# CarePlex Orthopaedic Ambulatory Surgery Center
# Community Health Needs Assessment
# 2016

SENTARA®

**CarePlex Orthopaedic Ambulatory Surgery Center**

**2016 Community Health Needs Assessment**

## Table of Contents

## I. INTRODUCTION

CarePlex Orthopaedic Ambulatory Surgery Center has conducted a community health needs assessment in collaboration with Sentara CarePlex 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:

- Accident/ Injury Reduction
- Underinsured/ Uninsured
- Access
- Community Outreach

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.

CarePlex Orthopaedic 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.

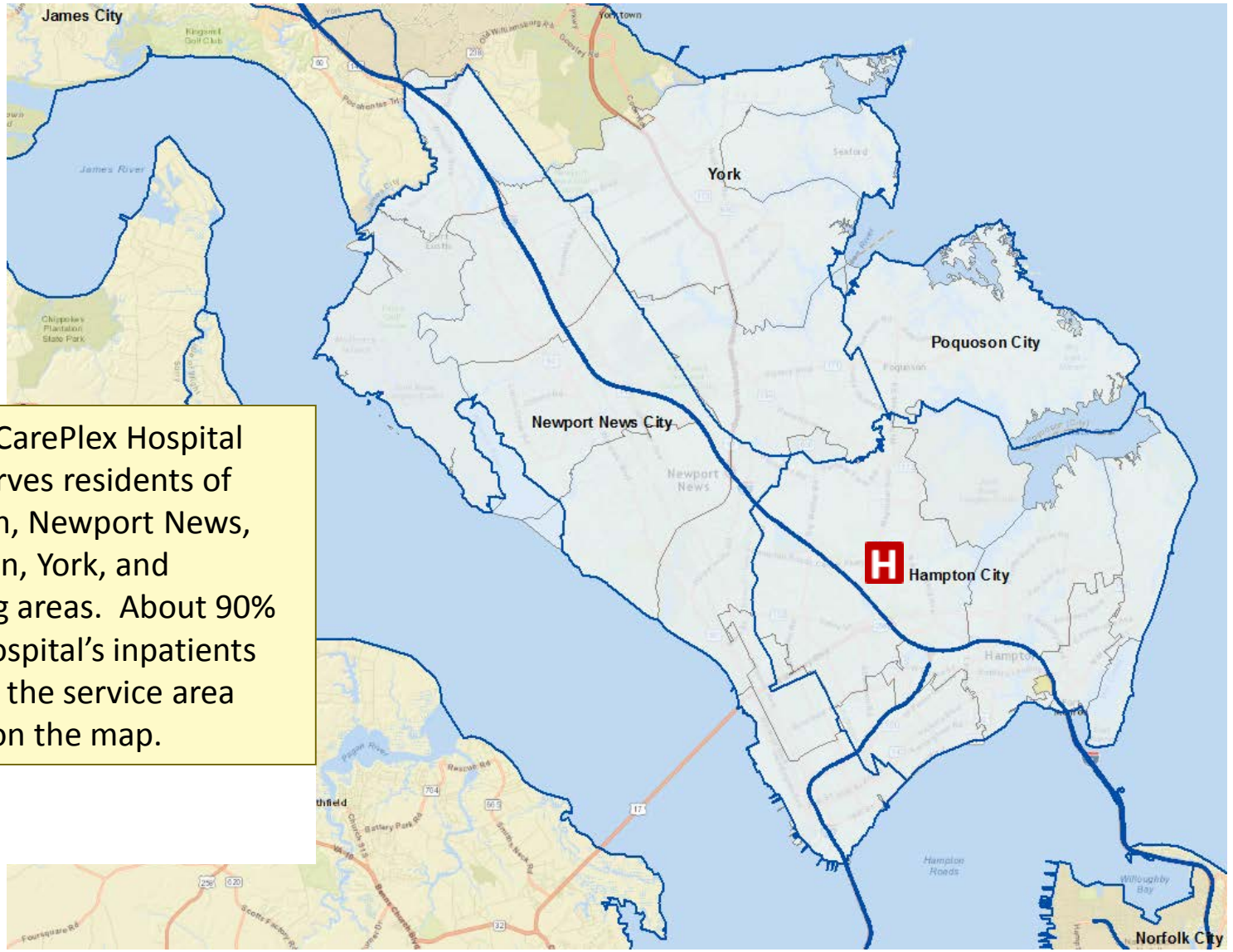
Your input is important to us so that we can incorporate your feedback into our assessments. You may use our online feedback form available on the Sentara.com website. Thanks!

# Sentara CarePlex Hospital (SCH) 2016 Community Health Needs Assessment

## Community Description

# Community Description

*Sentara CarePlex Hospital Service Area*




Sentara CarePlex Hospital (SCH) serves residents of Hampton, Newport News, Poquoson, York, and adjoining areas. About 90% of the hospital's inpatients reside in the service area shaded on the map.

Key:

H SCH

# Area-wide Key Demographic Characteristics

| DEMOGRAPHIC CHARACTERISTICS | Selected Area | Virginia | USA |
|---|---|---|---|
| 2010 Total Population | 380,085 | 8,001,038 | 308,745,538 |
| 2016 Total Population | 384,846 | 8,428,339 | 322,431,073 |
| 2021 Total Population | 393,355 | 8,801,874 | 334,341,965 |
| % Change 2016 - 2021 | 2.2% | 4.4% | 3.7% |
| Median Household Income | $54,075 | $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 | 73,552 | 19.1% | 74,016 | 18.8% | 18.5% | 19.0% |
| 15-17 | 14,936 | 3.9% | 15,263 | 3.9% | 3.8% | 4.0% |
| 18-24 | 44,388 | 11.5% | 41,327 | 10.5% | 10.0% | 9.8% |
| 25-34 | 58,296 | 15.1% | 57,983 | 14.7% | 13.6% | 13.3% |
| 35-54 | 94,640 | 24.6% | 94,675 | 24.1% | 26.8% | 26.0% |
| 55-64 | 47,647 | 12.4% | 49,997 | 12.7% | 12.9% | 12.8% |
| 65+ | 51,387 | 13.4% | 60,094 | 15.3% | 14.4% | 15.1% |
| **Total** | **384,846** | **100.0%** | **393,355** | **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 | 8,024 | 3.2% | 4.8% | 5.8% |
| Some High School | 17,423 | 6.9% | 7.0% | 7.8% |
| High School Degree | 67,423 | 26.8% | 25.0% | 27.9% |
| Some College/Assoc. Degree | 93,099 | 36.9% | 27.3% | 29.2% |
| Bachelor's Degree or Greater | 66,001 | 26.2% | 35.8% | 29.4% |
| **Total** | **251,970** | **100.0%** | **100.0%** | **100.0%** |



- **The area's 2016 total population is 384,846 with projected growth of 2.2% over the next five years.**
  - This expected rate of growth is less than both the Virginia and U.S rates.
- **The median household income ($54,075)** is 18% lower than the state and 3% lower than the US median income.
- **Population by age group:**
  - 26.6% of this population is aged 18-34, which is a greater percent compared to Virginia (23.6%) and the U.S. (23.1%).
  - The 65+ age cohort (13.4%) is a lower percent compared to Virginia (14.4%) and the U.S (15.1%).
- **10.1% of the population age 25+ has only some high school education or less.**
  - This is less than Virginia (11.8%) and the U.S. (13.6%).

# Area-wide Key Demographic Characteristics, Cont.

| DEMOGRAPHIC CHARACTERISTICS | | | | | |
|---|---|---|---|---|---|
| | 2016 | 2021 | % Change | Virginia % Change | USA % Change |
| Total Male Population | 186,904 | 191,558 | 2.5% | 4.5% | 3.8% |
| Total Female Population | 197,942 | 201,797 | 1.9% | 4.4% | 3.6% |
| Females, Child Bearing Age (15-44) | 81,233 | 81,427 | 0.2% | 1.3% | 1.5% |

| HOUSEHOLD INCOME DISTRIBUTION | | | | |
|---|---|---|---|---|
| | Income Distribution | | | |
| 2016 Household Income | HH Count | % of Total | Virginia % of Total | USA % of Total |
| <$15K | 17,107 | 11.3% | 9.6% | 12.3% |
| $15-25K | 15,897 | 10.5% | 8.3% | 10.4% |
| $25-50K | 38,933 | 25.7% | 20.8% | 23.4% |
| $50-75K | 30,406 | 20.1% | 17.6% | 17.6% |
| $75-100K | 19,466 | 12.9% | 12.6% | 12.0% |
| Over $100K | 29,616 | 19.6% | 31.1% | 24.3% |
| Total | 151,425 | 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 | 186,370 | 48.4% | 62.5% | 61.3% |
| Black Non-Hispanic | 142,634 | 37.1% | 18.9% | 12.3% |
| Hispanic | 27,743 | 7.2% | 9.2% | 17.8% |
| Asian & Pacific Is. Non-Hispanic | 13,076 | 3.4% | 6.3% | 5.4% |
| All Others | 15,023 | 3.9% | 3.1% | 3.1% |
| Total | 384,846 | 100.0% | 100.0% | 100.0% |



- **The projected growth of Females, Child Bearing Age (15-44) is 0.2%, much lower than the state (1.3%) and the U.S. (1.5%).**
- **21.8% of the population has a household income below $25,000.**
  - This is higher than Virginia (17.9%) and lower than the U.S. (22.7%).
  - 200% of the current Federal Poverty Level for a family of four is $48,600.
- **7.2% of the population is Hispanic, which is lower than both Virginia (9.2%) and the U.S. (17.8%).**
- **37.1% of the population is Black Non-Hispanic, nearly twice the portion of Virginia (18.9%) and over three times the U.S. portion (12.3%).**

# Key Demographic Data by ZIP Code

| City, ZIP Code, & ZIP 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 |
| Newport News | 23601 | Warwick/ Hilton Vill | 25,208 | 1.8% | 15.4% | 13.6% | 22.4% | 4.1% | 38.3% | -0.3% |
| Newport News | 23602 | Denbigh | 40,562 | 2.0% | 13.2% | 14.8% | 24.0% | 3.7% | 40.7% | -1.7% |
| Newport News | 23603 | Lee Hall | 3,851 | 0.7% | 5.8% | 24.9% | 30.0% | 1.4% | 47.5% | -4.2% |
| Newport News | 23604 | Fort Eustis | 6,490 | 11.6% | 0.2% | 73.3% | 25.8% | 8.4% | 60.3% | 5.8% |
| Newport News | 23605 | Parkview | 13,852 | 0.2% | 13.3% | 13.5% | 22.3% | 3.5% | 40.9% | -2.8% |
| Newport News | 23606 | Oyster Point | 30,623 | 4.7% | 13.0% | 15.3% | 18.6% | 7.7% | 48.8% | 4.2% |
| Newport News | 23607 | East End | 24,398 | 1.0% | 12.2% | 14.0% | 27.2% | 1.3% | 40.4% | 0.2% |
| Newport News | 23608 | Patrick Henry | 43,852 | 2.6% | 9.8% | 22.3% | 26.7% | 4.2% | 44.0% | -1.8% |
| Hampton | 23651 | Fort Monroe | 623 | -3.9% | 5.1% | 6.3% | 31.1% | -0.5% | 46.5% | -9.3% |
| Hampton | 23661 | Wythe | 13,901 | 0.2% | 17.3% | 14.8% | 21.2% | -0.8% | 35.9% | -2.2% |
| Poquoson | 23662 | Poquoson | 12,095 | 1.0% | 19.1% | 16.8% | 20.1% | -15.9% | 33.8% | 2.3% |
| Hampton | 23663 | Phoebus | 13,948 | 0.5% | 12.8% | 15.9% | 24.4% | 0.0% | 40.4% | -0.8% |
| Hampton | 23664 | Foxhill / Buckroe | 10,413 | 0.3% | 16.7% | 17.7% | 20.3% | -1.6% | 34.3% | -1.3% |
| York | 23665 | Langley | 5,628 | 4.3% | 0.3% | 68.4% | 37.4% | 1.5% | 56.9% | -1.0% |
| Hampton | 23666 | Modern /Riverdale | 51,232 | 3.0% | 14.2% | 17.8% | 21.8% | 2.7% | 40.6% | 1.0% |
| Hampton | 23669 | Olde Hampton | 42,687 | 1.1% | 14.0% | 16.3% | 21.5% | -0.5% | 42.9% | -1.1% |
| York | 23692 | Grafton | 18,320 | 2.0% | 20.6% | 13.8% | 19.2% | -9.7% | 32.8% | 3.9% |
| York | 23693 | Tabb | 23,603 | 3.5% | 11.7% | 31.9% | 22.6% | -9.2% | 37.0% | 3.9% |
| York | 23696 | Seaford | 3,560 | -0.4% | 20.2% | 9.2% | 21.3% | -11.6% | 31.1% | 6.0% |
| | | **Total** | **384,846** | **2.2%** | **13.4%** | **16.9%** | **23.0%** | **0.9%** | **41.0%** | **0.2%** |
| | | **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 SCH service region is Fort Eustis; Fort Monroe and Seaford are expected to decline over the next 5 years.
- Both the % of total population aged 65+ and the growth rate of this cohort is lower than Virginia and U.S. overall. Fort Eustis and Langley have less than 0.5% of the population in this age range with a high predicted growth rate over the next 5 years.
- The pediatric population is expected to grow at the national rate (0.9%), but 9 ZIP codes are predicted to remain flat or experience declines. 30% or more of the population of Lee Hall and Langley are children.
- The female population of childbearing age (15-44) in this service area is projected to grow by 0.2%, with 11 ZIP codes likely experiencing a decline. More than half the female population in Fort Eustis and Langley fall within this cohort, a much higher percentage than Virginia or the U.S.

# Key Demographic Data by ZIP Code

| City, ZIP Code, & ZIP 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 |
| Newport News | 23601 | Warwick/ Hilton Vill | 31.2% | 2.1% | 5.7% | 23.5% | 10.3% |
| Newport News | 23602 | Denbigh | 31.1% | 4.6% | 9.5% | 15.7% | 9.5% |
| Newport News | 23603 | Lee Hall | 31.0% | 2.5% | 12.1% | 19.5% | 9.6% |
| Newport News | 23604 | Fort Eustis | 13.3% | 3.5% | 14.6% | 11.8% | 0.4% |
| Newport News | 23605 | Parkview | 52.3% | 1.3% | 6.5% | 28.8% | 15.7% |
| Newport News | 23606 | Oyster Point | 18.8% | 2.5% | 10.6% | 20.4% | 11.3% |
| Newport News | 23607 | East End | 80.7% | 0.5% | 3.2% | 45.8% | 23.0% |
| Newport News | 23608 | Patrick Henry | 42.5% | 4.7% | 11.7% | 19.5% | 9.3% |
| Hampton | 23651 | Fort Monroe | 14.1% | 0.5% | 10.8% | 7.7% | 0.3% |
| Hampton | 23661 | Wythe | 60.2% | 1.7% | 4.5% | 30.1% | 12.9% |
| Poquoson | 23662 | Poquoson | 1.2% | 2.5% | 2.7% | 11.7% | 7.2% |
| Hampton | 23663 | Phoebus | 48.9% | 1.9% | 5.9% | 27.8% | 15.5% |
| Hampton | 23664 | Foxhill / Buckroe | 21.5% | 1.3% | 5.6% | 14.9% | 9.7% |
| York | 23665 | Langley | 14.6% | 2.1% | 14.5% | 8.4% | 1.5% |
| Hampton | 23666 | Modern /Riverdale | 50.9% | 3.3% | 5.8% | 22.2% | 7.6% |
| Hampton | 23669 | Olde Hampton | 47.3% | 2.1% | 5.6% | 29.1% | 10.7% |
| York | 23692 | Grafton | 5.9% | 4.1% | 5.0% | 10.3% | 6.4% |
| York | 23693 | Tabb | 11.9% | 9.2% | 5.7% | 7.0% | 3.6% |
| York | 23696 | Seaford | 2.0% | 1.7% | 3.2% | 7.0% | 5.2% |
| | | **Total** | **37.1%** | **3.2%** | **7.2%** | **21.8%** | **10.1%** |
| | | **Virginia** | **18.9%** | **6.3%** | **9.2%** | **17.9%** | **11.8%** |
| | | **United States** | **12.3%** | **5.4%** | **17.8%** | **22.7%** | **13.6%** |

- The SCH service area overall has a larger portion of the population than the state and U.S. that is Black, Non-Hispanic; 4 ZIP codes are greater than 50%.
- All but one ZIP code have a smaller portion of Asian Non-Hispanic population than the state or U.S.
- This area has a 60% smaller proportion of Hispanic population than the U.S. as a whole (7.2% vs 17.8%); 7 ZIP codes have a larger portion of Hispanic population than Virginia.
- 6 ZIP codes in the SCH service area have a higher portion of households with income below $25K than either Virginia or the U.S.
- 3 ZIP codes in the SCH service area have a higher percent of population age 25+ that did not graduate high school than either Virginia or the U.S.



