjusted death rates for Bay County residents were more than 50 percent higher for chronic lower respiratory disease, Alzheimer's disease, diabetes, suicide, influenza and pneumonia, septicemia, hypertension, benign neoplasm, pneumonitis, and viral hepatitis.

Exhibit 12: Selected Causes of Death, Rates per 100,000, 2015-17

Indicator	Bay County	Florida
Tobacco-related cancer deaths to persons 35 and over	153.2	**167.4**
Stroke age-adjusted death rate	39.1	**38.7**
Diabetes age-adjusted death rate	36.9	**20.0**
Female breast cancer age-adjusted death rate	20.8	**19.3**
Prostate cancer age-adjusted death rate	15.2	**17.0**
Motor vehicle crashes age-adjusted death rate	18.1	**14.8**
Colorectal cancer age-adjusted death rate	12.9	**13.5**
Chronic liver disease and cirrhosis age-adjusted death rate	16.2	**11.9**
Influenza and pneumonia age-adjusted death rate	17.7	**9.5**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 12 summarizes 2015-17 selected causes of death rates, per 100,000, for Bay County and the state of Florida.

Observations

The health of populations can be measured by mortality indictors, which identify the life spans and causes of death. Data in *Exhibit 12* indicate the following:

- Age-adjusted death rates for residents of Bay County were more than 50 percent higher than the Florida rates for diabetes and influenza and pneumonia; and
- Age-adjusted death rates for residents of Bay County were also higher overall for stroke, female breast cancer, motor vehicle crashes, and chronic liver disease and cirrhosis.

Exhibit 13: Infant Deaths, Rates per 1,000 Live Births, 2015-17

Indicator	Bay County	Florida
Infant deaths	5.8	6.1
Neonatal infant deaths	3.4	4.2
Postneonatal infant deaths	2.4	2.0

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 13 presents 2015-17 infant deaths per 1,000 live births for Bay County and the state of Florida.

Observations
The health of populations can be measured by mortality indictors, which identify the life spans and causes of death. Data in *Exhibit 13* indicate the following:

- The Bay County postneonatal infant death rate is higher than the Florida rate.

Exhibit 14: Cancer Incidence, Rates per 100,000, 2013-15

Indicator	Measure	Bay County	Florida
Breast cancer	Per 100,000 females	123.2	118.6
Prostate cancer	Per 100,000 males	101.1	86.9
Lung cancer	Per 100,000 population	83.2	58.9
Colorectal cancer	Per 100,000 population	44.0	36.6
Melanoma	Per 100,000 population	20.3	24.0
Cervical cancer	Per 100,000 females	8.0	8.5

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 14 presents 2013-15 age-adjusted cancer incidence rates for Bay County and the state of Florida.

Observations
The health of populations can be measured by morbidity indictors, which identify the prevalence of diseases and/or medical conditions. Data in *Exhibit 14* indicate the following:

- Bay County cancer incidence rates are higher than Florida rates for breast cancer, prostate cancer, lung cancer, and colorectal cancer.

Exhibit 15: Selected Hospitalizations, Rates per 100,000

Indicator	Year	Bay County	Florida
Diabetes hospitalization	2015-17	3,028.0	**2,345.2**
Amputation due to diabetes hospitalization	2012-14	21.6	**28.2**
Coronary heart disease hospitalization	2015-17	442.9	**293.6**
Stroke hospitalization	2015-17	339.7	**234.3**
Congestive heart failure hospitalization	2015-17	241.3	**157.9**
Chronic lower respiratory disease (CLRD) hospitalization	2015-17	395.3	**353.2**
Asthma hospitalization	2015-17	807.2	**807.8**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 15 presents hospitalizations rates, per 100,000, for selected conditions for Bay County and the state of Florida.

Observations
The health of populations can be measured by morbidity indictors, which identify the prevalence of diseases and/or medical condition. The causes for hospitalizations can identify specific diseases and conditions prevalent in the community. Data in *Exhibit 15* indicate the following:

- Bay County hospitalization rates are more than 50 percent higher than Florida rates for coronary heart disease and congestive heart failure; and
- Bay County hospitalization rates are also higher overall for strokes and Chronic Lower Respiratory Disease (CLRD).

Exhibit 16: Selected Reportable & Infectious Diseases, Rates per 100,000

Indicator	Year	Bay County	Florida
HIV cases	2015-17	13.2	**23.8**
AIDS cases	2015-17	6.2	**10.4**
Salmonellosis	2014-16	37.4	**29.4**
Meningococcal disease in people <24	2014-16	0.7	**0.2**
Tuberculosis cases	2015-17	1.7	**2.9**
Varicella	2014-16	1.7	**3.4**
Pertussis [whooping cough]	2014-16	3.3	**2.3**
Campylobacteriosis	2014-16	17.1	**14.8**
Chlamydia cases	2014-16	447.2	**449.6**
Cryptosporidiosis	2014-16	3.1	**5.6**
Cyclosporiasis	2014-16	0.4	**0.2**
Giardiasis, acute	2014-16	4.0	**5.6**
Gonorrhea cases	2014-16	132.0	**122.2**
Haemophilus influenzae in people <5	2014-16	-	**103.0**
Hepatitis A	2014-16	0.8	**0.6**
Hepatitis B, acute	2014-16	4.0	**2.7**
Hepatitis B, chronic	2014-16	100.0	**14,713.0**
Infectious syphilis cases	2014-16	2.1	**10.4**
Legionellosis	2014-16	0.2	**1.5**
Listeriosis	2014-16	0.2	**0.2**
Measles (rubeola)	2014-16	-	**10.0**
Rubella	2014-16	-	**1.0**
Shiga toxin-producing Escherichia coli (STEC) infection	2014-16	-	**0.6**
Shigellosis	2014-16	1.5	**8.2**
Streptococcus pneumoniae in people <6	2014-16	4.0	**252.0**
Tetanus	2014-16	-	**11.0**
Vibriosis (excluding cholera)	2014-16	2.7	**0.9**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average;
dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 16 presents selected reportable and infectious disease rates, per 100,000, for Bay County and the state of Florida.

Observations
The health of populations can be measured by morbidity indictors, which identify the prevalence of diseases and/or medical condition. Rates of selected reportable and infectious diseases can identify specific diseases and conditions prevalent in the community. Data in *Exhibit 16* indicate the following:

- Bay County disease rates are more than 50 percent higher than Florida rates for Meningococcal disease in people less than 24 years of age, cyclosporiasis, and vibriosis (excluding cholera); and
- Bay County disease rates are also higher overall for salmonellosis, pertussis [whooping cough], campylobacteriosis, gonorrhea cases, hepatitis A, and acute hepatitis B.

Exhibit 17: Maternal, Infant, and Young Child Health Indicators

Indicator	Year	Bay County	Florida
Early prenatal care (care began 1st trimester)	2015-17	73.0%	**78.3%**
Preterm with Low Birth Weight	2015-17	5.6%	**6.0%**
Low birth weight births (births < 2500 grams)	2015-17	8.6%	**8.7%**
Preterm births (births < 37 weeks gestation)	2015-17	9.9%	**10.1%**
Multiple births	2015-17	3.5%	**3.3%**
Births to teens 15-19 [per 1,000 females 15-19]	2015-17	35.3	**19.7**
Repeat births to mothers 15-19	2015-17	15.0%	**15.7%**
Mothers initiating breastfeeding at birth	2015-17	77.3%	**85.7%**
Kindergarten children fully immunized	2015-17	96.6%	**93.7%**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average;
dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 17 presents indicators for maternal, infant, and young child health in Bay County and the state of Florida.

Observations
The health of populations can be measured by conditions prevalent in the community. Maternal, infant, and young child health indicators can identify conditions in the community that negatively impact the health of pregnant women and can potentially impact the future needs of children. Data in *Exhibit 17* indicate the following:

- The Bay County rate for births to teens 15-19 is more than 50 percent higher than the Florida rate;
- The Bay County rate is higher than the Florida rate for multiple births; and
- The Bay County rates for early prenatal care (care began 1st trimester) and mothers initiating breastfeeding at birth are lower than the Florida rate.

