Virginia Beach Ambulatory Surgery Center
Community Health Needs Assessment
2016

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Virginia Beach Ambulatory Surgery Center

2016 Community Health Needs Assessment

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I. INTRODUCTION

Virginia Beach Ambulatory Surgery Center has conducted a community health needs assessment in collaboration with Sentara Virginia Beach General Hospital. The assessment provides us with a picture of the health status of the residents in our communities and provides us with information about health and health-related problems that impact health status.

Our assessment includes a review of population characteristics such as age, educational level, and racial and ethnic composition because social factors are important determinants of health. The assessment also looks at risk factors like obesity and smoking and at health indicators such as infant mortality and preventable hospitalizations. Community input is important so the assessment also includes survey results from key stakeholders including public health, social services, service providers, and those who represent underserved populations. The report also includes findings from focus groups with community members on health issues and barriers to achieving good health.

The needs assessment identifies numerous health issues that our communities face. Considering factors such as size and scope of the health problem, the severity and intensity of the problem, the feasibility and effectiveness of possible interventions, health disparities associated with the need, the importance the community places on addressing the need, and consistency with our mission “to improve health every day”, we have identified a number of priority health problems in our area to address in our implementation strategy:

- Obesity
- Cancer
- Dental Health
- Cardiac Health

Our previous Community Health Needs Assessment also identified a number of health issues. An implementation strategy was developed to address these problems. The hospital has tracked progress on the implementation activities in order to evaluate the impact of these actions. The implementation progress report is available in the Appendix.

Virginia Beach Ambulatory Surgery Center works with a number of community partners to address health needs. Information on available resources is available from sources like 2-1-1 Virginia and Sentara.com. Together, we will work to improve the health of the communities we serve.

Your input is important to us so that we can incorporate your feedback into our assessments. You may use our online feedback form available on the Sentara.com website. Thanks!

Sentara Virginia Beach General Hospital (SVBGH) 2016 Community Health Needs Assessment

Community Description

Community Description

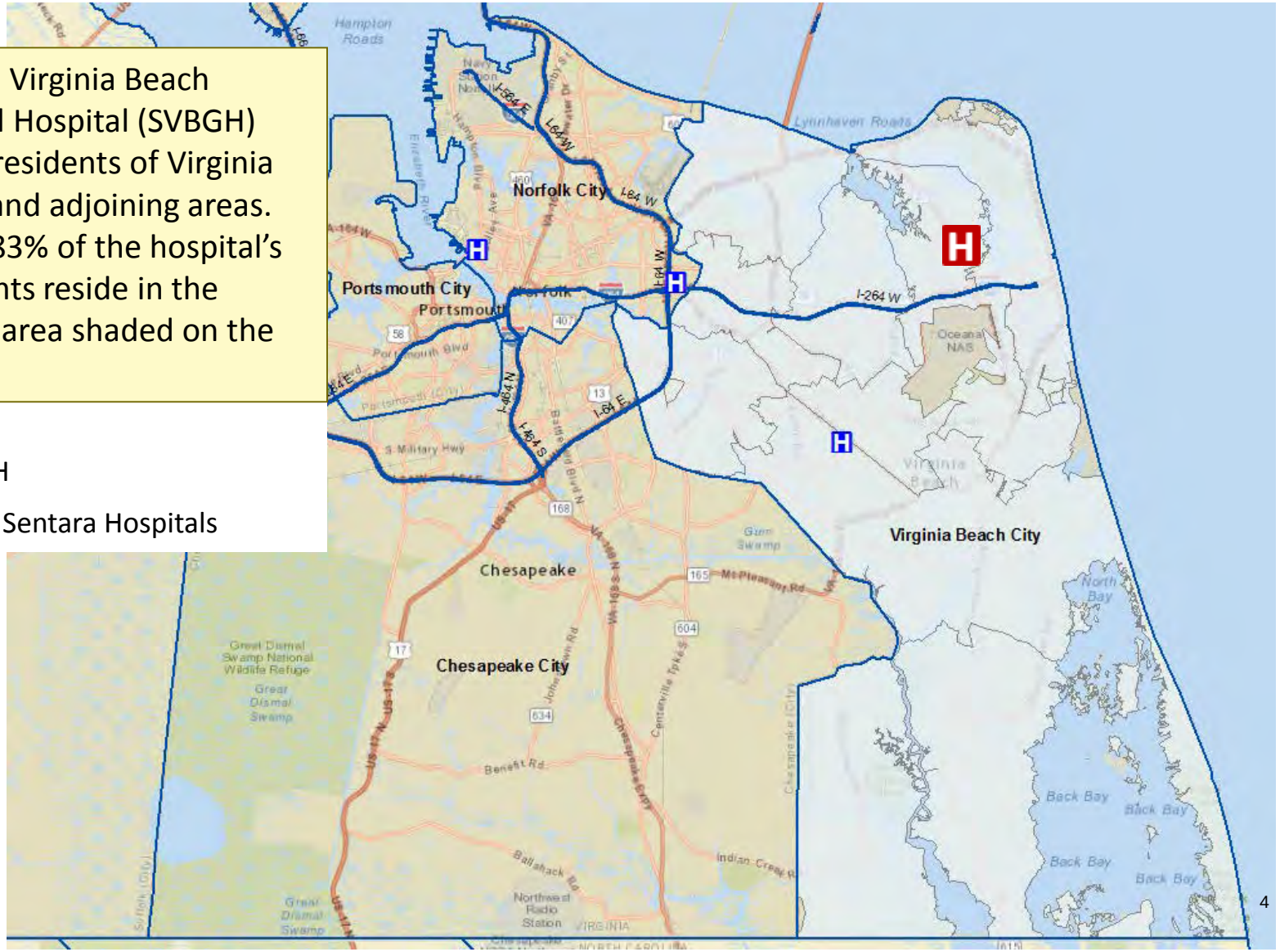
Sentara Virginia Beach General Hospital Service Area

Sentara Virginia Beach General Hospital (SVBGH) serves residents of Virginia Beach and adjoining areas. About 83% of the hospital's inpatients reside in the service area shaded on the map.

Key:

H SVBGH

H Other Sentara Hospitals



Area-wide Key Demographic Characteristics

DEMOGRAPHIC CHARACTERISTICS	Selected Area	Virginia	USA
2010 Total Population	435,905	8,001,038	308,745,538
2016 Total Population	453,036	8,428,339	322,431,073
2021 Total Population	470,435	8,801,874	334,341,965
% Change 2016 - 2021	3.8%	4.4%	3.7%
Median Household Income	$66,240	$65,624	$55,720

POPULATION DISTRIBUTION	Age Distribution					
Age Group	2016	% of Total	2021	% of Total	Virginia 2016 % of Total	USA 2016 % of Total
0-14	87,146	19.2%	89,350	19.0%	18.5%	19.0%
15-17	17,171	3.8%	17,914	3.8%	3.8%	4.0%
18-24	43,196	9.5%	41,690	8.9%	10.0%	9.8%
25-34	72,683	16.0%	68,423	14.5%	13.6%	13.3%
35-54	120,558	26.6%	124,838	26.5%	26.8%	26.0%
55-64	54,297	12.0%	58,762	12.5%	12.9%	12.8%
65+	57,985	12.8%	69,458	14.8%	14.4%	15.1%
Total	**453,036**	**100.0%**	**470,435**	**100.0%**	**100.0%**	**100.0%**

EDUCATION LEVEL	Education Level Distribution			
2016 Adult Education Level	Pop Age 25+	% of Total	Virginia 2016 % of Total	USA % of Total
Less than High School	4,313	1.4%	4.8%	5.8%
Some High School	12,532	4.1%	7.0%	7.8%
High School Degree	70,152	23.0%	25.0%	27.9%
Some College/Assoc. Degree	114,087	37.3%	27.3%	29.2%
Bachelor's Degree or Greater	104,439	34.2%	35.8%	29.4%
Total	**305,523**	**100.0%**	**100.0%**	**100.0%**

- **The area's 2016 total population is 453,036 with projected growth of 3.8% over the next five years.**
  - This expected rate of growth is less than Virginia and about the same as the U.S. rate.
- **The median household income ($66,240)** is 1% higher than the state and 19% higher than the U.S. median income.
- **Population by age group:**
  - 16% of this population is age 25-34, which is a greater percent compared to Virginia (13.6%) and the U.S. (13.3%).
  - The 65+ age cohort (12.8%) is a lower percent compared to Virginia (14.4%) and the U.S. (15.1%).
- **5.5% of the population age 25+ has only some high school education or less.**
  - This is less than half of Virginia (11.8%) and the U.S. (13.6%).
- **37.3% of the population age 25+ has some college or an associate degree, a much higher rate than either Virginia or the U.S.**

Area-wide Key Demographic Characteristics, Cont.

DEMOGRAPHIC CHARACTERISTICS					
	2016	2021	% Change	Virginia % Change	USA % Change
Total Male Population	222,076	230,881	4.0%	4.5%	3.8%
Total Female Population	230,960	239,554	3.7%	4.4%	3.6%
Females, Child Bearing Age (15-44)	94,602	94,896	0.3%	1.3%	1.5%

HOUSEHOLD INCOME DISTRIBUTION				
	Income Distribution			
2016 Household Income	HH Count	% of Total	Virginia % of Total	USA % of Total
<$15K	12,056	6.9%	9.6%	12.3%
$15-25K	11,016	6.3%	8.3%	10.4%
$25-50K	39,291	22.5%	20.8%	23.4%
$50-75K	37,355	21.4%	17.6%	17.6%
$75-100K	25,290	14.5%	12.6%	12.0%
Over $100K	49,254	28.3%	31.1%	24.3%
Total	174,262	100.0%	100.0%	100.0%

RACE/ETHNICITY				
	Race/Ethnicity Distribution			
Race/Ethnicity	2016 Pop	% of Total	Virginia % of Total	USA % of Total
White Non-Hispanic	282,069	62.3%	62.5%	61.3%
Black Non-Hispanic	84,177	18.6%	18.9%	12.3%
Hispanic	37,127	8.2%	9.2%	17.8%
Asian & Pacific Is. Non-Hispanic	30,369	6.7%	6.3%	5.4%
All Others	19,294	4.3%	3.1%	3.1%
Total	453,036	100.0%	100.0%	100.0%

- **The projected growth of Females, Child Bearing Age (15-44) is 0.3%, which is much lower than the state (1.3%) and the U.S. (1.5%).**
- **13.2% of the population has a household income below $25,000.**
  - This is lower than both Virginia (17.9%) and the U.S. (22.7%).
  - 200% of the current Federal Poverty Level for a family of four is $48,600.
- **8.2% of the population is Hispanic, which is lower than both Virginia (9.2%) and the U.S. (17.8%).**

Key Demographic Data by ZIP Code

ZIP Code & Name		Population and Age							
		2016 Population	Projected 2016-2021 % Change in Total Pop.	2016 % of Total Pop. that is age 65+	Projected 2016-2021 % Change in Pop. age 65+	2016 % of Total Pop. that is age 0-17	Projected 2016-2021 % Change in Pop. age 0-17	2016 % of Female Pop. that is age 15-44	Projected 2016-2021 % Change in Female Pop. age 15-44
23451	Oceanfront	43,896	4.5%	16.7%	18.1%	20.1%	5.6%	39.1%	1.6%
23452	Little Neck	60,012	1.7%	13.5%	13.2%	23.2%	2.0%	40.9%	-0.9%
23453	Green Run	37,558	3.8%	7.7%	31.6%	27.3%	0.9%	44.5%	-1.1%
23454	Hilltop	62,589	3.9%	12.3%	19.6%	23.1%	1.7%	40.7%	0.8%
23455	Bayside	51,566	3.8%	15.5%	15.1%	20.7%	5.5%	39.6%	0.9%
23456	Princess Anne	55,680	5.9%	10.9%	34.5%	23.9%	-0.9%	38.6%	2.2%
23457	Back Bay	4,384	4.5%	16.7%	24.5%	18.6%	-1.7%	33.7%	3.2%
23462	Witchduck	62,361	4.0%	11.4%	15.0%	24.3%	6.8%	44.8%	-0.5%
23463	CBN	402	9.5%	4.7%	26.3%	24.9%	19.0%	57.4%	2.4%
23464	Kempsville	74,588	3.4%	13.4%	20.9%	22.6%	2.0%	40.2%	0.0%
	Total	**453,036**	**3.8%**	**12.8%**	**19.8%**	**23.0%**	**2.8%**	**41.0%**	**0.3%**
	Virginia	**8,428,339**	**4.4%**	**14.4%**	**20.2%**	**22.3%**	**2.0%**	**39.2%**	**1.3%**
	United States	**322,431,073**	**3.7%**	**15.1%**	**17.6%**	**23.0%**	**0.9%**	**38.7%**	**1.5%**

- The highest projected growth area in the SVBGH service region is Princess Anne; 4 ZIP codes are expected to grow at a higher rate than Virginia and the U.S. in the next 5 years.
- Although the % of total population aged 65+ is lower than Virginia and U.S. overall, the 65+ growth rate in the SVBGH service area is expected to exceed national rates; 2 ZIP codes may have > 30% growth.
- The pediatric population is expected to grow at more than three times the national rate (2.8% vs 0.9%), although Princess Anne and Back Bay are predicted to have declines.
- The female population of childbearing age (15-44) in this service area is projected to grow by 0.3%, with Little Neck, Green Run, and Witchduck likely experiencing declines.

Source: Truven/Market Expert

Key Demographic Data by ZIP Code

ZIP Code & Name		Race and Ethnicity			Income and Education	
		2016 % of Pop.: Black, Non-Hispanic	2016 % of Pop.: Asian, Non-Hispanic	2016 % of Pop.: Hispanic Ethnicity (Any Race)	% of Households with Income Below $25,000	% of Pop age 25+ that did not Graduate from High School
23451	Oceanfront	9.3%	2.1%	7.6%	17.6%	4.0%
23452	Little Neck	18.5%	4.8%	9.4%	13.2%	7.0%
23453	Green Run	27.1%	11.3%	10.7%	11.6%	5.1%
23454	Hilltop	11.2%	3.8%	7.9%	15.0%	4.4%
23455	Bayside	14.7%	5.6%	7.7%	12.8%	5.1%
23456	Princess Anne	15.1%	9.1%	7.0%	6.2%	4.0%
23457	Back Bay	4.2%	1.2%	3.0%	9.9%	8.6%
23462	Witchduck	29.8%	6.0%	9.3%	15.2%	7.7%
23463	CBN	26.6%	5.2%	7.2%	23.2%	6.8%
23464	Kempsville	22.8%	11.0%	7.2%	12.5%	5.9%
	Total	**18.6%**	**6.7%**	**8.2%**	**13.2%**	**5.5%**
	Virginia	**18.9%**	**6.3%**	**9.2%**	**17.9%**	**11.8%**
	United States	**12.3%**	**5.4%**	**17.8%**	**22.7%**	**13.6%**

- Green Run has the highest amount of racial/ethnic diversity.
- The SVBGH service area overall has a similar portion of the population to the state that is Black, Non-Hispanic; 4 ZIP codes have a higher portion than the Virginia average.
- This area has a 54% smaller proportion of Hispanic population than the U.S. as a whole (8.2% vs 17.8%); the ZIP code with the largest proportion of Hispanic population is Green Run in Virginia Beach.
- Every ZIP code in the SVBGH service area has a lower percent of households with income below $25K than either Virginia or the U.S. ranging from 17.6% to 6.2% of households.
- Every ZIP code in the SVBGH service area has a much lower percent of population age 25+ that did not graduate high school than either Virginia or the U.S.

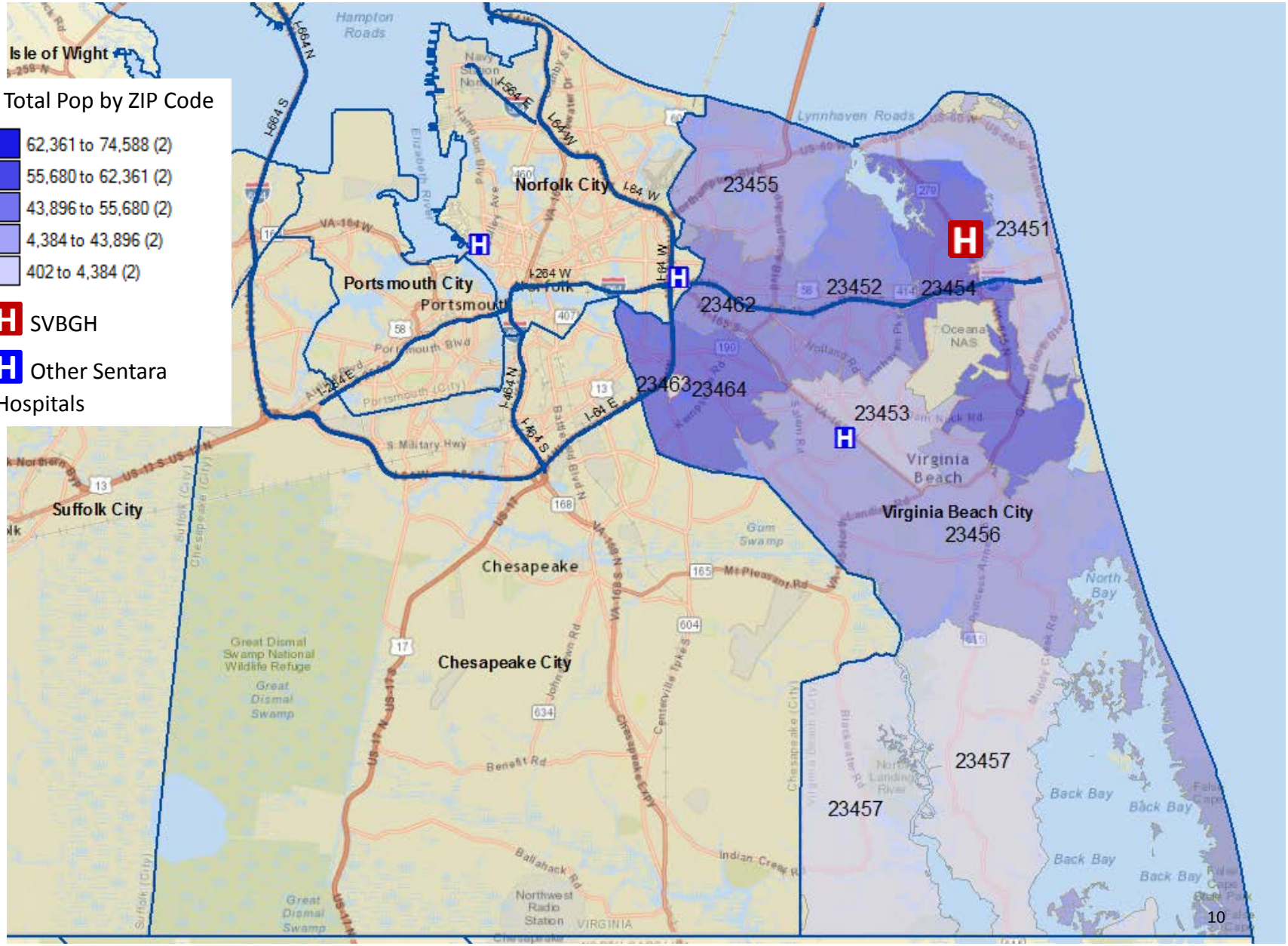
Source: Truven/Market Expert

Key Demographic Data by ZIP Code

ZIP Code	ZIP Name	Total Population 2016	Total Population 2021	% Change 2016-2021	2016 Pop Density / Sq Mile	% of Service Area Pop	% White NonHisp	% Black NonHisp	% Hispanic	% Asian NonHisp	% Other NonHisp
23451	Oceanfront	43,896	45,890	4.5%	2092	9.7%	77.8%	9.3%	7.6%	2.1%	3.3%
23452	Little Neck	60,012	61,054	1.7%	3577	13.2%	62.9%	18.5%	9.4%	4.8%	4.5%
23453	Green Run	37,558	38,999	3.8%	3942	8.3%	45.7%	27.1%	10.7%	11.3%	5.2%
23454	Hilltop / Oceana	62,589	65,023	3.9%	2547	13.8%	73.1%	11.2%	7.9%	3.8%	4.1%
23455	Bayside	51,566	53,533	3.8%	2619	11.4%	68.3%	14.7%	7.7%	5.6%	3.7%
23456	Princess Anne	55,680	58,970	5.9%	867	12.3%	64.7%	15.1%	7.0%	9.1%	4.2%
23457	Back Bay	4,384	4,581	4.5%	67	1.0%	89.6%	4.2%	3.0%	1.2%	2.0%
23462	Witchduck	62,361	64,850	4.0%	5477	13.8%	50.1%	29.8%	9.3%	6.0%	4.8%
23463	CBN	402	440	9.5%	1336	0.1%	55.2%	26.6%	7.2%	5.2%	5.7%
23464	Kempsville	74,588	77,095	3.4%	4354	16.5%	54.5%	22.8%	7.2%	11.0%	4.4%
Total SPAH Service Area		453,036	470,435	3.8%	1810	100.0%	62.3%	18.6%	8.2%	6.7%	4.3%
Virginia		8,428,339	8,801,874	4.4%	213.8		62.5%	18.9%	6.3%	9.2%	3.1%
USA		322,431,073	334,341,965	3.7%	91.4		61.3%	12.3%	5.4%	17.8%	3.1%