Source: Truven/Market Expert

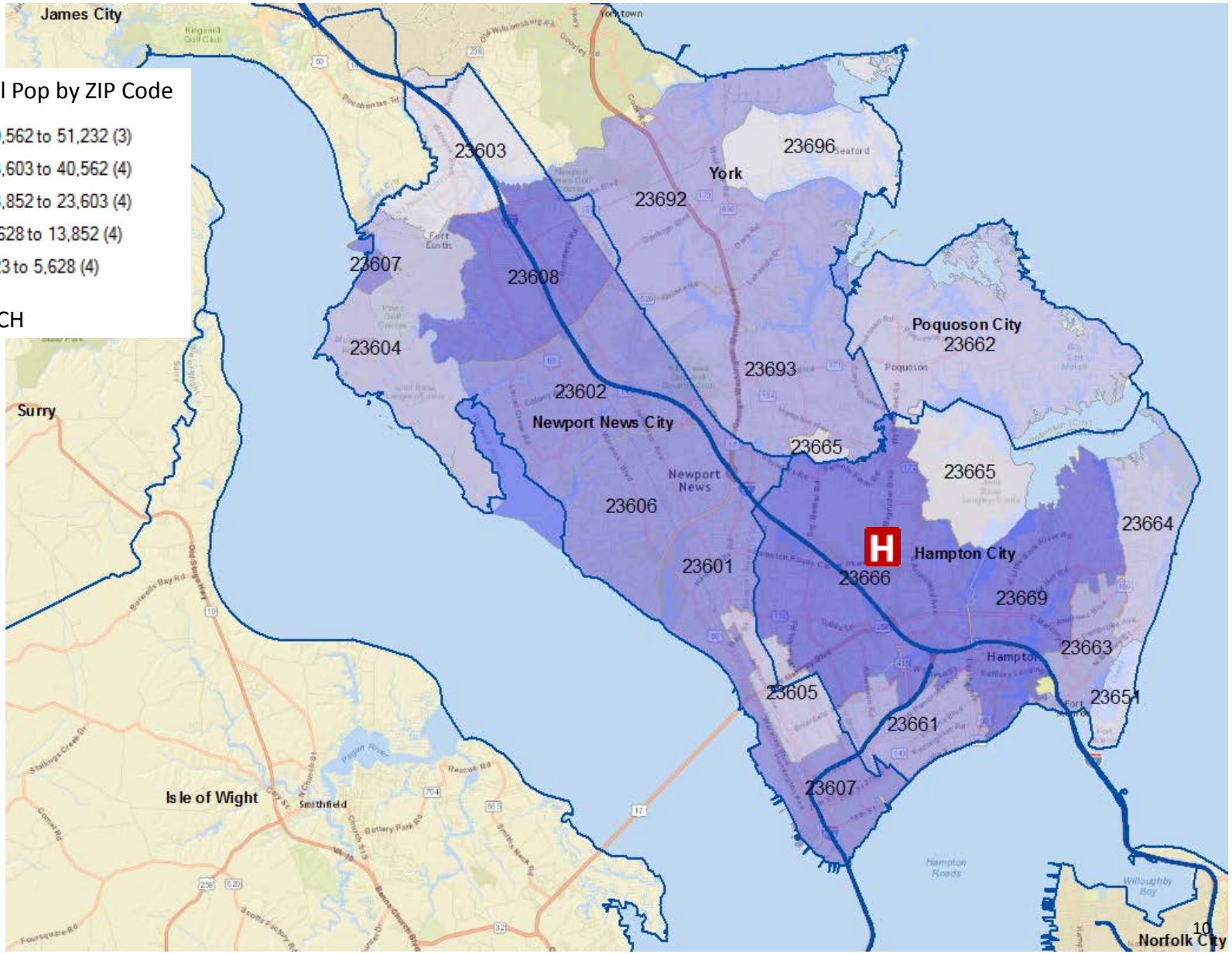
# Key Demographic Data by ZIP Code

| City/County | ZIP Code | ZIP Name | Total Pop 2016 | Total Pop 2021 | % Change 2016-2021 | 2016 Pop Density / Sq Mile | % of Service Area Pop | % White NonHisp | % Black NonHisp | % Hispanic | % Asian NonHisp | % Other NonHisp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Newport News | 23601 | Warwick/ Hilton Vill | 25,208 | 25,654 | 1.8% | 3324 | 6.6% | 57.2% | 31.2% | 5.7% | 2.1% | 3.8% |
| Newport News | 23602 | Denbigh | 40,562 | 41,368 | 2.0% | 2678 | 10.5% | 50.0% | 31.1% | 9.5% | 4.6% | 4.7% |
| Newport News | 23603 | Lee Hall | 3,851 | 3,879 | 0.7% | 530 | 1.0% | 49.6% | 31.0% | 12.1% | 2.5% | 4.9% |
| Newport News | 23604 | Fort Eustis | 6,490 | 7,241 | 11.6% | 558 | 1.7% | 61.9% | 13.3% | 14.6% | 3.5% | 6.8% |
| Newport News | 23605 | Parkview | 13,852 | 13,880 | 0.2% | 3819 | 3.6% | 36.3% | 52.3% | 6.5% | 1.3% | 3.6% |
| Newport News | 23606 | Oyster Point | 30,623 | 32,077 | 4.7% | 2958 | 8.0% | 65.2% | 18.8% | 10.6% | 2.5% | 3.0% |
| Newport News | 23607 | East End | 24,398 | 24,633 | 1.0% | 3628 | 6.3% | 12.2% | 80.7% | 3.2% | 0.5% | 3.4% |
| Newport News | 23608 | Patrick Henry | 43,852 | 44,983 | 2.6% | 4117 | 11.4% | 36.0% | 42.5% | 11.7% | 4.7% | 5.0% |
| Hampton | 23651 | Fort Monroe | 623 | 599 | -3.9% | 382 | 0.2% | 70.3% | 14.1% | 10.8% | 0.5% | 4.3% |
| Hampton | 23661 | Wythe | 13,901 | 13,926 | 0.2% | 2853 | 3.6% | 29.7% | 60.2% | 4.5% | 1.7% | 3.9% |
| Poquoson | 23662 | Poquoson | 12,095 | 12,215 | 1.0% | 700 | 3.1% | 91.5% | 1.2% | 2.7% | 2.5% | 2.2% |
| Hampton | 23663 | Phoebus | 13,948 | 14,014 | 0.5% | 4330 | 3.6% | 39.1% | 48.9% | 5.9% | 1.9% | 4.2% |
| Hampton | 23664 | Foxhill / Buckroe | 10,413 | 10,443 | 0.3% | 1783 | 2.7% | 67.9% | 21.5% | 5.6% | 1.3% | 3.6% |
| York | 23665 | Langley | 5,628 | 5,868 | 4.3% | 820 | 1.5% | 61.7% | 14.6% | 14.5% | 2.1% | 7.1% |
| Hampton | 23666 | Modern /Riverdale | 51,232 | 52,763 | 3.0% | 2506 | 13.3% | 35.7% | 50.9% | 5.8% | 3.3% | 4.2% |
| Hampton | 23669 | Olde Hampton | 42,687 | 43,138 | 1.1% | 3217 | 11.1% | 41.0% | 47.3% | 5.6% | 2.1% | 3.9% |
| York | 23692 | Grafton | 18,320 | 18,688 | 2.0% | 804 | 4.8% | 82.4% | 5.9% | 5.0% | 4.1% | 2.7% |
| York | 23693 | Tabb | 23,603 | 24,439 | 3.5% | 1810 | 6.1% | 68.7% | 11.9% | 5.7% | 9.2% | 4.5% |
| York | 23696 | Seaford | 3,560 | 3,547 | -0.4% | 508 | 0.9% | 91.5% | 2.0% | 3.2% | 1.7% | 1.6% |
| Total SCH Service Area | | | 384,846 | 393,355 | 2.2% | 2032 | 100.0% | 48.4% | 37.1% | 7.2% | 3.2% | 4.1% |
| 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% |



