



Healthy Volusia Report

Access to Healthcare Services

The Institute on Medicine describes access to healthcare as “the timely use of personal health services to achieve the best health outcomes.” Although many factors influence access to health services, Healthy People 2020 (HP2020) states that understanding access encompasses four components — **coverage, timeliness, types of services, and the workforce.**

For many of us, access to healthcare systems is through **insurance coverage** from our employers. These healthcare systems provide a broad range of services including preventive and primary care to address our needs. In theory, these services are offered in a manner to avoid geographic, social, cultural and financial barriers that might inhibit the **timely use** of health services.

The Robert Wood Johnson Foundation reports a US deficit of 40,000 primary care physicians. Their 2012

Health Policy Snapshot states, “Because of this shortage, many people have little access to primary care and increasingly are turning to hospital emergency rooms for care or going without.”

Despite obstacles to health services, the 2014 County Health Rankings report ranks Volusia County 18th of the

67 Florida counties in providing accessible healthcare for its residents. Still, Volusia County health professionals are often told access to health services is an issue in our community.

In this report, we follow the HP2020 components of access to better understand the access to care experiences of Volusia County residents. HP2020 objectives provide an extensive overview and comparison of local access indicators to the state and national numbers. Ambulatory Care Sensitive Conditions, for which hospital admissions could be prevented by primary care intervention, are examined as evidence of access to a regular source of preventive care. The challenge of obtaining **services** for dental patients and substance exposed newborns are delineated by local providers. The medical workforce is assessed to determine if Volusia County has a suitable **physician workforce** for the its population. Approximately 33% of Florida’s physician workforce is in primary care while 36% of the Volusia County physician workforce is in primary care. The Access to Healthcare Services report also explores geographic access and the distribution of healthcare facilities using geographic mapping software.

Access to a regular source of primary care is essential in preventing the onset of disease, treating disease and minimizing the degree of disability. Barriers to care lead to worse health outcomes, lower quality of life and higher mortality rates. The more we can make the healthy choice the easy choice for our community, the more likely Volusia County will be a healthier community.



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Report Card

| Objectives | Volusia (2012) | FL (2012) | US (2011) | Healthy People 2020 Target ⁵ |
|--|----------------------------------|----------------------------------|------------------------------|---|
| Increase the proportion of persons with any type of health care insurance | 82.1 ¹ (2010) | 83.0 ¹ (2010) | 82.8 ² | 100.0 |
| Increase the proportion of persons with a usual primary care provider | 82.0 ₁ (2010) | 81.7 ¹ (2010) | 76.8 ² (2010) | 83.9 |
| Increase the percentage of women 18 years of age and older who received a Pap test in the past year | 56.3 ¹ (2010) | 57.1 ¹ (2010) | 73.7 ² (2010) | 93.0 |
| Total Infant Mortality Rate per 1,000 live births | 3.8 ³ (2012) | 6.0 ³ | 6.1 ² | 6.0 |
| Increase the proportion of pregnant women who receive prenatal care beginning in first trimester | 79.9 ³ (2010-2012) | 79.4 ³ (2010-2012) | 83.1 ² (2010) | 77.9 |
| Reduce the proportion of adults with high total blood cholesterol levels | 41.3 ³ | 38.6 ¹ | 15.0 ² (2010) | 13.5 |
| Reduce stroke deaths per 100,000 population | 35.7 ³ | 31.5 ² | 39.1 ² | 33.8 |
| Reduce coronary heart disease deaths per 100,000 population | 106.5 ³ | 105.3 ² | 113.6 ² (2010) | 108.8 |
| Adults who could not see a dentist due to cost/reduce | 21.8 ³ (2010) | 19.2 ² (2010) | Data Not Available | Data Not Available |
| Access to dental care by Low Income Patients | 29.3 ³ (2010) | 36.4 ³ (2010) | 35.2 ² (2010) | 33.2 |
| Percentage of people age 18 and older who visited a dentist or a dental clinic (Used the oral health care system in the past year) | 62.8 ³ (2010) | 64.7 ² (2010) | 35.2 ² (2010) | 49.0 |
| Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines | 71.7 ¹ (2010) | 68.2 ¹ (2010) | 52.1 ² (2010) | 70.5 |
| Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines | 58.8 ¹ (2010) | 61.5 ¹ (2010) | 73.7 ² (2010) | 81.1 |

NOTE: N/A indicates the data are not available. The references for the Report Card data are listed on page 12. All data are 2012 unless otherwise indicated. The year in parentheses is the year of that specific indicator.

¹Centers for Disease Control. (2010). *Behavioral Risk Factor Surveillance System, 2010*. <http://www.floridacharts.com/charts/Brfss.aspx>

²U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Healthy People 2020*. Washington, DC.

³Florida Community Health Assessment Resource Tool Set (FL CHARTS), www.floridacharts.com

⁴Florida Department of Health, Bureau of Vital Statistics (unless otherwise indicated)

⁵Centers for Disease Control and Prevention, *Healthy People 2020*, <http://www.healthypeople.gov/2020/topicsobjectives2020/>

Report Card Summary

by Kevin Murphy, MSEPM, FDOH-Volusia

Improving access to comprehensive and quality health services is a major Healthy People 2020 goal. In 2010, 82.1 percent of Volusia County residents had some type of healthcare insurance, trailing the state and national rates. Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone.

Ambulatory Care Sensitive Conditions (ACSC) such as asthma, diabetes or hypertension are hospitalization conditions where timely and effective ambulatory care can decrease hospitalizations by preventing the onset of an illness or condition, controlling an acute episode of an illness or managing a chronic disease or condition. Volusia County rates of ACSC hospitalizations for Chronic Obstructive Pulmonary Disease (153.1), Diabetes (168.5), and congestive heart failure (125.8), all exceeded the state rate per the respective illness. This may be an indicator of a lack of or failure of prevention efforts, a primary care resource shortage, poor performance of primary healthcare delivery systems, or other factors that create barriers to obtaining timely and effective care.

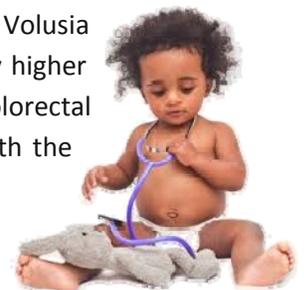


Prenatal care (PNC) refers to the medical care that women receive during pregnancy. To achieve the greatest benefit for both the mother and baby, it is recommended that women begin prenatal care visits in the first trimester of pregnancy or as soon as pregnancy is suspected or confirmed. In Volusia County, 79.9% of the pregnant women received prenatal care between 2010 and 2012 which is less than 1 percent higher than the Florida rate of 79.4% and 2% higher than the Healthy People 2020 target of 77.9%. Early PNC allows healthcare providers to identify potential problems as early as possible so they can be prevented or treated before they become serious.

Public health programs emphasizing access to and utilization of early PNC services exist that focus on those women least likely to receive early prenatal care including teens, women with less than a high school education, and Black and Hispanic women.

Oral health reflects and influences general health and well-being. In Volusia County, 62.8% of adults visited a dentist or dental clinic in 2010, which was slightly less than 64.7% for Florida. There is an increasing interest in the impact of oral health on atherosclerosis and cardiovascular disease. Poor maternal oral health has been associated with preterm birth, development of preeclampsia, and delivery of a small-for-gestational age infant. Monitoring access to dental care by low income individuals helps bring awareness of oral health disparities and where they may exist. In 2010, the percentage of residents who could not see a dentist because of cost was higher for Volusia County (21.8%) than for Florida (19.2%). Conversely, 29.3% of low income Volusia County residents had access to dental care, as compared to 36.4% for Florida.