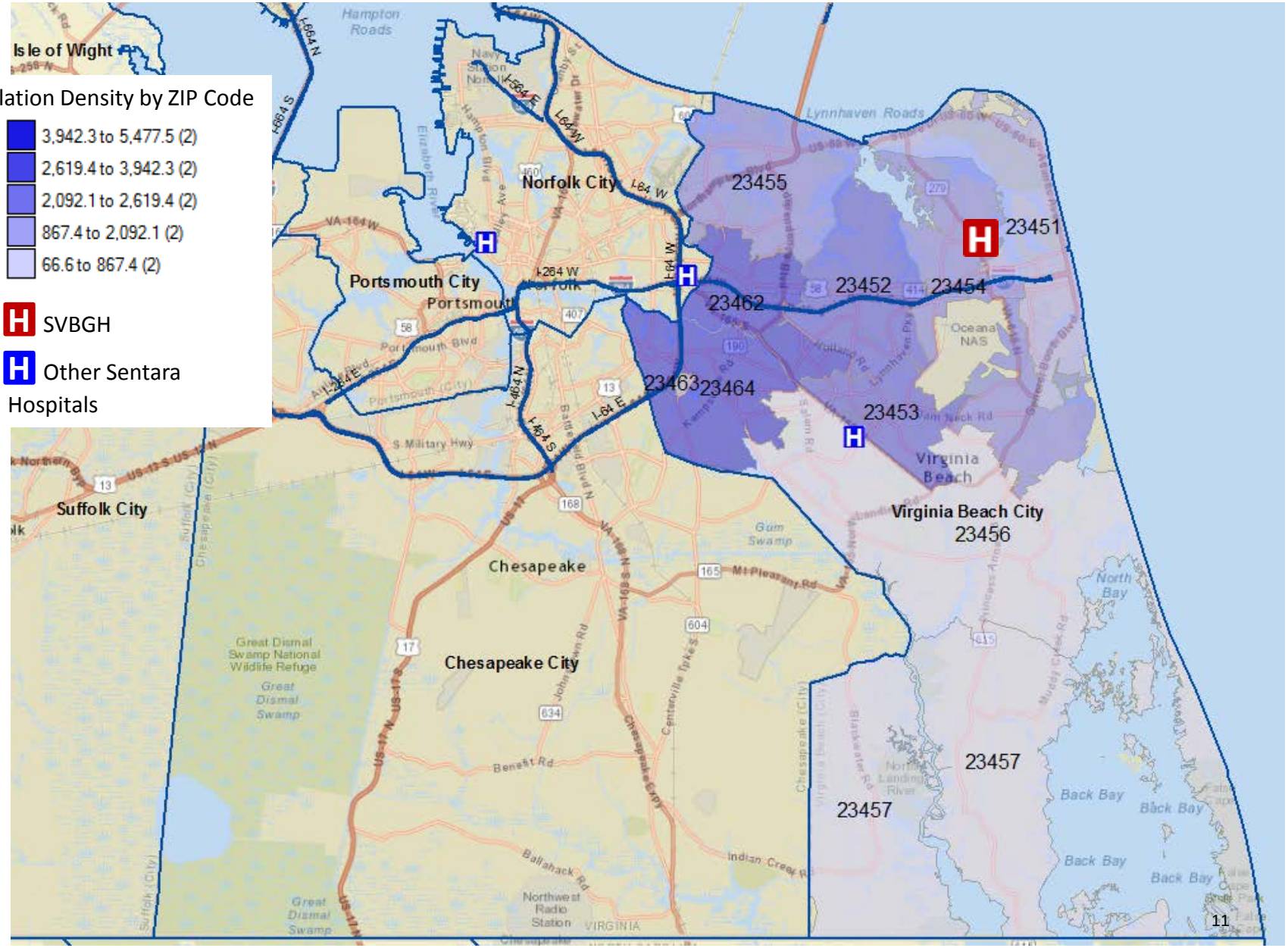
Source: Truven/Market Expert

2016 Total Population by ZIP Code



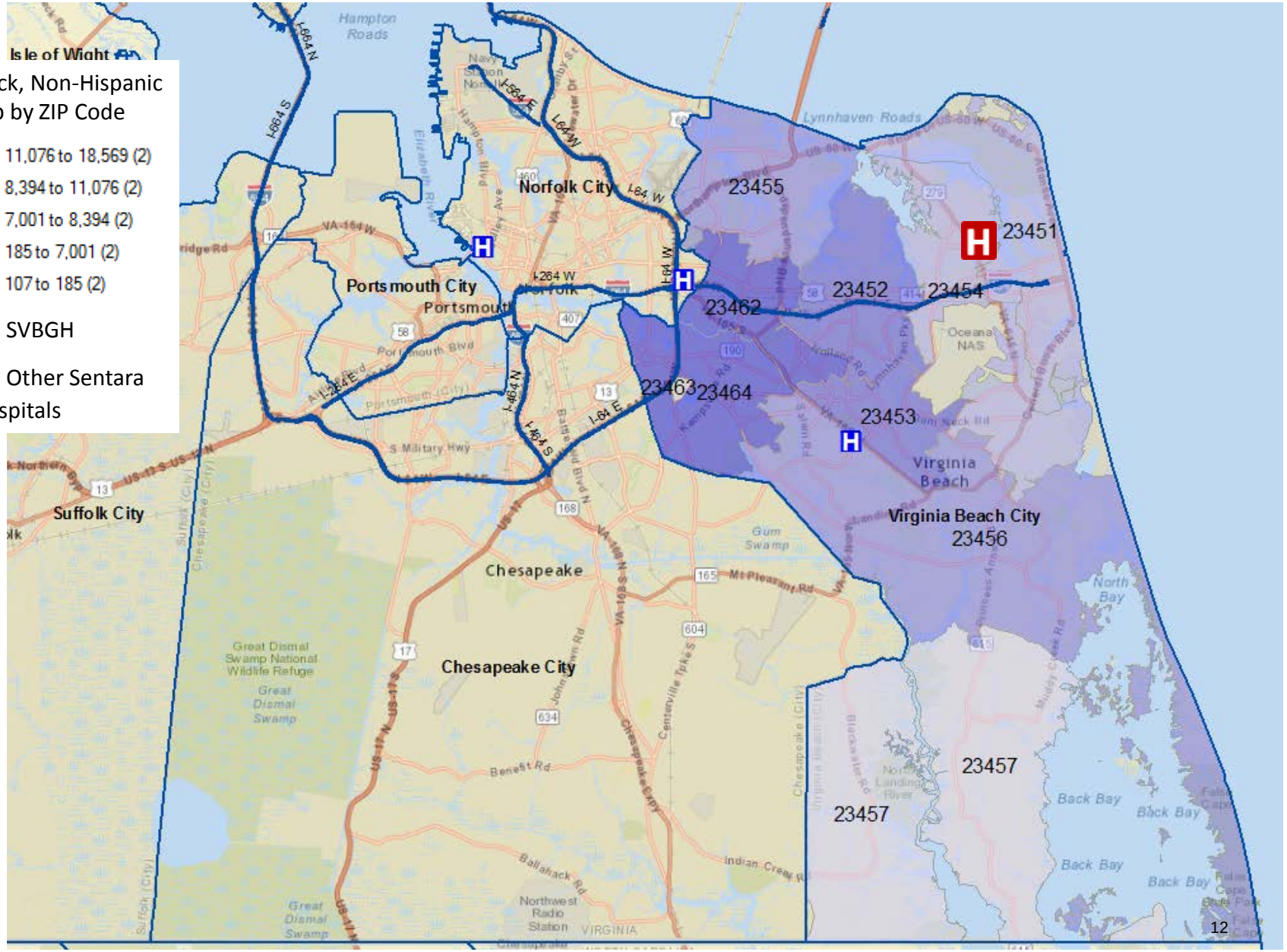
Source: Truven/Market Expert

2016 Population Density by ZIP Code



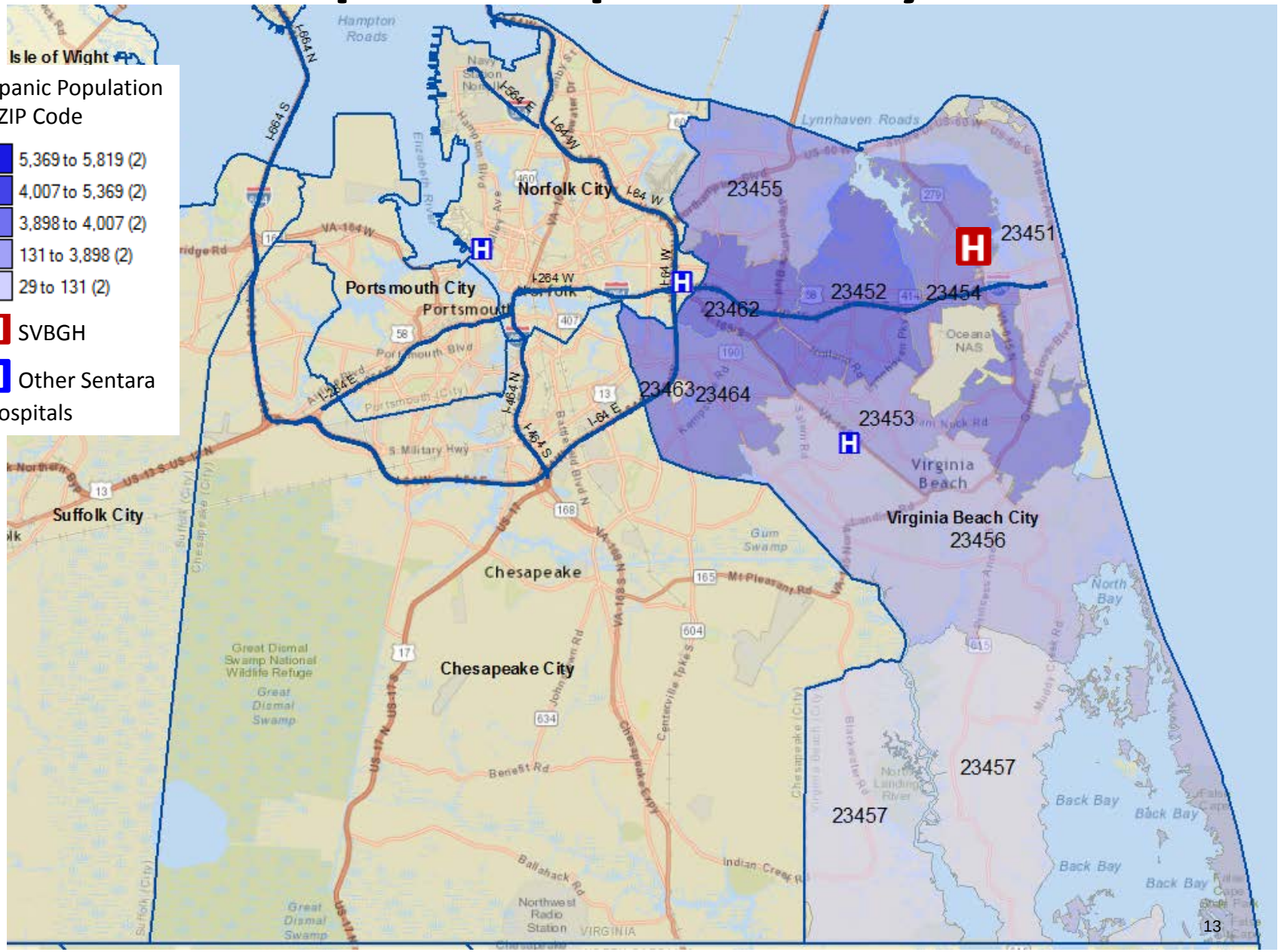
Source: Truven/Market Expert

2016 Black, Non-Hispanic Population by ZIP Code



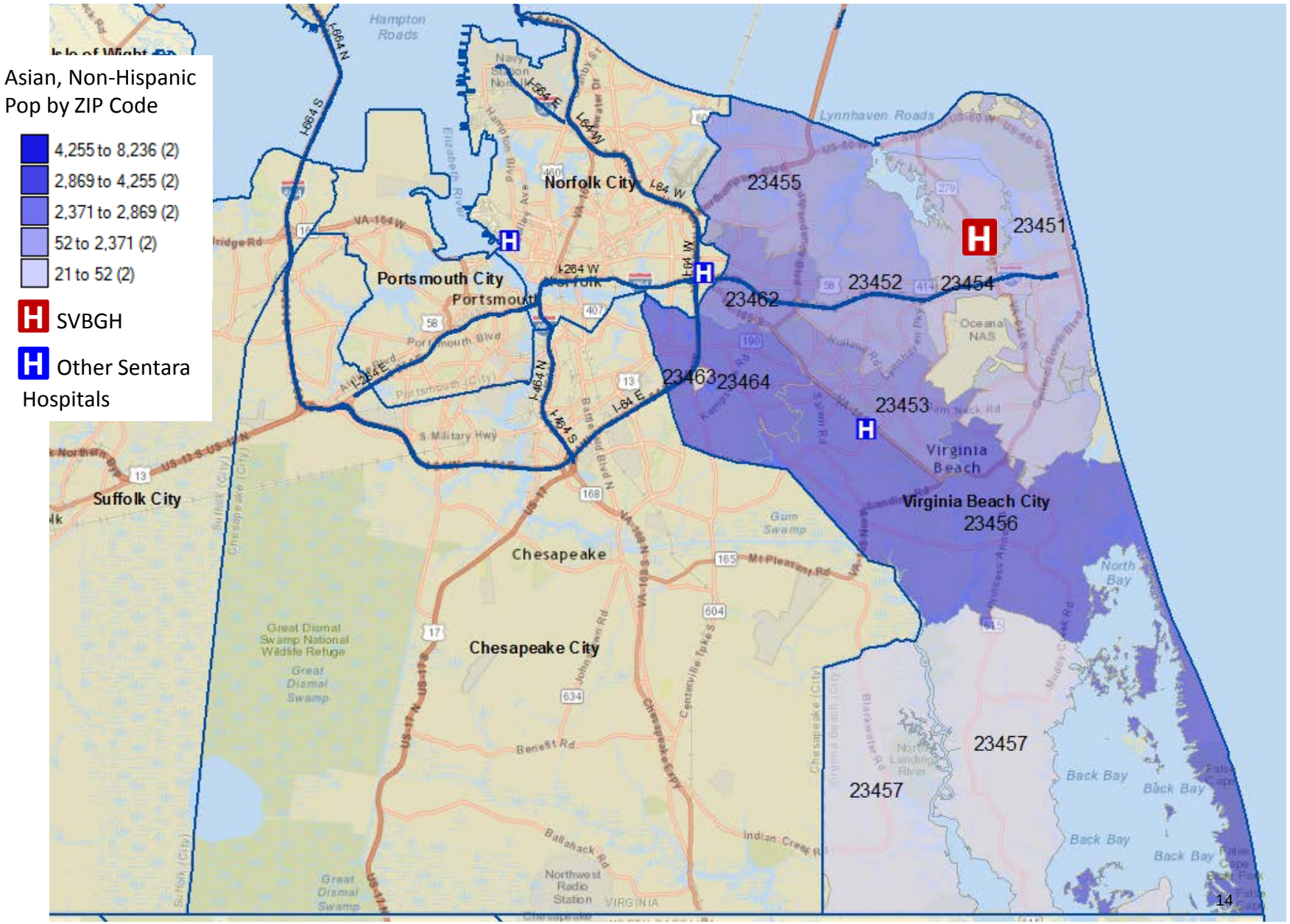
Source: Truven/Market Expert

2016 Hispanic Population by ZIP Code



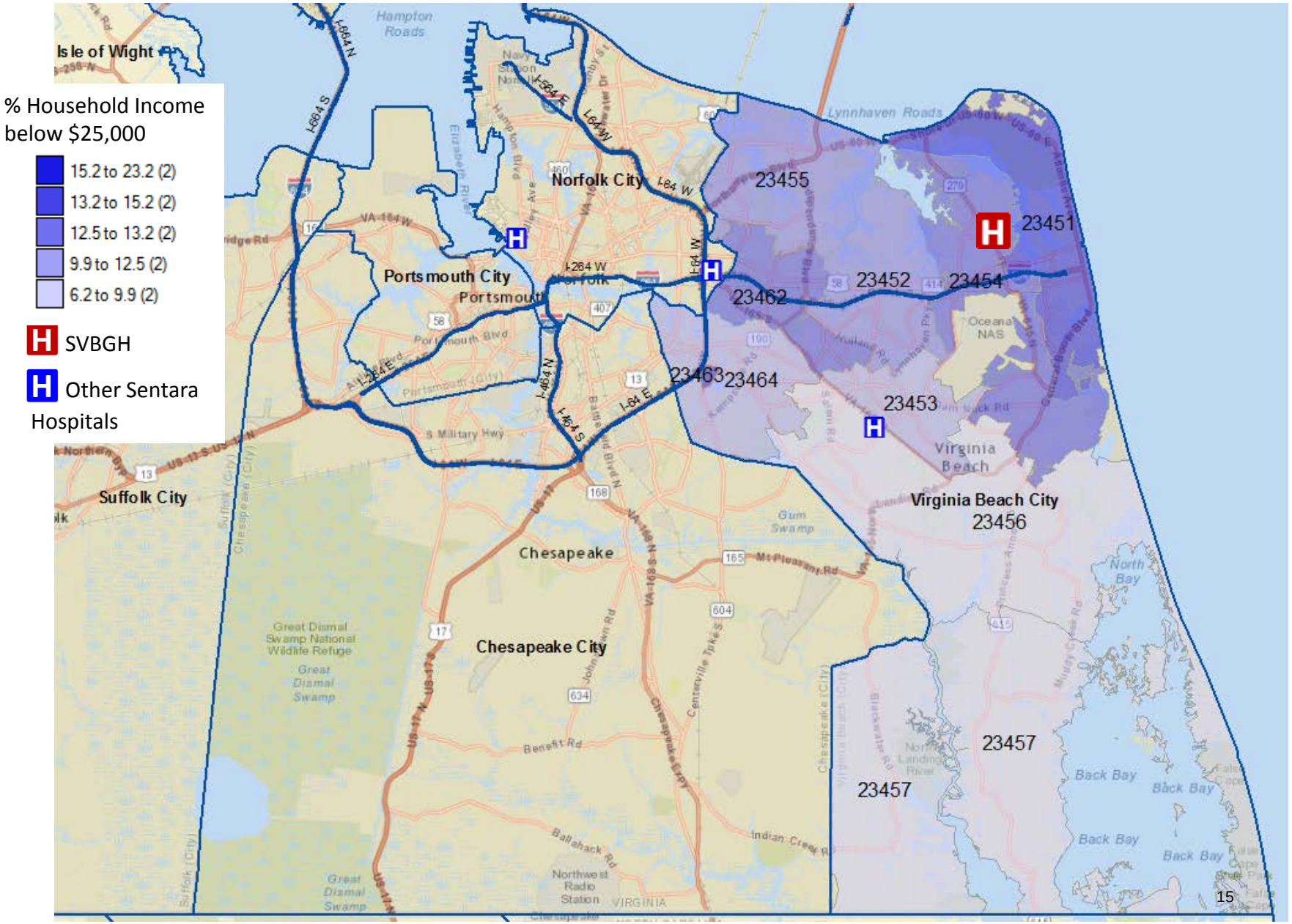
Source: Truven/Market Expert

2016 Asian, Non-Hispanic Population by ZIP Code



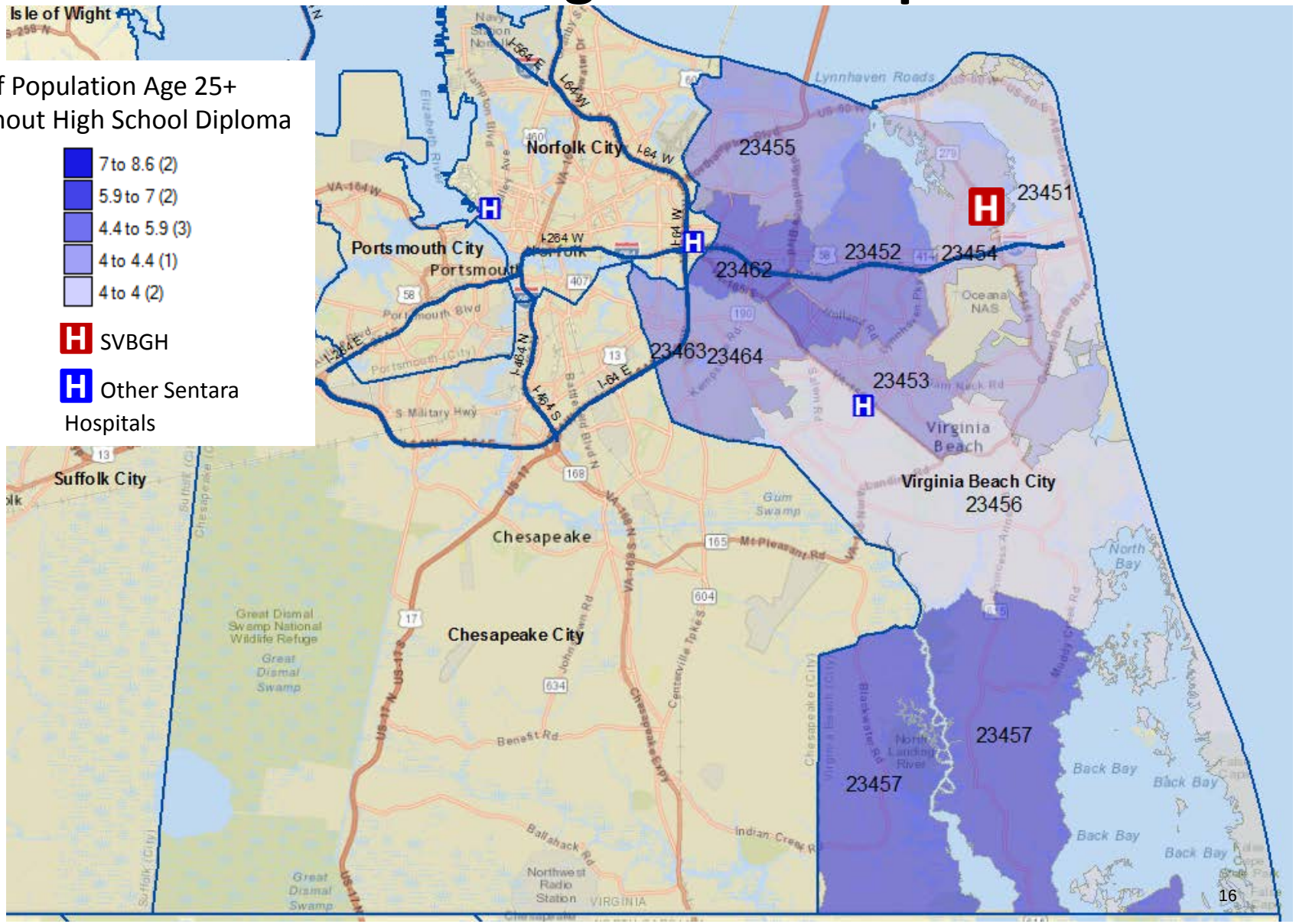
Source: Truven/Market Expert

2016 % of Households with Income below $25,000



Source: Truven/Market Expert

2016 % of Population Age 25+ without a High School Diploma



Source: Truven/Market Expert

ZIP Codes Included in SVBGH Service Area

ZIP Code	City/County	ZIP Code Name
23451	Virginia Beach	Oceanfront
23452	Virginia Beach	Little Neck
23453	Virginia Beach	Green Run
23454	Virginia Beach	Hilltop / Oceana
23455	Virginia Beach	Bayside
23456	Virginia Beach	Princess Anne
23457	Virginia Beach	Back Bay
23462	Virginia Beach	Witchduck
23463	Virginia Beach	CBN
23464	Virginia Beach	Kempsville

Health Status Indicators Report

Prepared for Sentara Virginia Beach General Hospital

By Community Health Solutions

July 2016

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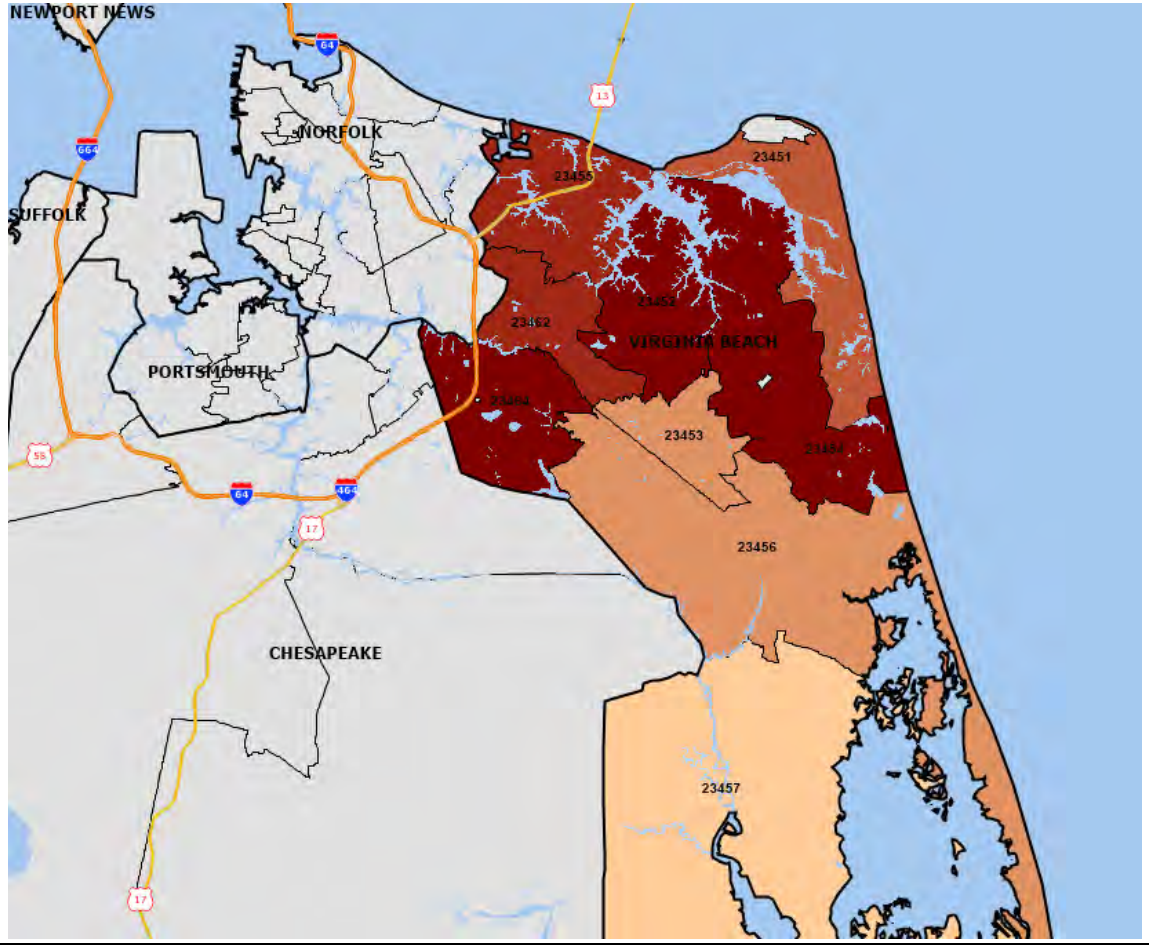
Introduction

This document presents a health status indicators report for Sentara Virginia Beach General Hospital. The report was commissioned by Sentara Healthcare and Sentara Virginia Beach General Hospital, and produced by Community Health Solutions. The study presents health status indicators for the Sentara Virginia Beach General Hospital service area of nine zip codes, all of which fall within Virginia Beach City.