Exhibit 18: Health Status Indicators, 2016

Indicator	Bay County	Florida
Average number of unhealthy mental days in the past 30 days	3.7%	3.6%
Average number of days where poor mental or physical health interfered with activities of daily living in the past 30 days (Among adults who have had at least one day of poor mental or physical health)	7.9%	5.7%
Adults who said their overall health was "good" to "excellent"	75.2%	80.5%
Adults who said their overall health was "fair" or "poor"	24.8%	19.5%
Adults whose poor physical or mental health kept them from doing usual activities on 14 or more of the past 30 days (Among adults who have had at least one day of poor mental or physical health)	29.0%	18.6%
Adults with good physical health	83.4%	87.1%
Adults who had poor physical health on 14 or more of the past 30 days	16.6%	12.9%
Average number of unhealthy physical days in the past 30 days	4.9%	4.0%
Adults with good mental health	87.2%	88.6%
Adults who had poor mental health on 14 or more of the past 30 days	12.8%	11.4%
Adults who have ever been told they had a depressive disorder	13.2%	14.2%

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average;
dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 18 presents health status indicators for Bay County and the state of Florida.

Observations
The health of populations can be measured by conditions prevalent in the community. Health status indicators provide an assessment of the conditions of community residents. Data in *Exhibit 18* indicate the following:

- The health status of Bay County residents is worse than the health status of Florida residents for nearly every health status indicator; and
- The percentage of Bay County adults whose poor physical or mental health kept them from doing usual activities on 14 or more of the past 30 days is more than 50 percent than Florida residents overall.

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Exhibit 19: Mental Health Status Indicators

Indicator	Year	Bay County	Florida
Suicide (age-adjusted death rate)	2015-17	22.7	**14.2**
Hospitalizations for mental disorders	2014-16	989.2	**983.5**
Hospitalizations for mood and depressive disorders	2014-16	497.2	**484.4**
Hospitalizations for schizophrenic disorders	2014-16	159.4	**221.5**
Hospitalizations for mental disorders, except drug and alcohol-induced mental disorders	2014-16	844.5	**821.5**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average;
dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 19 presents mental health status indicators for Bay County and the state of Florida.

Observations
The health of populations can be measured by conditions prevalent in the community. Health status indicators provide an assessment of the conditions of community residents. Data in *Exhibit 19* indicate the following:

- The Bay County suicide rate is more than 50 percent higher than the Florida rate; and
- Bay County rates for hospitalizations for mental disorders, hospitalizations for mood and depressive disorders, and hospitalizations for mental disorders, except drug and alcohol-induced mental disorders, are higher than Florida rates.

Clinical Care – Access to Health Care

Exhibit 20: Access to Care Indicators - Insurance and Cost

Indicator	Year	Bay County	Florida
Adults with health insurance coverage	2012-16	83.9%	**83.6%**
Adults who have Medicare	2016	39.4%	**37.9%**
Adults who could not see a doctor at least once in the past year due to cost	2016	18.7%	**16.6%**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 20 presents indicators for access to care indicators related to insurance and cost for Bay County and state of Florida.

Observations

Access to care can be measured by insurance coverage of community residents. Indicators related to insurance and cost are relevant because lack of insurance, types of insurance, and the cost of medical services are primary barriers to healthcare access. Data in *Exhibit 20* indicate the following:

- Approximately one in six adults in Bay County (16.1 percent) and the state of Florida (16.4 percent) did not have health insurance in 2016;
- Four in ten Bay County residents (39.4 percent) are covered by Medicare, which may limit access to some providers; and
- Approximately one in six adults in Bay County (18.7 percent) and the state of Florida (16.6 percent) could not see a doctor due to cost.

Exhibit 21: Access to Care Indicators - Provider Services

Indicator	Measure	Year	Bay County	Florida
Adults who have a personal doctor	Percent	2016	71.2%	**72.0%**
Total licensed Florida family practice physicians	Per 100,000 population	2014-16	14.8	**15.8**
Total licensed Florida dentists	Per 100,000 population	2014-16	48.5	**57.4**
Total hospital beds	Per 100,000 population	2015-17	418.0	**312.9**
County health department full-time employees	Per 100,000 population	2015-17	98.8	**48.0**
County health department expenditures per person	Per person	2015-17	$62.90	**$36.00**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 21 presents indicators for access to care indicators related to provider services for Bay County and the state of Florida.

Observations
Access to care can be measured by providers utilized by and/or available to of community residents. Data in *Exhibit 21* indicate the following:

- In Bay County, the rates of personal care doctors, family practice physicians, and dentists are lower than the Florida rates.

Exhibit 22: Access to Care Indicators - Preventable Hospitalizations (Under 65), 2017

Indicator	Bay	Florida
	Rate	Rate
All conditions	1,306.9	**1,033.0**
Chronic obstructive pulmonary disease (COPD)	191.3	**168.2**
Diabetes	239.0	**167.4**
Bacterial pneumonia	165.8	**103.9**
Cellulitis	108.7	**99.9**
Grand mal & other epileptic conditions	97.3	**81.7**
Congestive heart failure	114.8	**73.7**
Asthma	60.4	**71.5**
Dehydration - volume depletion	57.1	**62.3**
Nutritional deficiencies	124.2	**55.0**
Gastroenteritis	53.0	**48.3**
Kidney/urinary infection	33.6	**29.8**
Convulsions ages 6 years or older	24.8	**26.6**
Severe ear, nose, & throat infections	17.5	**19.5**
Pelvic inflammatory disease	19.0	**12.1**
Dental conditions	13.4	**12.0**
Skin grafts with cellulitis	6.0	**8.0**
Hypertension	5.4	**7.0**
Angina	9.4	**6.5**
Convulsions	4.7	**4.5**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 22 presents 2017 indicators for preventable hospitalization rates, per 100,000 population, of residents under 65 for Bay County and the state of Florida.

Observations

Access to care can be measured by preventative hospitalizations, known as Ambulatory Care Sensitive Conditions (ACSC). ACSCs are theoretically preventable hospitalizations when timely outpatient care is available and received. Data in *Exhibit 22* indicate the following:

- In Bay County, the ACSC discharge rates for bacterial pneumonia, congestive heart failure, nutritional deficiencies, and pelvic inflammatory disease are more than 50 percent higher than the Florida rates; and
- In Bay County, and the rates for all conditions, Chronic Obstructive Pulmonary Disease (COPD), diabetes, cellulitis, grand mal & other epileptic conditions, gastroenteritis, kidney/urinary infection, dental conditions, angina, and convulsions are higher than the overall Florida rates.

Clinical Care – Preventive Services

Exhibit 23: Clinical Care, Preventive Services, 2016

Indicator	Bay County	Florida
Adults who had a medical checkup in the past year	79.7%	**76.5%**
Adults who received a flu shot in the past year	34.6%	**35.0%**
Adults who have ever received a pneumonia vaccination	35.1%	**34.6%**
Women 40 years of age and older who received a mammogram in the past year	55.3%	**60.8%**
Women 18 years of age and older who received a Pap test in the past year	50.5%	**48.4%**
Men 50 years of age and older who received a PSA test in the past two years	61.7%	**54.9%**
Adults ages 50 years and older who received a blood stool test in the past year	14.2%	**16.0%**
Adults 50 years of age and older who received a sigmoidoscopy or colonoscopy in the past five years	60.3%	**53.9%**
Adults less than 65 years of age who had an HIV test in the past 12 months	21.0%	**19.7%**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 23 presents 2016 clinical care indicators related to preventive services for Bay County and the state of Florida.

Observations
Evaluating the utilization of preventive services can inform both access to care of residents and the likelihood that residents will utilize available preventive services. Data in *Exhibit 23* indicate the following:

- In Bay County, adults are less likely to receive a flu shot, women 40 and older are less likely to receive a mammogram, and adults over 50 are less likely to receive a blood stool test than Florida residents.