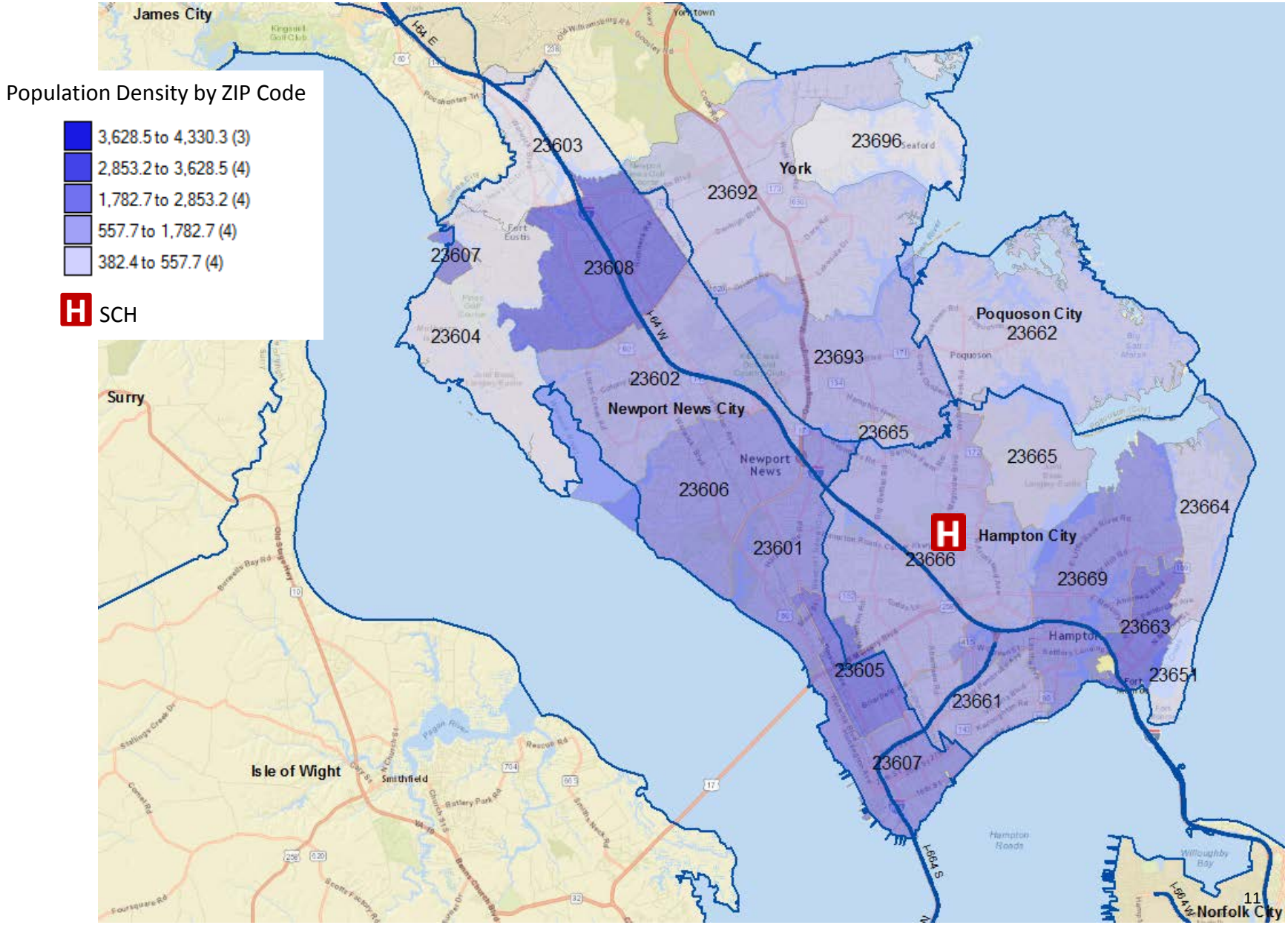
Source: Truven/Market Expert

# 2016 Total Population by ZIP Code



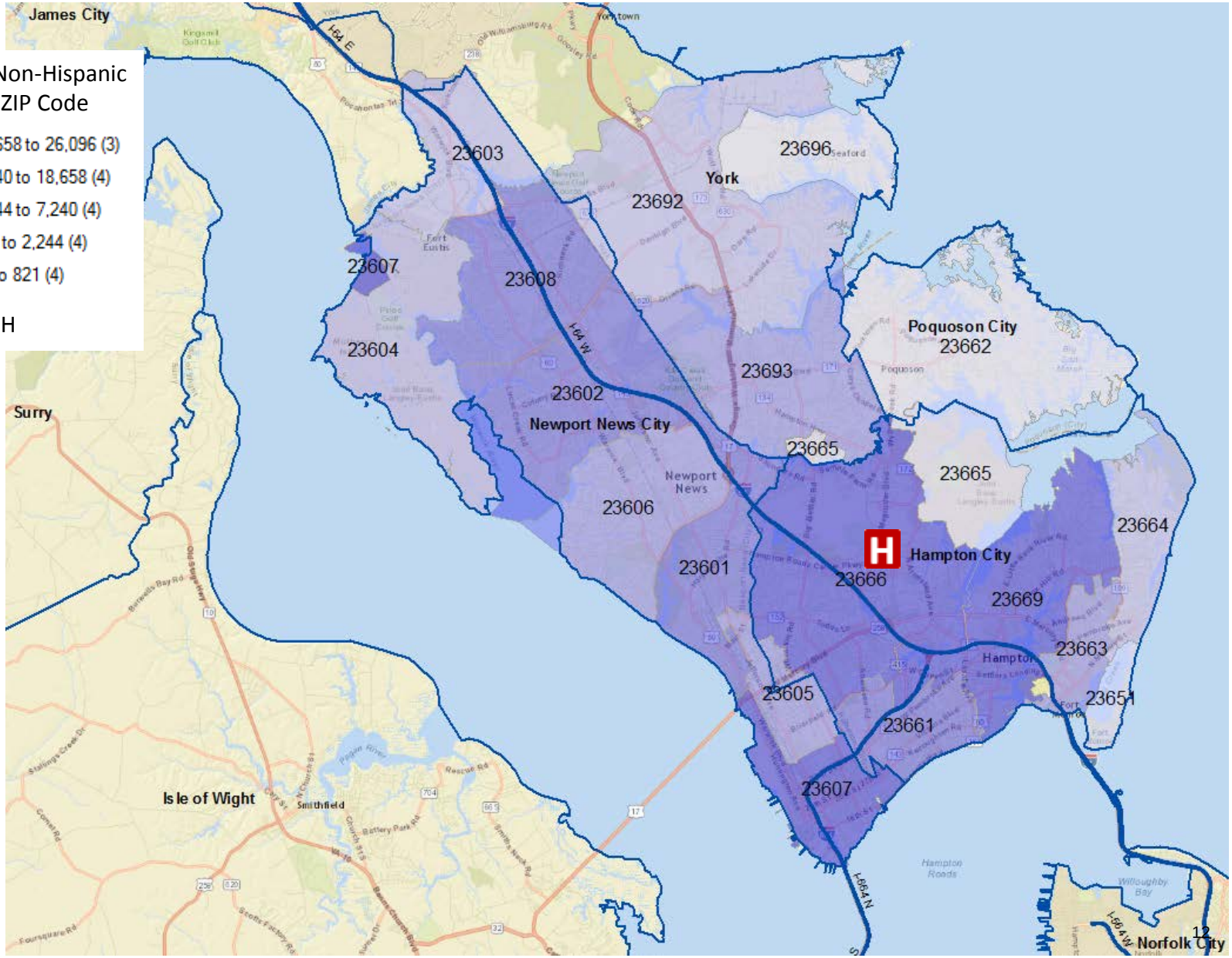

Source: Truven/Market Expert

# 2016 Population Density by ZIP Code



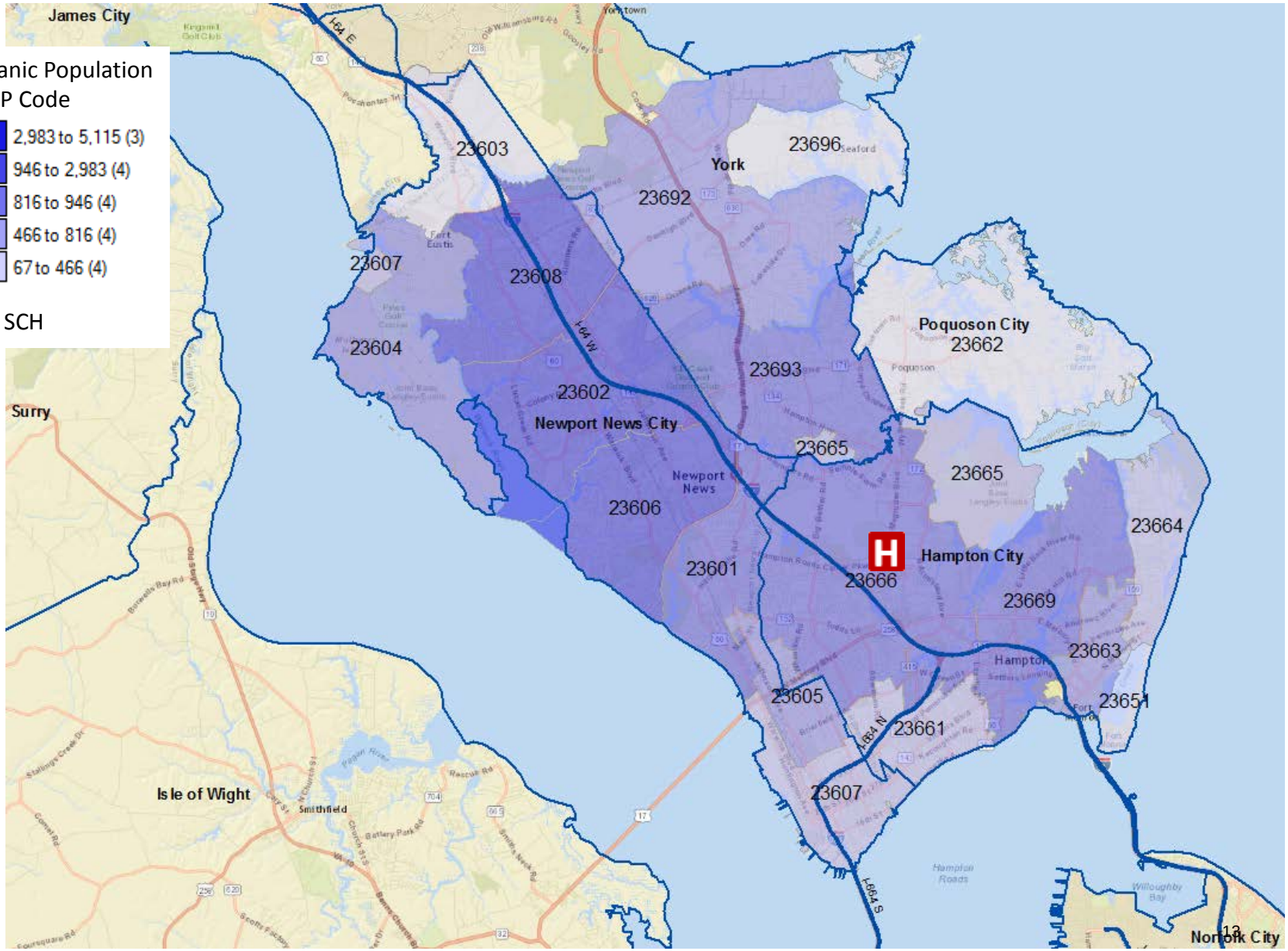

Source: Truven/Market Expert

# 2016 Black, Non-Hispanic Population by ZIP Code



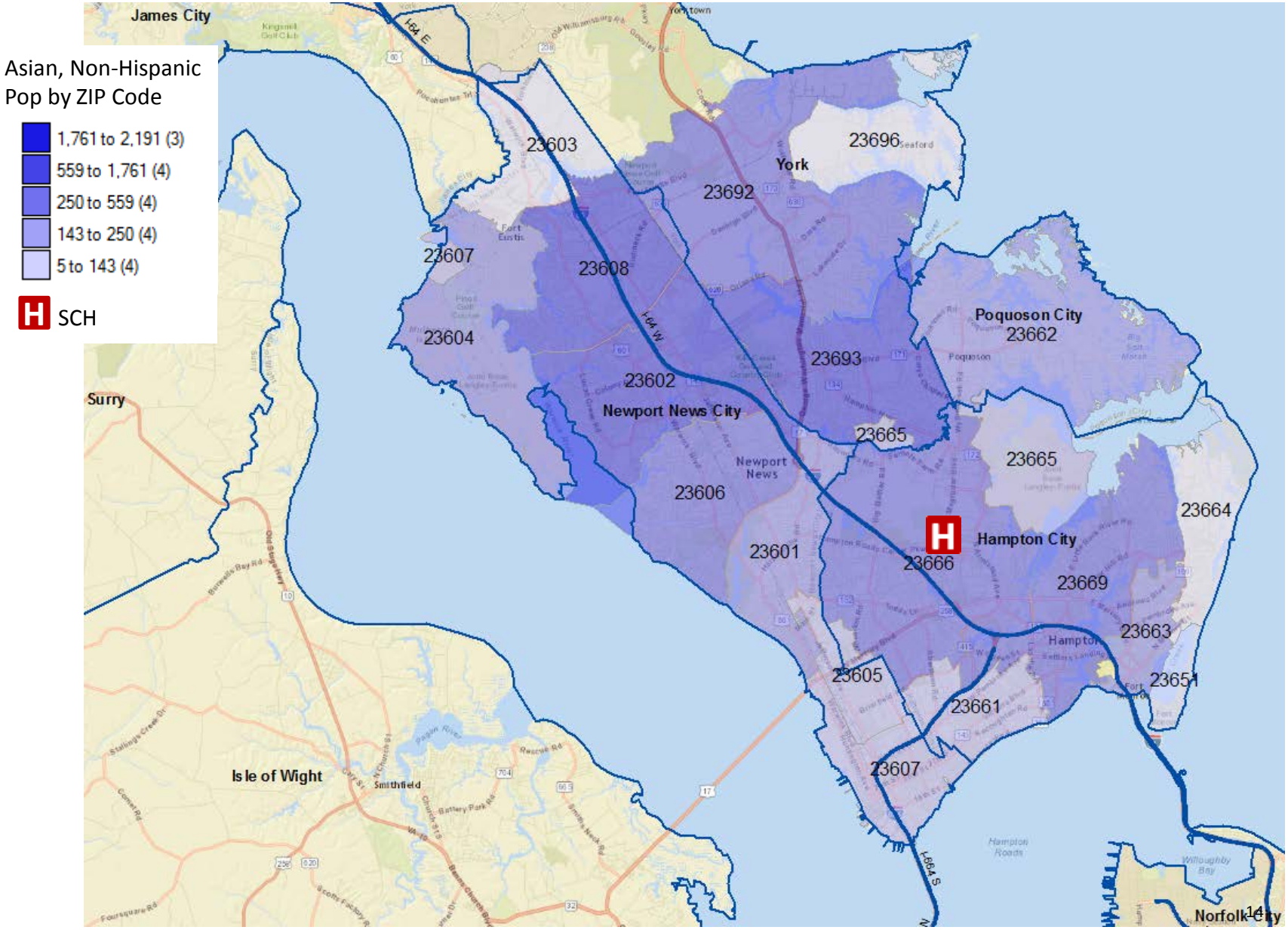

Source: Truven/Market Expert

# 2016 Hispanic Population by ZIP Code



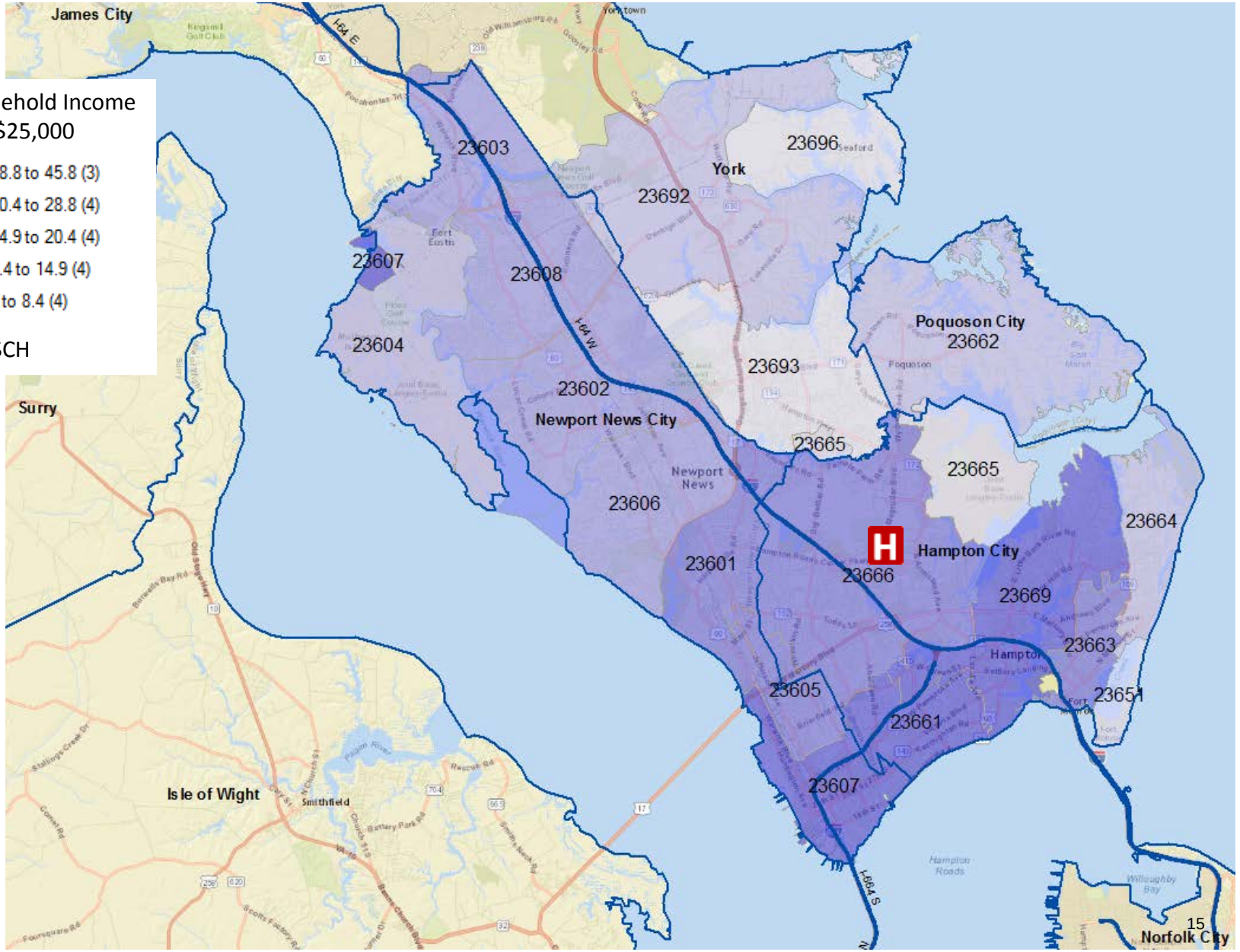

Source: Truven/Market Expert

# 2016 Asian, Non-Hispanic Population by ZIP Code




Source: Truven/Market Expert

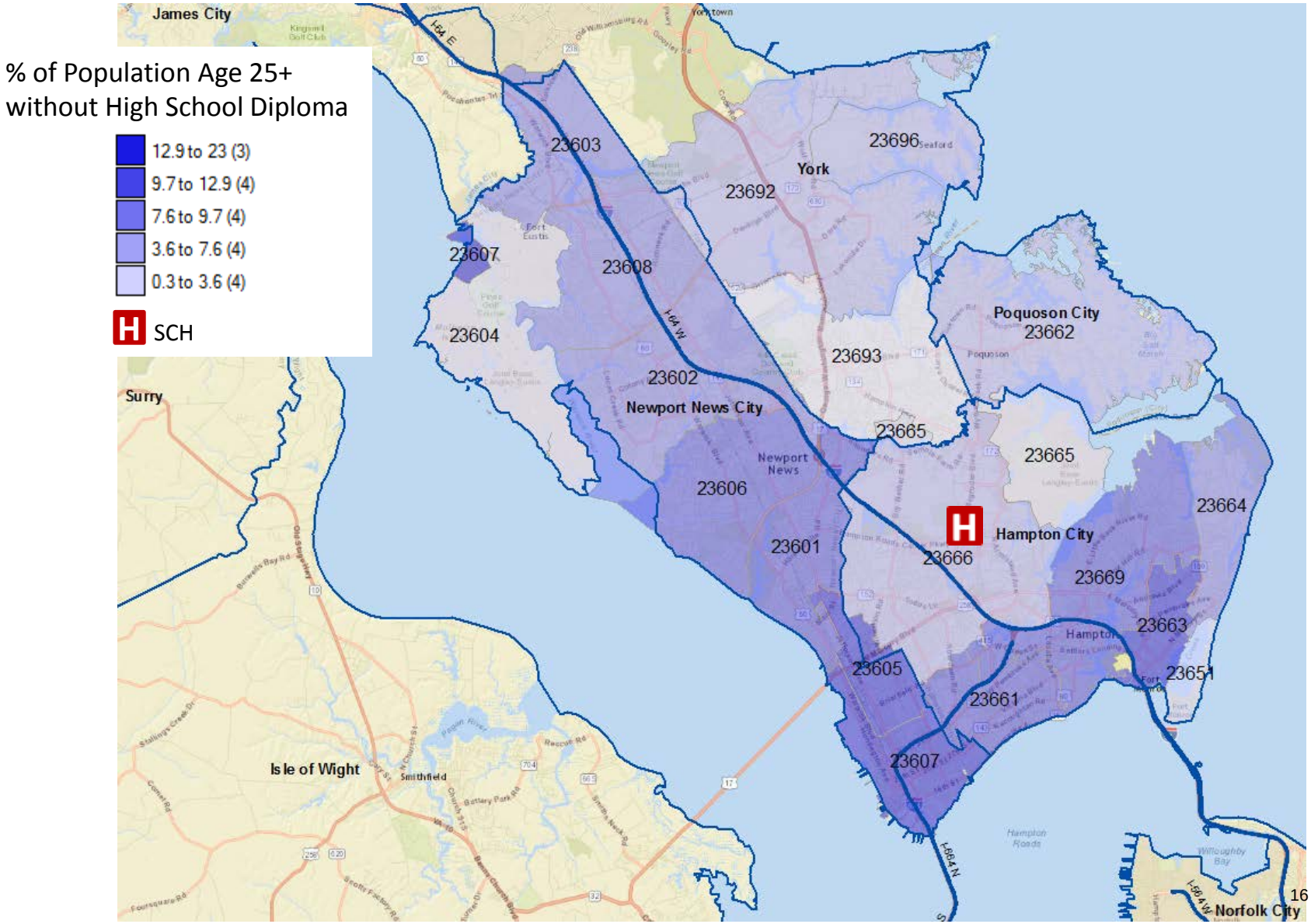
# 2016 % of Households with Income below $25,000






Source: Truven/Market Expert

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




Source: Truven/Market Expert

# ZIP Codes Included in SCH Service Area

| City | ZIP | ZIP Common Name | State |
|---|---|---|---|
| Newport News | 23601 | Warwick/ Hilton Vill | VA |
| Newport News | 23602 | Denbigh | VA |
| Newport News | 23603 | Lee Hall | VA |
| Newport News | 23604 | Fort Eustis | VA |
| Newport News | 23605 | Parkview | VA |
| Newport News | 23606 | Oyster Point | VA |
| Newport News | 23607 | East End | VA |
| Newport News | 23608 | Patrick Henry | VA |
| Hampton | 23651 | Fort Monroe | VA |
| Hampton | 23661 | Wythe | VA |
| Poquoson | 23662 | Poquoson | VA |
| Hampton | 23663 | Phoebus | VA |
| Hampton | 23664 | Foxhill / Buckroe | VA |
| York | 23665 | Langley | VA |
| Hampton | 23666 | Modern /Riverdale | VA |
| Hampton | 23669 | Olde Hampton | VA |
| York | 23692 | Grafton | VA |
| York | 23693 | Tabb | VA |
| York | 23696 | Seaford | VA |

# Health Status Indicators Report

## Prepared for Sentara CarePlex Hospital

**By Community Health Solutions**

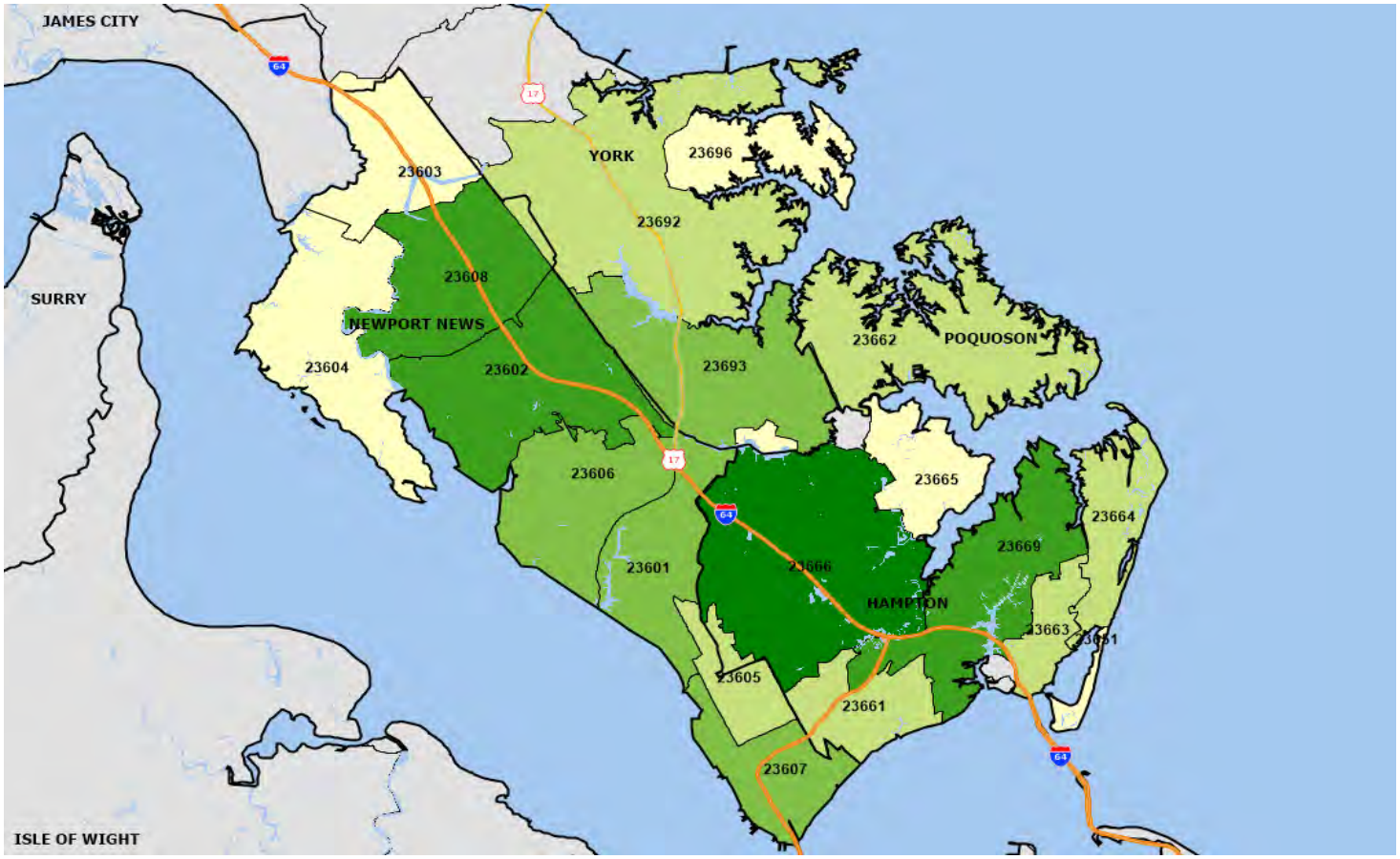
**October 2016**

## Table of Contents

# Introduction

This document presents a health status indicators report for Sentara CarePlex Hospital. The report was commissioned by Sentara Healthcare and Sentara CarePlex Hospital, and produced by Community Health Solutions. The study presents health status indicators for the Sentara CarePlex Hospital service area of 19 zip codes, which fall within the cities of Hampton, Newport News, and Poquoson; and York County.

**The Study Region by Zip Code**



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 2,954 deaths in the study region.
- The leading causes of death in the study region were Malignant Neoplasms (cancer), Heart Disease, Chronic Lower Respiratory Diseases, Cerebrovascular Diseases (stroke), and Unintentional Injury.
- The death rates for the study region were higher (worse) than the state rates for all deaths combined; and specifically for Malignant Neoplasms (cancer); Diabetes; Alzheimer's Disease; Septicemia; Primary Hypertension and Renal Disease; and Parkinson's Disease.

**Mortality Trend – All Deaths (2011-2013)**

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

- **Trend by Race/Ethnicity:** As shown in *Exhibit 1C,* from 2011 to 2013, study region counts increased for the Black/African American population and remained relatively stable for the White population. The study region trends were consistent with the statewide trends.

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

**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, there were 1,423 premature deaths in 2013. Roughly 48% of all deaths in the study region, and 45% of deaths in Virginia statewide could be classified as premature deaths.
- **Trend by Cause:** As shown in *Exhibit 1E*, from 2011-2013, study region premature death counts:
    - Increased for all premature deaths combined, and specifically for Malignant Neoplasms (cancer), Diabetes and Suicide;

- Declined for Heart Disease, Cerebrovascular Diseases (stroke), and Chronic Lower Respiratory Diseases; and
- Remained stable for Unintentional Injury.
- Unlike the state, the study region counts increased for Malignant Neoplasms (cancer), Diabetes and Suicide.
- Unlike the state, the study region counts declined for Heart Disease, Cerebrovascular Diseases (stroke) and Chronic Lower Respiratory Diseases.
- Unlike the state, the study region counts remained relatively stable for Unintentional Injury.