The Study Region



The study draws upon multiple data sources to present seven health indicator profiles in the following categories:

1. Mortality Profile
2. Maternal and Infant Health Profile
3. Preventable Hospitalization Profile
4. Behavioral Health Hospitalization Profile
5. Adult Health Risk Factor Profile
6. Youth Health Risk Factor Profile
7. Uninsured Profile

The profiles are presented in order in the following pages. Following the profiles, *Appendix A* presents a set of Zip Code-Level maps of selected indicators. *Appendix B* provides detail on the methods used to produce the indicators.

Study Approach

This document contains a wide array of community health indicators from multiple sources. By design, the profiles do not include every possible indicator of community health. The profiles are focused on a core set of indicators that provide broad insight into community health, and for which there were readily available data sources. The results of this profile can be used to evaluate community health status compared to the Commonwealth of Virginia overall. The results can also be helpful for determining the number of people affected by specific health concerns. The analysis objectives for this study included the following:

- Provide a snapshot analysis (for the most current year of data) for each indicator profile.
- Provide a trend analysis (for the 2011-2013 timeframe) of selected indicators as requested by Sentara Healthcare.
- Provide both counts and rates (where available) for all indicators. *Counts* refer to the number of cases of a particular health condition, such as the number of newborns with low birth weight. *Rates* refer to the number of cases per capita, such as the percent of all newborns with low birth weight. Counts are helpful for understanding the magnitude of need within a region, while rates are helpful for comparing health indicators across geographies with different population sizes (i.e. the study region vs. Virginia statewide).
- For the snapshot indicators, identify where the study region rates were better or worse (higher or lower, depending on the indicator), than the state rate. For this report, a study region rate within one percent of the state rate is considered comparable (no difference).
- For the trend indicators, identify where the study region trend differs from the state trend. For this report, a percent change of one percent is considered relatively stable (no change).
- This analysis was conducted at the zip code level. There are indicators (e.g. pregnancy indicators) and rate-calculation models (age adjustment) that are not available at this geographic level.

1. Mortality Profile

This profile presents indicators of death counts and rates for the local area compared to Virginia. The indicators are based on analysis of death record data provided by the Virginia Department of Health, and demographic data from Alteryx, Inc. (see *Appendix B* for details on methods.)

Mortality Snapshot (2013)

As shown in *Exhibit 1A*:

- In 2013 there were 2,936 deaths in the study region.
- The leading causes of death in the study region were Malignant Neoplasms (cancer), Heart Disease, Cerebrovascular Disease (stroke), Unintentional Injury and Chronic Lower Respiratory Disease.
- The death rates for the study region were lower (better) than the state rates for all deaths combined, and for all leading causes of death.

Mortality Trend – All Deaths (2011-2013)

- **Trend by Cause:** As shown in *Exhibit 1B,* from 2011 to 2013, study region rates:
  - Increased for all deaths combined, and for Malignant Neoplasms (cancer), Heart Disease, Unintentional Injury, Cerebrovascular Diseases (stroke), Diabetes, Influenza and Pneumonia, and Nephritis and Nephrosis; and
  - Declined for Chronic Lower Respiratory Diseases, Alzheimer's Disease, and Septicemia.
  - Unlike the state, the study region rates increased for Malignant Neoplasms (cancer), Heart Disease, Unintentional Injury, Cerebrovascular Diseases (stroke), Diabetes, and Influenza and Pneumonia.
  - Unlike the state, the study region rates declined for Chronic Lower Respiratory Disease and Septicemia.

- **Trend by Race/Ethnicity:** As shown in *Exhibit 1C,* from 2011 to 2013, study region counts:
  - Increased for the Black/African American and White populations;
  - Declined for the Asian population; and
  - Remained relatively stable for the Hispanic Ethnicity population.
  - Unlike the state, the study region counts increased for the White population.
  - Unlike the state, the study region counts declined for the Asian population.
  - Unlike the state, the study region counts remained relatively stable for the Hispanic Ethnicity population.

- **Trend by Sex:** As shown in *Exhibit 1D,* from 2011 to 2013 study region counts increased for the both female and male populations. The study region trend was consistent with the statewide trend.

Premature Death Trends (2011-2013)

- **Definition:** Consistent with conventions in the field, premature mortality can be defined as deaths that occur before age 75.
- **Leading Causes:** As shown in *Exhibit 1E*, over the 2011 to 2013 time period, roughly 44% of all deaths could be classified as preventable deaths.
- **Trend by Cause:** As shown in *Exhibit 1E*, from 2011-2013, study region premature death counts:
    - Increased for all premature deaths combined, and for Malignant Neoplasms (cancer), Heart Disease, Unintentional Injury, Cerebrovascular Diseases (stroke), Diabetes, Chronic Liver Disease, and Nephritis and Nephrosis;
    - Declined for Suicide and Chronic Lower Respiratory Diseases; and
    - Remained stable for Septicemia.
    - Unlike the state, the study region counts increased for Malignant Neoplasms (cancer), Unintentional Injury, and Diabetes.
    - Unlike the state, the study region counts declined for Suicide and Chronic Lower Respiratory Diseases.
    - Unlike the state, the study region counts remained relatively stable for Septicemia.

- **Trend by Race/Ethnicity:** As shown in *Exhibit 1F,* from 2011 to 2013, study region premature death counts:
    - Increased for the Black/African American and White populations; and
    - Declined for the Asian and Hispanic Ethnicity populations.
    - Unlike the state, the study region counts declined for the Asian and Hispanic Ethnicity populations.

- **Trend by Sex:** As shown in *Exhibit 1G*, from 2011 to 2013, the number of premature deaths in the study region increased for both the female and male populations. The study region trend was consistent with the statewide trend.

Exhibit 1A. Mortality Snapshot (2013)

Indicator	Virginia	Study Region
Counts		
Deaths by All Causes	62,309	2,936
Counts-Leading 14 Causes of Death		
Malignant Neoplasms, Deaths	14,348	728
Heart Disease, Deaths	13,543	587
Cerebrovascular Diseases, Deaths	3,278	149
Unintentional Injury, Deaths	2,794	143
Chronic Lower Respiratory Diseases, Deaths	3,168	129
Diabetes Mellitus, Deaths	1,618	81
Nephritis and Nephrosis, Deaths	1,547	69
Alzheimer's Disease, Deaths	1,634	69
Influenza and Pneumonia, Deaths	1,430	67
Septicemia, Deaths	1,464	66
Suicide, Deaths	1,047	46
Chronic Liver Disease, Deaths	836	39
Parkinson’s Disease, Deaths	549	25
Primary Hypertension and Renal Disease, Deaths	629	21
Crude Death Rates per 100,000 Population		
Deaths by All Causes	755.5	655.2
Malignant Neoplasms, Deaths	174.0	162.5
Heart Disease, Deaths	164.2	131.0
Cerebrovascular Diseases, Deaths	39.7	33.2
Unintentional Injury, Deaths	33.9	31.9
Chronic Lower Respiratory Diseases, Deaths	38.4	28.8
Diabetes Mellitus, Deaths	19.6	18.1
Nephritis and Nephrosis, Deaths	18.8	15.4
Alzheimer's Disease, Deaths	19.8	15.4
Influenza and Pneumonia, Deaths	17.3	15.0
Septicemia, Deaths	17.8	14.7
Suicide, Deaths	12.7	10.3
Chronic Liver Disease, Deaths	10.1	8.7
Primary Hypertension and Renal Disease, Deaths	7.6	--
Parkinson's Disease, Deaths	6.7	--

Note: Rates are not calculated where n<30.Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Exhibit 1B. Mortality Trend (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
All Deaths (Leading 10 Causes)					
Total Deaths (All Causes)	2,745	2,818	2,936	3%	7%
Malignant Neoplasms (Cancer)	635	719	728	1%	15%
Heart Disease	540	577	587	3%	9%
Chronic Lower Respiratory Disease	155	141	129	2%	-17%
Unintentional Injury	133	114	143	2%	8%
Cerebrovascular Disease (Stroke)	122	135	149	-1%	22%
Alzheimer's Disease	104	73	69	-9%	-34%
Septicemia	73	53	66	7%	-10%
Diabetes Mellitus	67	79	81	-1%	21%
Influenza and Pneumonia	60	45	67	2%	12%
Nephritis and Nephrosis	60	67	69	9%	15%
Crude Death Rates per 100,000 Population					
Total Deaths (All Causes)	633.4	640.2	655.2	2%	3%
Malignant Neoplasms (Cancer)	146.5	163.4	162.5	-1%	11%
Heart Disease	124.6	131.1	131.0	1%	5%
Chronic Lower Respiratory Disease	35.8	32.0	28.8	1%	-20%
Unintentional Injury	30.7	25.9	31.9	1%	4%
Cerebrovascular Disease (Stroke)	28.2	30.7	33.2	-3%	18%
Alzheimer's Disease	24.0	16.6	15.4	-10%	-36%
Septicemia	16.8	12.0	14.7	5%	-13%
Diabetes Mellitus	15.5	17.9	18.1	-2%	17%
Influenza and Pneumonia	13.8	10.2	15.0	0%	8%
Nephritis and Nephrosis	13.8	15.2	15.4	7%	11%

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Exhibit 1C. All Death Trend by Race/Ethnicity (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Asian	102	95	92	15%	-10%
Black/African American	440	449	473	4%	8%
White	2,189	2,267	2,339	1%	7%
Hispanic Ethnicity	53	42	53	8%	0%
Notes: Deaths with an Other/Unknown race were not included in the analysis. Hispanic is a classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.					
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.					

Exhibit 1D. All Death Trend by Sex (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Female	1,437	1,457	1,509	3%	5%
Male	1,308	1,361	1,427	4%	9%
Notes: Deaths with an Other/Unknown sex were not included in the analysis.					
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.					

Exhibit 1E. Leading Causes – Premature Death Trend (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Premature Deaths (Leading 10 Causes)					
Total Premature Deaths (All Causes)	1,198	1,223	1,309	4%	9%
Malignant Neoplasms	355	397	429	0%	21%
Heart Disease	197	218	213	6%	8%
Unintentional Injury	85	73	95	-2%	12%
Suicide	62	51	43	0%	-31%
Chronic Lower Respiratory Diseases	53	49	38	1%	-28%
Cerebrovascular Diseases	41	46	55	5%	34%
Diabetes	38	34	42	-1%	11%
Septicemia	28	27	28	11%	0%
Chronic Liver Disease	24	34	33	21%	38%
Nephritis and Nephrosis	17	23	26	16%	--
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.					

Exhibit 1F. Premature Mortality Trend by Race/Ethnicity (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Asian	56	54	51	3%	-9%
Black/African American	286	265	293	3%	2%
White	846	900	942	2%	11%
Hispanic Ethnicity	34	23	25	0%	--
Notes: Deaths with an Other/Unknown race were not included in the analysis. Hispanic is a classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.					
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.					

Exhibit 1G. Premature Mortality Trend by Sex (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Female	536	520	566	3%	6%
Male	662	703	743	4%	12%
Notes: Deaths with an Other/Unknown sex were not included in the analysis.					
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.					

2. Maternal and Infant Health Profile

This profile presents indicators of maternal and infant health for the local area compared to Virginia. The indicators are based on analysis of birth record data provided by the Virginia Department of Health, and demographic data from Alteryx, Inc. (see *Appendix B* for details on methods.)

Maternal and Infant Health Snapshot (2013)

- As shown in *Exhibit 2A,* in 2013 there were 5,998 live births in the study region. Among the live births were 430 low weight births, 730 late prenatal care births, 1,850 non-marital births, and 246 births to teens.
- The study region had higher rates than Virginia as a whole for live births overall, and for births to teens age 18-19. The study region also had lower (better) rates than Virginia as a whole for most other maternal and infant health indicators.

Maternal and Infant Health Trend (2011-2013)

- **Select Birth Indicators**. As shown in *Exhibit 2B*, from 2011 to 2013, the study region rates/percentages:
  - Declined for total live births and low weight births; and
  - Remained relatively stable for non-marital births.
  - Unlike the state, the study region percentages declined for low weight births.

- **Teenage Births Trend by Age Group**. As shown in *Exhibit 2C*, from 2011 to 2013, the study region counts declined for all births to teens. The study region trends were consistent with the statewide trends.
- **Teenage Births Trend Race/Ethnicity**. As shown in *Exhibit 2D,* from 2011 to 2013 there was a decline in the number of teen births among all race/ethnic groups. The study region trends were consistent with the statewide trends.

Exhibit 2A. Maternal and Infant Health Snapshot (2013)

Indicator	Virginia	Study Region
Counts		
Total Live Births	101,977	5,998
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	8,178	430
Late Prenatal Care (No Prenatal Care in First 13 Weeks)	13,435	730
Non-Marital Births	35,289	1,850
Live Births to Teens Age 10-19	5,316	246
Live Births to Teens Age 18-19	4,073	202
Live Births to Teens Age 15-17	1,208	42
Live Births to Teens Age <15	35	2
Rates		
Live Birth Rate per 1,000 Population	12.3	13.4
Low Weight Births pct. of Total Live Births	8%	7%
Late Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	13%	12%
Non-Marital Births pct. of Total Live Births	35%	31%
Teenage (age 10-19) Live Birth Rate per 1,000 Teenage Female Population (age 10-19)	10.3	8.7
Teenage (age 18-19) Live Birth Rate per 1,000 Teenage Female Population (age 18-19)	36.4	40.9
Teenage (age 15-17) Live Birth Rate per 1,000 Teenage Female Population (age 15-17)	8.0	4.6
Teenage (age <15) Live Birth Rate per 1,000 Teenage Female Population (age <15)	0.1	0.1
Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B.		

Exhibit 2B. Select Birth Indicators Trend (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Total Live Births	6,237	6,262	5,998	-1%	-4%
Low Weight Births	510	528	430	0%	-16%
Non Marital Births	1,931	2,016	1,850	-3%	-4%
Rates	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Total Live Births (per 1,000 population)	14.4	14.2	13.4	-3%	-7%
Low Weight (as a percent of Total Live Births)	8%	8%	7%	0%	-12%
Non Marital Births (as a percent of Total Live Births)	31%	32%	31%	-1%	0%
Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B.					

Exhibit 2C. Teenage Births Trend by Age (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Teenage (Age 10-19) Live Births						
Age	Total Teenage Live Births	299	312	246	-19%	-18%
	18-19	226	245	202	-15%	-11%
	15-17	71	65	42	-29%	-41%
	<15	2	2	2	-39%	--
Note: Percent change is not calculated where n<30. Births with unknown age were not included in the analysis.						
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.						

Exhibit 2D. Teenage Births Trend by Race/Ethnicity (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Teenage (Age 10-19) Live Births						
Race	Black/African American	126	120	94	-23%	-25%
	White	144	153	115	-26%	-20%
Ethnicity	Hispanic Ethnicity	29	29	25	-5%	--
Note: Percent change is not calculated where n<30. Births with an Other/Unknown race were not included in the analysis. Hispanic is classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.						
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.						

3. Preventable Hospitalization Profile

The Agency for Healthcare Research and Quality (AHRQ) defines a set of conditions (called Prevention Quality Indicators, or 'PQIs') for which hospitalization should be avoidable with proper outpatient health care. This profile presents indicators of preventable hospitalizations based on PQI definitions for the study region compared to Virginia. High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents. The indicators are based on analysis of hospital discharge data provided by the Virginia Health Information (VHI), and demographic data from Alteryx, Inc. (see *Appendix B* for details on methods.) The analysis includes records of discharges of Virginia residents from Virginia hospitals excluding state and federal facilities.

Preventable Hospitalization Snapshot (2013)

As shown in *Exhibit 3A*:

- In 2013 there were 3,745 PQI hospital discharges from Virginia hospitals for residents of the study region.
- The leading PQI diagnoses in the study region were Congestive Heart Failure, COPD or Asthma in Older Adults (age 40+), Bacterial Pneumonia, Diabetes, and Urinary Tract Infection.
- The PQI discharge rates for the study region were higher (worse) than the Virginia rates for Congestive Heart Failure, Perforated Appendix, and Asthma in Younger Adults (age 18-39).

Preventable Hospitalization Trend (2011-2013)

- **By Leading Diagnoses.** As shown in *Exhibit 3B,* from 2011 to 2013, study region rates:
  - Increased for Congestive Heart Failure; and
  - Declined for Total PQIs, COPD or Asthma in Older Adults (age 40+), Bacterial Pneumonia, Diabetes, and Urinary Tract Infection.
  - Unlike the state, the study region rates increased for Congestive Heart Failure.
  - Unlike the state, the study region rates declined for Diabetes and Bacterial Pneumonia.

- **By Age Group**. As shown in *Exhibit 3C,* from 2011 to 2013, study region rates declined for all age groups. The study region trends were consistent with the statewide trends.

- **By Race/Ethnicity**. As shown in *Exhibit 3D*, from 2011 to 2013, study region rates declined for all race/ethnic groups. The study region trends were consistent with the statewide trends.

- **By Payer.** As shown in *Exhibit 3E*, from 2011 to 2013, study region counts:
  - Increased for the Medicare and Private Insurance populations; and
  - Declined for the Medicaid and Self-Pay/Uninsured populations.
  - Unlike the state, the study region counts increased for the Private Insurance population.
  - Unlike the state, the study region counts declined for the Self-Pay/Uninsured population.

Exhibit 3A. Preventable Hospitalization Snapshot (2013)

Indicator	Virginia	Study Region
Counts		
Total PQI Discharges (see note)	76,860	3,745
Congestive Heart Failure	18,239	1,037
COPD or Asthma In Older Adults (age 40+)	16,026	768
Bacterial Pneumonia	11,867	548
Diabetes	9,938	453
Urinary Tract Infection	8,452	366
Dehydration	7,743	338
Hypertension	2,768	117
Perforated Appendix	1,189	98
Angina	941	56
Asthma in Younger Adults (age 18-39)	444	47
Crude Rates per 100,000 Population		
Total PQI Discharges (see note)	932.0	835.7
Congestive Heart Failure	221.2	231.4
COPD or Asthma In Older Adults (age 40+)	194.3	171.4
Bacterial Pneumonia	143.9	122.3
Diabetes	120.5	101.1
Urinary Tract Infection	102.5	81.7
Dehydration	93.9	75.4
Hypertension	33.6	26.1
Perforated Appendix	14.4	21.9
Angina	11.4	12.5
Asthma in Younger Adults (age 18-39)	5.4	10.5
Note: The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons.		
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.		

Exhibit 3B. Preventable Hospitalization Trend by Diagnosis (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
Counts	**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Total PQI Discharges	3,754	3,653	3,745	-6%	0%
Congestive Heart Failure	893	960	1,037	-8%	16%
COPD or Asthma In Older Adults (age 40+)	758	667	768	-20%	1%
Bacterial Pneumonia	583	607	548	-29%	-6%
Diabetes	531	424	453	-2%	-15%
Urinary Tract Infection	388	392	366	-22%	-6%
Crude Rates per 100,000 Population					
Total PQI Discharges	866.2	829.9	835.7	-7%	-4%
Congestive Heart Failure	206.1	218.1	231.4	-9%	12%
COPD or Asthma In Older Adults (age 40+)	174.9	151.5	171.4	-21%	-2%
Bacterial Pneumonia	134.5	137.9	122.3	30%	-9%
Diabetes	122.5	96.3	101.1	0%	-17%
Urinary Tract Infection	89.5	89.1	81.7	-23%	-9%

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.

Exhibit 3C. Preventable Hospitalization Trend by Age Group (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts (Total PQI Discharges)		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
Age	Adults Age 18-29	183	169	168	-23%	-8%
	Adults Age 30-44	324	282	272	-21%	-16%
	Adults Age 45-64	1,014	945	996	-18%	-2%
	Seniors Age 65+	2,233	2,257	2,309	-20%	3%
Crude Rates per 100,000 Population						
Age	Adults Age 18-29	228.1	209.5	197.7	-24%	-13%
	Adults Age 30-44	361.2	311.0	295.6	-21%	-18%
	Adults Age 45-64	902.5	820.0	858.9	-19%	-5%
	Seniors Age 65+	4,807.3	4,539.4	4,709.5	-23%	-2%
Note: PQI Discharges with an unknown age were not included in the analysis.						
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.						

Exhibit 3D. Preventable Hospitalization Trend by Race/Ethnicity (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts (Total PQI Discharges)					**Virginia**	**Study Region**
Race	Asian	98	106	88	-11%	-10%
	Black/African American	894	851	873	-16%	-2%
	White	2,485	2,438	2,428	-22%	-2%
Ethnicity	Hispanic Ethnicity	75	51	9	-30%	--
Crude Rates per 100,000 Population						
Race	Asian	370.9	384.3	314.9	-24%	-15%
	Black/African American	1,047.9	985.4	993.7	-21%	-5%
	White	846.3	821.1	802.2	-19%	-5%
Ethnicity	Hispanic Ethnicity	249.7	172.3	--	-23%	--
Note: Rates and/or percent change are not calculated where n<30. PQI Discharges with an Other/Unknown race were not included in the analysis. Hispanic is classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.						
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.						

Exhibit 3E. Preventable Hospitalization Trend by Payer (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts (Total PQI Discharges)					**Virginia**	**Study Region**
Payer	Medicare	2,472	2,445	2,543	2%	3%
	Medicaid	299	291	215	-6%	-28%
	Private	252	267	265	-12%	5%
	Self-Pay/Uninsured	343	316	319	2%	-7%
Crude Rates per 100,000 Population						
Payer	Medicare	--	--	--	--	--
	Medicaid	--	--	--	--	--
	Private	--	--	--	--	--
	Self-Pay/Uninsured	--	--	--	--	--

Note: PQI Discharges with an unknown payer were not included in the analysis. Enrollment data were not available to calculate rates.

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.

4. Behavioral Health Hospitalization Profile

Behavioral health is another important indicator of community health status. The indicators in this Behavioral Health Hospitalization Profile are based on analysis of hospital discharge data provided by Virginia Health Information (VHI), and demographic data from Alteryx, Inc. (see Appendix B for details on methods.) The analysis includes records of discharges of adult Virginia residents from Virginia hospitals excluding state and federal facilities.
Due to the lack of reporting on the part of a regional child/adolescent psychiatric hospital, the analysis in this profile does not include data for residents age 0-17.