Some types of cancer can be found before they cause symptoms, a method commonly known as "Screening". Preventative cancer screening, based on the most recent guidelines, is vital to early detection and treatment. Based on current guidelines, the proportion of women who received a breast cancer screening in Volusia County in 2010 58.8% was slightly lower than Florida (61.5%). The US (73.7%) is significantly higher than both the county and state. Conversely, the percentage of adults who have received a colorectal cancer screening based on current guidelines in Volusia County (71.7%) is higher than both the state of Florida (68.2%) and US (52.1%) as well as exceeds the Healthy People 2020 target.



Substance Exposed Newborns: Challenges Accessing Healthcare

by Dixie Morgese, Healthy Start Coalition of Flagler-Volusia

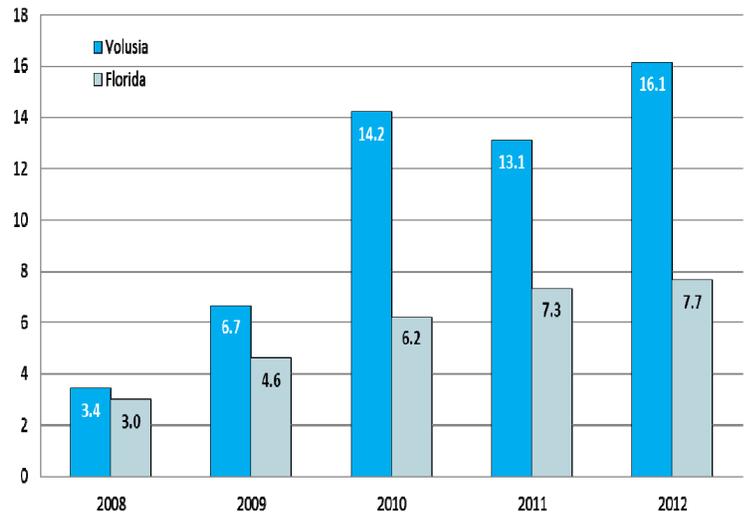
Access to prenatal care is a major priority for the Healthy Start Coalition of Flagler and Volusia Counties. In Volusia County, according to prenatal Healthy Start screening data, about 80% of births are to mothers who receive prenatal care in their first trimester. Fifteen percent receive care in their second trimester and 3% in their third trimester. A remaining 2.0% were recorded in 2012 to have had no prenatal care at all.

Across the nation as well as in Volusia County, there has been a significant increase in the number of pregnant women using opiate drugs during pregnancy and, consequently, an increase in the number of babies born with Neonatal Abstinence Syndrome (NAS). NAS refers to medical complications associated with symptoms of withdrawal experienced by neonates (infants in their first thirty days of life) as a direct result of their mothers drug use during pregnancy. Babies with NAS have symptoms that impact the Central Nervous System, the Gastrointestinal functioning, and the Metabolic, Vasomotor and Respiratory systems. These infants typically have difficulty regulating themselves as their tiny bodies experience withdrawal from the drug their mother was taking. Babies that show these symptoms are often sent to the Neonatal Intensive Care Unit (NICU) for specialized medical care. Once stabilized, babies can be discharged but may need ongoing medical care and developmental services. Public health is concerned about this growing issue as it impacts perinatal health and well-being and infant development. Babies with NAS are at a higher risk for sleep-related death, poor weight gain, chronic ear infection, and overstimulation. This may make them more difficult to care for, may affect their ability to bond with caregivers, and make them more susceptible to child abuse and neglect.

According to a 2012 Journal of American Medicine Association article, the prevalence of NAS nationally increased from 1.2 per 1,000 U.S. hospital births in 2000 to 3.39 per 1,000 U.S. hospital births in 2009. In 2009, there were more than 13,000 infants diagnosed with NAS, or approximately one infant born every hour. In Florida, according to the Statewide Task Force on Prescription Drug Abuse and Newborns (PDAN) February 2013 Final Report from the Florida Office of the Attorney General, the NAS rate increased from 3.0 per 1,000 in 2008 to 7.3 per 1,000 in 2011. This is more than twice the national rate. The number of NAS births has more than doubled from 2008 (691) to 2011 (1,563). Similarly, Volusia County NAS cases in 2011 (61 babies) were almost four times greater than in 2008 (18 babies). In a 2012 PDAN Task Force progress report, NAS numbers increased for Florida as well as for Volusia County. Florida had a total of 1,630 cases and Volusia County had a total of 76 cases. Figure 1 illustrates NAS case rates per 1,000 live births in Florida and Volusia County.

Figure 1

Neonatal Abstinence Syndrome Rates per 1,000 Live Births in Florida and Volusia County, 2008-2012



Why are the NAS numbers so high? - The overall deaths related to opioid pain relievers (OPR) indicates a rising public health epidemic directly related to the recommendation of prescription drugs. The Attorney General’s Task Force examined the link between the rising number of NAS cases and the overall rates of OPR deaths, OPR treatment admissions, and kilograms of OPR sold in the United States from 1999-2009. Figure 2 shows a dramatic increase in the national rates of OPR deaths, treatment admissions and sales in the United States over the ten year period.¹ New laws were implemented in Florida in 2011 delineating standards of care for physicians prescribing controlled substances for pain and addressing dispensing and sales by pharmacies and wholesale distributors (Florida Legislature 2011 Session HB 7095).

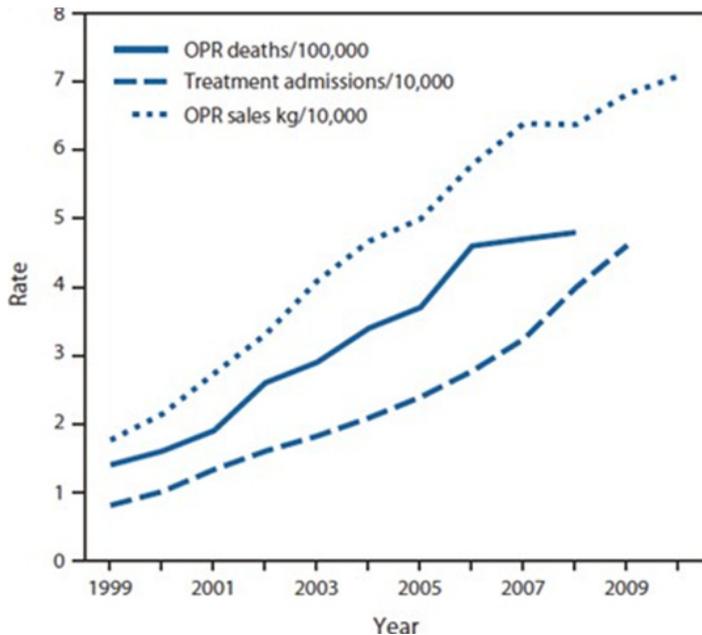
What can we do? - Volusia County has formed strong partnerships with area hospitals, substance abuse treatment centers, the Healthy Start Coalition, the Department of Children and Families, Community Partnership for Children,

Substance Exposed Newborns: Challenges Accessing Healthcare (continued)

Circuit 7 judiciary, private physicians, infant mental health experts, and others to address this growing problem through a Substance Exposed Newborn Task Force.

Figure 2

U.S. Rates of OPR deaths per 100,000, Treatment admissions per 10,000 population, and OPR sales kg per 10,000 population from 1999 – 2010



Recommendations and proposed strategies - Our SEN Task Force has much work to do to improve access to care for babies affected by maternal drug use.