- **Trend by Race/Ethnicity:** As shown in *Exhibit 1F,* from 2011 to 2013, the study region premature death counts:
  - Increased for the Black/African American population; and
  - Remained relatively stable for the White population.
  - Unlike the state, the study region counts remained relatively stable for the White population.

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

## Exhibit 1A. Mortality Snapshot (2013)

| Indicator | Virginia | Study Region |
|---|---|---|
| **Counts** | | |
| Deaths by All Causes | 62,309 | 2,954 |
| **Counts-Leading 14 Causes of Death** | | |
| Malignant Neoplasms, Deaths | 14,348 | 701 |
| Heart Disease, Deaths | 13,543 | 565 |
| Chronic Lower Respiratory Diseases, Deaths | 3,168 | 137 |
| Cerebrovascular Diseases, Deaths | 3,278 | 135 |
| Unintentional Injury, Deaths | 2,794 | 116 |
| Diabetes Mellitus, Deaths | 1,618 | 104 |
| Alzheimer's Disease, Deaths | 1,634 | 84 |
| Septicemia, Deaths | 1,464 | 73 |
| Nephritis and Nephrosis, Deaths | 1,547 | 72 |
| Influenza and Pneumonia, Deaths | 1,430 | 61 |
| Primary Hypertension and Renal Disease, Deaths | 629 | 45 |
| Suicide, Deaths | 1,047 | 42 |
| Chronic Liver Disease, Deaths | 836 | 35 |
| Parkinson's Disease, Deaths | 549 | 30 |
| **Crude Death Rates per 100,000 Population** | | |
| Deaths by All Causes | 755.5 | 775.0 |
| Malignant Neoplasms, Deaths | 174.0 | 183.9 |
| Heart Disease, Deaths | 164.2 | 148.2 |
| Chronic Lower Respiratory Diseases, Deaths | 38.4 | 35.9 |
| Cerebrovascular Diseases, Deaths | 39.7 | 35.4 |
| Unintentional Injury, Deaths | 33.9 | 30.4 |
| Diabetes Mellitus, Deaths | 19.6 | 27.3 |
| Alzheimer's Disease, Deaths | 19.8 | 22.0 |
| Septicemia, Deaths | 17.8 | 19.2 |
| Nephritis and Nephrosis, Deaths | 18.8 | 18.9 |
| Influenza and Pneumonia, Deaths | 17.3 | 16.0 |
| Primary Hypertension and Renal Disease, Deaths | 7.6 | 11.8 |
| Suicide, Deaths | 12.7 | 11.0 |
| Chronic Liver Disease, Deaths | 10.1 | 9.2 |
| Parkinson's Disease, Deaths | 6.7 | 7.9 |

*Note: Rates and/or percent change 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) | 2,863 | 2,938 | 2,954 | 3% | 3% |
| Malignant Neoplasms (Cancer) | 685 | 678 | 701 | 1% | 2% |
| Heart Disease | 637 | 594 | 565 | 3% | -11% |
| Cerebrovascular Disease (Stroke) | 171 | 142 | 135 | -1% | -21% |
| Chronic Lower Respiratory Diseases | 131 | 135 | 137 | 2% | 5% |
| Unintentional Injury | 118 | 81 | 116 | 2% | -2% |
| Diabetes Mellitus | 98 | 117 | 104 | -1% | 6% |
| Nephritis and Nephrosis | 68 | 70 | 72 | 9% | 6% |
| Septicemia | 68 | 63 | 73 | 7% | 7% |
| Alzheimer's Disease | 56 | 81 | 84 | -9% | 50% |
| Influenza and Pneumonia | 40 | 50 | 61 | 2% | 53% |
| **Crude Death Rates per 100,000 Population** | | | | | |
| Total Deaths (All Causes) | 767.2 | 769.2 | 775.0 | 2% | 1% |
| Malignant Neoplasms (Cancer) | 183.6 | 177.5 | 183.9 | -1% | 0% |
| Heart Disease | 170.7 | 155.5 | 148.2 | 1% | -13% |
| Cerebrovascular Disease (Stroke) | 45.8 | 37.2 | 35.4 | -3% | -23% |
| Chronic Lower Respiratory Diseases | 35.1 | 35.3 | 35.9 | 1% | 2% |
| Unintentional Injury | 31.6 | 21.2 | 30.4 | 1% | -4% |
| Diabetes Mellitus | 26.3 | 30.6 | 27.3 | -2% | 4% |
| Nephritis and Nephrosis | 18.2 | 18.3 | 18.9 | 7% | 4% |
| Septicemia | 18.2 | 16.5 | 19.2 | 5% | 5% |
| Alzheimer's Disease | 15.0 | 21.2 | 22.0 | -10% | 47% |
| Influenza and Pneumonia | 10.7 | 13.1 | 16.0 | 0% | 49% |

*Note: Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 Deaths Trend by Race/Ethnicity (2011-2013)

| Indicator | Study Region | | | % Change (2011-2013) | |
|---|---|---|---|---|---|
| **Counts** | **2011** | **2012** | **2013** | **Virginia** | **Study Region** |
| Asian | 33 | 52 | 58 | 15% | -- |
| Black/African American | 1,053 | 1,064 | 1,109 | 4% | 5% |
| White | 1,767 | 1,817 | 1,766 | 1% | 0% |
| Hispanic Ethnicity | 33 | 44 | 40 | 8% | -- |
| *Notes: Deaths with 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. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | |
| *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 Deaths Trend by Sex (2011-2013)

| Indicator | Study Region | | | % Change (2011-2013) | |
|---|---|---|---|---|---|
| **Counts** | **2011** | **2012** | **2013** | **Virginia** | **Study Region** |
| Female | 1,447 | 1,463 | 1,501 | 3% | 4% |
| Male | 1,416 | 1,475 | 1,453 | 4% | 3% |
| *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 Deaths 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) | 1,349 | 1,402 | 1,423 | 4% | 5% |
| Malignant Neoplasms | 376 | 411 | 428 | 0% | 14% |
| Heart Disease | 270 | 235 | 249 | 6% | -8% |
| Unintentional Injury | 88 | 61 | 88 | -2% | 0% |
| Diabetes | 58 | 76 | 60 | -1% | 3% |
| Cerebrovascular Diseases | 56 | 50 | 49 | 5% | -13% |
| Chronic Lower Respiratory Diseases | 53 | 56 | 44 | 1% | -17% |
| Suicide | 34 | 44 | 38 | 0% | 12% |
| Nephritis and Nephrosis | 32 | 27 | 29 | 16% | -- |
| Septicemia | 28 | 20 | 40 | 11% | -- |
| Chronic Liver Disease | 24 | 44 | 29 | 21% | -- |
| *Note: Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | |
| *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 | 19 | 34 | 32 | 3% | -- |
| Black/African American | 616 | 621 | 668 | 3% | 8% |
| White | 708 | 743 | 706 | 2% | 0% |
| Hispanic Ethnicity | 21 | 26 | 24 | 0% | -- |
| *Notes: Deaths with 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. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | |
| *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 | 557 | 570 | 593 | 3% | 6% |
| Male | 792 | 832 | 830 | 4% | 5% |
| *Notes: Deaths with Other/Unknown sex were not included in the analysis. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | |
| *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 5,221 live births in the study region. Among the live births were 466 low weight births, 505 late prenatal care births, 2,369 non-marital births, and 343 births to teens.
- The study region had a higher birth rate overall, and had higher rates (worse) than Virginia as a whole for non-marital births, births to teens overall, and births to teens age 15-19.

**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 live births overall, and remained relatively stable for low weight and non-marital births. The study region trends were consistent with the statewide trends.
- **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 of all age groups. The study region trends were consistent with the statewide trends.
- **Teenage Births Trend Race/Ethnicity**. As shown in *Exhibit 2D,* from 2011 to 2013, the study region counts declined for teens of all racial/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 | 5,221 |
| Low Weight Births (under 2,500 grams / 5 lb. 8 oz.) | 8,178 | 466 |
| Late Prenatal Care (No Prenatal Care in First 13 Weeks) | 13,435 | 505 |
| Non-Marital Births | 35,289 | 2,369 |
| Live Births to Teens Age 10-19 | 5,316 | 343 |
| Live Births to Teens Age 18-19 | 4,073 | 277 |
| Live Births to Teens Age 15-17 | 1,208 | 66 |
| Live Births to Teens Age <15 | 35 | 0 |
| **Rates** | | |
| Live Birth Rate per 1,000 Population | 12.3 | 13.7 |
| Low Weight Births pct. of Total Live Births | 8% | 9% |
| Late Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births | 13% | 10% |
| Non-Marital Births pct. of Total Live Births | 35% | 45% |
| Teenage (age 10-19) Live Birth Rate per 1,000 Teenage Female Population (age 10-19) | 10.3 | 13.3 |
| Teenage (age 18-19) Live Birth Rate per 1,000 Teenage Female Population (age 18-19) | 36.4 | 45.8 |
| Teenage (age 15-17) Live Birth Rate per 1,000 Teenage Female Population (age 15-17) | 8.0 | 8.6 |
| Teenage (age <15) Live Birth Rate per 1,000 Teenage Female Population (age <15) | 0.1 | 0.0 |
| *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 | 5,326 | 5,272 | 5,221 | -1% | -2% |
| Low Weight Births | 449 | 486 | 466 | 0% | 4% |
| Non-Marital Births | 2,432 | 2,420 | 2,369 | -3% | -3% |
| **Rates** | **2011** | **2012** | **2013** | **Virginia** | **Study Region** |
| Total Live Births (per 1,000 population) | 14.3 | 13.8 | 13.7 | -3% | -4% |
| Low Weight (as a percent of Total Live Births) | 8% | 9% | 9% | 0% | 0% |
| Non-Marital Births (as a percent of Total Live Births) | 46% | 46% | 45% | -1% | 0% |
| *Note: Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | |
| *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 Group (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 | 432 | 407 | 343 | -19% | -21% |
| | 18-19 | 322 | 299 | 277 | -15% | -14% |
| | 15-17 | 103 | 105 | 66 | -29% | -36% |
| | <15 | 7 | 3 | 0 | -39% | -- |
| *Note: Rates and/or percent change are not calculated where n<30. Births with Other/Unknown age were not included in the analysis. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | | |
| *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 | 270 | 244 | 216 | -23% | -20% |
| | White | 134 | 124 | 90 | -26% | -33% |
| Ethnicity | Hispanic Ethnicity | 30 | 31 | 25 | -5% | -- |
| *Note: Rates and/or percent change are not calculated where n<30. Births with Other/Unknown race were not included in the analysis. Hispanic is classification of ethnicity; therefore, Hispanic individuals are also included in the race categories. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | | |
| *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 2,578 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+), Diabetes, Bacterial Pneumonia, and Dehydration.
- The study region discharge rate was higher than the statewide rate for Asthma in Younger Adults (age 18-39).

**Preventable Hospitalization Trend (2011-2013)**

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

- **By Age Group**. As shown in *Exhibit 3C,* from 2011 to 2013, the study region rates:
  - Increased for age 18-29 population;
  - Remained relatively stable for the age 30-44 population; and
  - Declined for the 45+ population.
  - Unlike the state, the study region rates increased for the age 18-29 population.

- **By Race/Ethnicity**. As shown in *Exhibit 3D*, from 2011 to 2013, the study region rates:
  - Increased for the Black/African American population; and
  - Declined for the White population.
  - Unlike the state, the study region rate increased for the Black/African American population.

- **By Payer.** As shown in *Exhibit 3E*, from 2011 to 2013, study region counts increased for all payer groups. Unlike the state, the study region counts increased for the Medicaid and Private payer populations.

## Exhibit 3A. Preventable Hospitalization Snapshot (2013)

| Indicator | Virginia | Study Region |
|---|---|---|
| **Counts** | | |
| Total PQI Discharges (see note) | 76,860 | 2,578 |
| Congestive Heart Failure | 18,239 | 781 |
| COPD or Asthma In Older Adults (age 40+) | 16,026 | 438 |
| Diabetes | 9,938 | 368 |
| Bacterial Pneumonia | 11,867 | 325 |
| Dehydration | 7,743 | 256 |
| Urinary Tract Infection | 8,452 | 209 |
| Hypertension | 2,768 | 115 |
| Asthma in Younger Adults (age 18-39) | 444 | 41 |
| Perforated Appendix | 1,189 | 36 |
| Angina | 941 | 13 |
| **Crude Rates per 100,000 Population** | | |
| Total PQI Discharges (see note) | 932.0 | 676.4 |
| Congestive Heart Failure | 221.2 | 204.9 |
| COPD or Asthma In Older Adults (age 40+) | 194.3 | 114.9 |
| Diabetes | 120.5 | 96.5 |
| Bacterial Pneumonia | 143.9 | 85.3 |
| Dehydration | 93.9 | 67.2 |
| Urinary Tract Infection | 102.5 | 54.8 |
| Hypertension | 33.6 | 30.2 |
| Asthma in Younger Adults (age 18-39) | 5.4 | 10.8 |
| Perforated Appendix | 14.4 | 9.4 |
| Angina | 11.4 | -- |

*Note: The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons. Rates and/or percent change are not calculated where n<30.*

*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** |
| All PQI Discharges (see note) | 2,509 | 2,443 | 2,578 | -6% | 3% |
| Congestive Heart Failure | 704 | 724 | 781 | -8% | 11% |
| COPD or Asthma In Older Adults (age 40+) | 448 | 395 | 438 | -20% | -2% |
| Bacterial Pneumonia | 404 | 337 | 325 | -29% | -20% |
| Diabetes | 384 | 404 | 368 | -2% | -4% |
| Urinary Tract Infection | 229 | 214 | 209 | -22% | -9% |
| **Crude Rates per 100,000 Population** | | | | | |
| All PQI Discharges (see note) | 672.3 | 639.6 | 676.4 | -7% | 1% |
| Congestive Heart Failure | 188.6 | 189.5 | 204.9 | -9% | 9% |
| COPD or Asthma In Older Adults (age 40+) | 120.0 | 103.4 | 114.9 | -21% | -4% |
| Bacterial Pneumonia | 108.3 | 88.2 | 85.3 | -30% | -21% |
| Diabetes | 102.9 | 105.8 | 96.5 | 0% | -6% |
| Urinary Tract Infection | 61.4 | 56.0 | 54.8 | -23% | -11% |

*Note: The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 | 141 | 153 | 164 | -23% | 16% |
| | Adults Age 30-44 | 220 | 206 | 221 | -21% | 0% |
| | Adults Age 45-64 | 803 | 760 | 813 | -18% | 1% |
| | Seniors Age 65+ | 1,345 | 1,324 | 1,380 | -20% | 3% |
| **Crude Rates per 100,000 Population** | | | | | | |
| Age | Adults Age 18-29 | 188.7 | 203.7 | 214.8 | -24% | 14% |
| | Adults Age 30-44 | 319.7 | 293.6 | 318.0 | -21% | -1% |
| | Adults Age 45-64 | 831.0 | 756.4 | 816.2 | -19% | -2% |
| | Seniors Age 65+ | 3,143.3 | 2,882.3 | 3,063.9 | -23% | -3% |

*Note: PQI Discharges with an unknown age were not included in the analysis. The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 | 14 | 12 | 18 | -11% | -- |
| | Black/African American | 1,030 | 1,008 | 1,108 | -16% | 8% |
| | White | 1,398 | 1,292 | 1,302 | -22% | -7% |
| Ethnicity | Hispanic Ethnicity | 32 | 30 | 30 | -30% | -- |
| **Crude Rates per 100,000 Population** | | | | | | |
| Race | Asian | -- | -- | -- | -24% | -- |
| | Black/African American | 718.9 | 685.8 | 769.9 | -21% | 7% |
| | White | 714.8 | 650.5 | 647.0 | -19% | -9% |
| Ethnicity | Hispanic Ethnicity | 132.0 | 131.1 | 126.7 | -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. The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 | 1,511 | 1,471 | 1,545 | 2% | 2% |
| | Medicaid | 139 | 115 | 155 | -6% | 12% |
| | Private | 389 | 443 | 466 | -12% | 20% |
| | Self-Pay/Uninsured | 259 | 255 | 276 | 2% | 7% |

*Note: PQI Discharges with unknown payer were not included in the analysis. Enrollment data were not available to calculate rates. The sum of the individual diagnoses may differ slightly from the Total Discharges figure for technical reasons. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 2,148 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, Depressive Disorder, Alcoholic Psychoses, and Other Nonorganic Psychoses.
- The BH discharge rates for the study region were higher than the statewide rates for Schizophrenic Disorders, Depressive Disorder, and Other Nonorganic Psychoses.

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

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

- **By Age Group**. As shown in *Exhibit 4C*, from 2011 to 2013 from 2011 to 2013, the study region rates:
  - Increased for the age 18-44 population;
  - Declined for the age 65+ population; and
  - Remained relatively stable for the age 45-64 population.
  - Unlike the state, the study region rate increased for the age 18-29 population.
  - Unlike the state, the study region rate decreased for age 65+ population.
  - Unlike the state, the study region rate remained relatively stable for the 45-64 population.

- **By Sex.** As shown in *Exhibit 4D*, from 2011 to 2013, the study region rates declined for the female population and increased for the male population. The study region trends were consistent with the statewide trends.

- **By Race/Ethnicity**. As shown in *Exhibit 4E*, from 2011 to 2013, the study region rates increased for the Black/African American and White populations. Unlike the state, the study region rate increased for the Black/African American population.