Behavioral Health Hospitalization Snapshot-Age 18+ (2013)

As shown in *Exhibit 4A*:

- In 2013 there were 2,829 behavioral health (BH) discharges for residents of the study region.
- The leading diagnoses for behavioral health hospitalization in the study region were Affective Psychoses, Schizophrenic Disorders, and Alcoholic Psychoses.
- The BH discharge rates for the study region were higher than the state rates for Affective Psychoses, Schizophrenic Disorders, Alcoholic Psychoses, Drug Psychoses, Symptoms Involving Head or Neck, and Altered Mental Status.

Behavioral Hospitalization Trend-age 18+ (2011-2013)

- **By Leading Diagnoses.** As shown in *Exhibit 4B*, from 2011 to 2013, study region rates:
  - Increased for Alcoholic Psychoses;
  - Declined for Schizophrenic Disorders; and
  - Remained relatively stable for Total BH Discharges (all BH diagnoses combined) and Affective Psychoses.
  - Unlike the state, the study region rate declined for Schizophrenic Disorders.
  - Unlike the state, the study region rates remained relatively stable for Total BH Discharges (all diagnoses combined) and Affective Psychoses.

- **By Age Group**. As shown in *Exhibit 4C*, from 2011 to 2013 from 2011 to 2013, study region rates:
  - Increased for residents age 30-64; and
  - Declined for residents age 18-29 and age 65+.
  - Unlike the state, the study region rate declined for the 18-29 age group.

- **By Sex.** As shown in *Exhibit 4D*, from 2011 to 2013, study region rates:
  - Increased for male residents; and
  - Declined for female residents.
  - The study region trends were consistent with the statewide trends.

- **By Race/Ethnicity.** As shown in *Exhibit 4E*, from 2011 to 2013, study region rates:
  - Increased for the White population;
  - Declined for the Asian population; and
  - Remained relatively stable for Black/African American population.
  - Unlike the state, the study region rate declined for the Asian population.

- **By Payer.** As shown in *Exhibit 4F*, from 2011 to 2013, study region counts:
  - Increased for the Medicaid and Self-Pay/Uninsured populations;
  - Declined for the Medicare population; and
  - Remained relatively stable for the Private Insurance population.
  - Unlike the state, the study region counts declined for the Medicare population.
  - Unlike the state, the study region counts remained relatively stable for the Private Insurance population.

Exhibit 4A. Behavioral Health Hospitalization Snapshot-Age 18+ (2013)

Indicator	Virginia	Study Region
Counts-BH Discharges		
Total BH Diagnoses	53,638	2,829
Counts-Leading 14 BH Diagnoses		
Affective Psychoses	22,078	1,308
Schizophrenic Disorders	8,064	463
Alcoholic Psychoses	4,033	304
Drug Psychoses	2,102	129
Alcohol Dependence Syndrome	2,388	110
Adjustment Reaction	2,031	65
Symptoms Involving Head or Neck	883	62
Other Nonorganic Psychoses	1,951	57
Altered Mental Status	976	55
Depressive Disorder, Not Elsewhere Classified	2,608	45
Drug Dependence	810	44
Neurotic Disorders	982	25
Other Organic Psychotic Conditions-Chronic	795	17
Non Dependent Abuse of Drugs	575	8
Note: Data for residents age 0-17 are not included. See details in Appendix B.		
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.		

Exhibit 4A. Behavioral Health Hospitalization Snapshot-Age 18+ (2013)- Continued

Indicator	Virginia	Study Region
Crude Rates Per 100,000 Population		
All Diagnoses	650.4	631.3
Affective Psychoses	267.7	291.9
Schizophrenic Disorders	97.8	103.3
Alcoholic Psychoses	48.9	67.8
Drug Psychoses	25.5	28.8
Alcohol Dependence Syndrome	29.0	24.5
Adjustment Reaction	24.6	14.5
Symptoms Involving Head or Neck	10.7	13.8
Other Nonorganic Psychoses	23.7	12.7
Altered Mental Status	11.8	12.3
Depressive Disorder, Not Elsewhere Classified	31.6	10.0
Drug Dependence	9.8	9.8
Neurotic Disorders	11.9	--
Other Organic Psychotic Conditions-Chronic	9.6	--
Non Dependent Abuse of Drugs	7.0	--
Note: Rates are not calculated where n<30. Data for residents age 0-17 are not included. See details in Appendix B.		
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.		

Exhibit 4B. Behavioral Health Hospitalization Trend by Leading Diagnoses-Age 18+ (2011-2013)

Indicator	Study Region			% Change (2011-2013)	
	2011	2012	2013	Virginia	Study Region
Counts					
Total BH Discharges (All Diagnoses)	2,739	2,960	2,829	3%	3%
Affective Psychoses	1,257	1,269	1,308	-1%	4%
Schizophrenic Disorders	493	508	463	1%	-6%
Alcoholic Psychoses	168	266	304	23%	81%
Crude Rates per 100,000 Population					
Total BH Discharges (All Diagnoses)	632.0	672.5	631.3	2%	0%
Affective Psychoses	290.1	288.3	291.9	-2%	1%
Schizophrenic Disorders	113.8	115.4	103.3	0%	-9%
Alcoholic Psychoses	38.8	60.4	67.8	21%	75%
Note: Data for residents age 0-17 are not included. See details in Appendix B.					
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.					

Exhibit 4C. Behavioral Health Hospitalization Trend by Age (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		2011	2012	2013	Virginia	Study Region
All BH Discharges						
Age	Adults Age 18-29	774	756	729	10%	-6%
	Adults Age 30-44	715	841	745	2%	4%
	Adults Age 45-64	912	995	1,025	3%	12%
	Seniors Age 65+	338	368	330	-4%	-2%
Crude Rates per 100,000 Population						
Age	Adults Age 18-29	964.9	937.3	857.7	7%	-11%
	Adults Age 30-44	797.1	927.6	809.6	2%	2%
	Adults Age 45-64	811.7	863.4	883.9	2%	9%
	Seniors Age 65+	727.7	740.1	673.1	-7%	-8%
Note: Data for residents age 0-17 are not included. Discharges with an unknown age were not included in the analysis. See details in Appendix B.						
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.						

Exhibit 4D. Behavioral Health Hospitalization Trend by Sex-Age 18+ (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
All BH Discharges						
Sex	Female	1,502	1,540	1,433	-1%	-5%
	Male	1,236	1,420	1,396	8%	13%
Crude Rates per 100,000 Population						
Sex	Female	674.6	684.6	625.7	-2%	-7%
	Male	586.6	659.8	637.1	7%	9%
Note: Discharges with an Other/Unknown sex were not included in the analysis. Data for residents age 0-17 are not included. See details in Appendix B.						
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.						

Exhibit 4E. Behavioral Health Hospitalization Trend by Race/Ethnicity-Age 18+ (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
All BH Discharges						
Race	Asian	40	54	39	14%	-3%
	Black/African American	547	650	567	2%	4%
	White	2,017	2,135	2,137	2%	6%
Ethnicity	Hispanic Ethnicity	56	48	5	-6%	--
Crude Rates per 100,000 Population						
Race	Asian	151.4	195.8	139.6	6%	-8%
	Black/African American	641.2	752.7	645.4	0%	1%
	White	686.9	719.0	706.1	2%	3%
Ethnicity	Hispanic Ethnicity	186.4	162.2	--	-7%	--
Note: Rates and/or percent change are not calculated where n<30. Discharges with an Other/Unknown race were not included in the analysis. Hispanic is classification of ethnicity; therefore, Hispanic individuals are also included in the race categories. Data for residents age 0-17 are not included. See details in Appendix B.						
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.						

Exhibit 4F. Behavioral Health Hospitalization Trend by Payer-Age 18+ (2011-2013)

Indicator		Study Region			% Change (2011-2013)	
Counts		**2011**	**2012**	**2013**	**Virginia**	**Study Region**
All BH Discharges						
Payer	Medicare	753	818	736	5%	-2%
	Medicaid	145	139	184	12%	27%
	Private	1,633	1,835	1,643	-2%	1%
	Self-Pay/Uninsured	202	164	261	14%	29%
Crude Rates per 100,000 Population						
Payer	Medicare	--	--	--	--	--
	Medicaid	--	--	--	--	--
	Private	--	--	--	--	--
	Self-Pay/Uninsured	--	--	--	--	--

Note: Discharges with an Other/Unknown payer were not included in the analysis. Enrollment data were not available to calculate rates. Data for residents age 0-17 are not included. See details in Appendix B.

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

5. Adult Health Risk Factor Profile

This profile presents indicators of adult health risks for adults age 18+ based on analysis of data from the Virginia Behavioral Risk Factor Surveillance Survey and demographic data from Alteryx, Inc. (see *Appendix B* for details on methods.) Please note that all indicators in this profile are estimates, and therefore subject to estimation error.

- As shown in *Exhibit 5*, substantial numbers of adults have lifestyle health risks related to nutrition, weight, physical inactivity, tobacco and alcohol. For example,
    - An estimated 267,204 adults age 18+ (77%) are not meeting the guidelines for fruit and vegetable intake,
    - An estimated 210,800 adults age 18+ (61%) are overweight or obese, and
    - An estimated 177,069 adults age 18+ (51%) are not meeting recommendations for physical activity.

Exhibit 5. Adult Health Risk Factor Profile (2014 Estimates)

Indicator		Virginia	Study Region
Estimates-Counts			
Estimated Adults age 18+		6,393,583	345,448
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	5,114,866	267,204
	Overweight or Obese	3,964,021	210,800
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	3,068,920	177,069
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	1,150,845	72,201
	Smoker	1,214,781	66,058
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	2,237,754	124,219
	High Blood Pressure (told by a doctor or other health professional)	1,918,075	98,868
	Arthritis (told by a doctor or other health professional)	1,534,460	82,272
	Diabetes (told by a doctor or other health professional)	575,422	26,102
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	1,214,781	67,552
	Fair or Poor Health Status	1,022,973	55,497
Estimates-Rates			
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	80%	77%
	Overweight or Obese	62%	61%
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	48%	51%
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	18%	21%
	Smoker	19%	19%
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	35%	36%
	High Blood Pressure (told by a doctor or other health professional)	30%	29%
	Arthritis (told by a doctor or other health professional)	24%	24%
	Diabetes (told by a doctor or other health professional)	9%	8%
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	19%	20%
	Fair or Poor Health Status	16%	16%
Note: State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended.			
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B. Data Sources for details.			

6. Youth Health Risk Factor Profile

This profile presents estimates of health risks for youth age 10-14 and 14-19. The indicators in this profile are estimates based on analysis of data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2013) and demographic data from Alteryx, Inc. (see *Appendix B* for details on methods.) Please note that all indicators in this profile are estimates, and therefore subject to estimation error.

- As shown in *Exhibit 6,* substantial numbers of youth have lifestyle health risks related to nutrition, weight, alcohol, mental health, physical inactivity, and tobacco. For example,
    - Only an estimated 2,932 youth age 14-19 (8%) and 3,380 youth age 10-14 (24%) met the guidelines for fruit and vegetable intake;
    - An estimated 9,560 youth age 14-19 (27%) are overweight or obese; and
    - An estimated 19,399 youth age 14-19 (56%) and 9,290 youth age 10-14 (66%) did not meet the guidelines for physical activity.

Exhibit 6. Youth Health Risk Factor Profile (2014 Estimates)

Indicator	Virginia	Study Region
Counts (Estimates)		
High School Youth Age 14-19		
Total Estimated High School Youth Age 14-19	654,462	34,882
Met Guidelines for Fruit and Vegetable Intake	54,707	2,932
Overweight or Obese	179,050	9,560
Not Meeting Recommendations for Physical Activity in the Past Week	363,586	19,399
Used Tobacco in the Past 30 Days	118,572	6,285
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	178,173	9,442
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	165,270	8,806
Middle School Youth Age 10-14		
Total Estimated Middle School Youth Age 10-14	523,850	14,059
Met Guidelines for Fruit and Vegetable Intake	125,285	3,380
Not Meeting Recommendations for Physical Activity in the Past Week	345,407	9,290
Used Tobacco in the Past 30 Days	19,192	327
Rates (Percent Estimates)		
High School Youth Age 14-19		
Met Guidelines for Fruit and Vegetable Intake	8%	8%
Overweight or Obese	27%	27%
Not Meeting Recommendations for Physical Activity in the Past Week	56%	56%
Used Tobacco in the Past 30 Days	18%	18%
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	27%	27%
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	25%	25%
Middle School Youth Age 10-14		
Met Guidelines for Fruit and Vegetable Intake	24%	24%
Not Meeting Recommendations for Physical Activity in the Past Week	66%	66%
Used Tobacco in the Past 30 Days	4%	2%
Note: State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended.		
Source: Estimates produced by Community Health Solutions using Youth Risk Behavioral Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B. Data Sources for details.		

7. Uninsured Profile

This profile presents estimates of the uninsured population within the 0-64 age group. The indicators in this profile are estimates based on analysis of data from the U.S. Census Bureau Small Area Health Insurance Estimates and demographic estimates from Alteryx, Inc. (see *Appendix B* for details on methods.) Please note that all indicators in this profile are subject to estimation error.
As shown in *Exhibit 7:*

- At any given point in 2014, an estimated 52,964 residents of the study region were uninsured.
- The estimated number of uninsured children age 0-18 was 6,693 in the study region. Among uninsured children, it is estimated that 50% have family income below 200 percent of the federal poverty level, possibly making them income-eligible for coverage through the state Medicaid or FAMIS program.
- The estimated number of uninsured adults age 19-64 was 46,270 in the study region. Among uninsured adults, it is estimated that 54% have family income below 200 percent of the federal poverty level.

Exhibit 7. Uninsured Profile (2014 Estimates)

Indicator	Virginia	Study Region
Estimated Uninsured Counts*		
Uninsured Nonelderly Age 0-64	1,013,986	52,964
Uninsured Children Age 0-18	120,105	6,693
Uninsured Children Age 0-18 <=138% FPL	38,955	2,171
Uninsured Children Age 0-18 <=200% FPL	60,293	3,360
Uninsured Children Age 0-18 <=250% FPL	74,045	4,126
Uninsured Children Age 0-18 <=400% FPL	98,441	5,486
Uninsured Children Age 0-18 138-400% FPL	59,485	3,315
Uninsured Adults Age 19-64	893,456	46,270
Uninsured Adults Age 19-64 <=138% FPL	327,185	16,944
Uninsured Adults Age 19-64 <=200% FPL	479,797	24,848
Uninsured Adults Age 19-64 <=250% FPL	578,328	29,951
Uninsured Adults Age 19-64 <=400% FPL	749,463	38,813
Uninsured Adults Age 19-64 138-400% FPL	422,276	21,869
Estimated Uninsured Percent		
Uninsured Children Percent	6%	6%
Uninsured Adults Percent	17%	16%

Note: Federal poverty level (FPL) categories are cumulative. State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended.

Source: Estimates produced by Community Health Solutions using U.S. Census Bureau Small Area Health Insurance Estimates (2013) and local demographic estimates from Alteryx, Inc. See Appendix B for details on methods.

APPENDIX A: Zip Code-Level Maps

The Zip Code-Level maps in this section illustrate the geographic distribution of the zip code-level study region on key health status indicators. The maps in this section include the following for 2013/2014:

1. Total Deaths, 2013	9. Estimated Adult Age 18+ Smokers, 2014
2. Heart Disease Deaths, 2013	10. Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014
3. Cerebrovascular Disease (Stroke) Deaths, 2013	11. Estimated Adults Age 18+ with Diabetes, 2014
4. Malignant Neoplasms (Cancer) Deaths, 2013	12. Estimated Adults Age 18+ who are Overweight or Obese, 2014
5. Total Live Births, 2013	13. Estimated High School-aged Youth (age 14-19) who are Overweight or Obese, 2014
6. Total Teenage Live Births (age<18), 2013	14. Estimated Uninsured Children Age 0-18, 2014
7. Total Prevention Quality Indicator Hospitalization Discharges, 2013	15. Estimated Uninsured Adults, Age 19-64, 2014
8. Total Behavioral Health Hospitalization Discharges, 2013	Map Table

Technical Notes

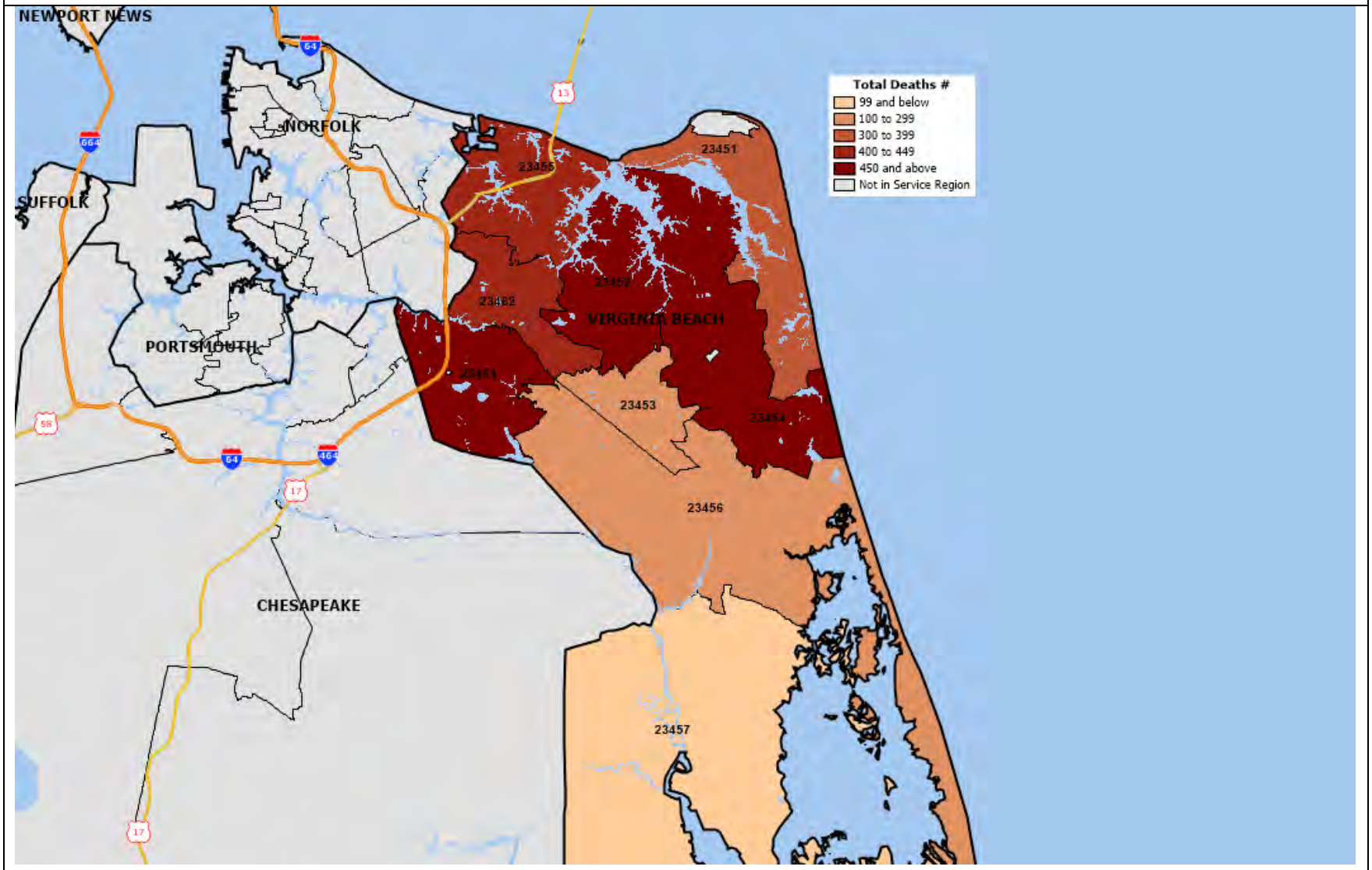
1. The maps and data include nine zip codes, as identified by Sentara Virginia Beach General Hospital, all of which fall within Virginia Beach City. It is important to note that zip code boundaries do not automatically align with city/county boundaries, and there are some zip codes that extend beyond the county boundaries.

2. The maps show counts rather than rates. Rates are not mapped at the zip code-level because in some zip codes the population is too small to support rate-based comparisons.

3. Data are presented in natural breaks.

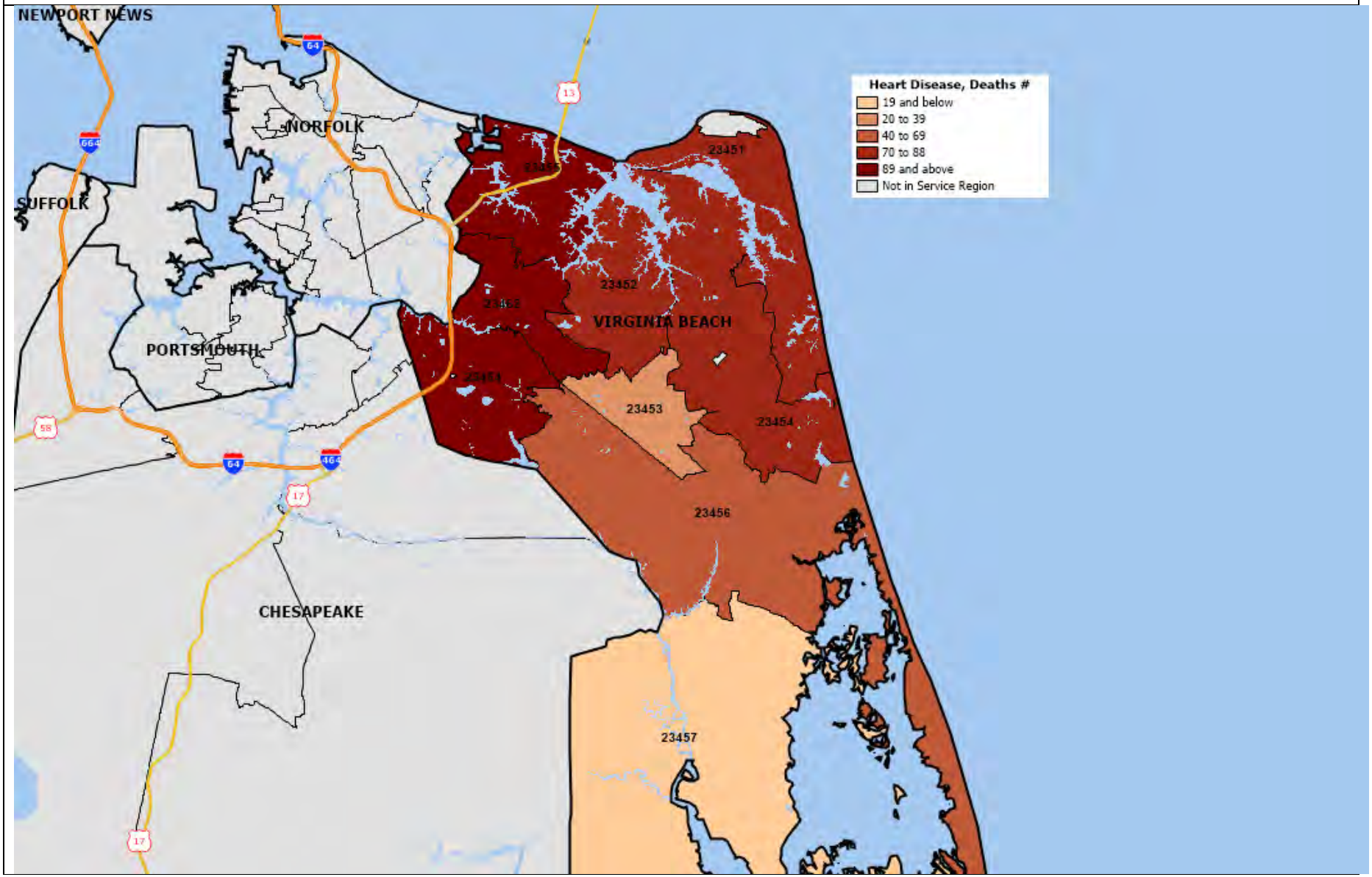
4. Zip Code-Level Study Region zip codes with zero values are noted.