This includes tactics such as:

- Increasing screening by prenatal care providers,
- Providing additional women's intervention services in west Volusia County
- Increasing the number of trained caregivers
- Establishing data-sharing agreements with participating organizations
- Improving linkage to family planning services for women of reproductive age in opioid management programs or admitted to substance abuse treatment

[NOTE: Though opiate use has escalated, it is important to note that alcohol use during pregnancy is more damaging and causes irreversible damage to the fetus.]

Resources - Our community-wide SEN Task Force is a great resource for community partners who serve substance affected pregnant women and their children. **For more information or materials for your patients, contact the Healthy Start Coalition of Flagler and Volusia Counties at (386)-252-4277.**

Additional Resources that may be helpful follow:

1. www.BornDrugFreeFL.com or 1-877-233-5656
2. www.astho.org
3. [http://myfloridalegal.com/webfiles.nsf/WF/RMAS-9GUKBJ/\\$file/Progress-Report-Online-2014.pdf](http://myfloridalegal.com/webfiles.nsf/WF/RMAS-9GUKBJ/$file/Progress-Report-Online-2014.pdf)

Accomplishments - Our Substance Exposed Newborn (SEN) Task Force has had several accomplishments that have improved access to the system of care for newborns. These include:

- Two specialized county-funded positions through Healthy Start and Stewart Marchman Behavioral Health Care (provider of outreach and intervention for pregnant women/families with NICU babies)
- Uniform referral for linking to these services through the Healthy Start Maternal and Child Assessment Center
- A brochure for providers that helps women understand the impact of opioid use and helpful resources
- A "fast-track" referral for Children's Medical Services so that pediatric services can begin immediately
- Specialized voluntary clinic services for women on opioid management
- Multi-disciplinary staffing 3 times weekly to review case status, ensure access to care & follow-up by our team.
- Specialized training program for NAS infants caregivers

Signs & Symptoms of NAS

Central Nervous System

- ◆ High pitched cry
- ◆ Irritability, fussiness
- ◆ Tremor or seizures
- ◆ Skin excoriation
- ◆ Sleep disturbances

Gastrointestinal

- ◆ Dehydration
- ◆ Poor feeding
- ◆ Excessive sucking or disorganized suck
- ◆ Diarrhea
- ◆ Vomiting

Metabolic, Vasomotor, Respiratory

- ◆ Fever
- ◆ Frequent yawning
- ◆ Sneezing, nasal flaring
- ◆ Rapid breathing

¹Vital Signs: Overdoses of Prescription Opioid Pain Reliever – United States 1999-2009 Morbidity and Mortality Weekly Report: November 4, 2011 / 60(43); 1487-1492.

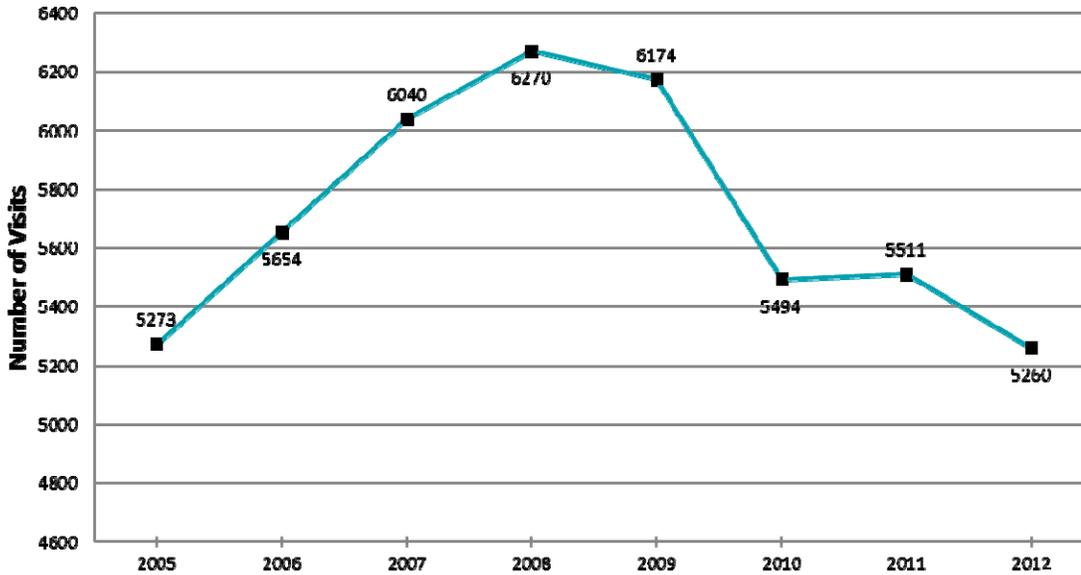
Access to Oral Healthcare for the Citizens of Volusia County

by Joann Weatherwax, Dental Program Director, FDOH Volusia

The health of the mouth and surrounding craniofacial structures are central to a person’s overall health and well-being. A key component to access to healthcare services is access to dental facilities and utilization of dental services. These

Figure 3

Number of Emergency Room Visits with a Dental Condition Volusia County, 2012



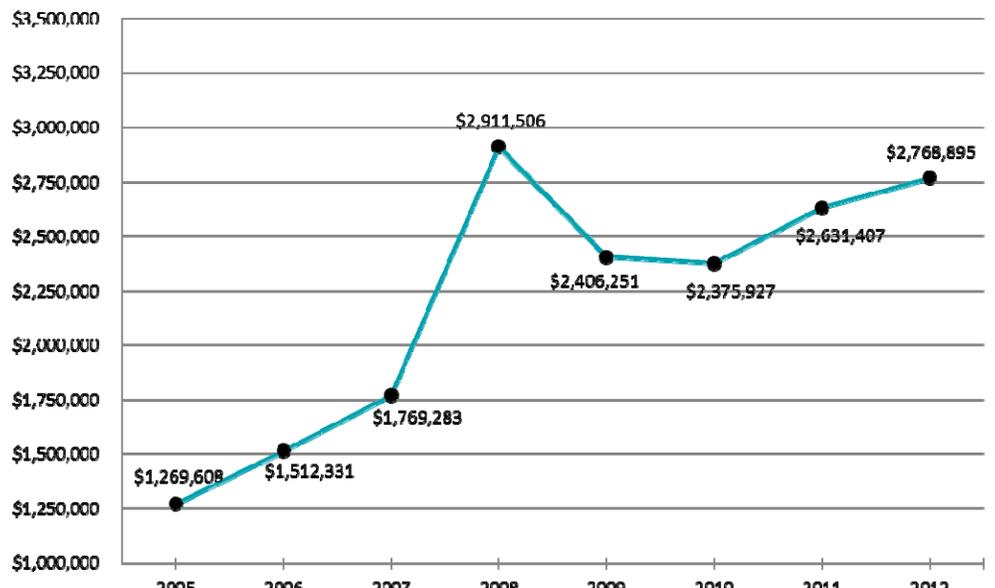
areas of access involve many factors which dictate utilization and can include financial restrictions, access to care, attitudes toward dental care and dental fear.¹ Figure 3 shows a significant decline from 2008 to 2012 for emergency room (ER) visits addressing dental emergencies in Volusia County. The Florida Department of Health in Volusia County opened six operatory dental offices in March 2008. This was followed by a reduction of 1,010 ER visits

for dental conditions over a five year span (2008-2012) and a reduction of \$142,611 charged in local ERs (Figure 4). The subsequent increasing charges for ER dental conditions (Figure 4), despite a decreasing number of ER visits (Figure 3), may reflect the increasing cost of ER visits.