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Health Behaviors

Exhibit 24: Health Behaviors - Tobacco Use and Exposure, 2016

Indicator	Bay County	Florida
Adults who are current smokers	17.1%	**15.5%**
Adult current smokers who tried to quit smoking at least once in the past year	52.6%	**62.1%**
Adults who are former smokers (currently quit smoking)	28.9%	**26.5%**
Adults who have never smoked	53.9%	**58.0%**
Adults who are current e-cigarette users	3.9%	**4.7%**
Adults who are former e-cigarette users	16.6%	**15.5%**
Adults who have never used e-cigarettes	79.4%	**79.8%**

Source: Florida Health Charts, 2018. Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 24 presents indicators for tobacco use and exposure for Bay County and the state of Florida.

Observations

Health behaviors contribute markedly to leading causes of death, disability, and social problems. Tobacco use, especially, can have negative impact on health. Data in *Exhibit 24* indicate the following:

- In Bay County, adults are more likely to be current or former smokers, including e-cigarettes, than Florida residents; and
- In Bay County, adults who are current smokers are less likely to have tried to quit smoking in the last year than Florida adult current smokers.

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Exhibit 25: Health Behaviors - Physical Activity, 2016

Indicator	Bay County	Florida
Adults who are sedentary	37.0%	**29.8%**
Adults who are inactive or insufficiently active	60.6%	**56.7%**
Adults who meet aerobic recommendations	41.0%	**44.8%**
Adults who meet muscle strengthening recommendations	35.6%	**38.2%**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 25 presents 2016 physical activity indicators for tobacco use and exposure for Bay County and the state of Florida.

Observations
Health behaviors contribute markedly to leading causes of death, disability, and social problems. Physical activity can positively impact health. Data in *Exhibit 25* indicate the following:

- In Bay County, adult residents are more likely to be sedentary and inactive than Florida adult residents; and
- In Bay County, adult residents are less likely to meet aerobic and muscle strengthening recommendations than Florida residents.

Exhibit 26: Health Behaviors - Overweight and Obesity, 2016

Indicator	Bay County	Florida
Adults who are overweight	35.7%	**35.8%**
Adults who are obese	30.5%	**27.4%**
Adults who have a healthy weight	31.4%	**34.5%**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average; dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 26 presents indicators for overweight and obesity incidence for Bay County and the state of Florida.

Observations
Health behaviors contribute markedly to leading causes of death, disability, and social problems. Overweight and obesity status can negatively impact health. Data in *Exhibit 26* indicate the following:

- In Bay County, adult residents are more likely to be obese and less likely to have a healthy weight than Florida adult residents.

Exhibit 27: Health Behaviors - Alcohol-suspected Motor Vehicle Crashes per 100,000 Population, 2014-16

Indicator	Bay County	Florida
Alcohol-suspected motor vehicle crash injuries	105.2	**53.6**
Alcohol-suspected motor vehicle crash deaths	5.9	**4.5**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average;
dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 27 presents indicators for alcohol-suspected motor vehicle crashes per 100,000 population for Bay County and the state of Florida.

Observations
Health behaviors contribute markedly to leading causes of death, disability, and social problems. Alcohol consumption can impair driving, leading to injuries and death from motor vehicle crashes. Data in *Exhibit 27* indicate the following:

- In Bay County, the rate of injuries from alcohol-suspected motor vehicle crashes is more than 50 percent higher than the Florida rate; and
- In Bay County, the rate of deaths from alcohol-suspected motor vehicle crashes is higher than Florida rates.

Economic Indicators

The following types of economic indicators with implications for health were assessed: (1) people in poverty; (2) household income; (3) unemployment rates; (4) insurance status; and (5) crime.

People in Poverty

Exhibit 28: Percent of People in Poverty, 2012-2016
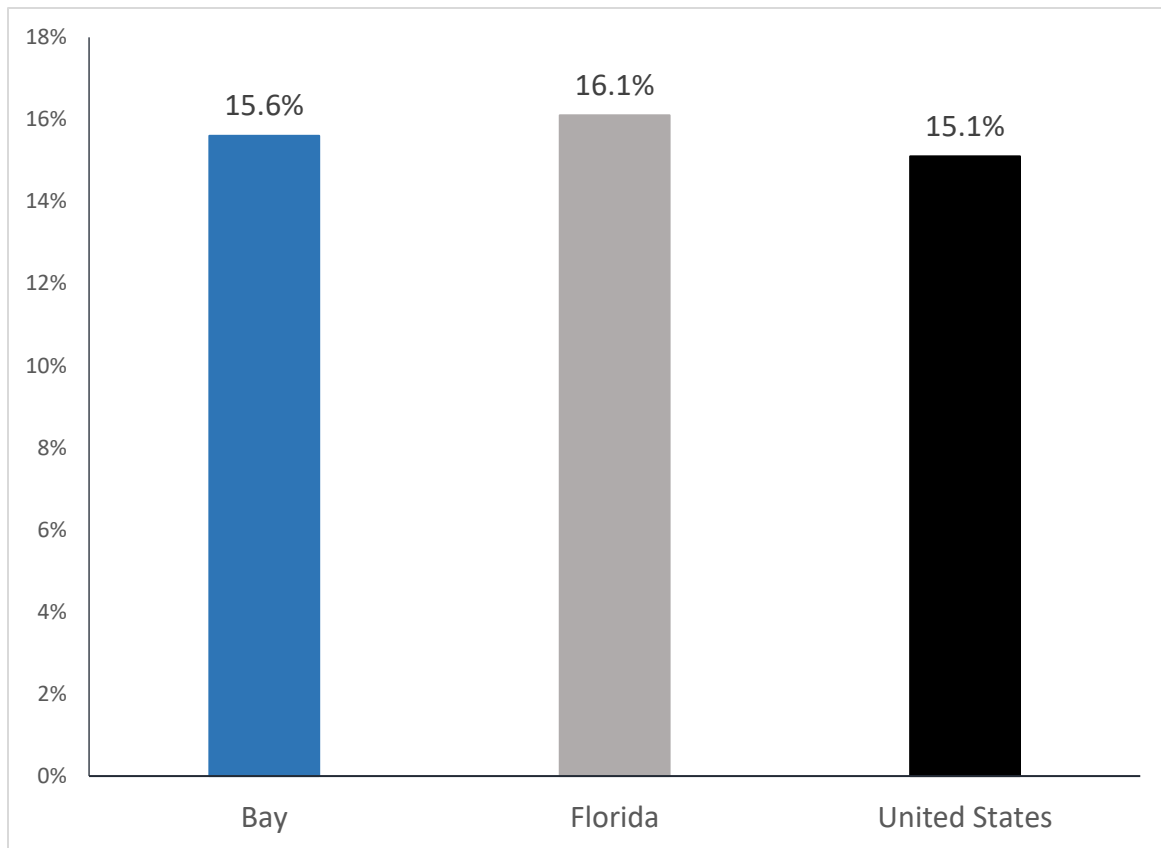
Source: U.S. Census Bureau, ACS 5-year estimates, 2012-2016.

Description
Exhibit 28 presents the percent of people in Bay County, the state of Florida, and the United States in poverty, 2012-2016.

Observations
As many health needs are associated with poverty, poverty rates and other measures of economic well-being can inform assessment of community health needs. Data in *Exhibit 28* indicate the following:

- In Bay County, residents are more likely to be in poverty than residents of the U.S. overall, but less likely to be in poverty than residents of Florida.