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

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

| Indicator | Virginia | Study Region |
|---|---|---|
| **Counts-BH Discharges** | | |
| Total BH Diagnoses | 53,638 | 2,148 |
| **Counts-Leading 14 BH Diagnoses** | | |
| Affective Psychoses | 22,078 | 789 |
| Schizophrenic Disorders | 8,064 | 532 |
| Depressive Disorder, Not Elsewhere Classified | 2,608 | 187 |
| Alcoholic Psychoses | 4,033 | 132 |
| Other Nonorganic Psychoses | 1,951 | 108 |
| Drug Psychoses | 2,102 | 53 |
| Alcohol Dependence Syndrome | 2,388 | 40 |
| Adjustment Reaction | 2,031 | 39 |
| Symptoms Involving Head or Neck | 883 | 30 |
| Neurotic Disorders | 982 | 29 |
| Altered Mental Status | 976 | 22 |
| Non Dependent Abuse of Drugs | 575 | 16 |
| Other Organic Psychotic Conditions-Chronic | 795 | 15 |
| Drug Dependence | 810 | 12 |
| *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 | 563.6 |
| Affective Psychoses | 267.7 | 207.0 |
| Schizophrenic Disorders | 97.8 | 139.6 |
| Depressive Disorder, Not Elsewhere Classified | 31.6 | 49.1 |
| Alcoholic Psychoses | 48.9 | 34.6 |
| Other Nonorganic Psychoses | 23.7 | 28.3 |
| Drug Psychoses | 25.5 | 13.9 |
| Alcohol Dependence Syndrome | 29.0 | 10.5 |
| Adjustment Reaction | 24.6 | 10.2 |
| Symptoms Involving Head or Neck | 10.7 | 7.9 |
| Neurotic Disorders | 11.9 | -- |
| Altered Mental Status | 11.8 | -- |
| Non Dependent Abuse of Drugs | 7.0 | -- |
| Other Organic Psychotic Conditions-Chronic | 9.6 | -- |
| Drug Dependence | 9.8 | -- |
| *Note: Rates and/or percent change 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) | 1,939 | 2,172 | 2,148 | 3% | 11% |
| Affective Psychoses | 661 | 766 | 789 | -1% | 19% |
| Schizophrenic Disorders | 427 | 504 | 532 | 1% | 25% |
| Alcoholic Psychoses | 116 | 129 | 132 | 23% | 14% |
| **Crude Rates per 100,000 Population** | | | | | |
| Total BH Discharges (All Diagnoses) | 519.6 | 568.6 | 563.6 | 2% | 8% |
| Affective Psychoses | 177.1 | 200.5 | 207.0 | 2% | 17% |
| Schizophrenic Disorders | 114.4 | 131.9 | 139.6 | 0% | 22% |
| Alcoholic Psychoses | 31.1 | 33.8 | 34.6 | 21% | 11% |

*Note: Data for residents age 0-17 are not included. See details in Appendix B. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 | 409 | 566 | 583 | 10% | 43% |
| | Adults Age 30-44 | 539 | 594 | 627 | 2% | 16% |
| | Adults Age 45-64 | 698 | 759 | 713 | 3% | 2% |
| | Seniors Age 65+ | 293 | 253 | 225 | -4% | -23% |
| **Crude Rates per 100,000 Population** | | | | | | |
| Age | Adults Age 18-29 | 547.4 | 753.7 | 763.5 | -2% | 39% |
| | Adults Age 30-44 | 783.2 | 846.5 | 902.1 | 8% | 15% |
| | Adults Age 45-64 | 722.4 | 755.4 | 715.8 | 2% | -1% |
| | Seniors Age 65+ | 684.7 | 550.8 | 499.5 | 3% | -27% |

*Note: Data for residents age 0-17 are not included. See details in Appendix B. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).*

*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 | 1,054 | 1,134 | 1,050 | -1% | 0% |
| | Male | 885 | 1,038 | 1,098 | 8% | 24% |
| **Crude Rates per 100,000 Population** | | | | | | |
| Sex | Female | 548.3 | 575.5 | 532.6 | -2% | -3% |
| | Male | 489.1 | 561.4 | 596.8 | 7% | 22% |
| *Note: Data for residents age 0-17 are not included. See details in Appendix B. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | | |
| *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 | 17 | 27 | 19 | 14% | -- |
| | Black/African American | 868 | 1,008 | 994 | 2% | 15% |
| | White | 984 | 1,058 | 1,063 | 2% | 8% |
| Ethnicity | Hispanic Ethnicity | 33 | 48 | 24 | -6% | -- |
| **Crude Rates per 100,000 Population** | | | | | | |
| Race | Asian | -- | -- | -- | 6% | -- |
| | Black/African American | 605.8 | 685.8 | 690.7 | 0% | 14% |
| | White | 503.1 | 532.7 | 528.2 | 2% | 5% |
| Ethnicity | Hispanic Ethnicity | 136.1 | 209.7 | -- | -7% | -- |
| *Note: Rates and/or percent change are not calculated where n<30. Data for residents age 0-17 are not included. See details in Appendix B. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | | |
| *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 | 695 | 651 | 606 | 5% | -13% |
| | Medicaid | 254 | 328 | 393 | 12% | 55% |
| | Private | 712 | 865 | 766 | -2% | 8% |
| | Self-Pay/Uninsured | 276 | 326 | 383 | 14% | 39% |
| *Note: Data for residents age 0-17 are not included. See details in Appendix B. Enrollment data were not available to calculate rates. Rates and/or percent change are not calculated where n<30. For this report, a percent change of one percent is considered relatively stable (no change).* | | | | | | |
| *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 228,557 adults age 18+ (78%) are not meeting the guidelines for fruit and vegetable intake;
    - An estimated 180,341 adults age 18+ (62%) are overweight or obese;
    - An estimated 154,170 adults age 18+ (53%) are not meeting recommendations for physical activity;
    - An estimated 84,087adults age 18+ (29%) have high blood pressure; and
    - An estimated 26,185 adults age 18+ (9%) have diabetes.

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

| Indicator | | Virginia | Study Region |
|---|---|---|---|
| **Estimates-Counts** | | | |
| *Estimated Adults age 18+* | | *6,393,583* | *291,977* |
| Lifestyle Risk Factors | Less than Five Servings of Fruits and Vegetables Per Day | 5,114,866 | 228,557 |
| | Overweight or Obese | 3,964,021 | 180,341 |
| | Not Meeting Recommendations for Physical Activity in the Past 30 Days | 3,068,920 | 154,170 |
| | 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 | 55,476 |
| | Smoker | 1,214,781 | 57,291 |
| Chronic Conditions | High Cholesterol (was checked, and told by a doctor or other health professional it was high) | 2,237,754 | 102,604 |
| | High Blood Pressure (told by a doctor or other health professional) | 1,918,075 | 84,087 |
| | Arthritis (told by a doctor or other health professional) | 1,534,460 | 70,651 |
| | Diabetes (told by a doctor or other health professional) | 575,422 | 26,185 |
| General Health Status | Limited in any Activities because of Physical, Mental or Emotional Problems | 1,214,781 | 59,759 |
| | Fair or Poor Health Status | 1,022,973 | 43,892 |
| **Estimates-Rates** | | | |
| Lifestyle Risk Factors | Less than Five Servings of Fruits and Vegetables Per Day | 80% | 78% |
| | Overweight or Obese | 62% | 62% |
| | Not Meeting Recommendations for Physical Activity in the Past 30 Days | 48% | 53% |
| | At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion) | 18% | 19% |
| | Smoker | 19% | 20% |
| Chronic Conditions | High Cholesterol (was checked, and told by a doctor or other health professional it was high) | 35% | 35% |
| | 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% | 9% |
| General Health Status | Limited in any Activities because of Physical, Mental or Emotional Problems | 19% | 20% |
| | Fair or Poor Health Status | 16% | 15% |
| 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 2,688 youth age 14-19 (8%) and 3,003 youth age 10-14 (25%) met the guidelines for fruit and vegetable intake;
    - An estimated 9,556 youth age 14-19 (29%) are overweight or obese;
    - An estimated 18,468 youth age 14-19 (56%) and 8,002 youth age 10-14 (66%) did not meet the guidelines for physical activity;
    - An estimated 5,917 youth age 14-19 (18%) and 294 youth age 10-14 (2%) used tobacco in the past month; and
    - An estimated 8,056 youth age 14-19 (25%) felt sad or hopeless almost every day at least two weeks in a row.

## 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* | *32,774* |
| Met Guidelines for Fruit and Vegetable Intake | 54,707 | 2,688 |
| Overweight or Obese | 179,050 | 9,556 |
| Not Meeting Recommendations for Physical Activity in the Past Week | 363,586 | 18,468 |
| Used Tobacco in the Past 30 Days | 118,572 | 5,917 |
| Had at least One Drink of Alcohol At least One Day in the Past 30 Days | 178,173 | 8,712 |
| 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 | 8,056 |
| **Middle School Youth Age 10-14** | | |
| *Total Estimated Middle School Youth Age 10-14* | *523,850* | *12,044* |
| Met Guidelines for Fruit and Vegetable Intake | 125,285 | 3,003 |
| Not Meeting Recommendations for Physical Activity in the Past Week | 345,407 | 8,002 |
| Used Tobacco in the Past 30 Days | 19,192 | 294 |
| **Rates (Percent Estimates)** | | |
| **High School Youth Age 14-19** | | |
| Met Guidelines for Fruit and Vegetable Intake | 8% | 8% |
| Overweight or Obese | 27% | 29% |
| 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% | 25% |
| 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 49,206 residents of the study region were uninsured.
- The estimated number of uninsured children age 0-18 was 5,761 in the study region. Among uninsured children, it is estimated that 2,892 (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 43,445 in the study region. Among uninsured adults, it is estimated that 23,330 (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 | 1,013,561 | 49,206 |
| Uninsured Children Age 0-18 | 120,105 | 5,761 |
| Uninsured Children Age 0-18 <=138% FPL | 38,955 | 1,869 |
| Uninsured Children Age 0-18 <=200% FPL | 60,293 | 2,892 |
| Uninsured Children Age 0-18 <=250% FPL | 74,045 | 3,552 |
| Uninsured Children Age 0-18 <=400% FPL | 98,441 | 4,722 |
| Uninsured Children Age 0-18 138-400% FPL | 59,485 | 2,853 |
| Uninsured Adults Age 19-64 | 893,456 | 43,445 |
| Uninsured Adults Age 19-64 <=138% FPL | 327,185 | 15,910 |
| Uninsured Adults Age 19-64 <=200% FPL | 479,797 | 23,330 |
| Uninsured Adults Age 19-64 <=250% FPL | 578,328 | 28,122 |
| Uninsured Adults Age 19-64 <=400% FPL | 749,463 | 36,443 |
| Uninsured Adults Age 19-64 138-400% FPL | 422,276 | 20,533 |
| **Estimated Uninsured Percent** | | |
| Uninsured Children Percent | 6% | 6% |
| Uninsured Adults Percent | 17% | 18% |

**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 | |

## **Technical Notes**

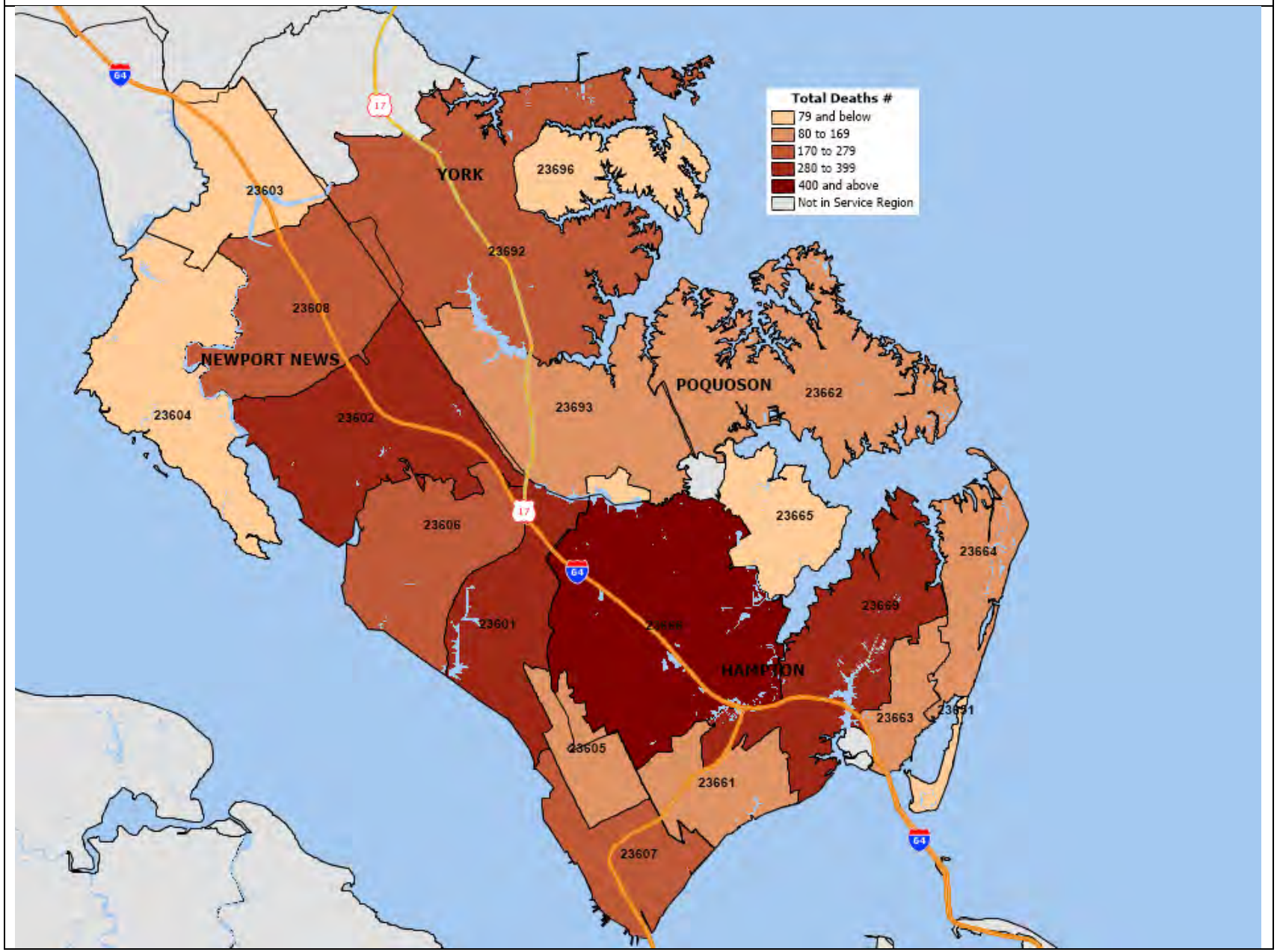
1. The maps and data include 19 zip codes, as identified by Sentara CarePlex Hospital, which fall within the cities of Hampton, Newport News, and Poquoson; and York County. It is important to note that zip code boundaries do not automatically align with city/county boundaries, and there are some zip codes that extend beyond the county boundaries. Also, not all zip codes in the region were identified by Sentara CarePlex Hospital as part of the Zip Code-Level Study Region.

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.

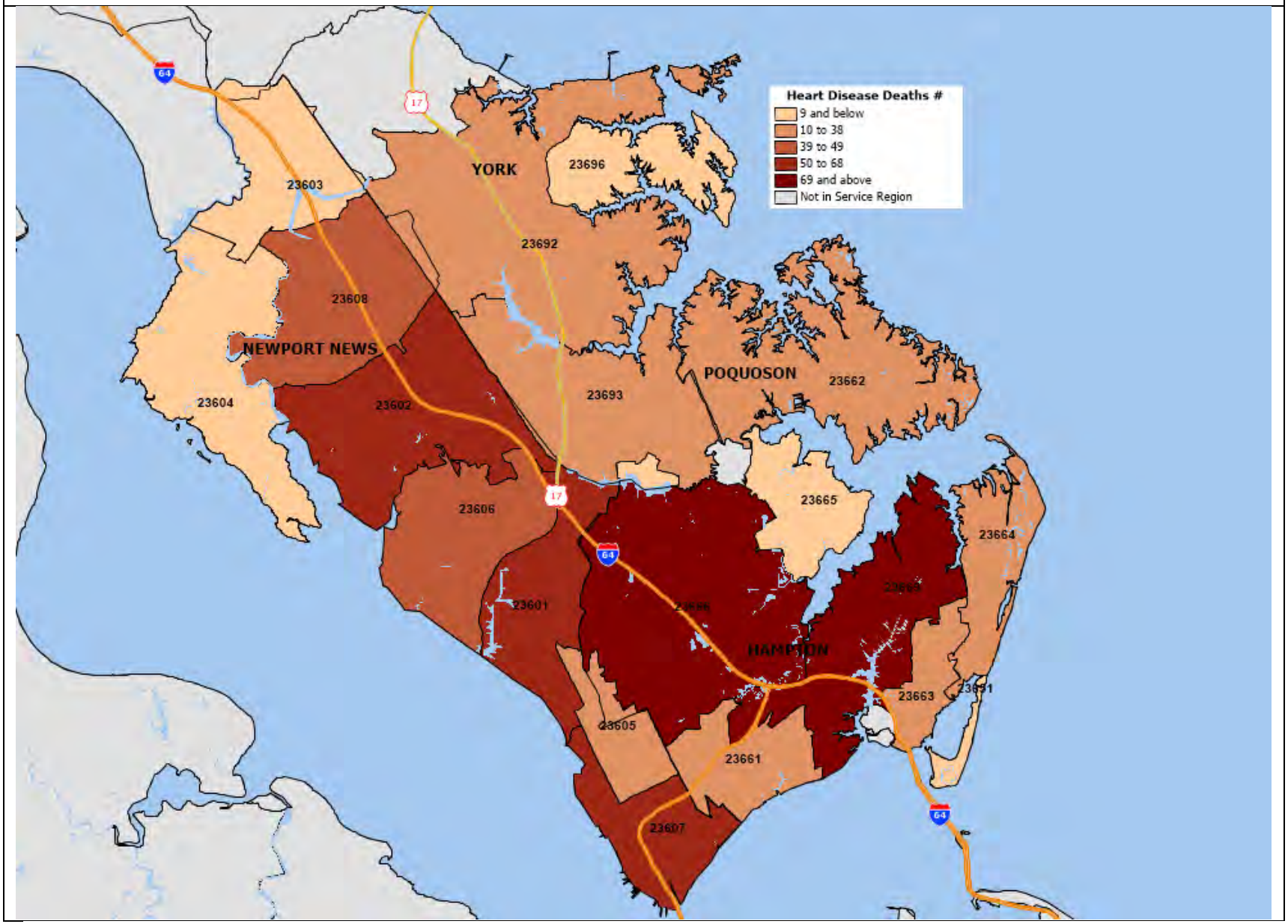
4. Zip Code-Level Study Region zip codes with zero values are noted.