Access to oral healthcare is also influenced by the number of dentists per population in a geographic area. According to the US Health Resources and Services Administration an area is designated as a Dental Health Professional Shortage Area when the dentist to population ratio is greater than 1:5,000. Volusia County currently has 311 dentists or a ratio of one dentist to 1,595 people. A

Figure 4

Total Charges of Emergency Room Visits with a Dental Condition Volusia County, 2012

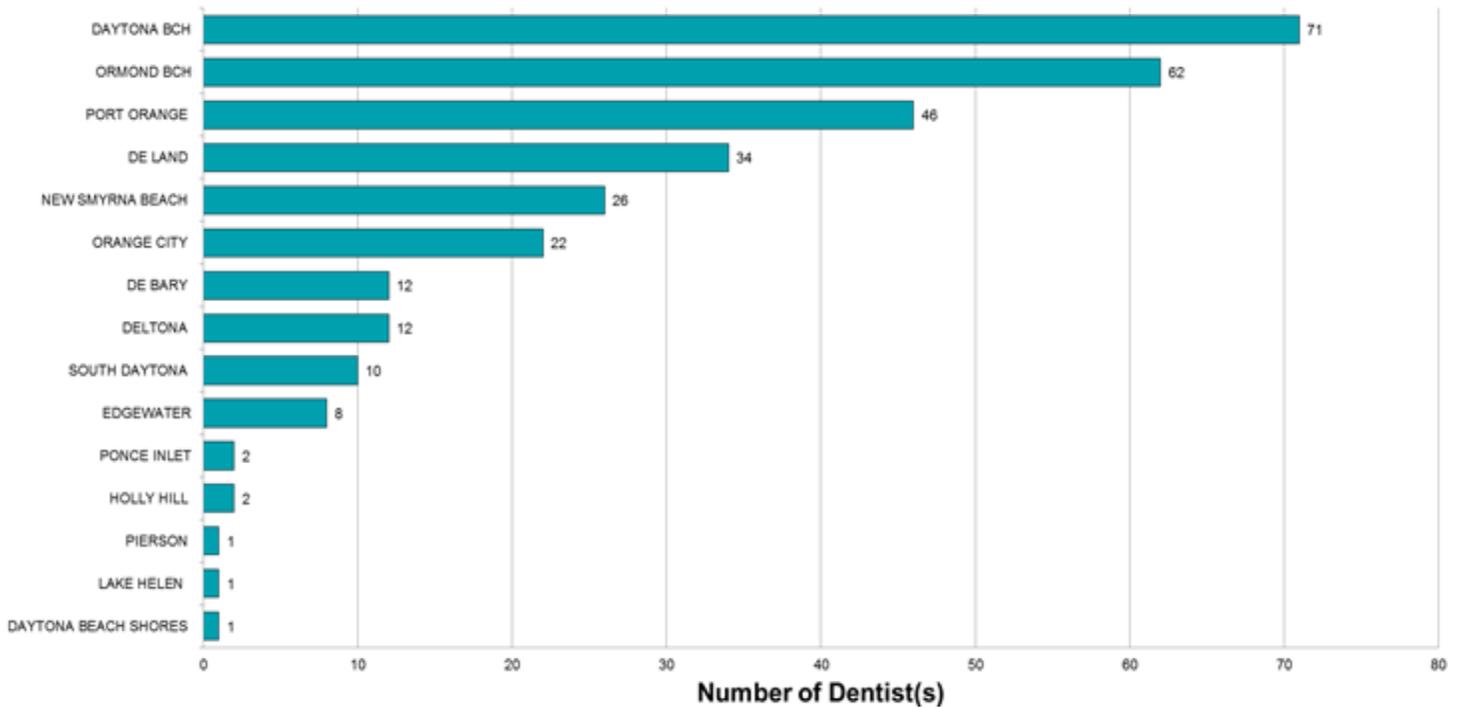


closer look at Figures 5 and 6 reveals that for certain cities within Volusia County access to dental services is more limited. In 2012, Holly Hill and Deltona had an estimated population of 11,628 and 85,400 people respectively. Holly Hill only had 2 dentists, a ratio of 1 dentist per 5,874 people, and Deltona had 12 licensed dentists, roughly one dentist per 7,120 people. Both cities exceed the HRSA dental health professional shortage definition of one dentist per 5000 persons. While Volusia County residents’ access to oral healthcare has

Access to Oral Healthcare for the Citizens of Volusia County (continued)

Figure 5

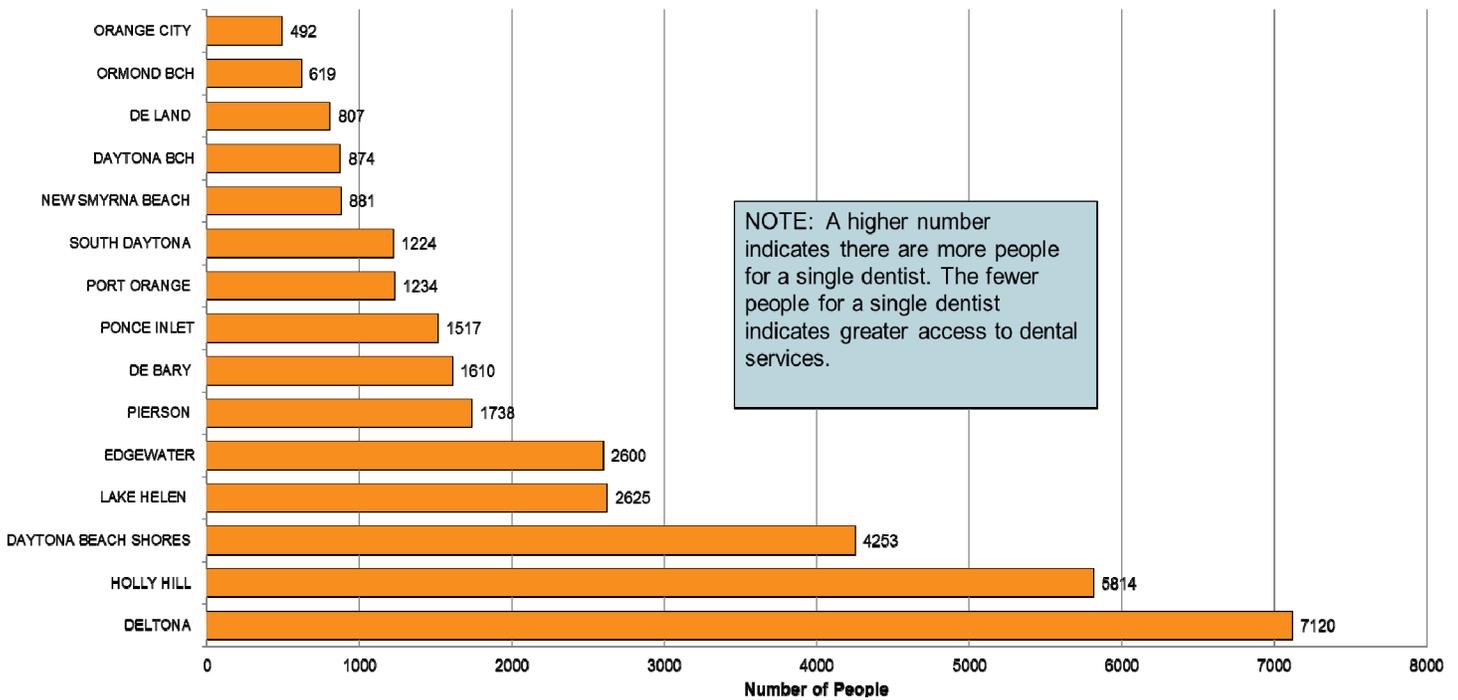
Number of Dentists in Selected Cities in Volusia County, 2014



improved over the last six years, pockets of disparities remain. In order to achieve an adequate level of access to dental care for all residents, adequate workforce coverage is paramount in ensuring an equitable distribution of dental services and is a crucial step towards better health overall.