Exhibit 29: Percent of People in Poverty, by County and Race / Ethnicity, 2012-2016

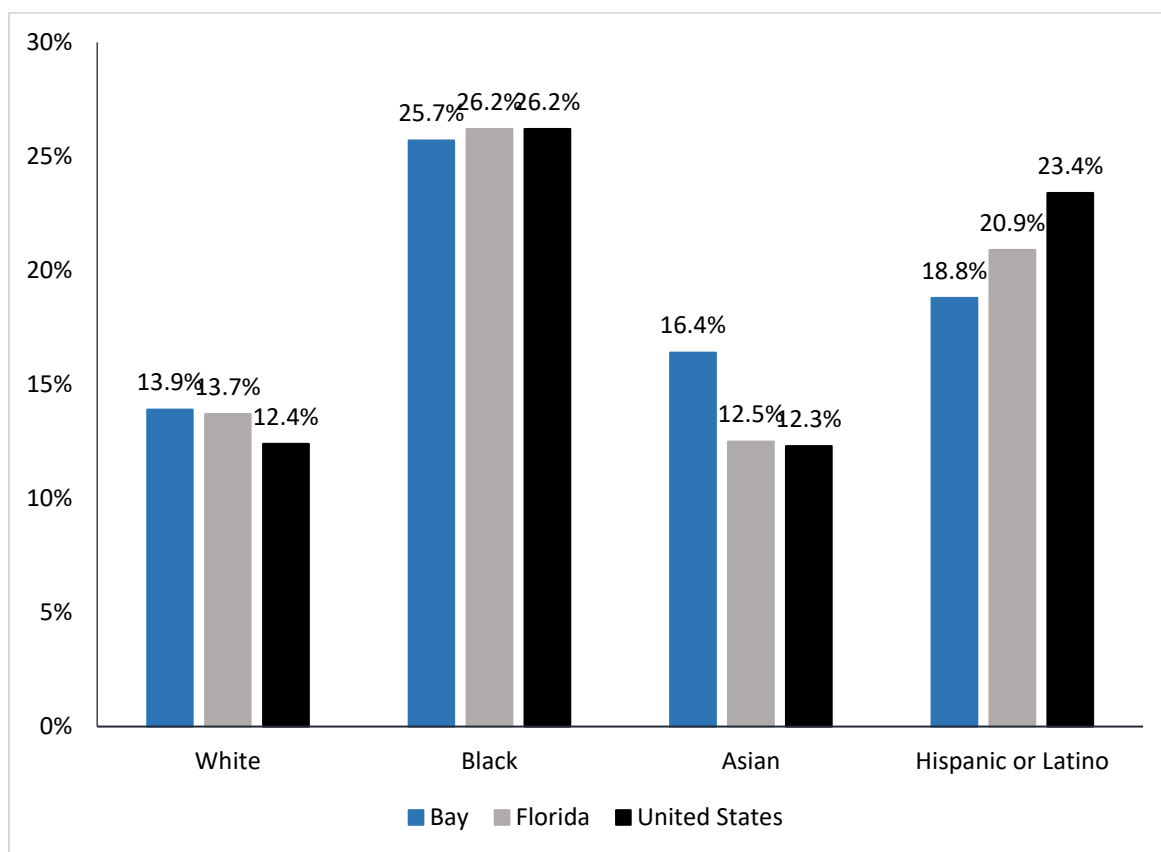Source: U.S. Census Bureau, ACS 5-year estimates, 2012-2016.

Description
Exhibit 29 presents the percent of people in Bay County, the state of Florida, and the United States in poverty, 2012-2016.

Observations
As many health needs are associated with poverty, poverty rates and other measures of economic well-being can inform assessment of community health needs. Data in *Exhibit 29* indicate the following:

- In Bay County, poverty rates for Asian, Black, and Hispanic or Latino residents were disproportionately higher than poverty rates for White residents; and
- In Bay County, poverty rates for White and Asian residents were higher than Florida and U.S. poverty rates.

Household Income

Exhibit 30: Percent Low-Income Households, 2016

Area	Occupied Housing Units	Average Median Income	Percent less than $25,000 per year	Percent less than $50,000 per year
Bay County	67,939	$48,577	22.6%	47.7%
Florida	**7,393,262**	**$48,900**	**23.6%**	**48.3%**
United States	117,716,237	$55,322	21.1%	42.4%

Source: U.S. Census Bureau, ACS 5-year estimates, 2012-2016.

Description

Exhibit 30 presents indicators for low income households in Bay County, the state of Florida, and the United States.

Observations

Household income is assessed by many public and private agencies to determine household needs for low-income assistance programs. Data in *Exhibit 30* indicate the following:

- In Bay County, one in five households (22.6 percent) has incomes below $25,000 and approximately half of households (47.7 percent) have incomes below $50,000.

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Exhibit 31: Percent Households Less Than $25,000 Annual Income, 2015
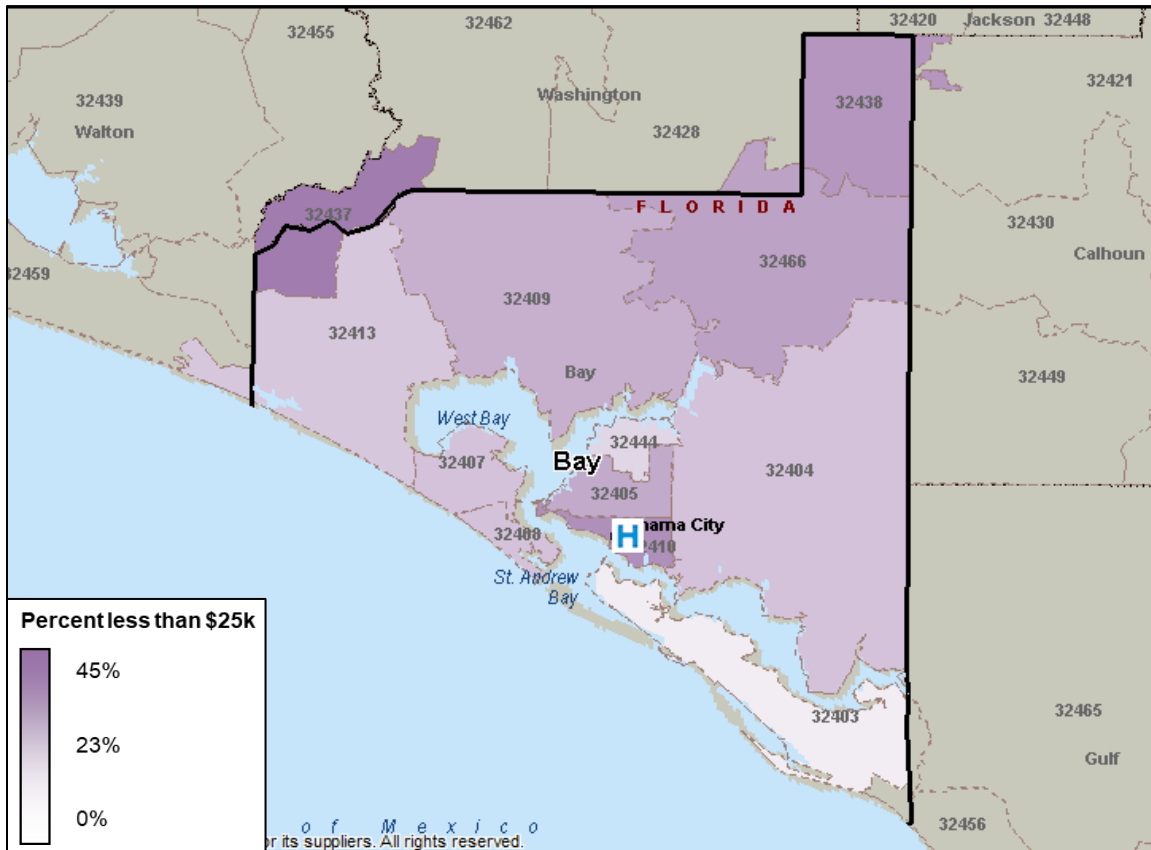
Sources: Microsoft MapPoint and U.S. Census Bureau, ACS 5-year estimates, 2012-2016.
Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Description
Exhibit 31 presents a map of the percentage of households in the community with incomes under $25,000.