Map 1: Total Deaths, 2013



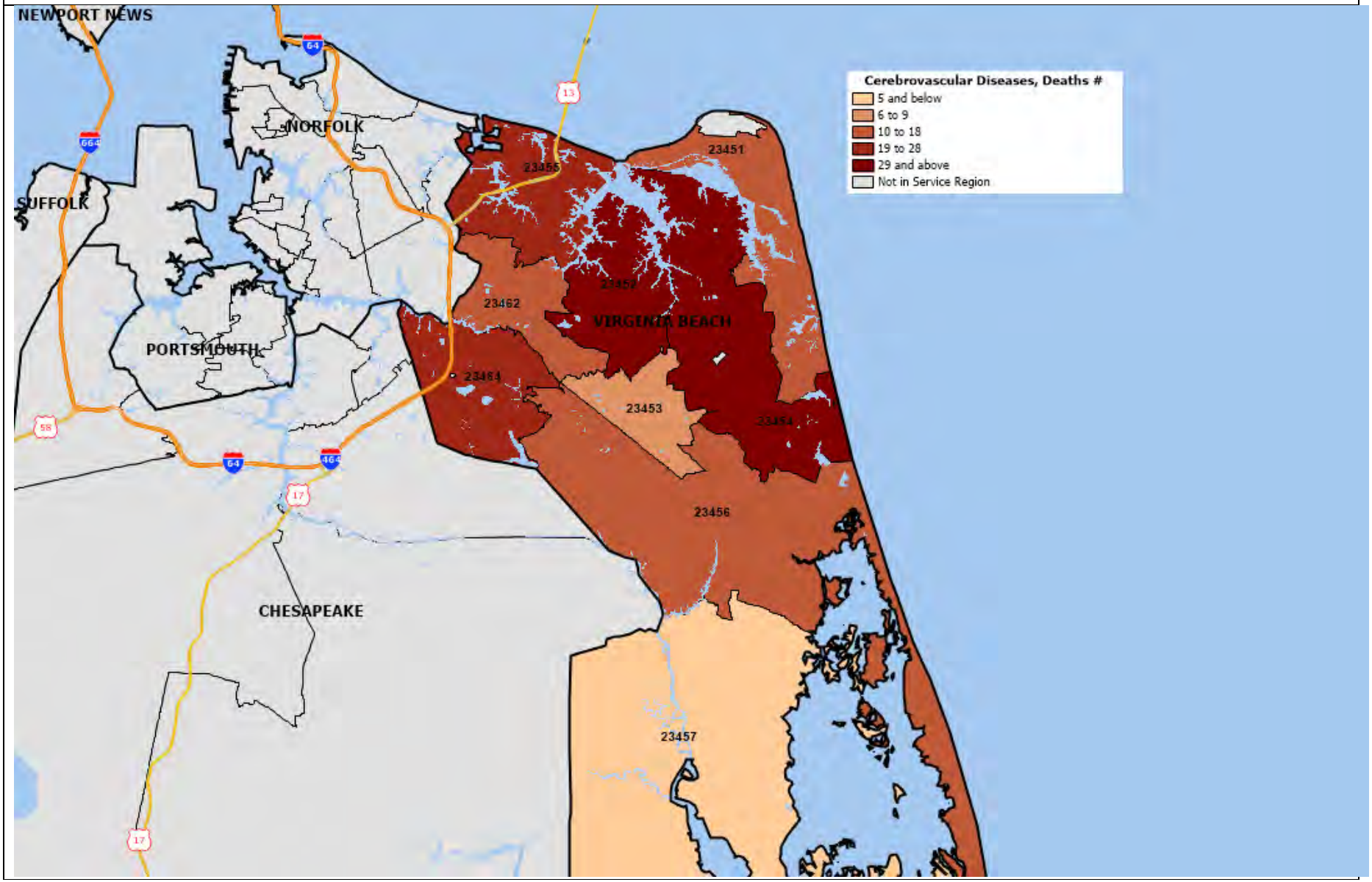
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Map 2: Heart Disease Deaths, 2013



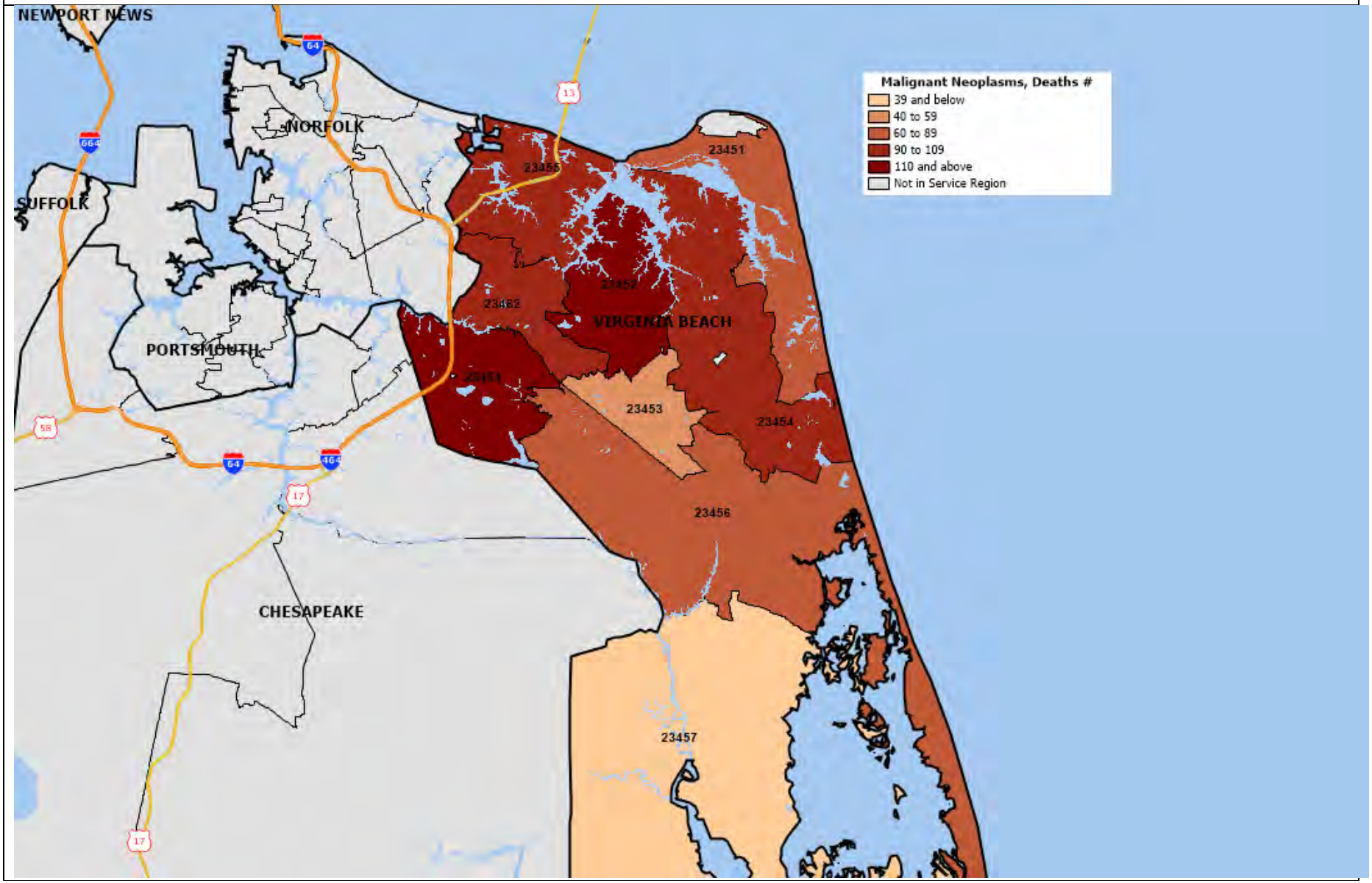
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Map 3: Cerebrovascular Disease (Stroke) Deaths, 2013



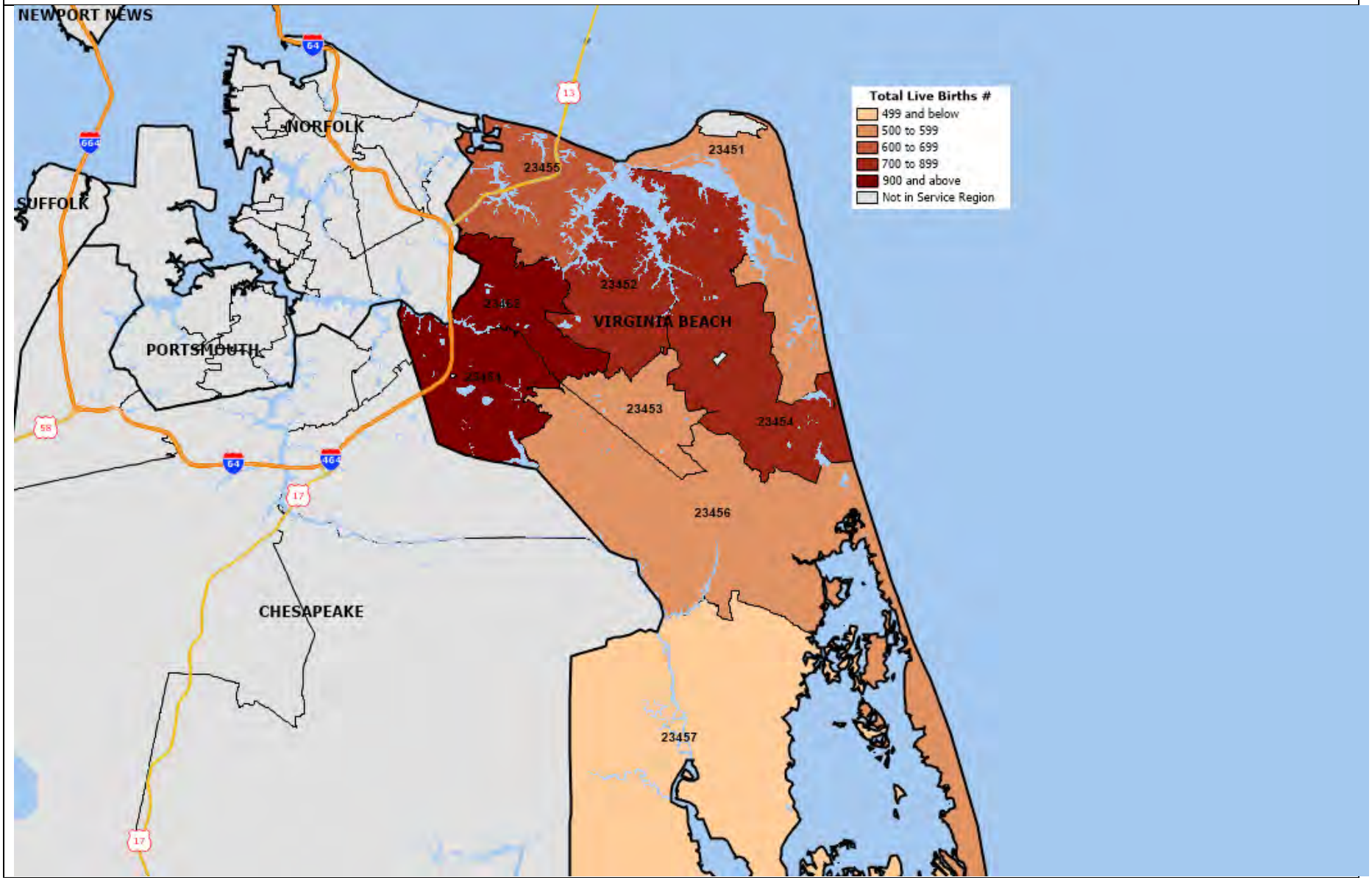
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported stroke deaths for zip code 23457.

Map 4: Malignant Neoplasms (Cancer) Deaths, 2013



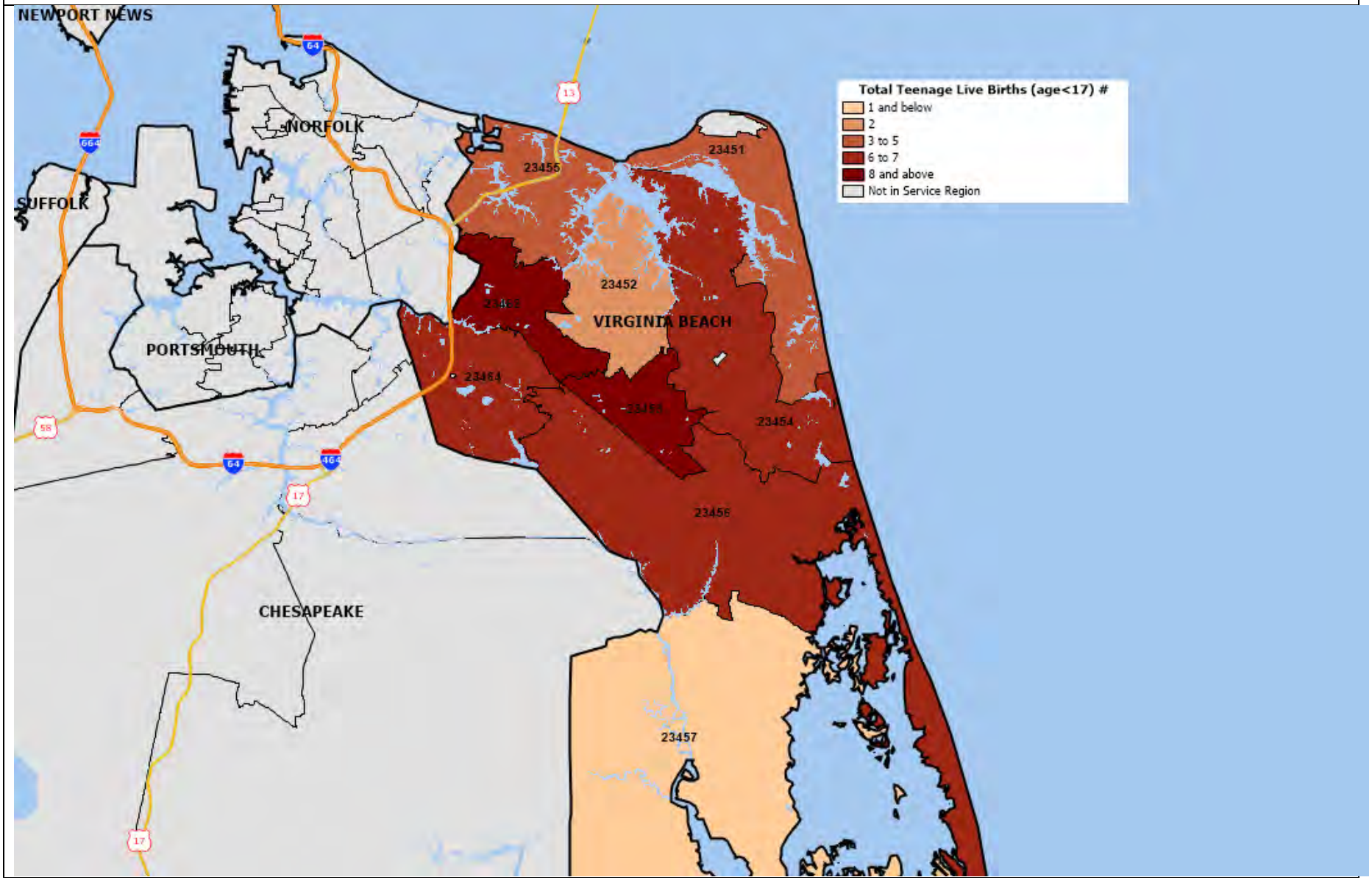
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Map 5: Total Live Births, 2013



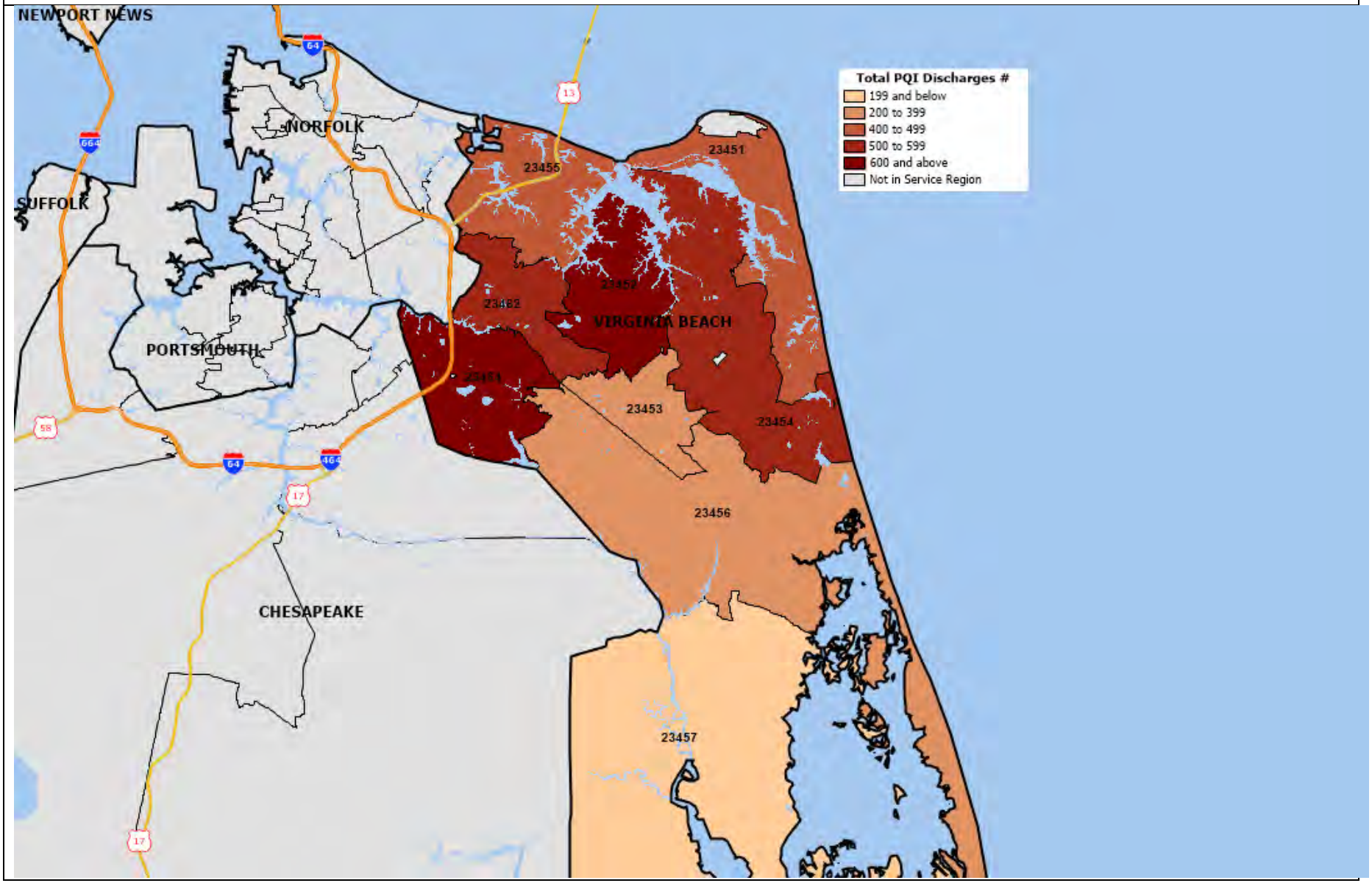
Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B.

Map 6: Total Teenage Live Births (age <18), 2013



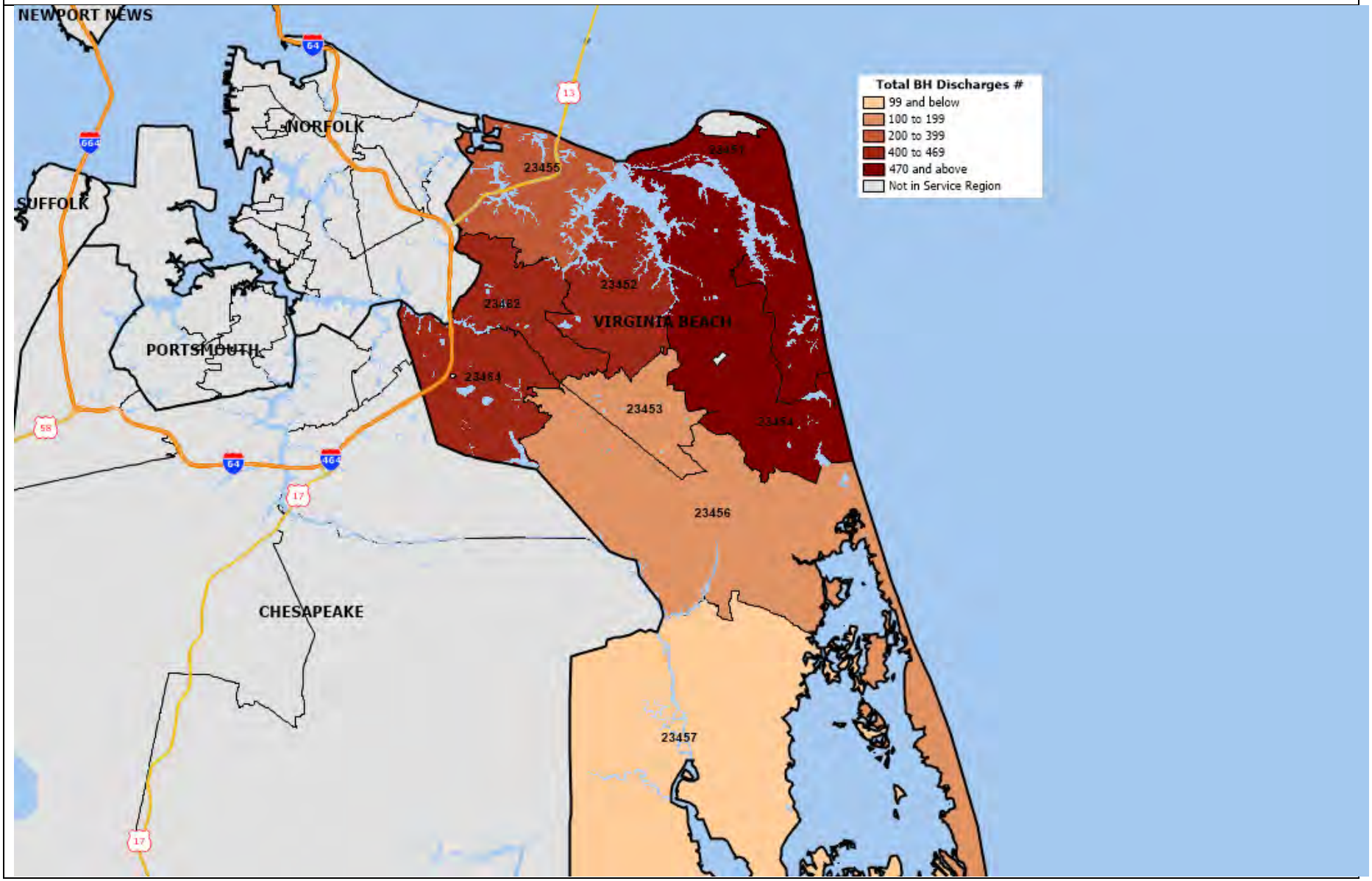
Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported teenage live births for zip code 23457.