Figure 6

Number of Persons per Dentist by City in Volusia County, 2014

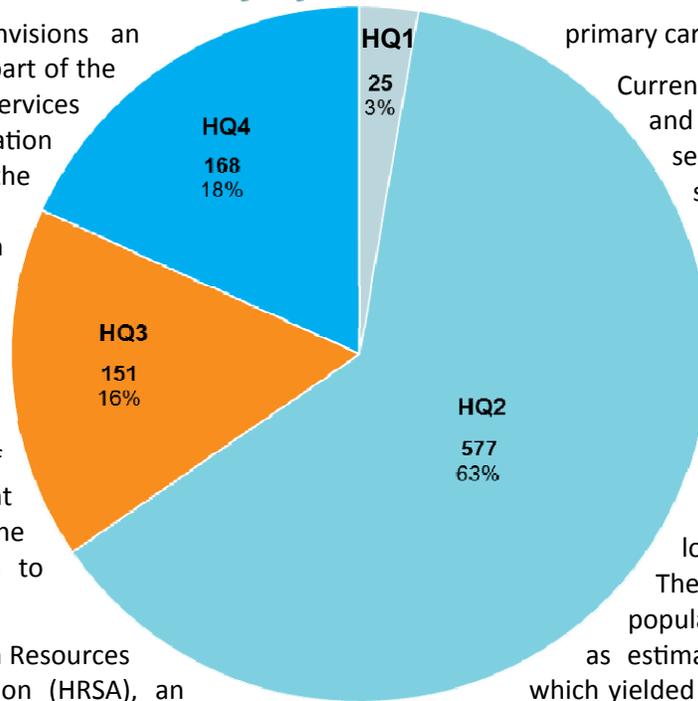


¹Access to Oral Health Factors Influencing Use of Dental Services in Rural and Urban Communities: Consideration for Practitioners in Underserved Areas, Heaton LJ, Smith TA, Tabould TP, Journal of Dental Education, 2004.

Distribution of Medical Doctors and Osteopathic Physicians in Volusia County by Health Quadrant, 2014

Healthy People 2020 envisions an increased workforce as a part of the Access to Healthcare Services component. A good indication of a healthy workforce is the ratio of physicians to the population they serve. In 2014, a Florida Department of Health Physician survey found that Volusia County had 1,002 total Physicians. With an estimated population of 500,000 people that meant a ratio of approximately one of any type of physician to every 500 people.¹

According to the US Health Resources and Services Administration (HRSA), an area is designated as a Health Professional Shortage Area (HPSA) when the HPSA physician to population ratio is greater than 1:3,500. In other words, when there are 3,500 or more people per physician, an area is eligible to be designated as a primary care HPSA. Volusia County currently has 328 primary care physicians or a ratio of 1 primary care physician to 1,524 people. The 2014 *County Health Rankings* measures the health of nearly every county in the US. The 2014 *County Health Rankings: Florida* report ranks Volusia County 21st in the state of Florida for access to



primary care physicians.

Currently, 921 Medical Doctors (MDs) and Osteopathic Physicians (DOs) serve Volusia County however, sub-county analysis identified a geographical distribution inequity of healthcare providers by health quadrant (HQ), see Figure 7. Health Quadrant 1 is limited in regards to currently licensed healthcare providers in Volusia County. Of the 921 MDs/DOs, only 3% (25) are located in Health Quadrant 1.²

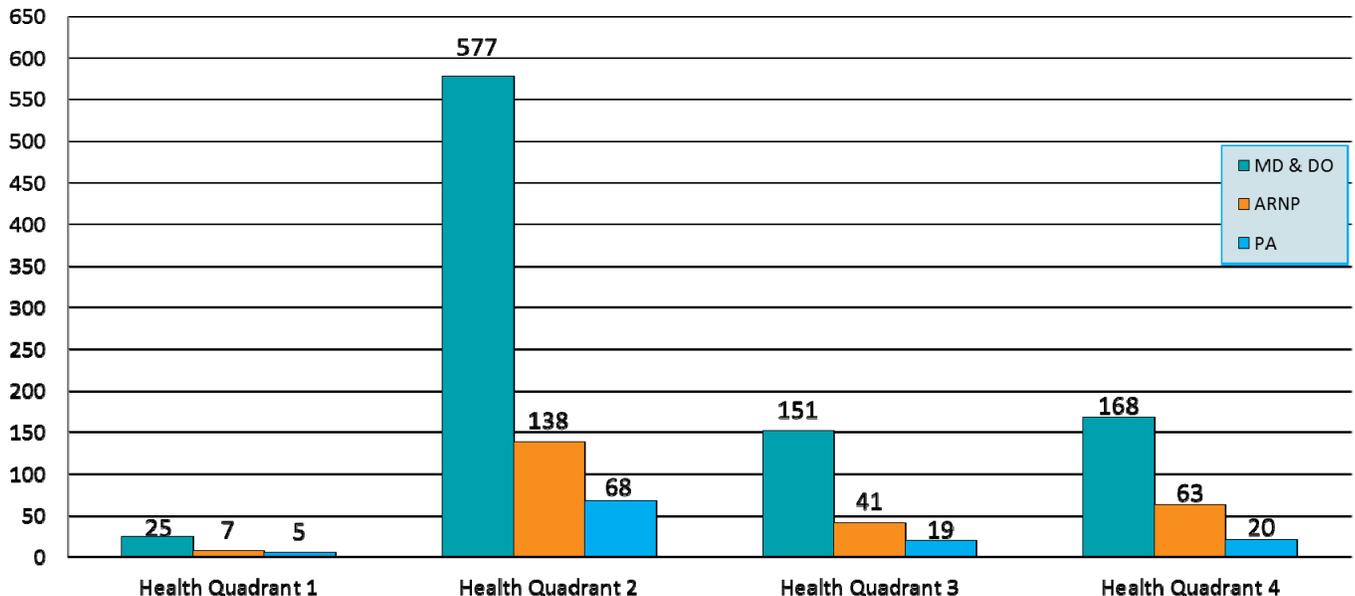
These 25 practitioners serve a population of roughly 80,000 people as estimated in 2012 by the Census, which yielded a ratio of one doctor to every 3,200 people. Furthermore, analysis of Advanced Registered Nurse Practitioners (ARNPs) and Physician Assistants (PAs) has similar findings in the limited provider coverage of HQ1. Of the 361 ARNPs and PAs only 12 (3%) were located in HQ1. In total, Volusia County has 1282 MDs, DOs, ARNPs, and PAs combined. Thirty-seven (3%) of those healthcare providers serve roughly 80,000 people living in Health Quadrant 1.