Observations
Household income is assessed by many public and private agencies to determine household needs for low-income assistance programs. Data in *Exhibit 31* indicate the following:

- In Bay County, 41.6 percent of households in ZIP Code 32437, 35.2 percent in 32401, 33.2 in 32438, 27.8 percent in 32466, and 27.0 percent in 32405 have incomes below $25,000.

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Unemployment Rate

Exhibit 32: Unemployment Rates, 2013-2017
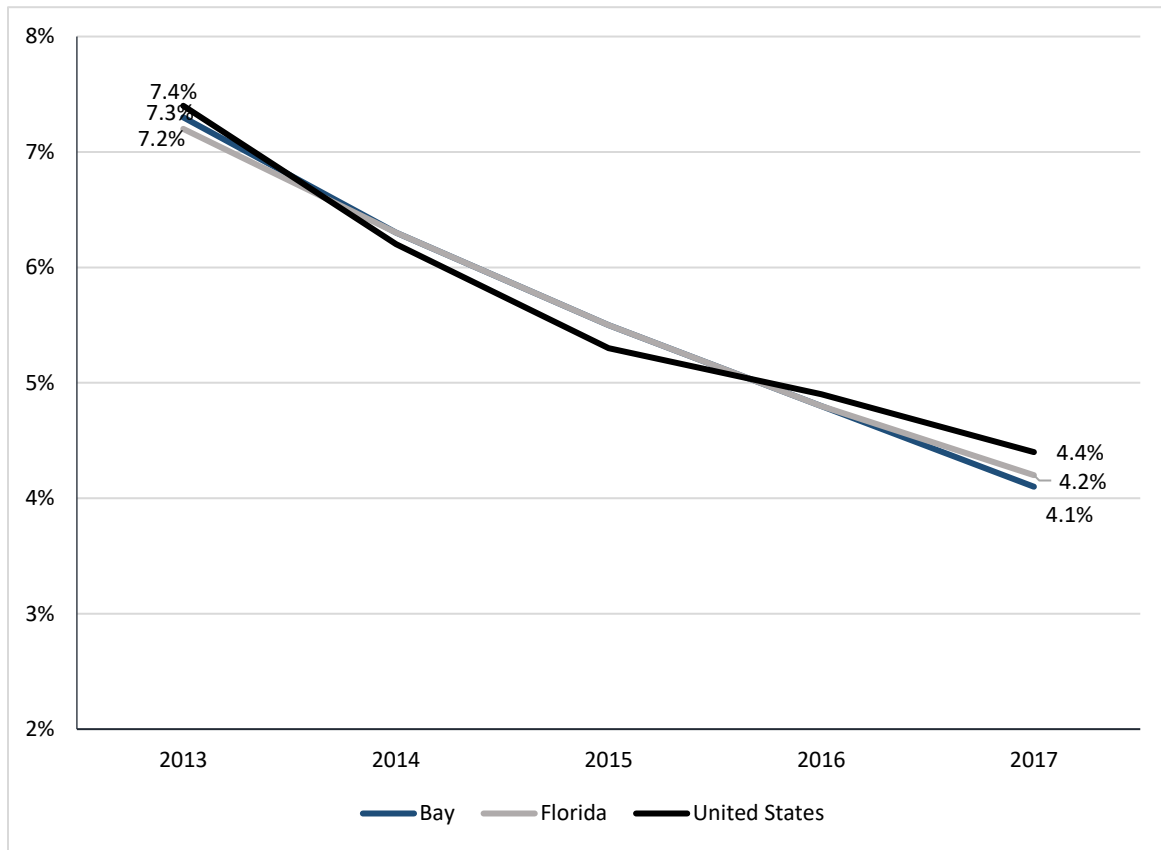
Source: U.S. Bureau of Labor Statistics, 2018.

Description
Exhibit 32 presents indicators for unemployment rates for Bay County, the state of Florida, and the United States.

Observations
Unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status. Data in *Exhibit 32* indicate the following:

- Unemployment rates decreased from 2013 to 2017 for Bay County, the state of Florida, and the U.S.; and
- Unemployment rates in Bay County were similar to the Florida and U.S. rates from 2013 to 2017.

Crime

Exhibit 33: Crime Rates per 100,000 Population, 2014-2016

Indicator	Bay County	Florida
Index crimes [*aggregate*]	4,481.2	**3,310.2**
Larceny	3,029.9	**2,099.8**
Burglary	692.6	**552.8**
Aggravated assault	391.6	**309.5**
Motor vehicle theft	231.1	**200.5**
Robbery	82.8	**105.2**
Rape	46.6	**37.2**
Murder	6.7	**5.2**
Forcible sex offenses	70.5	**52.7**
Domestic violence offenses	835.9	**536.2**

Source: Florida Health Charts, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 33 presents indicators for crime rates per 100,000 for Bay County and Florida. The "Index Crimes" is the aggregate of the rates for larceny, burglary, aggravated assault, motor vehicle theft, robbery, rape, and murder.

Observations
A safe environment supports community health by helping to prevent injury and promote recreation and good mental health. Data in *Exhibit 33* indicate the following:

- In Bay County, domestic violence offense rates were more than 50 percent higher than the Florida rate;
- In Bay County, rates for larceny, burglary, aggravated assault, motor vehicle theft, rape, murder, and forcible sex offenses were higher than Florida rates.

Other Socioeconomic Indicators

Exhibit 34: Other Socioeconomic Indicators, 2014-2016

Area	Population 25+ without High School Diploma	Population with a Disability	Population Linguistically Isolated
Bay County	11.3%	18.0%	2.6%
Florida	12.8%	13.3%	11.7%
U.S.	13.0%	12.5%	8.5%

Source: U.S. Census Bureau, ACS 5-year estimates, 2012-2016.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 34 portrays the percent of the population (aged 25 years and above) without a high school diploma, the percent of the population with a disability, and the percent of the population that is linguistically isolated.

Observations
A safe environment supports community health by helping to prevent injury and promote recreation and good mental health. Data in *Exhibit 34* indicate the following:

- In Bay County, the percentage of the population with a disability is higher than the Florida and U.S. percentages.

Local Health Status and Access Indicators

County Health Rankings

Exhibit 35: County Health Rankings, 2015 and 2018

Measure	Bay County	
	2015	2018
Health Outcomes	47	46
Health Factors	42	34
Length of Life	43	55
Premature death	43	55
Quality of Life	53	33
Poor or fair health	28	33
Poor physical health days	61	30
Poor mental health days	63	37
Low birthweight	31	35
Health Behaviors	51	40
Adult smoking	58	36
Adult obesity	27	34
Food environment index	42	45
Physical inactivity	29	33
Access to exercise opportunities	39	38
Excessive drinking	64	52
Alcohol-impaired driving deaths	47	36
Sexually transmitted infections	37	49
Teen births	44	47
Clinical Care	39	36
Uninsured	15	19
Primary care physicians	31	33
Dentists	22	24
Mental health providers	2	2
Preventable hospital stays	35	35
Diabetes monitoring	66	67
Mammography screening	45	45
Social & Economic Factors	21	33
High school graduation	28	51
Some college	17	17
Unemployment	26	30
Children in poverty	33	30
Income inequality	15	23
Children in single-parent households	22	29
Social associations	32	28
Violent crime	48	51
Injury deaths	31	44
Physical Environment	64	34
Air pollution	61	54
Severe housing problems	24	35
Driving alone to work	59	50
Long commute - driving alone	9	14

Source: County Health Rankings, 2018.

Description

Exhibit 35 presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation that incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of "health factors" and "health outcomes." These health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,[11] social and economic factors, and physical environment.[12] *County Health Rankings* is updated annually. *County Health Rankings* 2018 relies on data from 2010 to 2017.

The exhibit presents 2015 and 2018 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 67 counties in the Florida, with 1 indicating the most favorable rankings and 67 the least favorable. Light grey shading indicates rankings in the bottom half of Florida counties; dark grey shading indicates rankings in bottom quartile of Florida counties.