Map 7: Total Prevention Quality Indicator (PQI) Hospitalization Discharges, 2013



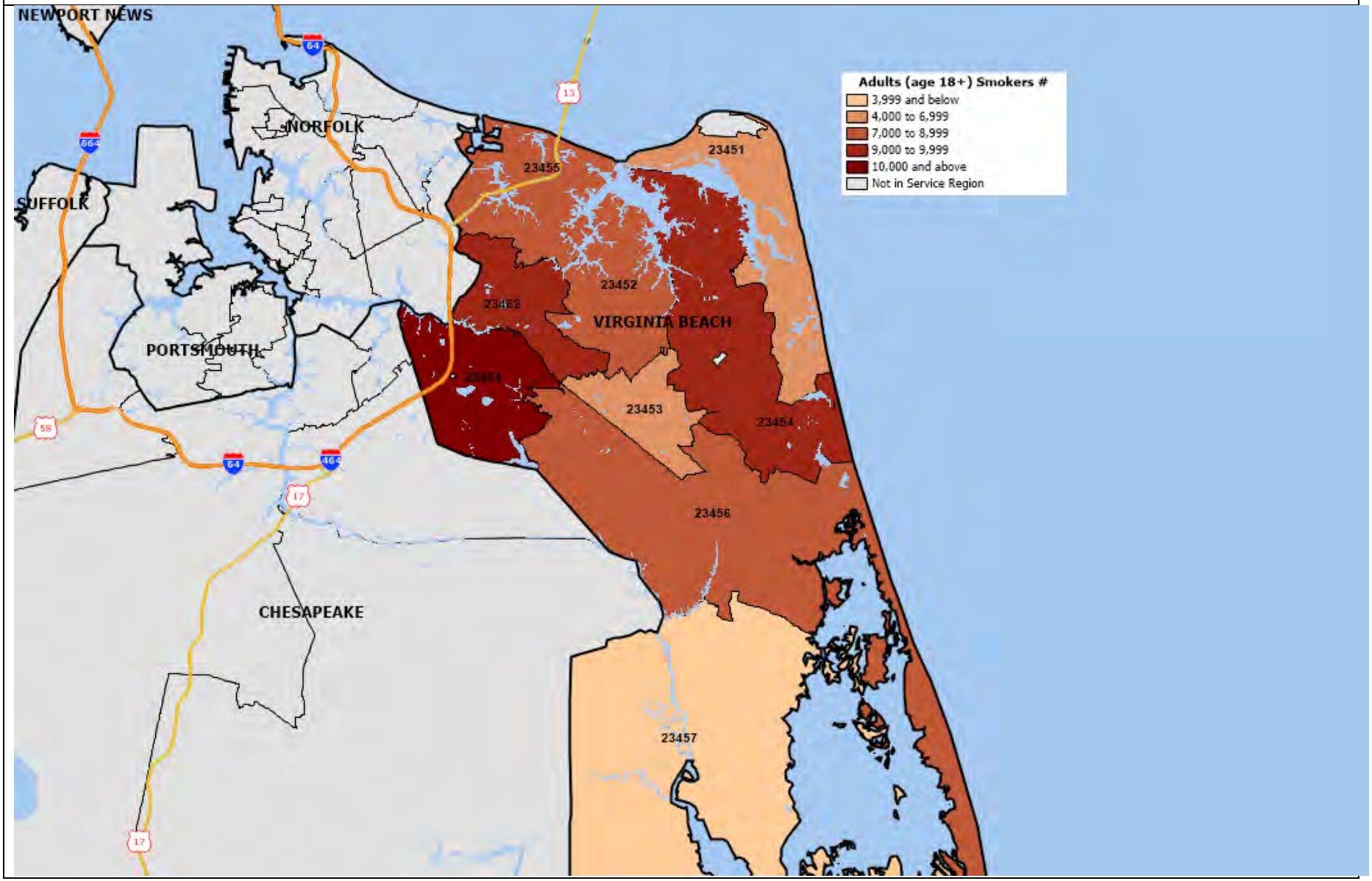
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.

Map 8: Total Behavioral Health (BH) Hospitalization Discharges, 2013



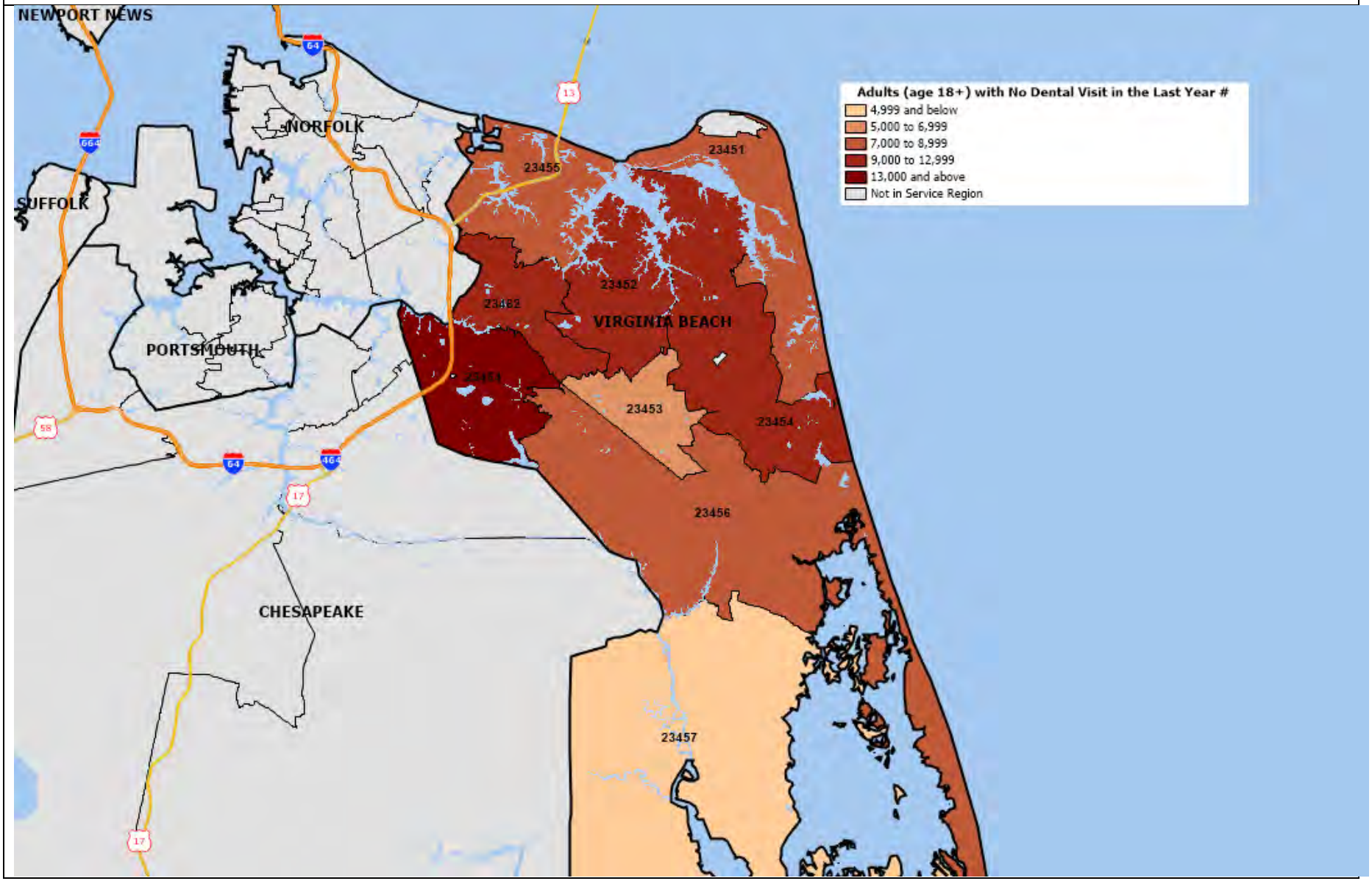
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.

Map 9: Estimated Adults Age 18+ Smokers, 2014-Estimates



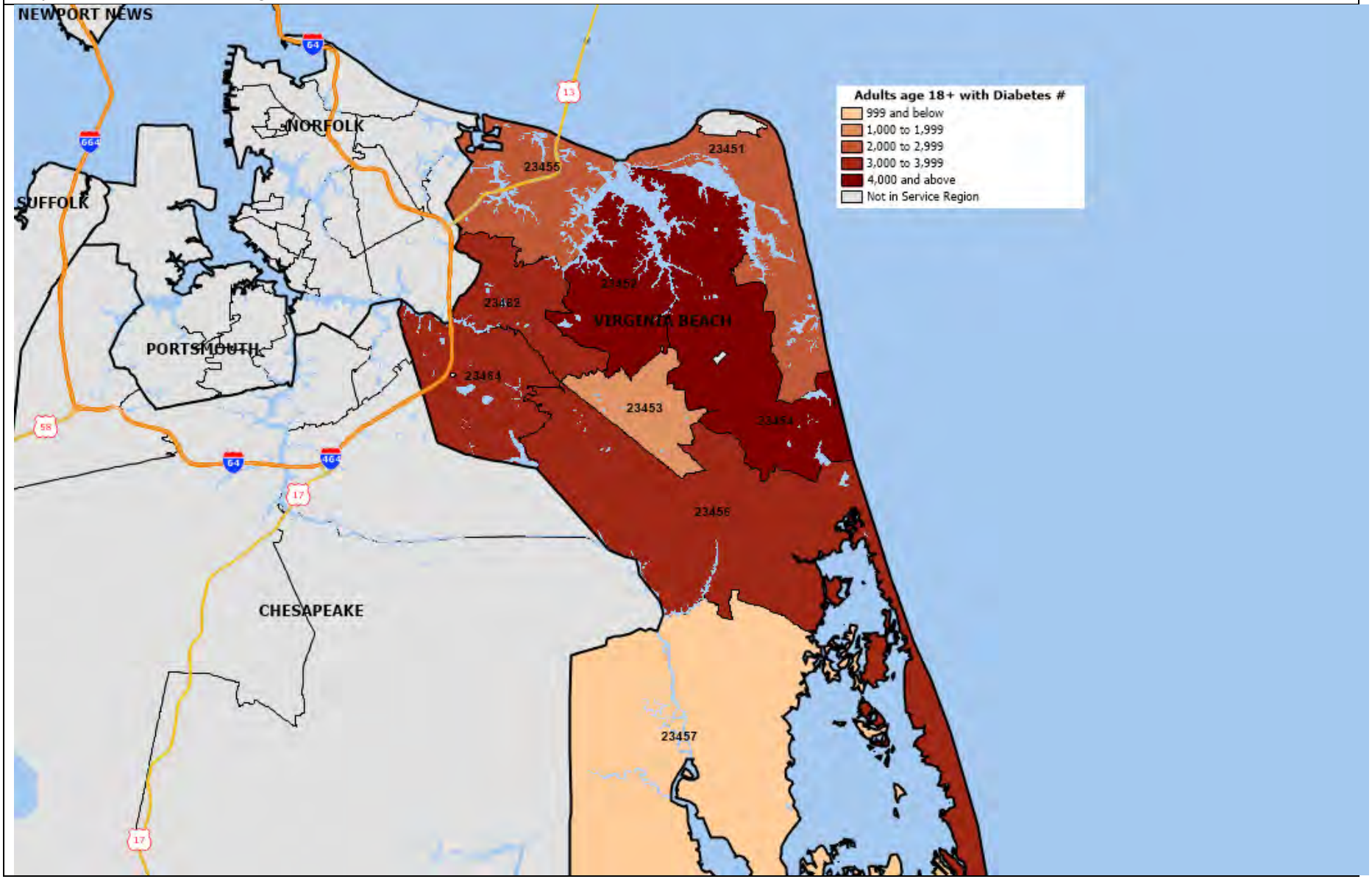
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

Map 10: Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014-Estimates



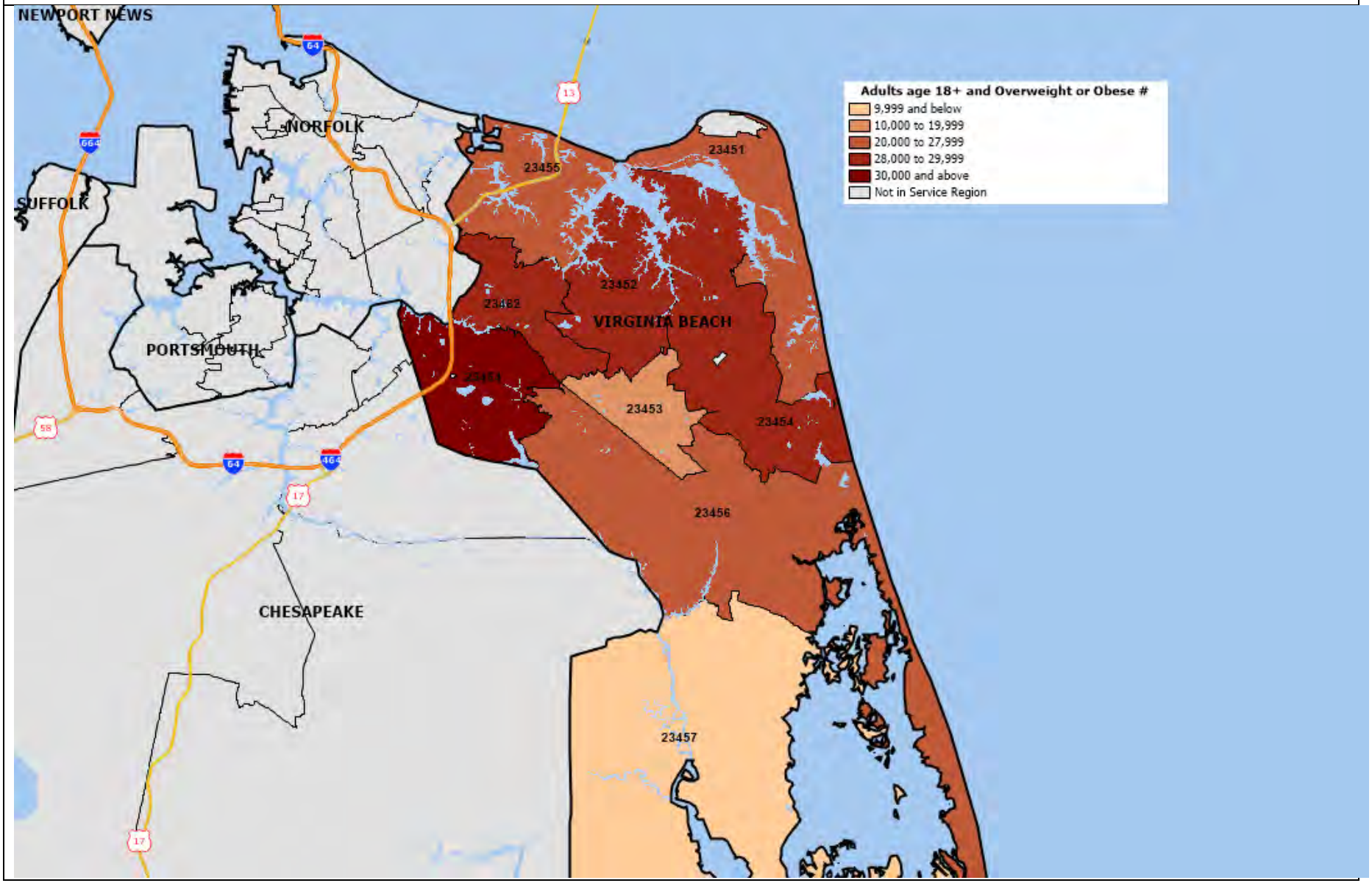
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

Map 11: Estimated Adults Age 18+ with Diabetes, 2014 -Estimates



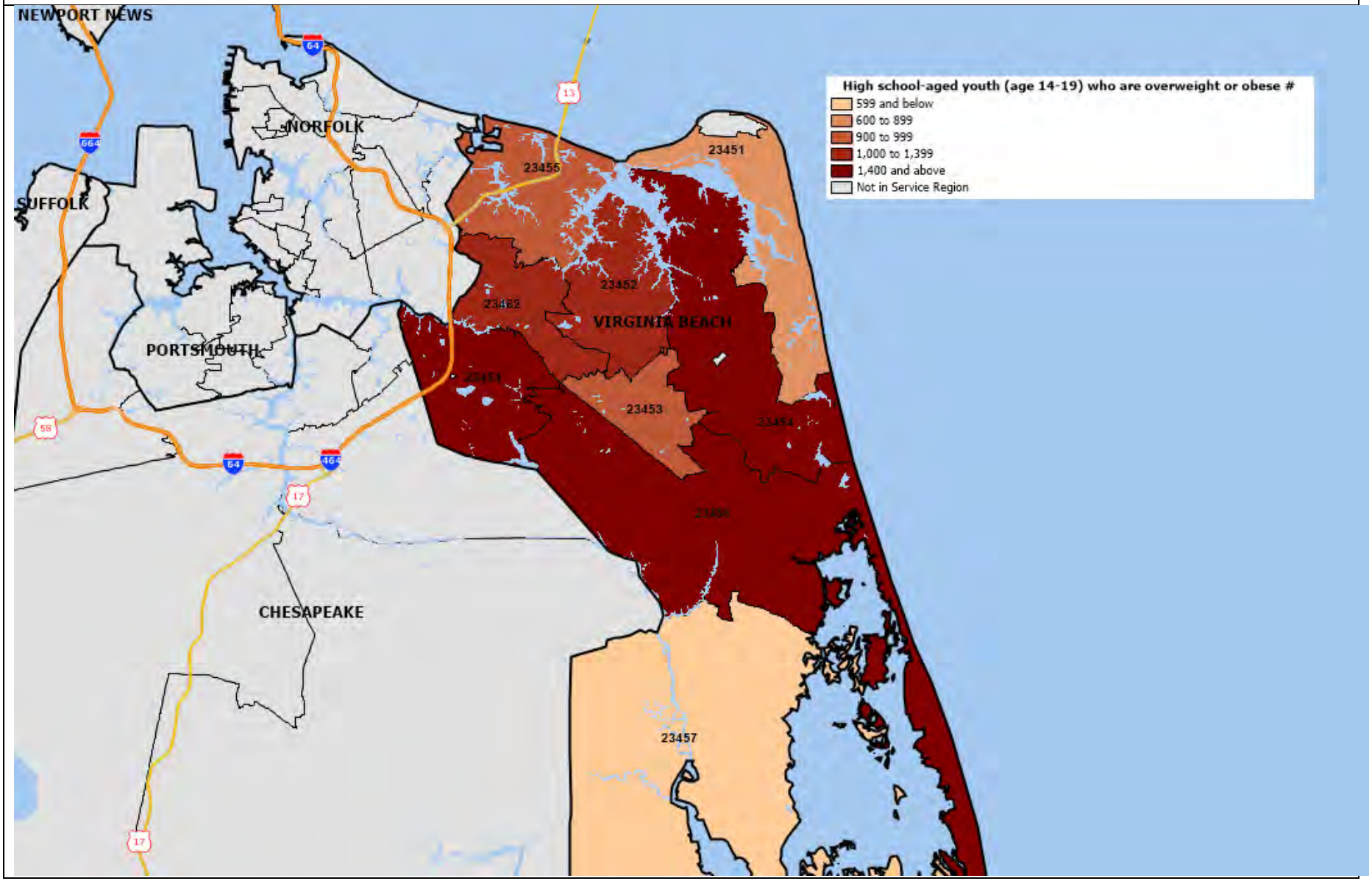
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

Map 12: Estimated Adults Age 18+ who are Overweight or Obese, 2014-Estimates



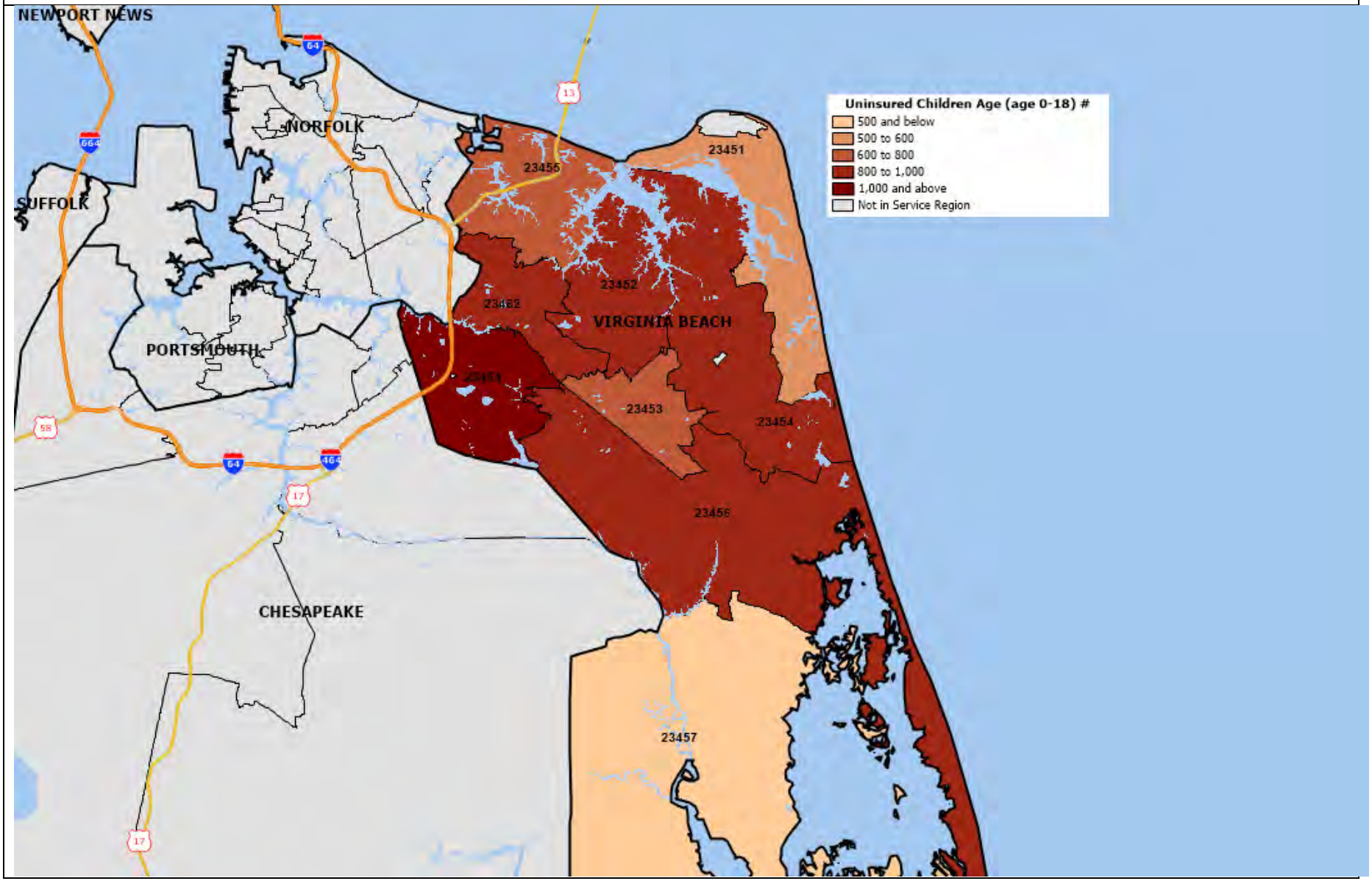
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B.