¹<http://www.hrsa.gov/shortage/>

²<http://ww2.doh.state.fl.us/irm00praes/praslist.asp>

Figure 7

MDs & DOs, ARNPs, and PAs in Volusia County by Health Quadrant, 2014



Ambulatory Care Sensitive Conditions (ACSC) and Hospitalizations

by Nathalie Moise, MPH and Kevin Murphy, MSEPM, FDOH-Volusia

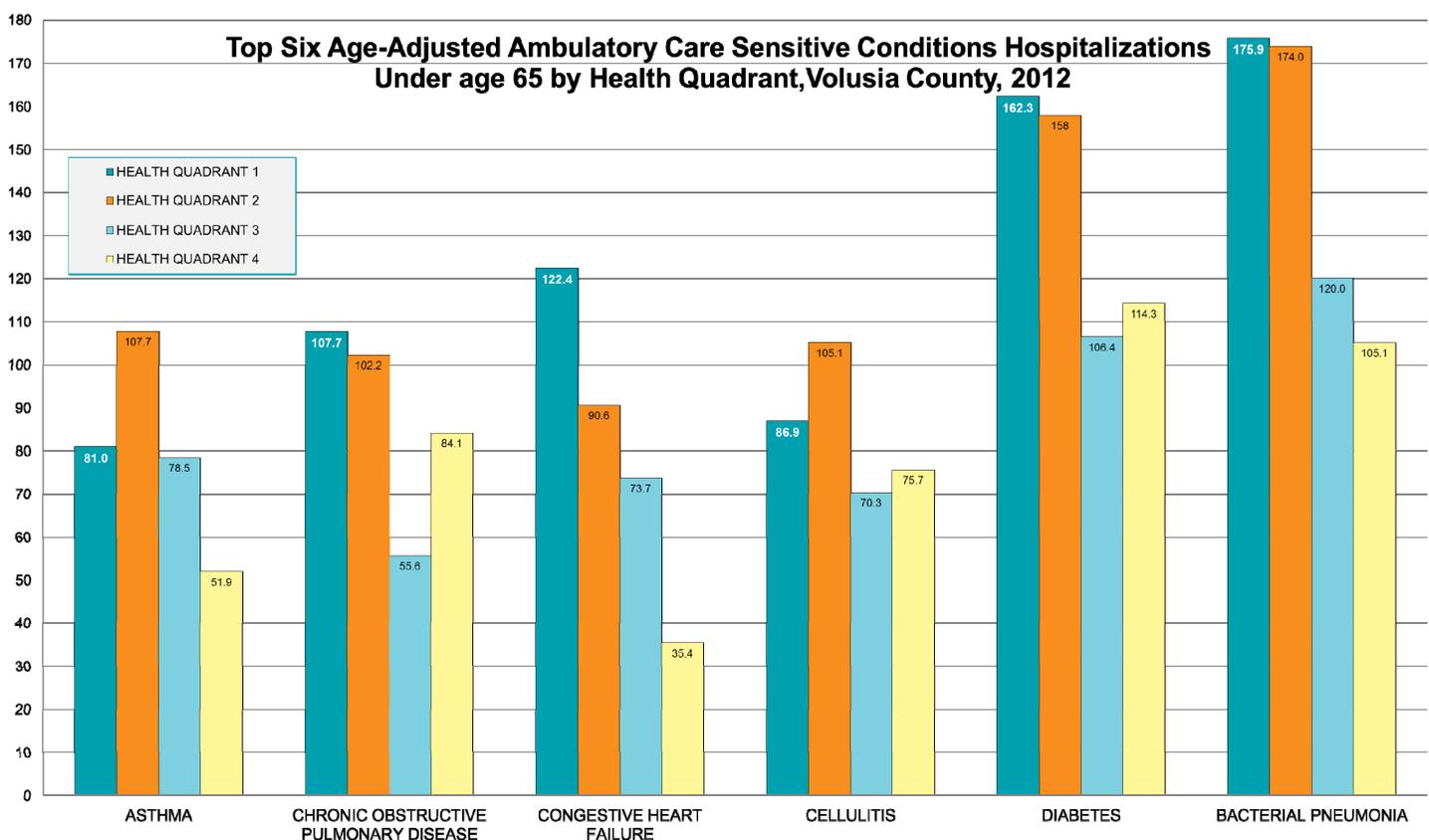
The Centers for Disease Control and Prevention consider chronic health conditions ambulatory care sensitive when the illness is controllable with effective and timely outpatient care that can potentially prevent the need for hospitalization. This report utilizes the ACSC definition provided by the Florida Department of Health Florida CHARTS program. The top six most prevalent conditions occurring in Volusia County are reported here. ACSC admission rates have been an essential tool used for analyzing access to care.

The number of hospitalizations, in Volusia County, due to ACSC conditions have increased over the past five years from 4,450 in 2008 to 4,613 in 2012. Although, diabetes patients can avoid emergency room visits and hospitalization through appropriate diet, exercise, medication, education and monitoring, hospitalization due to ACSC for diabetes in Volusia County increased 23.3% from 2008 to 2012.

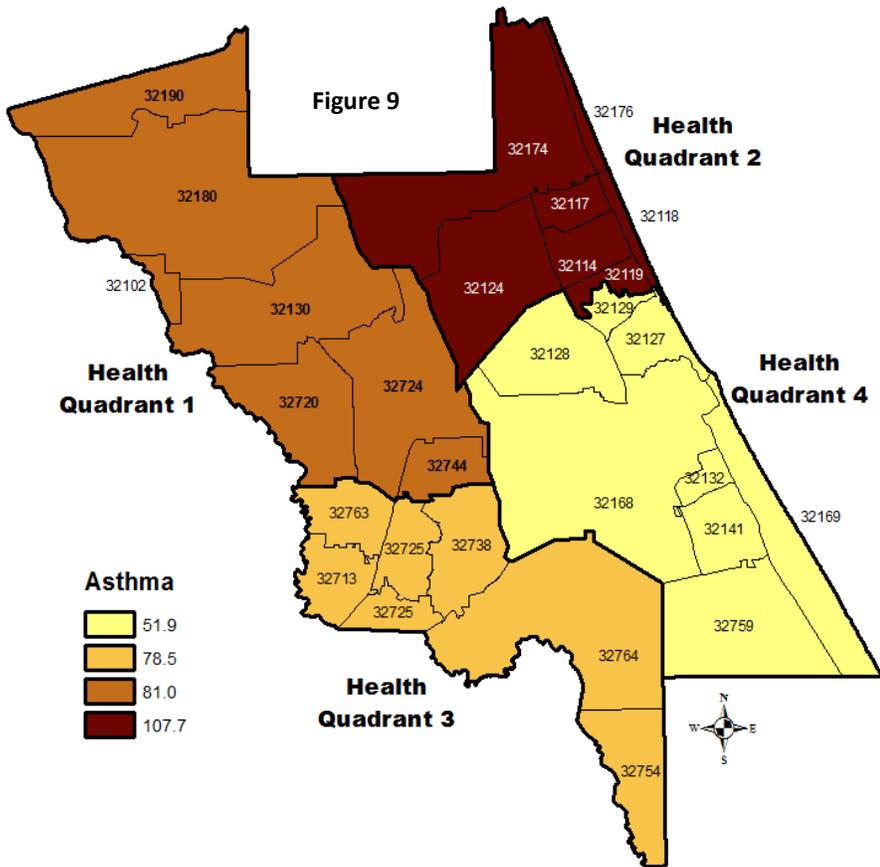
Presented in Figure 8 are age-adjusted rates of the top six ACSC preventable hospitalizations under age 65 in Volusia County. Health Quadrant 1 had the highest age-adjusted ACSC rate for almost every disease, except for asthma and cellulitis, in which Health Quadrant 2 carried the highest rates. In total, bacterial pneumonia (720 hospitalizations) made up 13.3% of all the ACSC hospitalizations in Volusia County in 2012, followed by diabetes (655, 12.1%), COPD (596, 11.0%), congestive heart failure (508, 9.4%), asthma (401, 7.4%), and cellulitis (399, 7.4%). These six ACSC contributed more than half (60.6%) of all ACSC hospitalizations in Volusia County in 2012.