Observations

Data in *Exhibit 35* indicate the following:

- Bay County ranked in the bottom 50th percentile among Florida counties for 26 of the 42 indicators assessed in 2018;
  - Seven of the 26 indicators that ranked in the bottom 50th percentile were in the bottom quartile (length of life, premature death, excessive drinking, diabetes monitoring, high school graduation, violent crime, and air pollution);
  - Rankings for 22 indictors fell between 2015 and 2018,

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[11] A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

[12] A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are fast food.

**Exhibit 36A: County Health Rankings Data Compared to Florida and U.S. Averages, 2018
Health Outcomes**

Indicator Category	Indicator	Bay County	Florida	U.S.
Length of life	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,478	**6,803**	6,700
Quality of life	Percentage of adults reporting fair or poor health (age-adjusted)	18.7%	**18.5%**	16.0%
Quality of life	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	4.2	**3.8**	3.7
Quality of life	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.2	**3.8**	3.8
Quality of life	Percentage of live births with low birthweight (< 2500 grams)	8.4%	**8.6%**	8.0%

Source: County Health Rankings, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 36A presents indicators for health outcomes from *County Health Rankings 2018* for Bay County, the state of Florida, and the United States.

Observations
County Health Ranking's Health Outcomes measure is based on length of life and quality of life indicators. Data in *Exhibit 36A* indicate the following:

- In Bay County, the number of years of potential life lost (YPLL) rate, the percentage of adults reporting fair or poor health, the average number of physically unhealthy days, and the average number of mentally unhealthy days are greater than Florida and U.S. averages.

Exhibit 36B: County Health Rankings Data Compared to Florida and U.S. Averages, 2018 Health Factors – Health Behaviors

Indicator Category	Indicator	Bay County	Florida	U.S.
Adult smoking	Percentage of adults who are current smokers	18.0%	**15.5%**	17.0%
Adult obesity	Percentage of adults that report a BMI of 30 or more	30.1%	**25.9%**	28.0%
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	6.6	**6.7**	7.7
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity	26.7%	**23.8%**	23.0%
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	75.5%	**87.0%**	83.0%
Excessive drinking	Percentage of adults reporting binge or heavy drinking	19.5%	**17.5%**	18.0%
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement	30.7%	**26.4%**	29.0%
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	477.7	**454.8**	478.8
Teen births	Number of births per 1,000 female population ages 15-19	43.4	**25.3**	27.0

Source: County Health Rankings, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 36B presents indicators for health behaviors from *County Health Rankings* for Bay County, the state of Florida, and the United States.

Observations

Health behavior indicators assess current activities, which can determine future health and may correlate to other health issues, such as diabetes. Data in *Exhibit 36B* indicate the following:

- In Bay County, the rate for teen births are more than 50 percent higher than the Florida rate and higher than the overall U.S. rate;
- In Bay County, rates for adult smoking, adult obesity, physical inactivity, excessive drinking, alcohol-impaired driving deaths, and sexually transmitted infections are higher than Florida rates, and most are higher than U.S. rates;
- In Bay County, the food environment index and the percent with access to exercise opportunities are lower than Florida and U.S. rates.

Exhibit 36C: County Health Rankings Data Compared to Florida and U.S. Averages, 2018 Health Factors – Clinical Care

Indicator Category	Indicator	Bay County	Florida	U.S.
Uninsured	Percentage of population under age 65 without health insurance	13.8%	**16.3%**	11.0%
Primary care physicians	Ratio of population to primary care physicians	1,974:1	**1,376:1**	1,320:1
Dentists	Ratio of population to dentists	2,091:1	**1,735:1**	1,480:1
Mental health providers	Ratio of population to mental health providers	437:1	**703:1**	470:1
Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	60.1	**53.6**	49.0
Diabetes monitoring	Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	78.0%	**85.6%**	85.0%
Mammography screening	Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	61.2%	**67.9%**	63.0%

Source: County Health Rankings, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description

Exhibit 36C presents indicators for clinical care from *County Health Rankings* for Bay County, state of Florida, and the United States.

Observations

Clinical care indicators assess a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services. Data in *Exhibit 36C* indicate the following:

- In Bay County, the ratio of the population to primary care physicians and dentists is higher than the Florida and U.S. rates;
- In Bay County, the rate of preventable hospital stays among Medicare enrollees is higher than the Florida and U.S. rates; and
- In Bay County, the percentages of Medicare enrollees receiving diabetes monitoring and mammography screening are lower than Florida and U.S. percentages.

Exhibit 36D: County Health Rankings Data Compared to Florida and U.S. Averages, 2018 Health Factors – Social and Economic Environment

Indicator Category	Indicator	Bay County	Florida	U.S.
High school graduation	Percentage of ninth-grade cohort that graduates in four years	71.0%	**77.9%**	83.0%
Some college	Percentage of adults ages 25-44 with some post-secondary education	60.7%	**61.8%**	65.0%
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	4.9%	**4.9%**	4.9%
Children in poverty	Percentage of children under age 18 in poverty	23.0%	**21.3%**	20.0%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.3	**4.7**	5.0
Children in single-parent households	Percentage of children that live in a household headed by single parent	37.2%	**38.5%**	34.0%
Social associations	Number of membership associations per 10,000 population	9.0	**7.1**	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	507.8	**499.6**	380.0
Injury deaths	Number of deaths due to injury per 100,000 population	87.2	**72.3**	65.0

Source: County Health Rankings, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 36D presents social and economic environment indicators from *County Health Rankings* for Bay County, the state of Florida, and the United States.

Observations
Social and economic indicators measure education, poverty, and other environment factors, which are correlated with health and health outcomes. Data in *Exhibit 36D* indicate the following:

- In Bay County, percentages of high school graduation and adults with some college are lower than Florida and U.S. percentages; and
- In Bay County, the percentage of children in poverty, violent crime offenses, and injury deaths are higher than Florida and U.S rates.

Exhibit 36E: County Health Rankings Data Compared to Ohio and U.S. Averages, 2018
Health Factors – Physical Environment

Indicator Category	Indicator	Bay County	Florida	U.S.
Air pollution - particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	8.1	**7.4**	8.7
Severe housing problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	17.8	**21.5**	19.0
Driving alone to work	Percentage of the workforce that drives alone to work	81.9%	**79.5%**	76.0%
Long commute - driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes	28.7%	**39.5%**	35.0%

Source: County Health Rankings, 2018.
Light grey shading indicates that rates were higher (worse) than the Florida average.
Dark grey shading indicates that rates were more than 50 percent higher than the Florida average.

Description
Exhibit 36E presents social and economic environment indicators from *County Health Rankings* for Bay County, the state of Florida, and the United States.

Observations
Factors in the physical environment impact are correlated with health and health outcomes. Data in *Exhibit 36E* indicate the following:

- In Bay County, particulate matter air pollution is higher than in Florida overall; and
- In Bay County, the percentage of the workforce that drives alone to work is greater than the overall Florida and U.S. percentages.

Exhibit 37: Community Health Status Indicators, 2018

Category	Indicator	Bay County
Length of Life	Years of Potential Life Lost Rate	▓
Quality of Life	% Fair/poor health	▓
	Physically unhealthy days	▓
	Mentally unhealthy days	░
	% Births - low birth weight	▓
Health Behaviors	% Smokers	░
	% Obese	▓
	Food environment index	▓
	% Physically inactive	▓
	% With access to exercise opportunities	▓
	% Excessive drinking	
	% Driving deaths alcohol-impaired	▓
	Chlamydia rate	
	Teen birth rate	▓
Clinical Care	% Uninsured	▓
	Primary care physicians rate	▓
	Dentist rate	▓
	Mental health professionals rate	░
	Preventable hospital rate	▓
	% Receiving HbA1c Screening	▓
	% Mammography screening	▓
Social & Economic Factors	High school graduation rate	▓
	% Some college	▓
	% Unemployed	▓
	% Children in poverty	▓
	Income ratio	
	% Children in single-parent households	▓
	Social association rate	
	Violent crime rate	▓
	Injury death rate	▓
Physical Environment	Average daily pm2.5	
	% Severe housing problems	
	% Drive alone to work	▓
	% Long commute - drives alone	▓

Source: Verité analysis of data from County Health Rankings, 2018
Light grey shading indicates rankings in the bottom half of peer counties;
dark grey shading indicates rankings in the bottom quartile of peer counties.