Map 1: Total Deaths, 2013



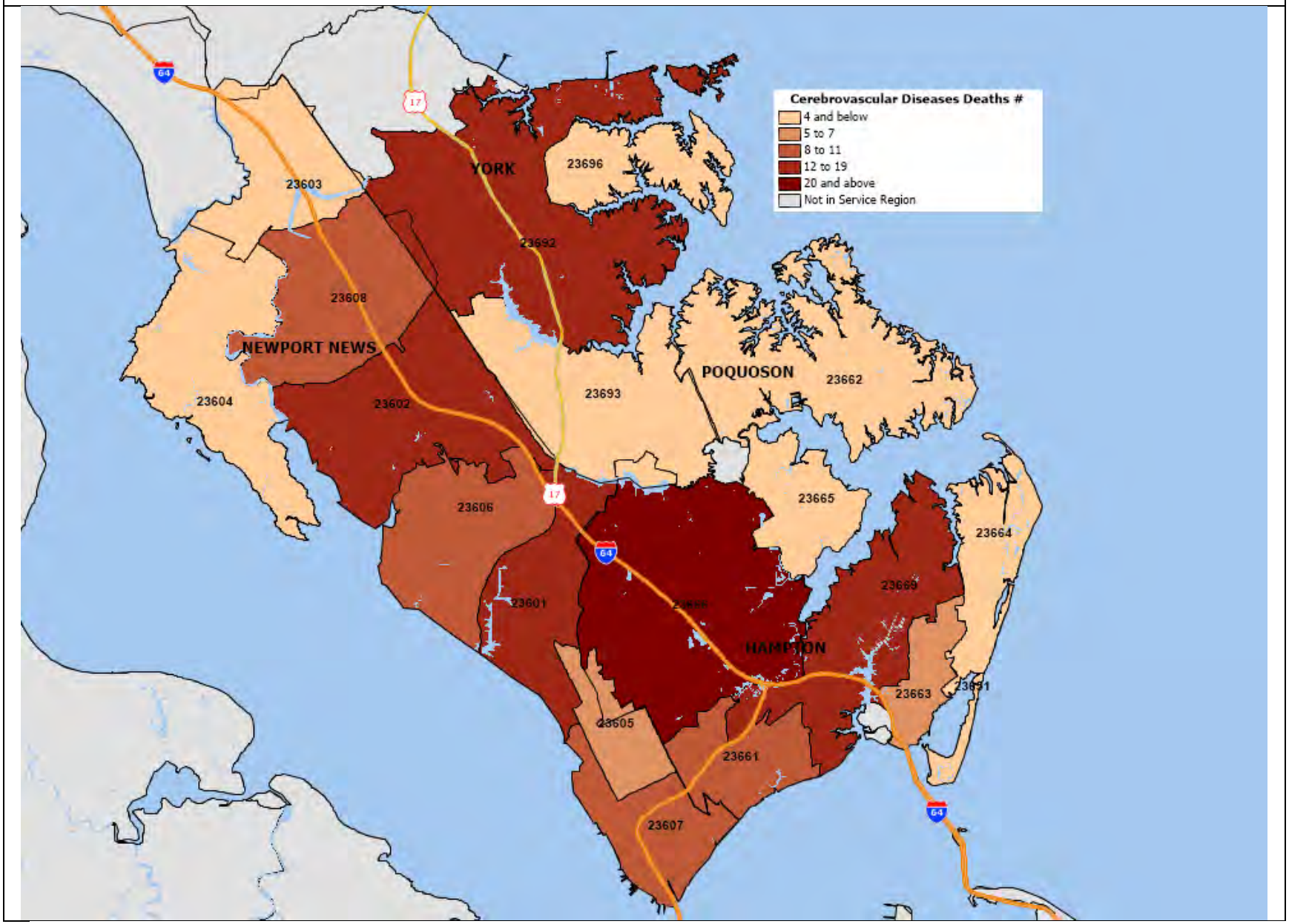

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B.

Map 2: Heart Disease Deaths, 2013



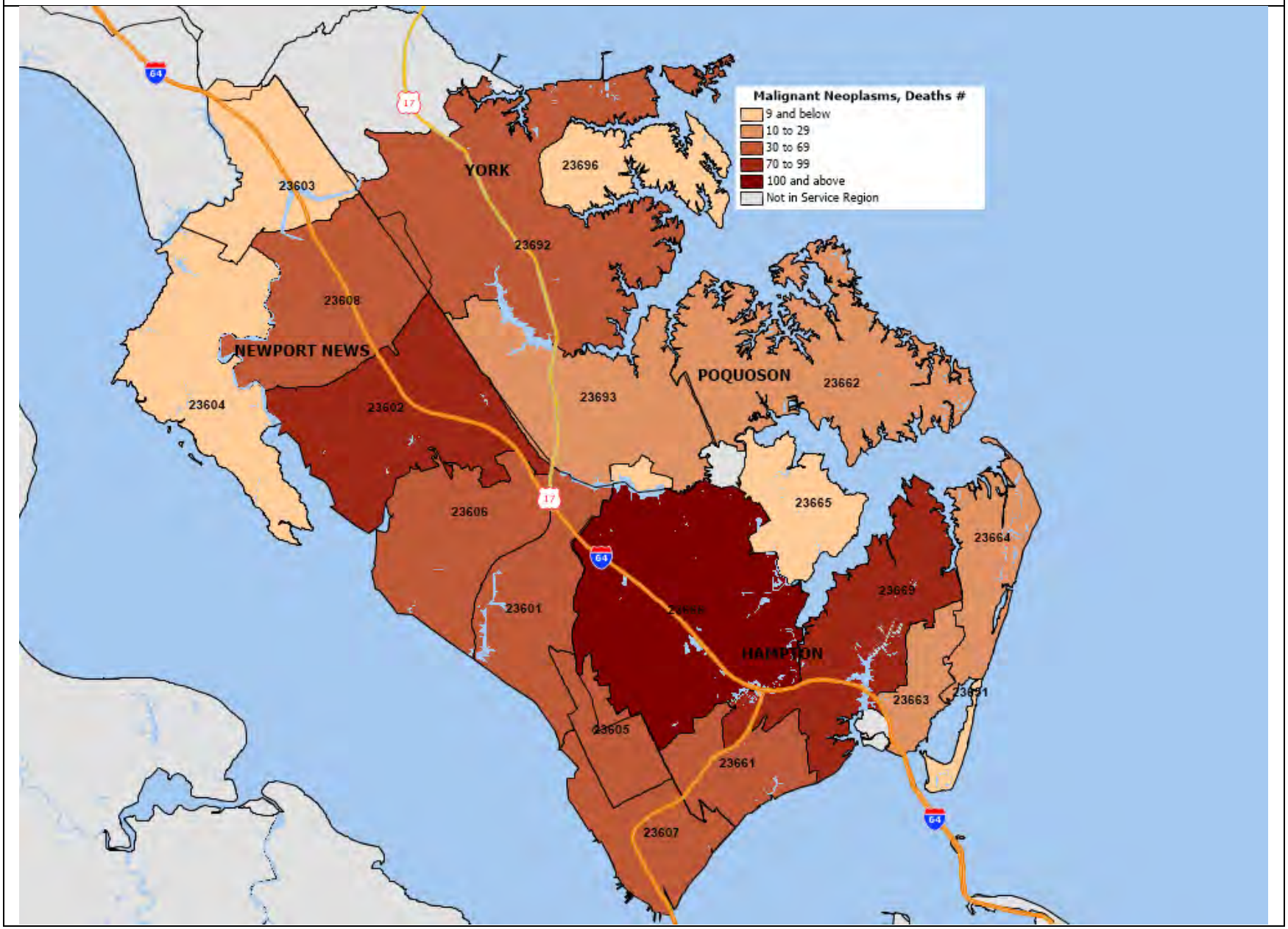

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported heart disease deaths for zip codes 23604 and 23665.

Map 3: Cerebrovascular Disease (Stroke) Deaths, 2013



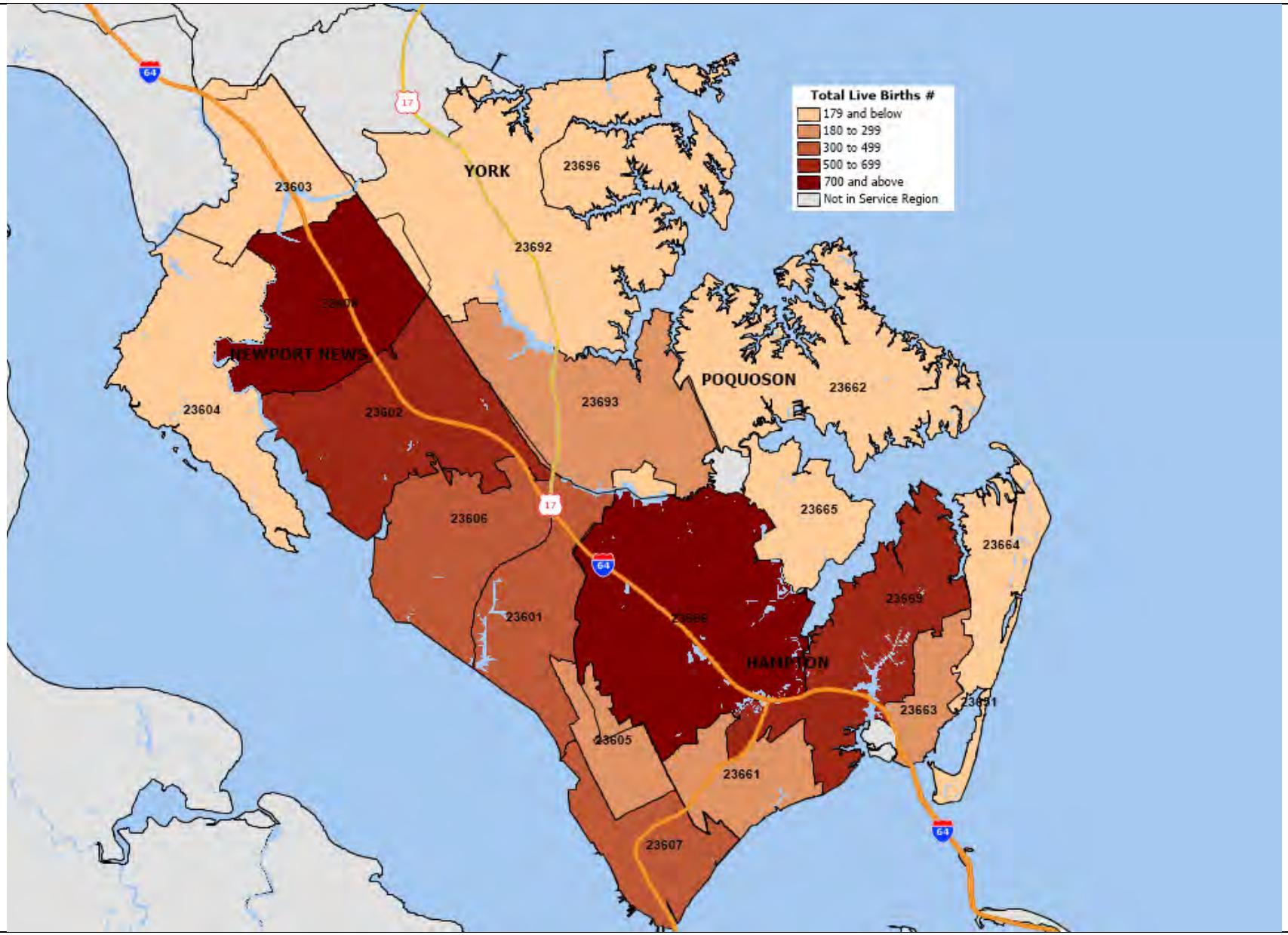

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported stroke deaths for zip codes 23604, 23665 and 23651.

Map 4: Malignant Neoplasms (Cancer) Deaths, 2013



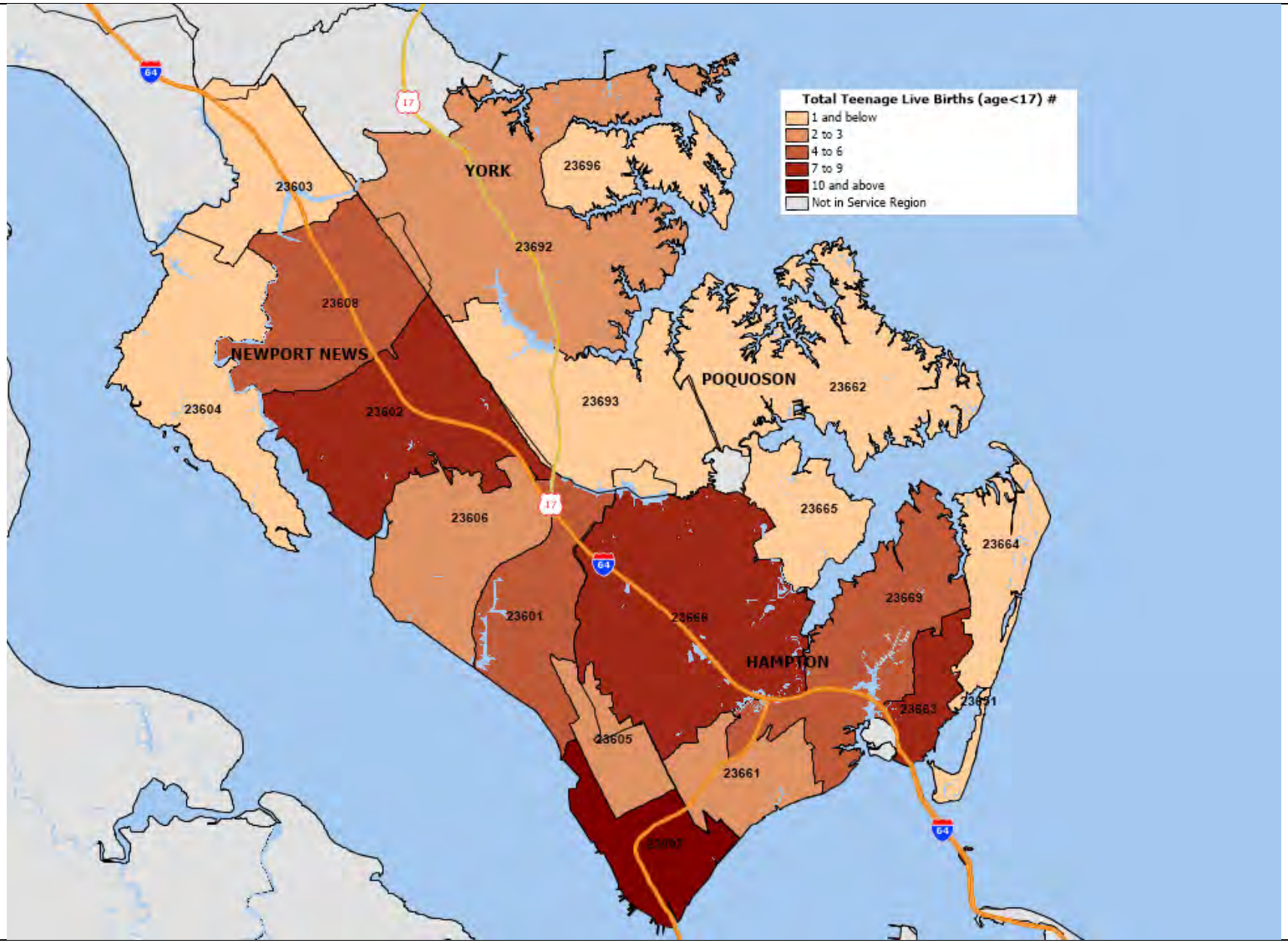

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported cancer deaths for zip code 22134.

Map 5: Total Live Births, 2013



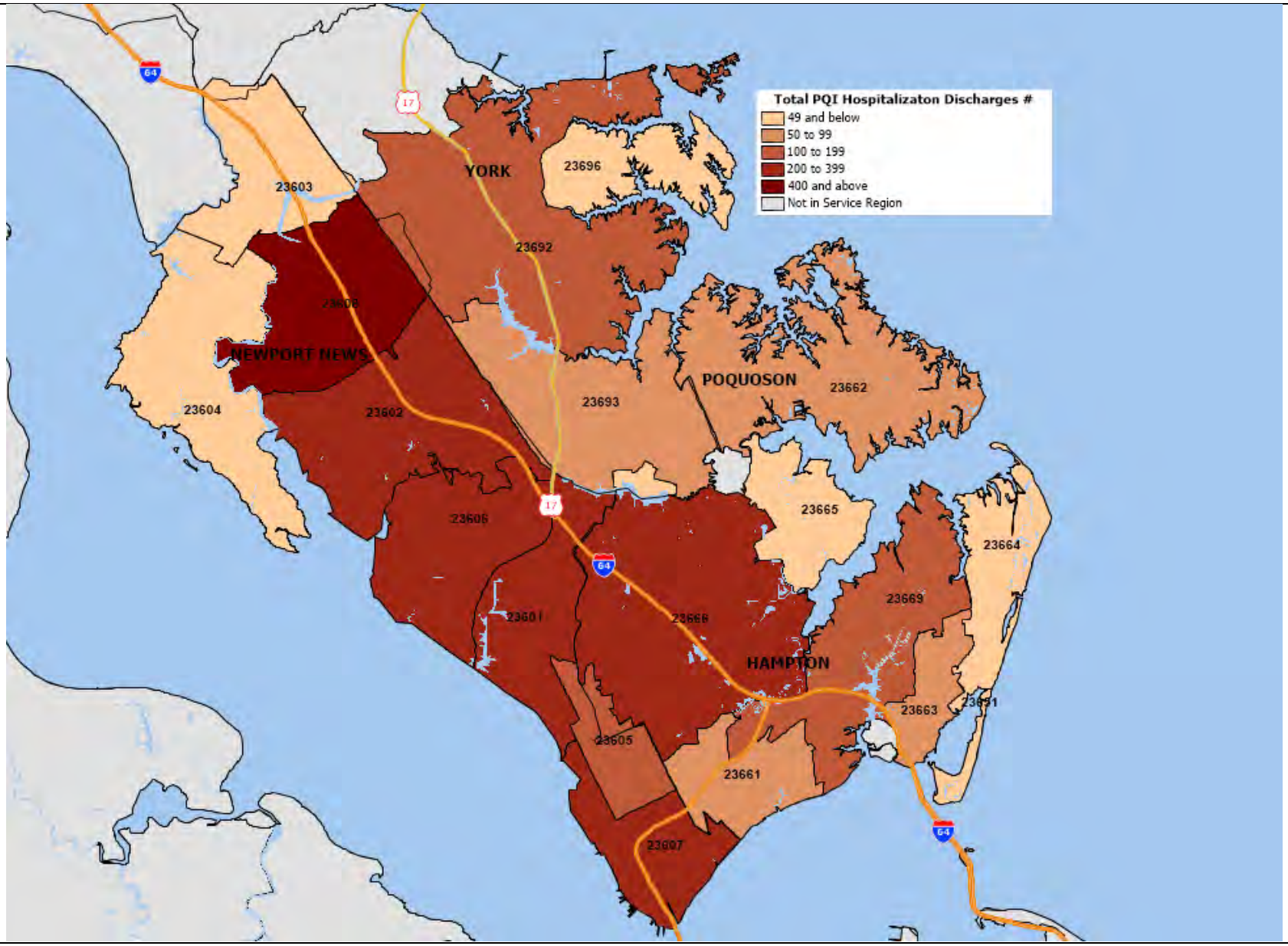

Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B.