Map 13: Estimated High School-aged Youth (age 14-19) who are Overweight or Obese, 2014-Estimates



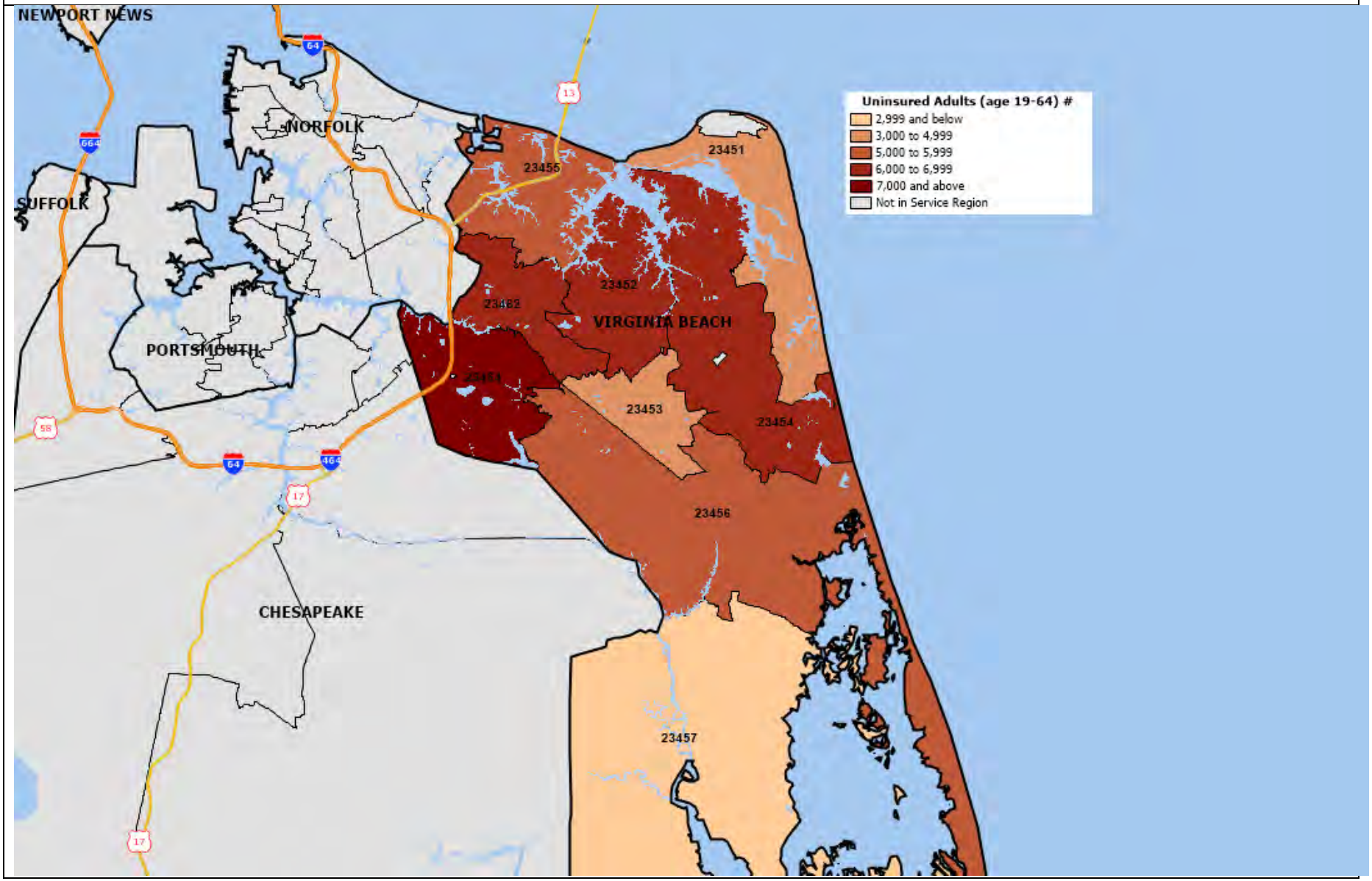
Source: Estimates produced by Community Health Solutions using Virginia Youth Risk Behavioral Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B. Data Sources for details.

Map 14: Estimated Uninsured Children, Age 0-18, 2014-Estimates



Source: Estimates of uninsured are based on Community Health Solutions analysis of U.S. Census Bureau Small Area Health Insurance Estimates (2013) and demographic data from Alteryx, Inc. See Appendix B. Data Sources for details.

Map 15: Estimated Uninsured Adults, Age 19-64, 2014 -Estimates



Source: Estimates of uninsured are based on Community Health Solutions analysis of U.S. Census Bureau Small Area. Health Insurance Estimates (2013) and demographic data from Alteryx, Inc. See Appendix B. Data Sources for details.

APPENDIX B: Health Status Indicators Data Sources

Profile	Source
Important Note on Data Sources	The data used to produce the health status indicators in this report were obtained from public or commercial sources as indicated throughout this appendix. Community Health Solutions cannot, and does not guarantee the accuracy of these data sources.
1) Mortality Profile (also Appendix A. Maps 1-4)	Community Health Solutions analysis of Virginia Department of Health death record data (2011-2013).
2) Maternal and Infant Health Profile (also Appendix A. Maps 5-6)	Community Health Solutions analysis of Virginia Department of Health death record data (2011-2013).
3) Preventable Hospitalization Profile (also Appendix A. Map 7) 4) Behavioral Health Hospitalization Profile (also Appendix A. Map 8)	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2011-013 datasets and demographic estimates from Alteryx, Inc. (2011-2013). Data include discharges for Virginia residents from Virginia hospitals reporting to Virginia Health Information, Inc.) The analysis includes records of discharges of Virginia residents from Virginia hospitals excluding state and federal facilities. **Preventable Hospitalizations**. The prevention quality indicator (PQI) definitions are based on definitions published by the Agency for Healthcare Research and Quality (AHRQ). The definitions are detailed in their specification of ICD-9 diagnosis codes and procedure codes. Not every hospital admission for congestive heart failure, bacterial pneumonia, etc. is included in the PQI definition; only those meeting the detailed specifications. Low birth weight is one of the PQI indicators, but for the purpose of this report, low birth weight is included in the Maternal and Infant Health Profile. Also, there are four diabetes-related PQI indicators which have been combined into one for the report. Within the Exhibits, the *All PQI Discharges* figures are based on an AHRQ methodology that counts a hospital discharge with multiple PQI diagnoses as one discharge. By comparison, the figures for individual discharges do include a small number of cases in which a single hospital discharge with more than one PQI diagnosis would be counted more than once. Also, AHRQ refined their method to exclude the perforated appendix PQI from its list, but this diagnosis is included in the data used for this study. As a result of these methodological factors, the sum of the individual PQI discharges may be slightly different than the total for All PQI Discharges. These differences or on the order of less than one percent. For more information on the AHRQ methodology, visit the AHRQ website at http://www.qualityindicators.ahrq.gov/modules/pqi_resources.aspx **Behavioral Health Hospitalizations-** Behavioral health data reported are based on the patient's primary diagnosis. The analysis includes records of discharges of adult Virginia residents from Virginia hospitals excluding state and federal facilities. Due to the lack of reporting on the part of a regional child/adolescent psychiatric hospital, the analysis in this profile does not include data for residents age 0-17. *NOTE: Virginia Health Information (VHI) requires the following statement to be included in all reports utilizing its data: VHI has provided non-confidential patient level information used in this report which was compiled in accordance with Virginia law. VHI has no authority to independently verify this data. By accepting this report the requester agrees to assume all risks that may be associated with or arise from the use of inaccurately submitted data. VHI edits data received and is responsible for the accuracy of assembling this information, but does not represent that the subsequent use of this data was appropriate or endorse or support any conclusions or inferences that may be drawn from the use of this data.*

Profile	Source
5) Adult Health Risk Factor Profile (also Appendix A. Maps 9-12)	Estimates of chronic disease and risk behaviors for adults 18+ were produced by Community Health Solutions using: • A multi-year dataset (2006-2010) from the Virginia Behavioral Risk Factor Surveillance System (BRFSS). For more information on BRFSS visit: http://www.cdc.gov/brfss/about/index.htm • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates.
6) Youth Health Risk Factor Profile (also Appendix A. Map 13)	Estimates of risk behaviors for youth age 14-19 and 10-14 were produced by Community Health Solutions using: • Data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2013). For more information on YRBSS visit: http://www.cdc.gov/HealthyYouth/yrbs/index.htm • Local demographic estimates from Alteryx, Inc. (2014). Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates.
7) Uninsured Profile (also Appendix A. Maps 14-15)	Estimates of uninsured nonelderly age 0-64 were produced by Community Health Solutions using: • U.S. Census Bureau Small Area Health Insurance Estimates (2013). For more information, visit: http://www.census.gov/did/www/sahie/data/index.html. • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, prior year locality-level rates were used to predict current year local counts and rates, with adjustments for local demographics. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates. Additionally, populations in group living quarters (e.g. colleges) and undocumented populations may not be adequately addressed in this model.

Community Insight

The community insight component of this CHNA consisted of two methodologies: an online Community Stakeholder Survey carried by the Sentara Strategy Department and a series of more in-depth Community Focus Groups carried out by the hospital.

The Community Stakeholder Survey was conducted jointly with all Sentara hospitals in South Hampton Roads due to the proximity of the hospitals and the wide variety of community stakeholders that work with multiple hospitals throughout the region. The survey tool was similar to but expanded from the survey utilized for the 2013 CHNA. The expansion was a result of a community collaborative effort. The survey was conducted using Survey Monkey, an online survey service, in June 2016. Stakeholders were invited to participate by email and were sent the link to open the survey. They were asked to identify the hospitals they work with and their answers were included with each hospital identified. Invitations were based on the recipients' employment or community engagement, community history, and knowledge. A wide-variety of stakeholders were sought, including representative from public health departments, social services, emergency services, healthcare providers, elected or non-elected government officials, representatives of underserved and/or minority populations, consumers of services, and others.

The survey contained questions on:

- The most important health problems in the community
- Community services that need strengthening
- Vulnerable/at-risk populations in the community
- Existing health assets within the community
- Health assets needed in the community
- Additional ideas of suggestions for improving community health

Across the region, 458 invitations were sent, and 121 individual stakeholders completed the survey. For Sentara Virginia Beach General Hospital, 46% of overall South Hampton Roads survey respondents indicated they work with the hospital, which includes 56 individual stakeholders. The survey results that follow are limited to these responses. Note that not all participants answered every question.

Community Focus Group Sessions were carried out by the hospital to gain more in-depth insight from community stakeholders. The questions below were utilized. The results of the focus groups are presented after the survey results.

- What are the most serious health problems in our community?
- Who/what groups of individuals are most impacted by these problems?
- What keeps people from being healthy? In other words, what are the barriers to achieving good health?
- What is being done in our community to improve health and to reduce the barriers? What resources exist in the community?
- What more can be done to improve health, particularly for those individuals and groups most in need?

Community Stakeholder Survey Results

The results of the 2016 Community Stakeholder Survey for Sentara Virginia Beach General Hospital are displayed on the following pages in table form. First, the list of community stakeholders participating in the survey are displayed below.

Sentara Virginia Beach General Hospital - Community Stakeholder Survey Participants by Organization	
Access Partnership	PFAC
American Cancer Society	PIN Ministry
American Heart Association	Retired USN
Anesthesia Specialists	Retired. Full-time advocate with the American Cancer Society Cancer Action Network and Co-Chair the Patients Family Advisory Council at VB.
Anthem	RG Electric Company, Inc
Atlantic Anesthesia	Saint Leo University
Beach Health Clinic	Senior Services of Southeastern Virginia
Bon Secours Health System	Sentara Health Plans, Optima Health
Chesapeake Regional Medical Center	Sentara Virginia Beach General Hospital (SVBGH)
City of VB	SVBGH Auxiliary
ECPI University, MSN Program	SVBGH Volunteer
Emergency Medical Services (EMS)	Tidewater Community College
Emergency Physicians of Tidewater (EPT)	Virginia Beach Rescue Squad Volunteer Paramedic
Eastern Virginia Medical School (EVMS)	Virginia Beach Department of Public Health
FFG	Virginia Beach Fire Department
Foodbank of Southeastern VA	Virginia Oral Health Coalition
LifeNet	Virginia Supportive Housing
Norfolk Community Services Board	Virginia Wesleyan College
Old Dominion University School of Dental Hygiene	Not Provided

Community Health Concerns

Survey participants were asked, “What are the most important health problems in your community?” Thirty-four choices were included in the survey; the number of choices each person could select was not restricted or ranked. The frequency of the health problems chosen are displayed below, followed by open-ended responses or additional comments submitted by the participants. Responses are ranked in order of the frequency identified; when counts equaled, the same rank is provided for those selections. Fifty-three participants responded to this question.

Frequency Rank	2016 Most Important Health Problem in Community	% of Participants Selecting Item
1	Mental Health - Behavioral Health Conditions (e.g. depression, anxiety, etc.)	81%
2	Diabetes	70%
3	Heart Disease	66%
	Obesity	66%
5	High Blood Pressure / Hypertension	64%
6	Cancer	62%
7	Substance Abuse (prescription or illegal drugs)	60%
8	Dementia / Alzheimer's Disease	59%
9	Alcohol Use	53%
10	Stroke	49%
11	Accidents / Injuries	47%
	Dental / Oral Health Care	47%
	Tobacco Use	47%
14	Orthopedic Problems	45%
15	Chronic Pain	43%
16	Respiratory Diseases (e.g. asthma, COPD, etc.)	42%
17	Infant and Child Health	40%
18	Arthritis	36%
	Neurological Conditions (e.g. seizures, multiple sclerosis, traumatic brain injury, etc.)	36%
	Physical Disabilities	36%
	Sexually Transmitted Diseases	36%
22	Prenatal and Pregnancy Care	34%
	Violence - Domestic Violence	34%
24	Infectious Diseases	32%
	Violence - Other than Domestic Violence	32%
26	Drowning / Water Safety	30%
	Environmental Health (e.g. pollution, mosquito control, water quality, etc.)	30%

28	Intellectual / Developmental Disabilities	28%
	Renal (kidney) Disease	28%
30	Hunger	26%
31	HIV / AIDS	25%
	Teen Pregnancy	25%
33	Autism	23%
34	Bullying	19%

Mental and behavioral health and diabetes topped the most important health problems selected by community stakeholder participants, followed by heart disease and obesity.

Fourteen participants chose to provide additional comments to the question, “What are the most important health problems in your community?” These responses are provided below. Note responses are unedited except in the interest of confidentiality (example: participant phone number redacted).

Additional Comments
• Healthy Eating • Access to Care • Prevention and Early Detection
• Too many "free-rides" for health care driving my costs higher and putting too much stress on those who give the care.
• I only listed those which affect me and my age group. All of these are important to one group or another.
• Uninsured and under-insured status creates barriers to care for any health problems. • Access Partnership receives numerous calls each month requesting assistance to obtain DME, medical supplies and medications. Social Workers, case managers, insurance companies, hospitals, health centers, free clinics and community members need nutritional supplements, adult diapers, walkers, wheelchairs, hospital beds, shower chairs, nebulizers, CPAPs (over 100 people are waiting for these at Sentara ACC). Out of necessity, Access Partnership has been coordinating donated supplies & equipment which people want to donate (they are often told by DME and supply companies that the items are paid for and to dispose of them or give them away). Most thrift stores will not accept large items (hospital beds). FREE Foundation will accept a number of items but does not accept diapers, nutritional supplements, beds, and more. • Dental/Oral Health is a significant problem which has been shown by HR residents sleeping overnight outside Green Run HS for the Mission of Mercy project on April 30. Over 500 were provided care but more approx 150 were turned away. • Tobacco, substance abuse, alcohol use all contribute to oral health care and oral health care (lack of or poor oral health care) contributes to heart disease, kidney disease, premature birth, uncontrolled diabetes, and more health issues. • Care connection is an additional need in our communities. Life Coaches are in some EDs, case managers and social workers are in the health care sites and communities but there is a need to "link" and connect all available resources. This has been a key objective for Access Partnership.
• Behavioral Health issues continue to plague the healthcare system and our community. Additional case management support to follow theses community members would be helpful to coordinate their care once discharged and be compliant with their medications. Better collaboration with community resources would also be helpful to maintain follow-up when these patients are released back into the community. • Patients with chronic pain is another big issue in the community. Finding alternative and innovative ways for these patients to manage their pain is important such as alternative medicine and clinics where these patients can be weaned off of pain medication safely.

• Wellness programs offered to the community free of charge to help support obesity, diabetes and heart disease is needed. Offering information and education in common places such as malls and recreation centers would help to reach a broader population and support prevention.
• Transportation
• We need more facilities like Rosemont Healthcase ...hospice, which is tops in every catagory, • rehab and long term
• Falls at any age, but specifically in the elderly plus elder care
• All of the conditions above are part of our society today. Some are more obvious or prevalent than others but all are present in our community.
• I believe all of the above are important to the Hampton Roads Community. However, the over health and nutrition in Hampton Roads play a huge part in the community and future well-being.
• Cardiovascular diseases
• As a volunteer paramedic I am exposed to all of these issues and each is just as important as another to that individual that it is affecting at the time. Obviously, some of these issues last a lifetime. Take for incident car accidents - not all are just bad driving, but so many are caused because of medical conditions, alcohol/drug abuse, elderly who should know longer be driving, etc... I see a real need for more mental health facilities. So many patients we bring in with mental health/alcohol/drug abuse do not necessarily need a jail nor always a hospital but a place they can go to get help and counseling. This is to include chronic pain and the over use/abuse of prescription pain medication. • Sepsis - this continues to be a real problem in all ages of the population, however, I see it a great deal in our elderly. More early recognition programs for families need to be in place. • More help needs to be given to people who cannot afford medications for such chronic illnesses as diabetes. We have repeat offenders who for whatever reason do not take their medications or cannot afford insulin pumps that is critical to their everyday life. • Drowning is definitely an issue that we should always be addressing in our community due to all of our natural resources and backyard accessibility to pools. • Obesity is huge in our community. We need to continue to work on improving this whether through workplace incentives, insurance incentives, medical payment incentives...; something because so many of the other diseases HTN, orthopedic problems, heart disease, diabetes, and even mental health and bullying etc... I feel may be associated with obesity. ----Nutrition
• Biggest need is mental health and substance abuse, particularly heroin and similar opioids (percocet, etc.).
• Support groups

Community Services Needing Strengthening

Survey participants were asked, "Which community health services need strengthening?" Thirty-five choices were included in the survey; the number of choices each person could select was not restricted or ranked. The frequency of the services chosen are displayed below, followed by open-ended responses or additional comments submitted by the participants. Responses are ranked in order of the frequency identified; when counts equaled, the same rank is provided for those selections. Fifty participants responded to this question.

Frequency Rank	2016 Community Services Needing Strengthening	% of Participants Selecting Item
1	Aging Services	66%
	Mental Health - Behavioral Health Services	66%
3	Care Coordination and Transitions of Care	58%
	Services for Vulnerable Populations (e.g. uninsured / underinsured, migrant workers, homeless, etc.)	58%
5	Health Care Insurance Coverage	54%
6	Dental / Oral Health Care Services	50%
7	Health Promotion and Prevention Services	46%
8	Substance Abuse Services	44%
9	Transportation Services	42%
10	Chronic Disease Services (e.g. diabetes, high blood pressure, etc.)	40%
	Long Term Care Services	40%
	Services for Caregivers	40%
13	Chronic Pain Management Services	38%
14	Early Intervention Services for Children	32%
	Food Safety Net (e.g. food bank, community gardens, school lunches, etc.)	32%
	Public Health Services	32%
	Social Services	32%
18	Domestic Violence Services	30%
	Home Health Services	30%
	Self Management Services (e.g. nutrition, exercise, taking medications)	30%
21	Cancer Services (e.g. screening, diagnosis, treatment, etc.)	28%
22	Hospice Services	24%
	Intellectual / Developmental Disabilities Services	24%
	Maternal, Infant, and Child Health Services	24%
	Primary Care Medical Services	24%
	Veterans Services	24%
27	Hospital Services (e.g. inpatient, outpatient, emergency care, etc.)	20%

	School Health Services	20%
	Specialty Medical Care Services (e.g. cardiologists, oncologists, etc.)	20%
30	Environmental Health Services	18%
31	Public Safety Services	16%
32	Pharmacy Services	14%
	Physical Rehabilitation	14%
	Workplace Health and Safety Services	14%
35	Family Planning Services	12%

Aging services and mental health and behavioral health services were the most frequently identified services by community stakeholders that need to be strengthened.

Nine participants chose to provide additional comments to the question, "Which community health services need strengthening?" These responses are provided below. Note responses are unedited except in the interest of confidentiality (example: participant phone number redacted).

Additional Comments
• Palliative Care - Resources and Education
• I have no idea what else is needed.
• Access to DME & Medical Supplies for uninsured and under-insured persons. Nutritional supplements are very expensive but most insurance will not cover cost unless only source of nutrition. Adult diapers are not covered by most private insurance, are very expensive but are needed for the health and comfort of individuals. Over 100 are on a waiting list for CPAPs at Sentara ACC and the sleep center will no longer perform sleep studies on patients that don't have coverage, funds or access to CPAP machines. Access Partnership has gathered about 40 donated CPAPs and provided to ACC who has them cleaned and ready for use for individuals in need. • Dental and oral services are most often excluded from coverage and there is a need to address reimbursement under medical benefits when oral health needs are adversely affecting medical health. Dental insurance is geared toward preventive care and most often has limits of $1,000 to $1,500 per year (under-insured). Access to dentures and partials is an issue that affects nutritional status and overall health but there are rare insurance programs that cover this. • Specialty care is difficult to obtain for the un/under insured. Most safety net providers focus on primary care and when a specialist is required, an "advocate" is needed to navigate. Specialty providers are being asked to see pro-bono cases by several different clinics, health centers, hospitals (specialists are required to take call and accept uninsured for privileges)
• The aging baby boomers are creating a strain on the healthcare system. Improved collaboration between hospitals, clinics and providers is needed to streamline and enhance care coordination in the community. Improving the referral process by establishing care compacts between providers improves care coordination. • Involving patients in their care using self-management support and decision aids to take a more patient centered approach to improving health would help compliance with care plans. • The cost of caring for patients with dementia is taking a toll on families leading to more parents living and being cared for by their children. This creates a strain on the caregiver emotionally and financially. Additional resources such as respite care should be expanded to keep the family unit healthy. Offer courses on Care for the Caregiver. • Expand the use of patient and family advisory councils to learn what the community wants when it comes to their health. While Sentara has councils in the hospital, consider expanding councils to be disease specific as well as incorporate them into the primary care setting (SMG) on a smaller scale.

• Provide patients education on when and what to do when their PCP office is closed. Providing alternatives to access care such as urgent care centers and telemedicine can reduce cost of care and misuse of resources (decrease ER visits). • Promote education on hospice services to increase usage. There's a big misconception of what hospice is in the community. Consider creating commercials to promote awareness. Care will improve tremendously for the patient as well as their family. • Promote patient and family centered care throughout the Sentara system by including the patient in everything you do. Promote this in commercials like Sentara's competitors instead of focusing solely on technology and the EMR.
• Supportive Housing for persons with significant behavioral health issues to support their overall well-being including their management of chronic disease and preventing medical conditions. "Housing is healthcare"
• I am not aware that these services are offered. If so, then perhaps there could be more information advertised. Really enjoyed the various seminars that were presented in the lobby.
• The above is a comprehensive list of community health services which can always be improved with Availability, Access and Quality.
• We still have many elderly who are living by themselves-- we need more affordable transitioning and not just rehab centers that have understaffed and at times unqualified people working in them. Many of our local rehab facilities need updating and have better facilities management and even at times care staff. So many times I walk into a facility that smells of urine and there is no place that should be like that. It is a matter of cleanliness. The staff quite often say this patient isn't mine so I don't have information on him. It is disgraceful the care our elderly, or people with severe head injuries, severe orthopedic injuries at times receive in facilities. • Cardiac arrests - we can do better! AHA has come out with a phone app that shows defibrillators and their locations, and will go off when a cardiac arrest is nearby prompting a citizen to respond if they are close by to initiate CPR. I think this is something Sentara should help the region supply with our 911 system. • In addition, I feel Sentara should consider lobbying or delegate etc.. for such things as requiring all people who get a DMV license needs to have gone through a cpr class and show proof prior to getting their license and that it must be maintained. So every time they renew, they must renew their CPR. • Also, I feel they should lobby the localities and request that as part of getting a business license if they have X number of employees they are required to purchase and maintain and AED. • Para-medicine is something that our community should look at adopting. I think this could help our Emergency Depts as so often many people that come in are for "sick visits" and it is something if a Medic were to have been doing preventive stops may could avoid so many of the unnecessary calls to 911 and stops to the ER. • Stroke Bus - http://www.emsworld.com/press_release/12178068/excellance-reveals-mobile-stroke-unit our area may benefit from something such as this.
• comprehensive health care that includes oral health - to reduce ED visits for dental issues; to improve diabetes outcomes, contribute to a reduction in preterm birth

Vulnerable/At-Risk Populations and Geographic Regions in the Community

Survey participants were asked two related free response questions: “Are there particular populations within the community who are vulnerable or at risk for health problems or having difficulties obtaining health services?” and, “Are there particular neighborhoods or geographic regions within the community where the resident population may be vulnerable or at risk for health problems or having difficulties obtaining health services?” Summary results for each question are provided below, listed in order of relative frequency noted by stakeholder participants, followed by tables listing the detailed, unedited responses to each question. Thirty-seven participants responded to the first question, while 33 participants responded to the second question.