Description
Exhibit 37 compares Bay County to other U.S. counties identified as comparable, peer counties. These comparisons follow a methodology developed by the Centers for Disease Control (CDC) for its *Community Health Status Indicators* Project (CHSI). CHSI developed a group of 30 to 35 peer counties for each county in the U.S. based on 19 variables, including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

CHSI analyses were formerly available from the CDC. Because comparisons with peer counties (rather than only counties in the same state) are meaningful, Verité Healthcare Consulting rebuilt the CHSI comparisons for this and other CHNAs. The Verité CHSI analysis utilized data compiled by *County Health Rankings* for all 3,143 U.S. counties. The Verité analysis was based on lists of "peer counties" that are also maintained by *County Health Rankings*.

Observations
Social and economic indicators measure education, poverty, and other environment factors, which are correlated with health and health outcomes. Data in ***Exhibit 37*** indicate the following:

- Bay County compares unfavorably to its peer counties for many indicators and ranks in the bottom quartile for Years of Potential Life Lost rate, fair/poor health, physically unhealthy days, births - low birth weight, obese, food environment index, physically inactive, access to exercise opportunities, alcohol-impaired driving deaths, teen birth rate, uninsured, primary care physicians rate, dentist rate, preventable hospital rate, HbA1c screening, mammography screening, high school graduation rate, some college, unemployed, children in poverty, children in single-parent households, violent crime rate, injury death rate, drive alone to work, and long commute - drives alone.

Community Need Index™ and Food Deserts

Dignity Health Community Need Index

Exhibit 38: Community Need Index™ Score by ZIP Code

| County	City	ZIP Code	CNI
Bay	Panama City	32401	4.4
Bay	Panama City	32403	3.0
Bay	Panama City	32404	4.2
Bay	Panama City	32405	4.0
Bay	Panama City Beach	32407	3.4
Bay	Panama City	32408	3.4
Bay	Panama City	32409	3.0
Bay	Panama City Beach	32413	3.6
Bay	Fountain	32438	3.4
Bay	Lynn Haven	32444	3.2
Bay	Youngstown	32466	3.2
Bay	**Entire County**		**3.8**

Source: Dignity Health, 2018

Description

Exhibit 38 summarizes the Community Need Index (CNI) for ZIP Codes with geographic coverage in Bay County. Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index™* that measures barriers to health care access by county and ZIP Code. The index is based on five social and economic indicators: (1) the percentage of elders, children, and single parents living in poverty; (2) the percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White; (3) the percentage of the population without a high school diploma; (4) the percentage of uninsured and unemployed residents; and (5) the percentage of the population renting houses. A CNI score is calculated for each ZIP Code based on these indicators, with a range from "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0).

Observations

Data in *Exhibit 38* indicate that ZIP Codes 32401 and 32404 have the highest need.

Exhibit 39: Map of Community Need Index™ Score by ZIP Code

Sources: MapPoint and Dignity Health, 2018

Description
Exhibit 39 maps Dignity Health's CNI scores by ZIP Code.

Observations
Data in *Exhibit 39* indicate two ZIP Codes with coverage within Bay County have "Highest Need" CNI scores. These ZIP Codes are 32401 and 32404.

Food Deserts (Lack of Access to Nutritious and Affordable Food)

Exhibit 40: Food Deserts by Census Tract, 2015
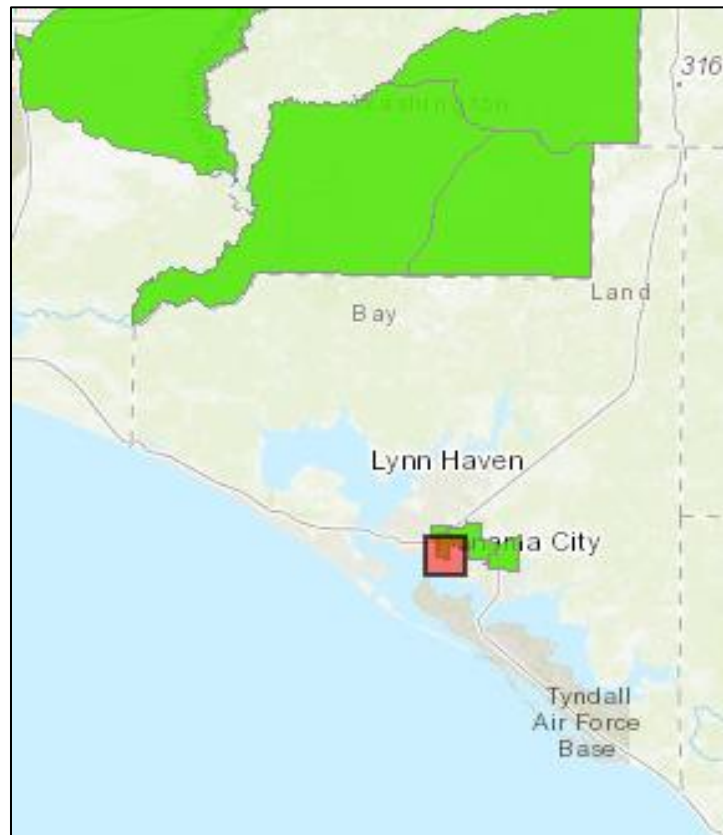
Source: Economic Research Services, U.S. Department of Agriculture,
2018 Note: Red Cube on the map represents the location of ASHB

Description
Exhibit 40 maps census tracts identified as "food deserts" by the Economic Research Service of
the U.S. Department of Agriculture (USDA). The USDA estimates the number of people in each
census tract that live in a "food desert," an area with "limited access to supermarkets,
supercenters, grocery stores, or other sources of healthy and affordable food." Food deserts in
Exhibit 40 are defined as "low income and low access tract measured at 1 mile for urban areas
and 10 miles for rural areas."

Observations
Data in *Exhibit 40* indicate that several census tracts in the ASHB community have been
designated as food deserts, particularly in areas adjacent to the hospital and Panama City.

Medically Underserved Areas and Populations

Exhibit 41: Medically Underserved Areas

County	Area	Medically Underserved Area
Bay	Southport Census County Division (CCD)	Medically Underserved Area
Bay	Panama City CCD	Medically Underserved Area
Bay	Youngstown CCD	Medically Underserved Area
Bay	Cedar Grove Service Area (*Five Census Tracts*)	Medically Underserved Area

Description
Exhibit 41 identifies Medically Underserved Areas (MUAs) within the ASHB community.

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, calculates an Index of Medical Underservice (IMU) score for communities across the U.S. The IMU score calculation includes the ratio of primary medical care physicians per 1,000 persons, the infant mortality rate, the percentage of the population with incomes below the poverty level, and the percentage of the population greater than age 64. IMU scores range from zero to 100, where 100 represents the least underserved and zero represents the most underserved.[13]

Any area or population receiving an IMU score of 62.0 or less qualifies for Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation. Federally Qualified Health Centers (FQHCs) may be established to serve MUAs and MUPs. Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. When a population group does not qualify for MUP status based on the IMU score, a MUP designation is made if "unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides."[14]

Observations
Data in *Exhibit 41* indicate the following:

- Census County Division (CCD) areas in Bay County that are designated as MUAs are Southport CCD, Panama City CCD, and Youngstown CCD.
- In Bay County, five census tracts in the Cedar Grove Service Area are designated as MUAs.