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



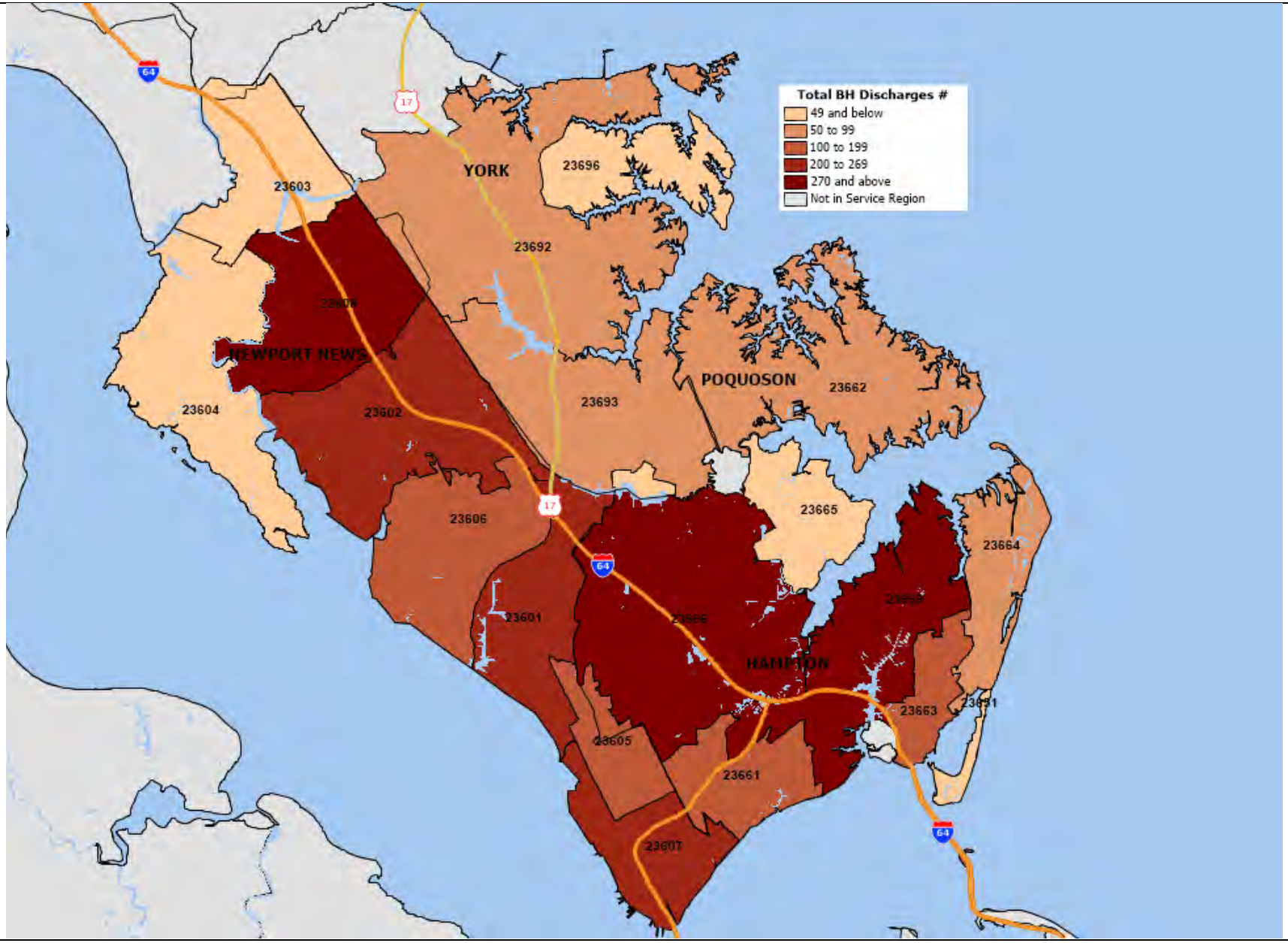

Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported teenage live births for zip codes 23603, 23604, 23651, 23664, 23665, 23693 and 23696.

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



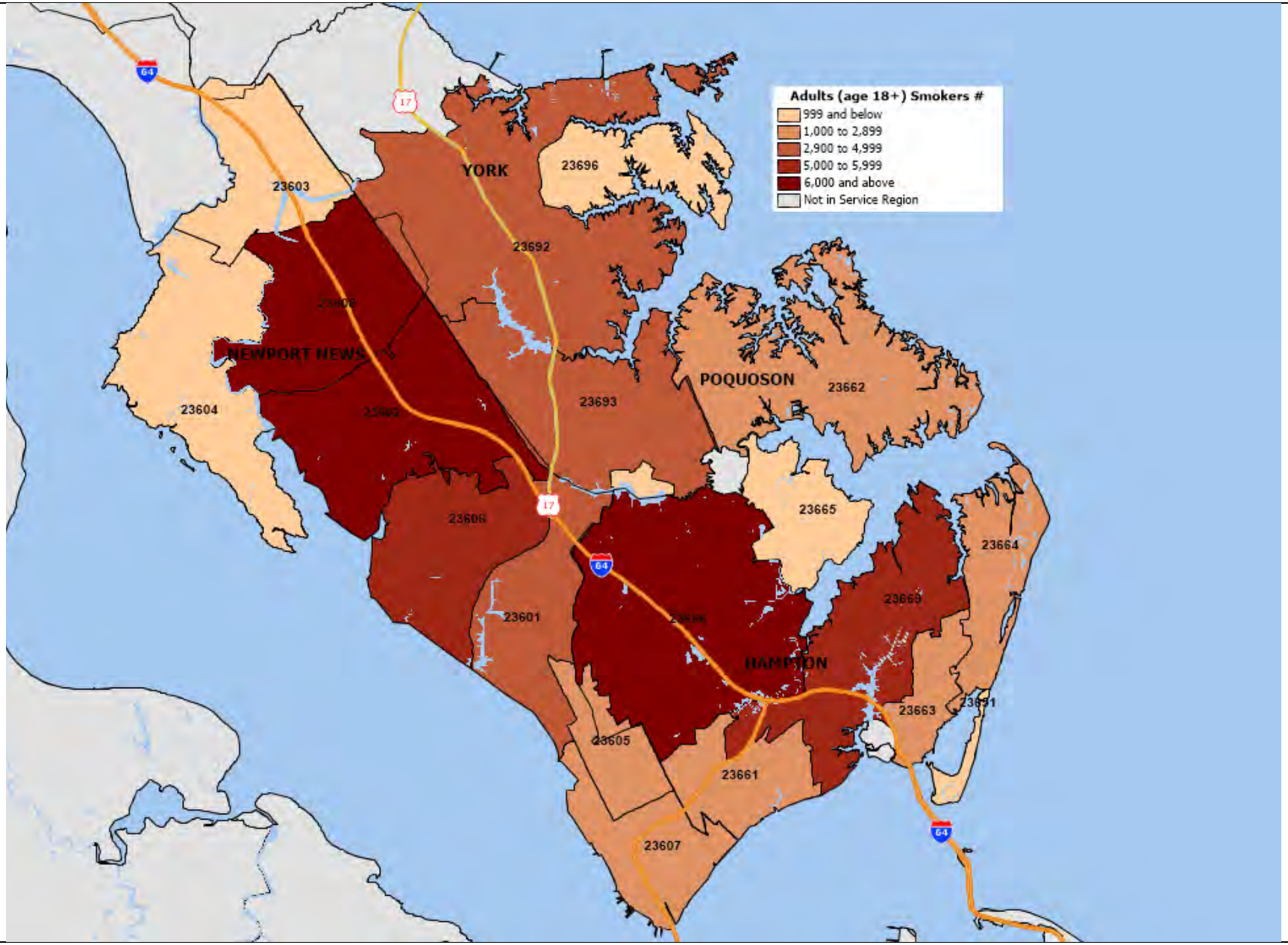

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B. Notes: There were no PQI hospitalization discharges for zip code 23665.

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



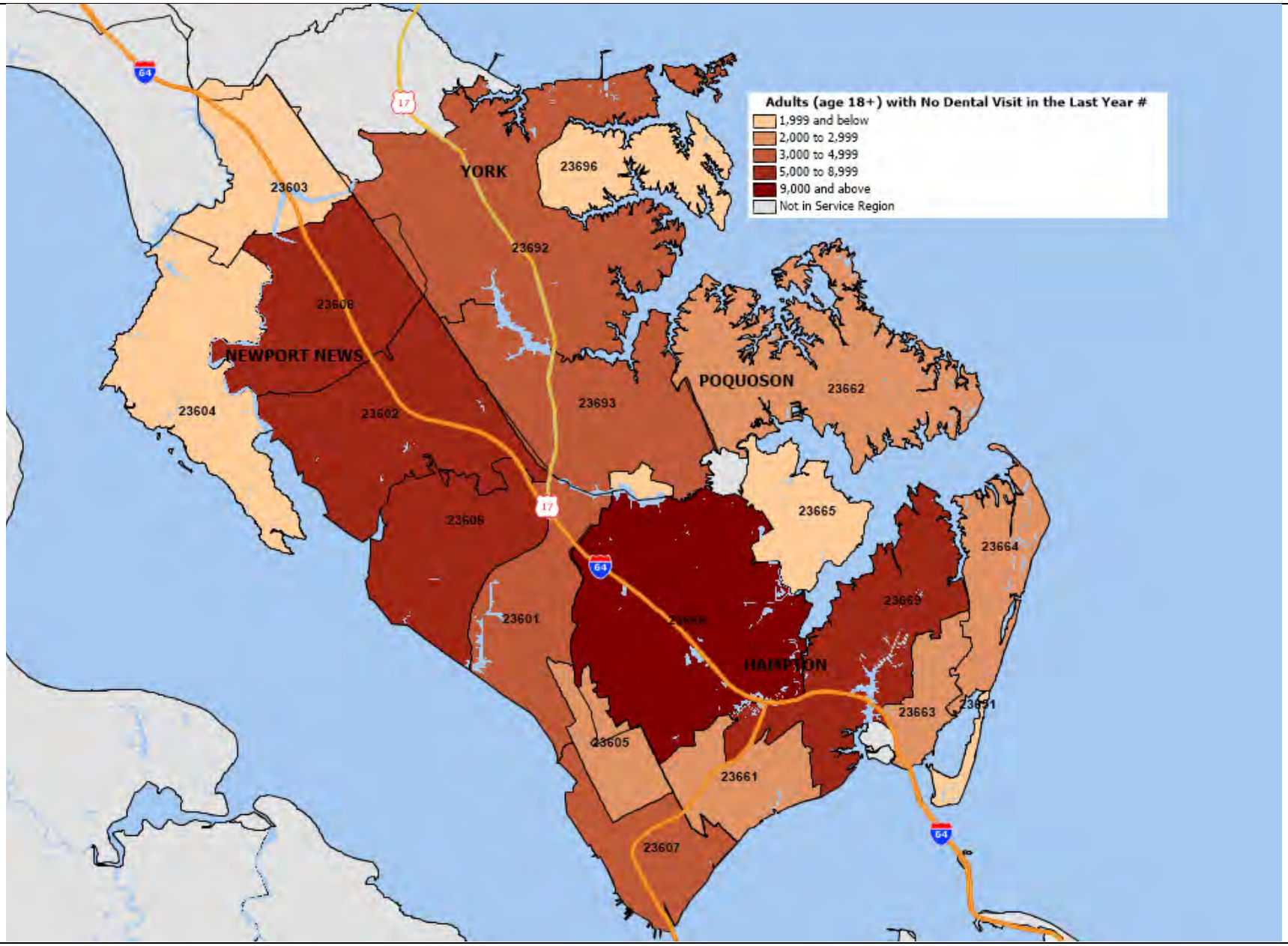

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B.