Vulnerable/At-Risk Populations	Vulnerable/At-Risk Geographic Regions
• Uninsured/ underinsured • Low income • Elderly • Individuals with mental health issues • Homeless • Individuals with disabilities • Children	• Low income regions • Areas with high homelessness • Portsmouth • Norfolk, including the Oceanview region • Virginia Beach, including the oceanfront and Northwest areas • Suffolk and Chesapeake, rural areas noted

Uninsured/underinsured, low income and elderly populations were most frequently identified by community stakeholders as being vulnerable or at risk for health problems or having difficulties obtaining health services. Low income regions and areas with high homelessness were commonly identified as vulnerable or at risk geographic regions.

“Are there particular populations within the community who are vulnerable or at risk for health problems or having difficulties obtaining health services?” Detailed Responses (unedited except for confidentiality reasons)
• There still seems to be many adults without health insurance who can not afford dental care services. This is an ongoing issue in our community.
• Substance abusers; mentally ill
• low health literacy populations , uninsured , indigent and obese populations, increased aging population
• The uninsured in our community still have a challenging time recognizing they need care and obtaining it. Person who speak other than English are at a great disadvantage in our community as translation services are limited and there is a dearth of multilingual service providers.
• uninsured
• uninsured
• Seniors and Children • Working Poor
• Rural areas as well as portions of Dist.#2/3/4 that are housing projects areas that are underserved.P
• Extremely low-income (under 100% poverty), unemployed, veterans, mentally and physically disabled, children and elderly populations are recognized vulnerable populations with many nonprofits and federal, state and local governments are working to address their needs. However, the working poor (over 100% and under

300% poverty) are over-income for most assistance, yet cannot afford health insurance premiums (without high deductibles & copays), and don't have funds to pay for preventive and therapeutic services.
• The mentally ill.
• Patients with mental health are overlooked. Many are homeless and unable to maintain compliance with their care plan. The ER becomes a revolving door for them. Some of these patients aren't eligible for Medicaid and are too mentally ill to maintain a job. More group homes and case management services are needed to assist theses individuals.
• Uninsured/Underinsured, Unemployed/Underemployed, • Non-English speaking
• Mental health & homelessness
• Persons experiencing homeless • Persons with serious mental illness - primary care physicians who are comfortable with medically treating persons with SMI
• low income, low education residents
• Not aware of these groups.
• Inadequately insured individuals
• Low Income/elderly.
• Home support for those not ready for, no financially capable, or refusing skilled care facilities.
• Elderly
• Homeless, uninsured
• As the baby boom generation ages and the cost of health care rises, I think there will be many problems with finding adequate care (assisted care options, physicians who will take Medicare patients, and other age related problems.
• No baby services at SVBGH. There is a huge area it services and SPA is not convient
• It is difficult for the homeless and extremely poor to receive comprehensive medical care because often times the lack the proper documentation to receive care at the free clinics.
• A low level of income and/or education affect the ability of a person to recognize the need and then obtain health services - especially those without any easy access to insurance or the homeless.
• Yes - underinsured, public housing, individuals living in food deserts
• Individuals who live in Adult Homes - lack of an advocate to insure that they receive appropriate care.
• Lack of access to oral health and mental health services
• Adults without health insurance
• Individuals with Disabilities for Dental Services • Veterans • Low income Seniors • All need Oral Healthcare Services
• Uninsured and those with mental illnesses
• The poor, the uninsured, children, the elderly, the homeless, individuals with disabilities, non-English speaking individuals
• Elderly, Underprivileged and Mental Health are the populations I would say we still have a lot of needs for service. • Elderly - Paramedicine could help by stopping by and making sure they are taking their meds, do an in home fall assessment. Continue with stroke awareness, heart attack awareness out reach programs.

• Mental health - Need more facilities as they do not always need jail time but they need counseling and detox. - Our community does NOT have enough beds and staff to take care of the demand. We see kids as young as 5 with suicidal ideations - we need more beds and staff for mental health. • Underprivileged - need education on health issues and need places to go for everyday medical care with easy access and leave the ER's for emergencies.
• With the aging population, Alzheimer treatment/care is important
• uninsured, under-insured, low-income
• Pediatric population; they only have one place to go, and it is not in your facilities.
• The people most vulnerable are those with some or no health insurance that still cannot afford the copays or the 20% payments. These individuals still not afford healthcare. People are making daily choices to seek treatment or not based on how much money is in the bank. The price of health care (on the bills) is astouding and illogical. The money reimbursed by insurance is the same. Healthcare costs and reimbursements do not make sense to the public (nothing adds up) and even to healthcare providers.

"Are there particular neighborhoods or geographic regions within the community where the resident population may be vulnerable or at risk for health problems or having difficulties obtaining health services?" Detailed Responses (unedited except for confidentiality reasons)
• Low income areas
• Portsmouth, Norfolk , Suffolk Chesapeake, Rural communities
• There are 11 census tracts within Virginia Beach that have a life expectancy of less than 75.0 years. They live on average 10+ years less than those in the highest life expectancy tract. These include the following: 040600, 041002, 042801, 044200, 040200, 044806, 040402, 045408, 046005, 040801, and 041003.
• South Norfolk - not enough primary care
• Calvert Square, Tidewater Park, Southside, Suffolk, Portsmouth
• Portsmouth VA.
• This area has many homeless individuals. Other then asking for money on the streets, I hope they are receiving health services.
• Average working class communities and those with young families. Child care averages $150 to $200 week and 2bdr apartments average $1,000/month. Add utilities, car payments, gas, etc. and there is nothing left to go to the dentist or see a doctor for preventive care. They delay until their need is acute and could have been prevented.
• ?
• The oceanfront in the winter time is home to many of the homeless. Transportation and insurance to receive medical care leads to deteriorating health as well as mental illness (depression).
• There are pockets throughout the area
• Ocean View, Berkley
• usual underserved areas
• Miss the nursery department. Princess Anne s quite a distance away.
• Portsmouth
• Economically challenged and homeless in the Virginia Beach Oceanfront area, the northwestern secontion of the Virginia Beach and Plaza/Green Run/ Salem areas.
• Generally low income neighborhoods need more intrusive intervention strategies
• Ocean View
• Low income housing, health issues resulting from violent acts, including sexual assault.
• A lot of the homeless live at the oceanfront of Virginia Beach.

• The Homeless are at the top of the list.
• Norfolk, Newport News, Portsmouth, Hampton
• Inner cities of Norfolk & Portsmouth
• Yes. Impoverished areas. Low income. Unemployed.
• Lower income neighborhoods in all of the cities and rural communities in Suffolk, Chesapeake and Virginia Beach
• I have witnessed all areas of Southampton Roads Virginia in need of oral healthcare services
• Norfolk, Portsmouth
• Green Run, Seatack, Bayside
• Jamestown Commons - Military Highway has many underprivileged housing areas that are part of the Virginia beach community, Birdneck area - a lot of homeless also live in this area, Campus East, and those neighborhoods around Wesleyan and Aragona, Plaza near Plaza apts, Lake Edward, Luther Manor Nursing home, Etc..
• not in Virginia Beach
• see above. zip code is very much a predictor of health
• All of the neighborhoods that you serve.
• Area of northhampton blvd is home to many sex offenders and a new building for the working homeless. The areas up Diamond Springs Rd are poor and dangerous. More services to this area of Virginia Beach would be great.

Health Assets in the Community

Survey participants were asked to think of health assets as people, institutions, programs, built resources (e.g. walking trails), or natural resources (e.g. beaches) that promote a culture of health. Then they were asked two related free response questions, "In your view, what are the most important health assets within the community?" followed by, "Are there any health assets that the community needs but is lacking?" Summary results for each question are provided below, listed in order of relative frequency noted by stakeholder participants, followed by tables listing the detailed, unedited responses to each question. Thirty-three participants responded to the first question, while 27 participants responded to the second question.

Most Important Health Assets Existing in Community	Needed Health Assets Currently Lacking in the Community
• Built resources, including community parks, recreation areas, safe walking/bike trails, community recreation centers/gyms, and Mount Trashmore • Natural resources, including beaches, bodies of water, and the outdoors • Safety net providers/clinics and other providers/medical care facilities • Health Department • Emphasis on collaborations, partnerships, institutions, programs, and people	• Built resources to improve the walkability and bikeability of communities • Mental health and substance abuse services/facilities • Assets focused on improving medical and preventive care to the indigent and uninsured/underinsured • Assets related to wellness and obesity prevention (increased access to healthy foods/venues, education) • Assets focused on improving the care to special populations (services/facilities for seniors, services for those living in adult homes) • Improved public transportation • Affordable housing

A variety of built and natural resources were frequently noted by stakeholders as the most important health assets that exist in the community. More built resources to improve the walkability and bikeability of communities, mental health and substance abuse services/facilities, and assets focused on improving medical and preventive care to the indigent and uninsured/underinsured were among the most frequently mentioned health assets that are needed in the community.

"In your view, what are the most important health assets within the community?" **Detailed Responses** (unedited except for confidentiality reasons)
• Safety net clinics and community health centers
• Community parks , walking trails , bike lanes ,athletic and fitness centers. Strong health systems .
• For Virginia Beach, the most influential resource we have are our amazing parks and recreation areas. We have an Outdoor Plan, a Bikes and Trailways Plan and a Complete Street policy. These all help promote active living in our community. We also have amazing partnerships and collaborations.
• Va Beach Health Clinic, bike and walking trails
• Chesapeake Regional Medical Center, Chesapeake Public Health Department, YMCA, Chesapeake Care Free Clinic
• Natural resources, built resources, evms

• Bike trail in Norfolk
• Safe walking trails.
• All that you have mentioned.
• people and institutions
• People helping people, for example the faith-based community. Churches have food pantries, are providing more affordable child care, dinners for seniors, shelter (NEST), emergency financial assistance for people in need. They are the best example of community assistance.
• beach, First Landing park, Mt. Trashmore
• Institutions that can be relied on to serve as models of health. Built resources that can be easily utilized in the metropolis that is Hampton Roads.
• Parks, parks & rec classes
• Sentara, EVMS, VDH, local outdoors
• Recreation Centers; bike/walking trails; boardwalk/beach.
• Bikeways, parks, pools, sports teams for all ages. Group fitness programs. Nutrition and lifestyle support programs.
• People
• Programs and institutions
• people within the healthcare community, mainly those who help the aging find the sources for the medical/physical care they need
• All out door activities. Marys Garden at SVBGH is a great service to the community
• Primary care Health providers despite lower reimbursement for them.
• Virginia Beach has many natural resources (the ocean and bay beaches, the State Park, bike and walking trails) as well as the Virginia Beach Parks and Recreation Center's year round programs. The schools, their programs and sports, are important health assets, as well as, the hospitals and their many educational and outreach programs.
• Walking paths, healthy-food access/ farmer's markets, Hands-only CPR training
• All of the resources listed above are great for individuals who have the ability to access resources but does not take into account people living in Adult Homes.
• We have a number of beaches, lakes walking trails, bike trails and parks that are accessible to all
• Expanded public and specialized transportation; greater access to evidence based wellness instruction, stronger links between health collaboratives and civic groups
• Recreation centers with modest fees.
• Safety net providers who have dental • ODU School of Dental Hygiene has 32 chair clinic • ODU School of Dental Hygiene 35 dental hygiene students who impact community • Sentara Grant -Dental Voucher Program for those who are uninsured and underserved • Mission of Mercy Dental Access Event 1x per year - over 600 individuals were turned away • Homeless Connect Norfolk Access Event
• Hospitals, Health Dept., Beach Health Clinic, Parks, Beaches, Farmer's Markets, Rec Centers, Libraries, Bikeways and Trails
• Bike trails, rec centers, boardwalk
• Yes
• Sentara is well located throughout the community. Safety on walking trails outside the state parks is an issue. The Public Health Department is underfunded - and they serve a large population in Hampton Roads. Assisting with funding of Public Health Initiatives (partnering) would be an important asset.

"Are there any health assets that the community needs but is lacking?" **Detailed Responses** (unedited except for confidentiality reasons)
• Substance abuse and mental health treatment, especially for those who cannot afford it or are uninsured
• More healthy eating and fresh food offerings • Senior offerings • Obesity prevention and education
• We are sorely lacking mental health services. With the increasing problem with substance abuse, we need more treatment programs as well as an integrated approach to mental and physical health.
• more preventative care for underinsured
• Mental health facilities, good public transit, bicycle trails
• Safe Parks for children, walking trails
• Yes, there should be more free community events given by hospitals on nutrition, heart disease, diabetes and cancer(skin care screening), how to read labels on nutrition etc..
• Coordination, connections to resources, teaching (without lecturing) how to access and better manage health resources. Many "classes" and workshops are offered but there is a limited amount of time to participate in the offerings. Access Partnership identified that if information is sent to some of the local churches, they reach out to their congregations. There is also a "trust" within the faith-based communities that may be lacking in other areas, especially in minority communities.
• Bike lanes on busy roads, wellness coordinators to assist the community with creating nutrition and exercise plans as well as providing coaching services. Healthier food at venues would also be great!
• Bike trails, walking trails, better public transportation that would encourage more biking and walking rather than just pulling in a parking space.
• Assertive outreach and access primary care and medications for no fee for indigent
• some sort of collaborative community analytic and needs identification capability
• In home or easy access follow up and compliance care for patients with chronic illness (diabetes, CAD, obesity,...). Especially for low income families and those with less than a high school education.
• soon we will be in short supply of affordable facilities needed for the aging and doctors in all fields that will take new patients on Medicare
• Checking on the elderly that live alone..getting them out of the house, transportation for them. We need a bigger and more specialized Nursing home on !st. Col. The present ones are old and some are horrible.
• Probably, but money is the biggest impediment to health care/asset improvement.
• education
• Services are lacking for people living in Adult homes.
• Not that I can think of
• Sidewalks
• Sidewalks.
• A call-center for our area for those who do not have access to healthcare services especially dental. Most go to the emergency room - expensive and inadequate care.
• Free clinics
• Affordable housing
• Paramedicine, • AHA App - CPR, - Pulse Point

• AED program for businesses and churches (large meeting areas and recreation areas, • Stop the Bleed program • Sepsis Program • More stroke awareness and heart attack awareness presenters to go to church groups, rotary clubs, etc... to present. • Facilities for Mental health
• collaboration among existing orgs and agencies will increase collective impact and improve outcomes.
• Safe walking areas at night

Additional Ideas and Suggestions

As an optional open-ended question, additional ideas or suggestions for improving community health were asked to be shared. Fourteen participants provided comments. The detailed responses are provided below. Note responses are unedited except in the interest of confidentiality (example: participant phone number redacted).

Additional Ideas and Suggestions
• The state government needs to expand Medicaid.
• Transportation for health care is a major concern for many. • More long term care facilities and resources for increasing senior populations . Better collaboration within the health community.
• Work collaboratively with CRMC and public health department
• Events, that are advertised (not just in-house) on nutrition, diabetes, cancer, heart disease/stroke, how to read labels, skin screening, legal help with wills (DNR,living wills etc.) The events should be free advertised widely.
• Bon Secours created Parish Nursing, now known as faith-based nursing and worked with health advocates and professionals within the churches. This was very successful but doesn't seem as active. There may be an opportunity to revisit faith community nursing in Hampton Roads since there are churches in every community. http://www.churchhealthcenter.org/fcnhome
• I listed my ideas on the previous pages.
• Need outpatient mental health support
• Rental bikes for downtown areas. More drive share areas for traveling to and from work.
• Obesity and poor nutrition contributes to a host of problems and should be addressed community wide.
• Mental health needs help. Not enough facilities. Patients need outside rec. areas. • Drugs are a big issue at the Oceanfront. More rehab for them. • Homeless are all over this area. Very little help for them.
• As a college, and community partner, all issues and concerns impact the welfare of our institution and area.
• Call Center for South Hampton Roads Area of VA. • Safety Net Providers help but weak on human resources and grants funding for dental • More visability for ODU School of Dental Hygiene Care Clinic where we can see many underserved individuals. • Transportation issues
• Feel free to contact me if you have any questions regarding any of my responses. [*Phone number redacted*]

- I write as the ED of a statewide organization, so my lens is not as specific to Hampton-Roads as i would like to best fill out this survey - but i see your community making great strides to collaborate and work collectively to improve health outcomes. my niche is oral health integration and the importance of including oral health as part of comprehensive health care (improving diabetes outcomes, early childhood health, and reducing pain and use of the ED for avoidable conditions.

Community Focus Group Session Findings

Community Focus Groups were carried out for greater insight from diverse stakeholders. Focus groups were often drawn from existing hospital and community groups or sought from other populations in the community, including representatives of underserved communities and consumers of services.

Five (5) focus group sessions were held in September and October month(s) of 2016. The number of participants ranged from 5 to 15. When possible, representatives from the health department and other local hospitals were invited to attend the sessions.

1. Women's Infant and Children Program (held in conjunction with the Virginia Beach Health Department and Sentara Princess Anne Hospital)
2. Virginia Beach Patient Family Advisory Council
3. People in Need (PIN) Ministries
4. Sentara Village (held in conjunction with the Virginia Beach Health Department and Sentara Princess Anne Hospital)
5. Sentara Virginia Beach EMS

A series of questions were asked during each focus group. A brief summary of the key findings for each topic is presented below.

Topic	Key Findings
What are the most serious health problems in our community?	Mental Health, Substance Abuse, Diabetes, Obesity, Heart Failure, Alzheimer's, Cancer, Aging Population, Respiratory, Hypertension, Food addiction, Maternal Health
Who/what groups of individuals are most impacted by these problems?	Low-income, elderly people, people with multiple chronic illnesses, people suffering from mental illness, cognitively impaired people, people with multiple medications, the uninsured, under-educated people,
What keeps people from being healthy? In other words, what are the barriers to achieving good health?	Addiction, transportation needs, housing needs, access issues for mental health and primary care, knowledge/awareness, fear/denial, lack of support and resources, lack of finances, large burdens, lack of education on chronic illnesses, mental health resources, lack of outpatient resources and continued post-discharge management
What is being done in the community to improve health and to reduce the barriers? What resources exist in the community?	PATH (mental health link for homeless), PIN Ministries, RN case managers with SMG, JCOC, CAMI, Rec Centers, support groups, Sentara.com education, prohibiting smoking in public places, incentives for preventative care, wellness programs at work, nutrition labels on food, WIC program

What more can be done to improve health, particularly for those individuals and groups most in need?	Wellness clinic for homeless population, mobile integrated healthcare, ED discharge redesign to include patient education and follow-up, Centers of Excellence, comprehensive education programs, increased community outreach, cost of insurance/copays, Sentara donate lab tests for community based clinics, open access scheduling for community based clinics, increased access to prescription medications, medical advocacy, primary care providers have open slots for no charge visits, network of specialists to see no charge patients, crisis stabilization unit, faster access to mental health services

V. APPENDIX

An evaluation of the progress toward the implementation strategies is included in the following pages.

Sentara Community Health Needs Assessment Implementation Strategy

2016 Progress Report

Hospital: Virginia Beach Ambulatory Surgery Center

Quarter (please indicate): First Quarter Second Quarter Third Quarter X Year End

In support of Sentara's 2014 goal to "demonstrate community benefit in the communities we serve", Sentara will measure the progress toward the community health needs assessment implementation strategies selected by each hospital on a quarterly basis.

To complete this quarterly progress report, the health problems and implementation strategies can be pasted into this document from the hospital's existing Three Year Implementation Strategy document. The quarterly progress should be identified in the third column below.

The quarterly report should include only key actions taken during the quarter; the report does not need to include all activities. Where possible the actions should be quantified, with outcomes measurements if available.

Reports should be emailed to Deb Anderson at dkanders@sentara.com within 15 days of the close of each quarter.

Health Problem	Three Year Implementation Strategies	Progress
Problem #1 Obesity	• Support the community healthy eating and nutritional awareness initiatives sponsored by Sentara Virginia Beach General Hospital in the following ways: o Distribute information to VBASC patients about the "Art and Science of Health Eating" series offered by the Virginia Beach Medical Society, Cardiology Vascular Associates, and Whole Food Market. o Informing patients about the Virginia Beach Diet Study.	• Posted information about the VBMS Healthy Eating series. • Investigating opportunities to partner with the hospital healthy eating programs for patients and staff. • Researching materials that promote healthy eating and provide education about weight control. • Conduct pre op screening and BMI risk assessment to identify patients who may not be candidates for outpatient surgery and to identify individuals who may benefit from educational programs.

Health Problem	Three Year Implementation Strategies	Progress
	o Offer the facility as a venue for patient educational symposia about diet, obesity and the impact on health. o Working collaboratively with SVBGH Patient Relations Department to identify additional opportunities to educate patients about the relationship between Obstructive Sleep Apnea (OSA), Obesity and Heart Disease. • Continue to promote nutritional awareness, emphasizing the relationship of obesity to disease through written educational materials and informing the public about community health and wellness programs sponsored by the hospital.	
Problem #2 Diabetes	• Make VBASC patients and families aware of the Diabetes management classes offered by the SVBGH Diabetes Educator. • Provide educational materials on the importance of reading and understanding food labels. • Provide information to VBASC patients and families about the "Healthy Living with Diabetes" educational program offered to the community. (Individual participation in this 9 hours (3 hours/3 days) program will provide free lifetime follow-up visits for those diagnosed with diabetes.)	• Provided patients and visitors a brochure about the Healthy Living with Diabetes program for members of the community. • Investigating opportunities to partner with the hospital Diabetes education programs for patients and staff at VBASC and on the website. • Conduct pre op screening to identify patients who may benefit from educational programs offered.
Problem #3 High Blood Pressure/Heart Disease	• Communicate information to patients and families about the availability of educational talks provided by the community partners (CVAL) about maintaining the health and wellness of the cardiovascular system. • Provide information about hospital sponsored blood pressure screenings, blood glucose testing, stroke education, vision screenings, diet and nutrition classes and smoking cessation classes available to the public. • Investigate opportunities to post educational materials about heart disease, obesity, OSA on the VBASC website. • Support future collaboration with other Southside Hospitals to provide prevention and wellness screenings for health issues:	• Provided information to patients and visitors about the SVBGH Annual Heart Walk in October. • Investigating opportunities to post educational materials about heart disease, obesity, OSA on the VBASC website. • Conduct pre op screening to identify patients with hypertension and those who would benefit from educational programs. • At the time of the routine post op call, inform patients about cardiac health and wellness programs.

Health Problem	Three Year Implementation Strategies	Progress
	cholesterol, BMI, and BP and by offering the facility as a venue to conduct these events.	
Problem #4 Cancer	• Inform patients and families about the SVBGH prostate cancer screenings and skin cancer screenings, and about the "Every Women Life Program" for the uninsured and underinsured women and the availability of yearly mammograms. • Promote and support community awareness of cancer support groups.	• Health Education Bulletin Board posted information about the Cancer Support Group Meetings at SVBGH. • Collaborating with the Hospital to identify opportunities to partner on Cancer prevention education and smoking cessation projects.