The data show that 38.4% of all ACSC hospitalizations among people under age 65 in Volusia County, in 2012, were adults between the ages of 55 and 64. The next highest age group (45 - 54) accounted for 27.0%. Adults between ages 35 and 64 accounted for 76.0% of all under age 65 ACSC hospitalizations in Volusia County, in 2012. Chronic disease management has been a tremendous burden on our healthcare system and analysis reveals that more than half (56.1%) of Volusia County residents who are hospitalized for ACSC treatment paid mainly through Medicare (younger disabled population) and Medicaid funding programs.

Figure 8



Rate of Ambulatory Care Sensitive Condition Hospitalization by Volusia County Health Quadrants, 2012



Asthma Hospitalizations (Under Age 65) Age-adjusted Rate per 100,000 Persons in Volusia County, 2012

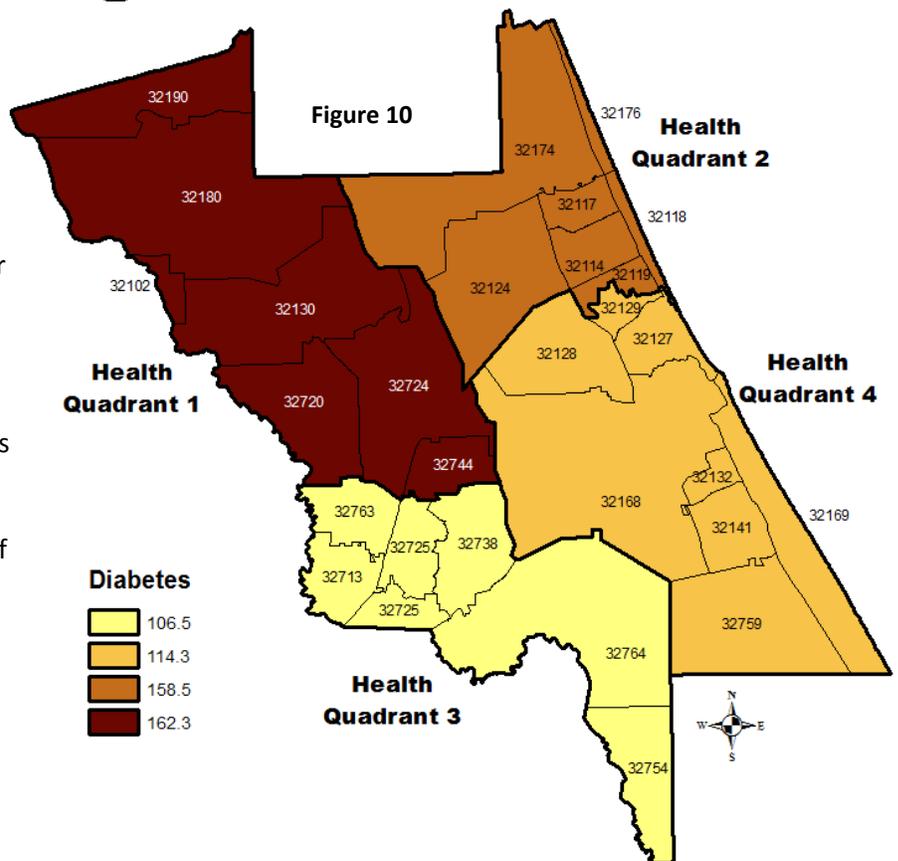
- The age-adjusted rate of Asthma Ambulatory Care Sensitive Conditions for Volusia County was 103.2 per 100,000 persons in 2012
- Health Quadrant 2 had the highest rate of ACSC hospitalizations for Asthma in 2012
- Health Quadrant 4 had the lowest rate of ACSC hospitalizations for Asthma in 2012

Source: Florida Agency for Health Care Administration, Hospital Dataset, 2012

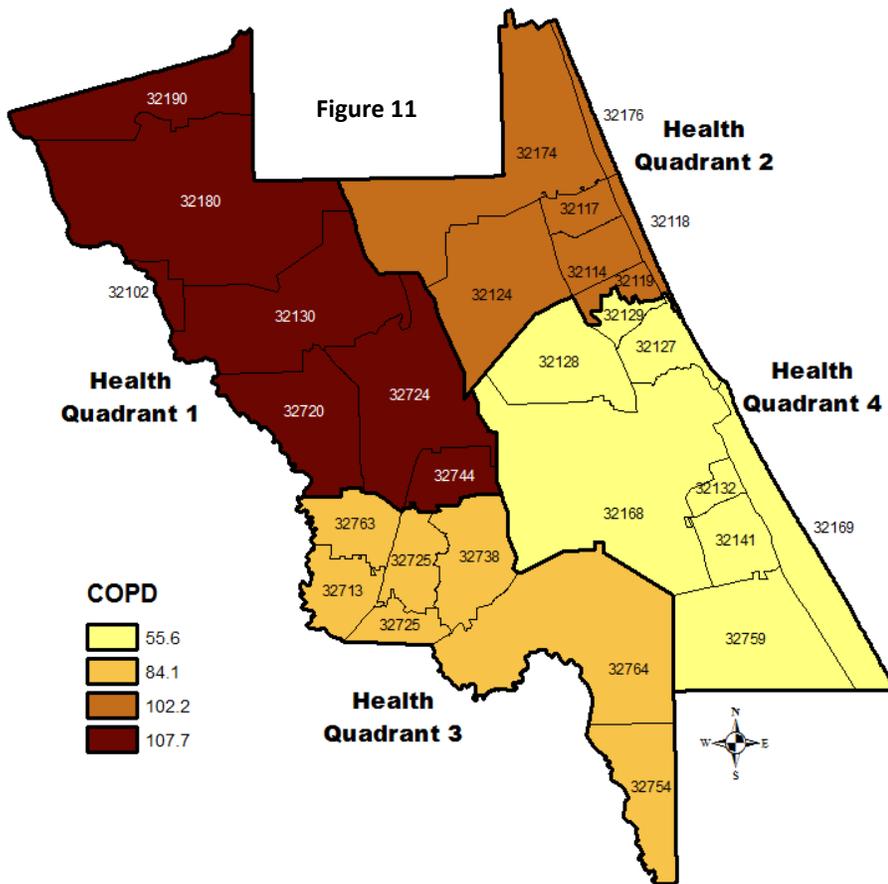
Diabetes Hospitalizations (Under Age 65) Age-adjusted Rate per 100,000 Persons in Volusia County, 2012

- The age-adjusted rate of Diabetes Ambulatory Care Sensitive Conditions for Volusia County was 168.5 per 100,000 persons in 2012
- Health Quadrants 1 had the highest rate of ACSC hospitalizations for Diabetes in 2012
- Health Quadrant 3 had the lowest rate of ACSC hospitalizations for Diabetes in 2012

Source: Florida Agency for Health Care Administration, Hospital Dataset, 2012



Rate of Ambulatory Care Sensitive Condition Hospitalization by Volusia County Health Quadrants, 2012 (continued)



Chronic Obstructive Pulmonary Disease (COPD) Hospitalizations Age-adjusted Rate (Under Age 65) per 100,000 Persons in Volusia County, 2012