[13] U.S. Health Resources and Services Administration. (n.d.) *Guidelines for Medically Underserved Area and Population Designation*. Retrieved 2013, from http://bhpr.hrsa.gov/shortage/muaps/index.html.
[14] *Ibid.*

Health Professional Shortage Areas

Exhibit 42: Health Professional Shortage Areas

County	Designation	HPSA
Primary Care		
Bay County	HPSA Population	Low Income, Bay County
Bay County	Comprehensive Health Center	PanCare of Florida, Inc.
Bay County	Correctional Facility	Calhoun Correctional Institution
Mental Health		
Bay County	HPSA Geographic High Needs	MH Catchment Area 2A
Bay County	Comprehensive Health Center	PanCare of Florida, Inc.
Bay County	Correctional Facility	Bay Correctional Facility
Bay County	Correctional Facility	CF-Bay Correctional Institute
Dental Care		
Bay County	HPSA Population	Low Income, Bay County
Bay County	Comprehensive Health Center	PanCare of Florida, Inc.

Source: HRSA, 2018

Description
Exhibit 42 identifies Health Professions Shortage Areas (HPSAs) within the ASHB community. An area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. HPSAs can be geographic areas and population groups. In addition, a facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

Observations
Data in *Exhibit 42* indicate the following:

- The low-income population of Bay County is designated as a primary care and dental care HPSA;
- The entirety of Bay County is designated as a mental health HPSA;
- Calhoun Correctional Institution is designated as a primary care HSPA;
- PanCare of Florida, Inc., is designated as mental health and dental care HPSA; and
- Bay Correctional Facility and CF-Bay Correctional Institute are designated as mental health HPSAs.

VERITÉ HEALTHCARE CONSULTING

Findings of Other Assessments

In recent years, the Florida Department of Health developed a State Health Improvement Plan and a Community Health Improvement Plan was developed by Bay County. This section identifies and discusses community health priorities found in that work.

Florida State Health Improvement Plan, 2017-2021

The Florida Department of Health prepared a 2017-2019 State Health Improvement Plan (SHIP), informed by its State Health Assessment. The State Health Assessment:

> "ensured that selected priorities were supported by data about the health status of Florida's residents, the effectiveness of Florida's public health system in providing essential services, residents' perceived quality of life and factors outside of health that impact health, now or in the future."[15]

Eight priority areas were identified in the Florida SHIP, as follows:

1. Behavioral health (including mental illness and substance abuse);
2. Chronic diseases and conditions (includes tobacco-related illnesses and cancer)
3. Health equity;
4. Healthy weight, nutrition, and physical activity;
5. Immunizations;
6. Injury, safety, and violence;
7. Maternal and child health; and
8. Sexually transmitted disease (includes other infectious diseases).

Bay County Community Health Improvement Plan, 2015-2018

A Community Health Improvement Plan ("CHIP") was produced by The Bay County Community Health Task Force in collaboration with the Florida Department of Health in Bay County for 2015 - 2018. The Bay County CHIP identified priority areas from key health issues facing the county, which were selected in collaboration with community partners. The three priority areas identified in the Bay County CHIP are as follows:

1. Chronic diseases;
2. Healthy Weight / Healthy Lifestyles; and
3. Mental Health/Substance Abuse.

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[15] Florida State Health Improvement Plan (SHIP) 2017–2021, Florida Department of Health.

VERITÉ HEALTHCARE CONSULTING

APPENDIX C – COMMUNITY INPUT PARTICIPANTS

Primary data were gathered by conducting interviews with key stakeholders. Key informant interviews were conducted face-to-face and by telephone by Verité Healthcare Consulting between November 2018 and January 2019. The interviews were designed to obtain input on health needs from persons who represent the broad interests of the communities served by Ascension Sacred Heart Emerald Coast, Ascension Sacred Heart Bay, and Ascension Sacred Heart Gulf.

Twenty-five interview sessions were held with 85 individuals representing numerous organizations. Interviewees included individuals with special knowledge of or expertise in public health, local public health department representatives with information and expertise relevant to the health needs of the community; and individuals and organizations serving or representing medically underserved, low-income, and minority populations. Organizations with representatives participating in interview sessions are listed below.

- Bay County Council on Aging
- Bay District Schools
- Big Bend Community Based Care
- Chautauqua Healthcare Services
- Chautauqua Healthcare Services - Health Families
- Chautauqua Healthcare Services - Panhandle 2-1-1
- Children's Home Society of Florida
- City of Panama City Beach
- Covenant Care
- Crestview Area Shelter for the Homeless
- Early Learning Coalition
- Florida Department of Children and Families
- Florida Department of Health in Bay County
- Florida Department of Health in Franklin County
- Florida Department of Health in Gulf County
- Florida Department of Health in Okaloosa County
- Florida Department of Health in Walton County
- Glenwood Working Partnership
- Gulf Coast Children's Advocacy Center
- Gulf Coast Regional Medical Center
- Gulf Coast State College
- Healthy Start - Okaloosa County
- Healthy Start Coalition of Bay, Franklin, & Gulf Counties
- Homelessness and Housing Alliance
- Life Management Center
- Lighthouse Health Plan
- New Vision
- Northwest Florida Area Agency on Aging, Inc.

- NWFL Health Council
- Opportunity Place, Inc.
- PanCare of Florida
- Ronda Coon Women's Home
- Ascension Sacred Heart Emerald Coast
- Ascension Sacred Heart Gulf
- Shelter House, Inc.
- The University of Florida's Institute of Food and Agricultural Sciences - Okaloosa County Extension
- The University of Florida's Institute of Food and Agricultural Sciences - Walton County Extension
- The Walton County Housing Agency
- United Way of Okaloosa - Walton
- Walton County Prevention Coalition
- Walton County Sheriff's Office
- Walton Okaloosa Council on Aging

VERITÉ HEALTHCARE CONSULTING

APPENDIX D – IMPACT OF ACTIONS TAKEN SINCE THE PREVIOUS CHNA[16]

ASHB uses evidence-based approaches in the delivery of healthcare services with the aim of achieving healthy outcomes for the community it serves. It undertakes periodic monitoring of its programs to measure and determine their effectiveness and ensure that best practices continue to be applied.

Given that the process for evaluating the impact of various services and programs on population health is longitudinal by nature, significant changes in health outcomes may not manifest for several community health needs assessment cycles. The hospital continues to evaluate the cumulative impact.

Previously, ASHB identified a number of community health needs in its 2016 CHNA. These health needs are as follows:

1. Mental health;
2. Healthy weight; and
3. Chronic disease management.

Discussion of interventions and the impact of these activities is below.

1. Mental health

Interventions on this health need included the following:

- Participated in local partnership with county resources;
- Provided resources at discharge for patients identified at risk; and
- Developed follow-up process for post discharge.

The impact of participating in local partnership with county resources is enhanced community collaboration related to mental services. The impact of resources to at-risk patients is increased awareness of local services. The impact of post-discharge follow-up is support of patients' continuity of care.

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[16] Source: Ascension Sacred Heart

2. Healthy weight

Interventions on this health need included the following:

- Participated in local partnership with county resources;
- Increased breastfeeding initiation rate within one hour of birth; and
- Coordinated staffing to have knowledgeable healthcare personnel as resource for breastfeeding moms.

The impact of participating in local partnership with county resources is enhanced community collaboration related to healthy lifestyles. The impact of breastfeeding initiation activities are increased breastfeeding rates. The impact of the breastfeeding personal effort is the hiring of a lactation counselor.

3. Chronic disease management

Interventions on this health need included the following:

- Developed partnerships with community organizations that will focus on chronic disease management;
- Provided educational resources and tools to CHF patients to assist in recognizing recurring symptoms; and
- Educated physicians on HHC resources for their CHF discharges

The impact of participating in local partnership with county resources is enhanced community collaboration related to healthy lifestyles. The impact of CHF educational resources is increased understanding of the disease and treatment. The impact of physician education is additional referrals to HHC services.

ASHB's 2016-2019 CHNA and Implementation Plan were made available to the public and open for public comment via the website https://healthcare.ascension.org/. No comments were received on the document at the time this report was written.