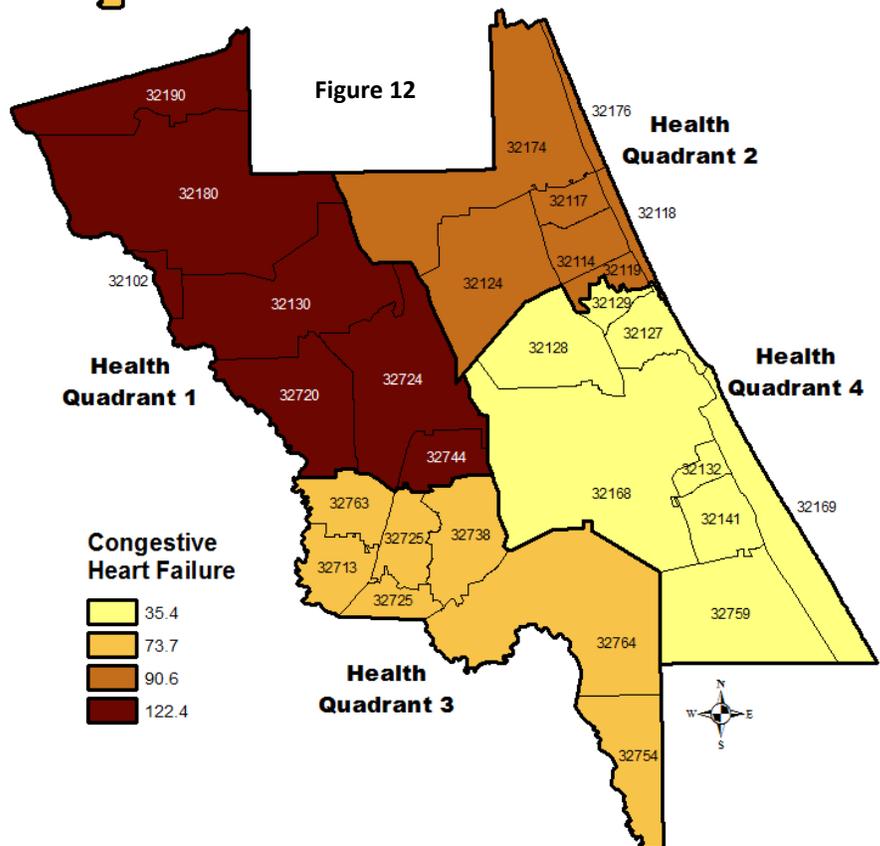
- The age-adjusted rate of COPD Ambulatory Care Sensitive Conditions for Volusia County was 125.8 per 100,000 persons in 2012
- Health Quadrant 1 had the highest rate of ACSC hospitalizations for COPD in 2012
- Health Quadrant 4 had the lowest rate of ACSC hospitalizations for COPD in 2012

Source: Florida Agency for Health Care Administration, Hospital Dataset, 2012

Congestive Heart Failure Hospitalizations (Under Age 65) Age-adjusted Rate per 100,000 Persons in Volusia County, 2012

- The age-adjusted rate of Congestive Heart Failure Ambulatory Care Sensitive Conditions for Volusia County was 153.9 per 100,000 persons in 2012
- Health Quadrant 1 had the highest rate of ACSC hospitalizations for Congestive Heart Failure in 2012
- Health Quadrant 4 had the lowest rate of ACSC hospitalizations for Congestive Heart Failure in 2012

Source: Florida Agency for Health Care Administration, Hospital Dataset, 2012

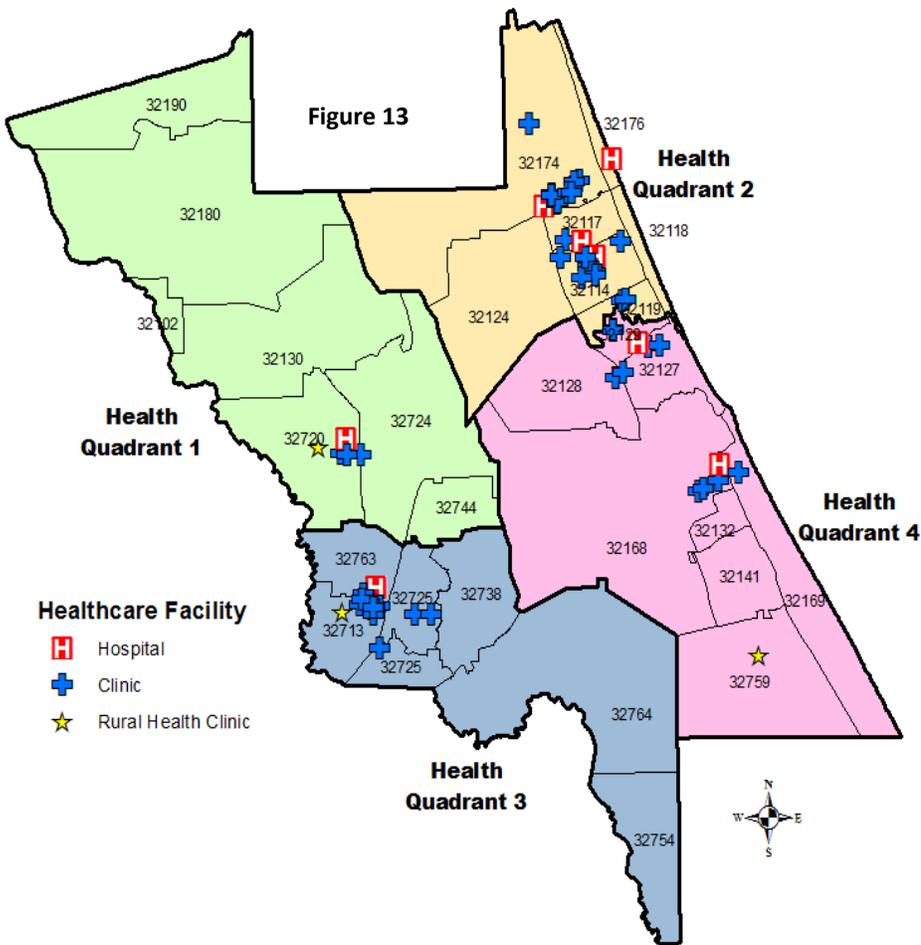


Healthy Volusia Report Key Points

- Volusia County is not considered a dental shortage area, according to the U.S. Health Resources and Services Administration, however, two cities (Holly Hill and Deltona) exceed the recommended population to dentist ratios. (See Figure 6)
- Health Quadrants 1 and 2 had the highest age-adjusted rates for hospitalizations due to the top six Ambulatory Care Sensitive Conditions (ACSC) among people under age 65. (See Figure 8) HQ1 and HQ2 also have the largest percentage of residents in poverty.
- Health Quadrant 1 has the fewest physicians in Volusia county, see Figure 7, and also the fewest number of healthcare facilities, see Figure 13. Only 37 MDs, DOs, ARNPs, and PAs have licenses to practice in HQ1 which serves roughly 80,000 people.
- The number of Newborn Abstinence Syndrome (NAS) cases in Volusia County has dramatically increased from 2008 (18 babies) to 2011 (61 babies), a four-fold surge. (See Figure 1) Similarly, Florida NAS births more than doubled from 2008 (691) to 2011 (1,563).

Florida Department of Health in Volusia County
Office of Informatics and Assessment
386 274-0605
www.volusiahealth.com

Healthcare Facilities by Zip Code and Health Quadrant (HQ) in Volusia County, 2014



The 2014 County Health Rankings cited Volusia County as providing ample clinical care services for its population. Volusia County was ranked 18th of all Florida counties. Key to access to care is not only the existence of services but also where the services are provided.

The Florida Agency for Health Care Administration maintains an online database of licensed providers and facilities in the state. This map displays the distribution of the 64 health clinics, eight hospitals and three rural healthcare facilities in Volusia County as listed in the database for 2014.

Each health quadrant has at least one hospital. Health Quadrant 1 has the fewest healthcare facilities while Health Quadrant 2 has the greatest number of hospitals and health clinics. Interestingly, most of the health clinics seem to cluster around the hospitals.