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



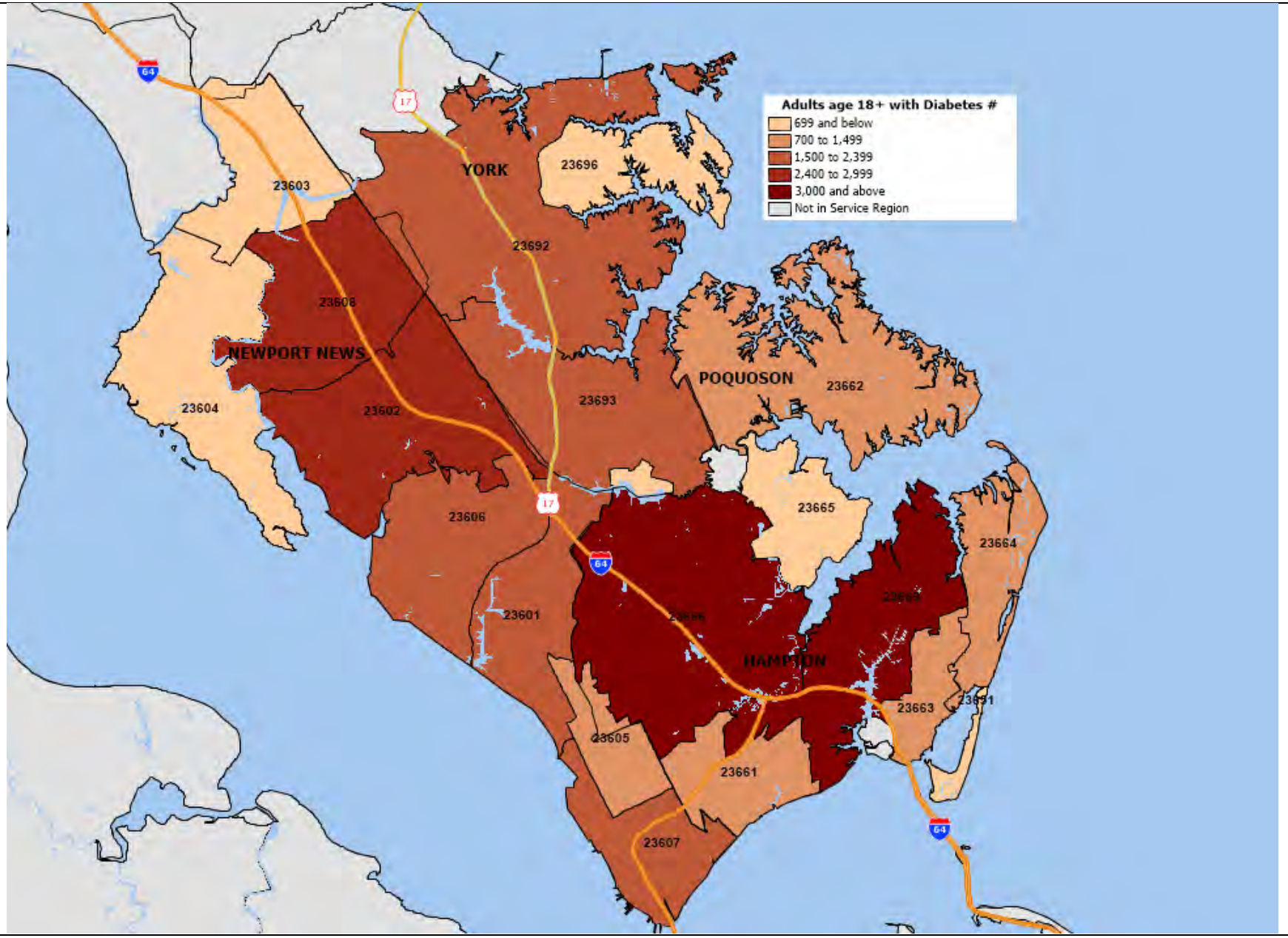

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

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



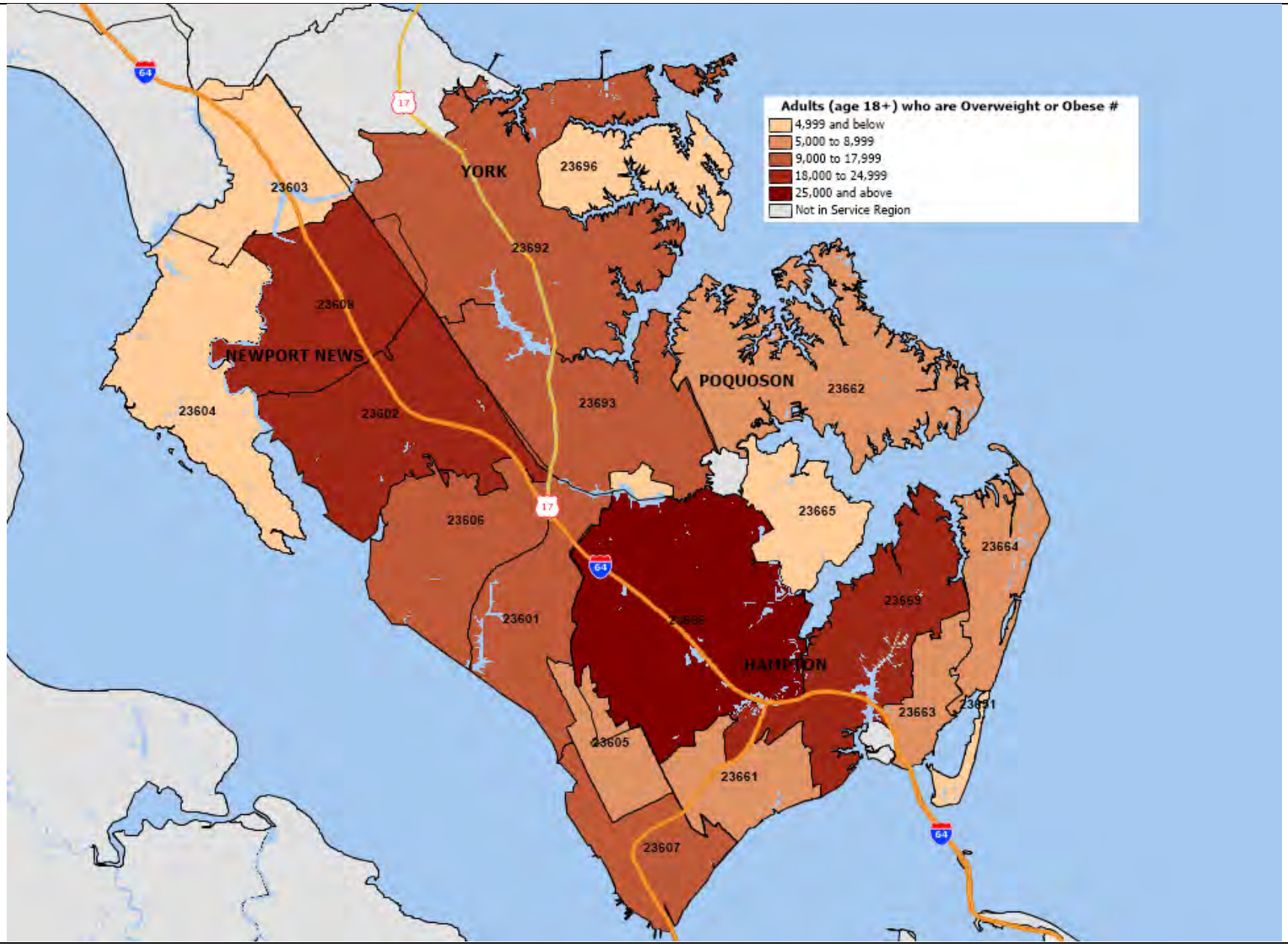

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

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



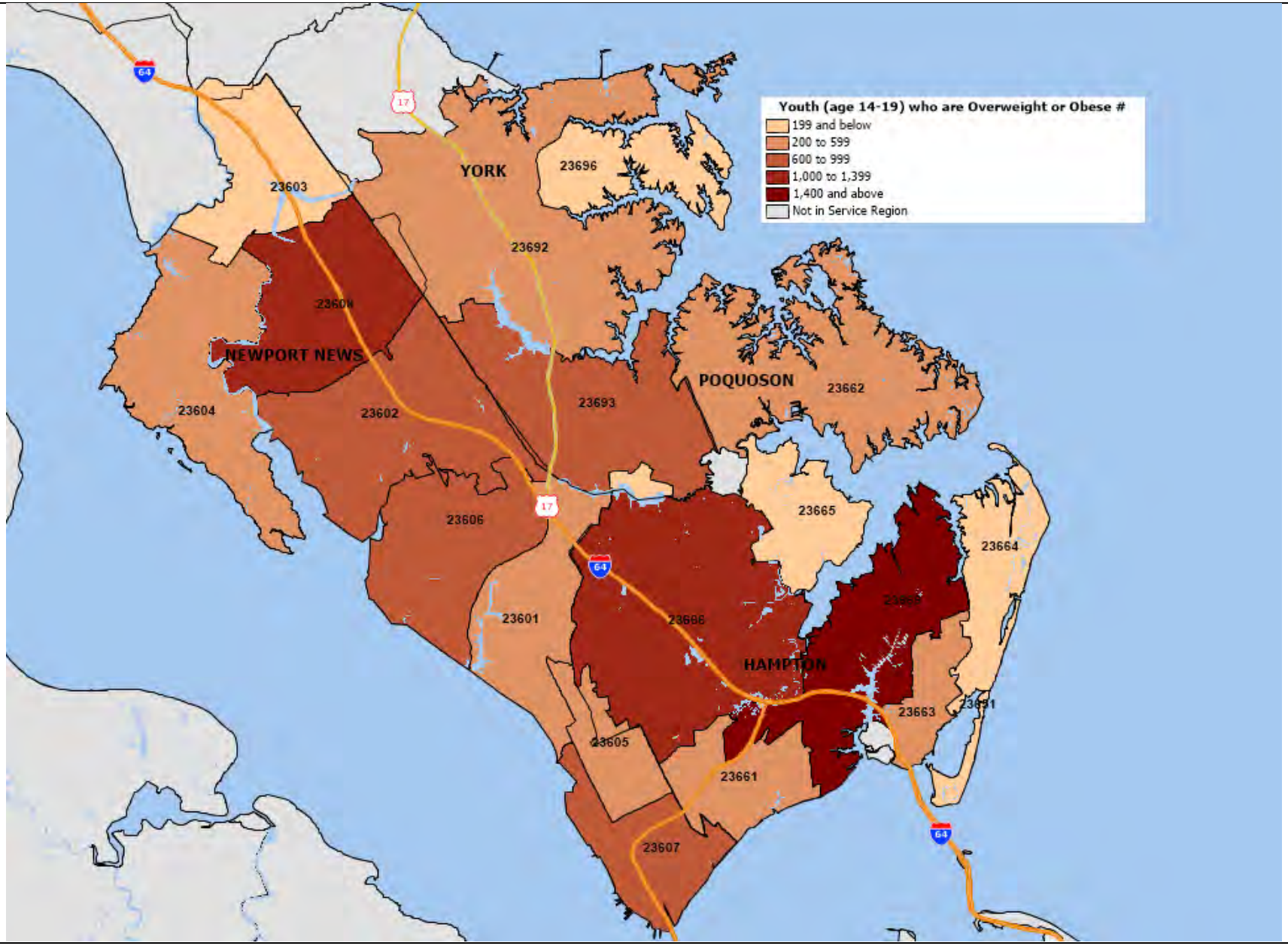

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See details in methods in Appendix B.

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



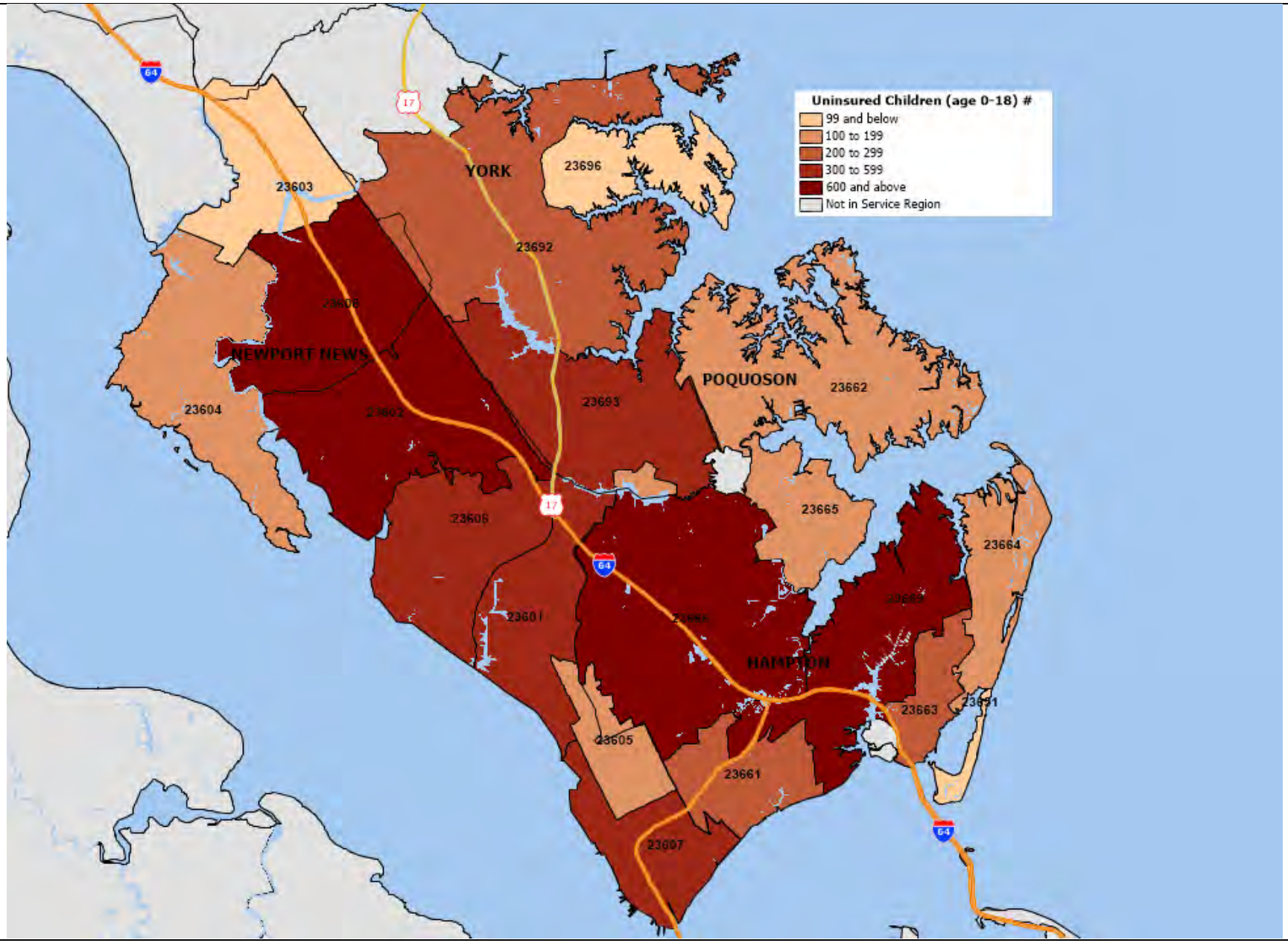

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B.

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



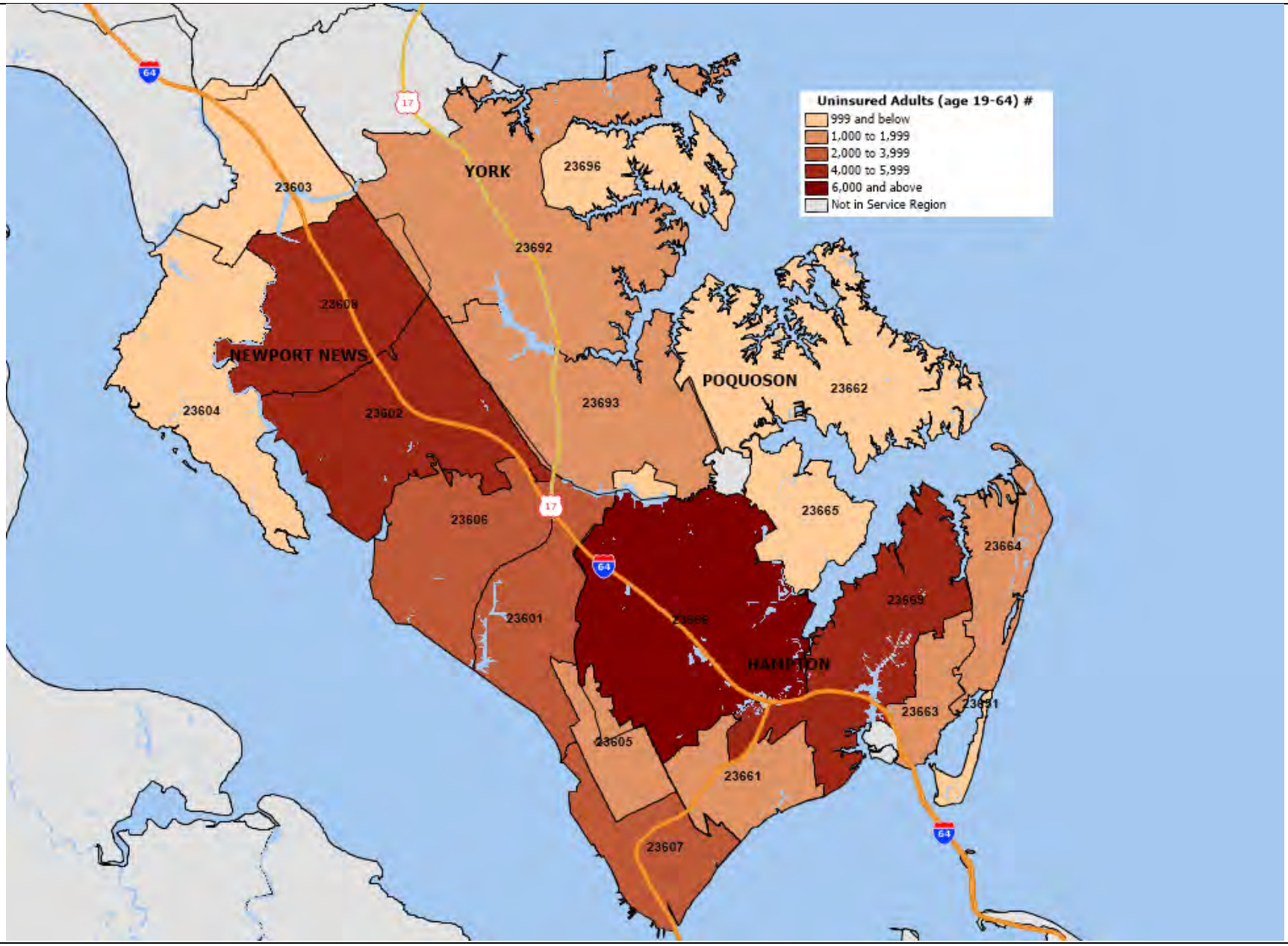

Source: Estimates produced by Community Health Solutions using Virginia Youth Risk Behavioral Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B. Data Sources for details.

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). Locality-Level counts and rates were obtained from the Virginia Department of Health. The combined study region counts and rates were produced by Community Health Solutions. |
| 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). Locality-Level counts and rates were obtained from the Virginia Department of Health. The combined study region counts and rates were produced by Community Health Solutions. |
| 3) Preventable Hospitalization Profile (also Appendix A. Map 7)<br><br>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.<br><br>**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.<br><br>**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.<br><br>*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:<br><br>• 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<br>• Local demographic estimates from Alteryx, Inc. (2014)<br><br>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:<br><br>• 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<br>• Local demographic estimates from Alteryx, Inc. (2014).<br><br>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:<br><br>• U.S. Census Bureau Small Area Health Insurance Estimates (2013). For more information, visit: http://www.census.gov/did/www/sahie/data/index.html.<br>• Local demographic estimates from Alteryx, Inc. (2014)<br><br>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 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 Survey Results

## Prepared for Sentara Careplex Hospital

### By Community Health Solutions

**August 2016**

# Community Survey Results

This report presents the results of a *Community Survey* commissioned by Sentara Careplex Hospital (Sentara Careplex). The survey is part of Sentara Careplex's 2016 Community Health Needs Assessment project. The survey was conducted jointly by Riverside Health System and Sentara Healthcare in an effort to obtain community input for the study. The *Community Survey* was conducted with a broad-based group of community stakeholders. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community;
- Vulnerable/at-risk populations in the community;
- Vulnerable/at-risk geographic regions in the community;
- Existing health assets within the community;
- Health assets needed in the community; and
- Additional ideas or suggestions for improving community health.

The community stakeholder list included representatives from public health, education, social services, business, local government and local civic organizations, among others. Riverside Health System and Sentara Healthcare staff conducted outreach for community input via email, through personal phone calls, and in-person at local events and meetings. An email survey request was sent to 922 unduplicated community stakeholders, and a total of 82 stakeholders in the Sentara Careplex service area submitted a response (although not every respondent answered every question). The respondents provided rich insights about community health in the study region. The survey results are summarized in the report, and detailed, open-ended responses are provided in *Appendix A*.

## 1. Survey Respondents by Organization

As shown in *Exhibit 1* on the following page, survey respondents were asked to provide the name of their organization.

| Exhibit 1. Survey Respondents by Organization | |
|---|---|
| **What is the name of your organization?** | |
| *Note: A count is provided for organizations with multiple survey respondents.* | |
| Angels of Mercy Medical Clinic | Riverside Doctors' Hospital Williamsburg- Board Member |
| Auxiliary of Sentara Williamsburg Regional Medical Center (2) | Respite Care of Williamsburg United Methodist Church |
| Avalon | Retired |
| Bay Rivers Telehealth Alliance | Riverside Behavioral Health Center |
| Beyond Boobs! | Riverside Health System (2) |
| Brentwood Pediatrics | Riverside House Calls Practice |
| Catholic Charities of Eastern Virginia | Riverside Medical Group |
| Celebrate Healthcare LLC | Riverside Medical Group - ED |
| Center for Weight Loss Success | Riverside PACE |
| City of Hampton, City Manager's Office | Second Chances Comprehensive Services LLC |
| City of Newport News | Sentara Family and Patient Advisory Committee |
| Colonial Behavioral Health (3) | Sentara Patient Family Advisory Counsel |
| County of York | Sentara Williamsburg Regional Medical Center (2) |
| Dominion Physical Therapy | Southeastern Virginia Health System |
| ECPI Medical Careers Institute | Spectrum/York County Board of Supervisors Chair |
| Foundation for Rehabilitation and Endowment | The Community Free Clinic |
| Hampton City Schools | Thomas Nelson Community College |
| Hampton Health Department | Tidewater Diagnostic Imaging |
| Hampton Newport News CSB | TowneBank |
| Hampton Roads Neurosurgical and Spine Specialists | TPGM |
| Hampton Roads Specialty Hospital | United Way of Greater Williamsburg |
| Hospice House and Support Care of Williamsburg (2) | United Way of the Virginia Peninsula (2) |
| James City County | VersAbility Resources |
| James City County Board of Supervisors | Village Events, Ltd. |
| James City County Police Department | Virginia Peninsula Chamber of Commerce |
| Newport News Division of Emergency Management (2) | Virginia Peninsula Foodbank |
| Newport News Fire Department | Volunteer |
| Old Hampton Family Associates, PC | Williamsburg Area Faith in Action |
| Old Point National Bank | Williamsburg Community Foundation |
| PBMares Wealth Management | Williamsburg Dept. of Human Services |
| Peninsula Agency on Aging (3) | Williamsburg Emergency Physicians (2) |
| Peninsula Health District | Williamsburg Health Foundation (2) |
| Peninsula Metropolitan YMCA | Williamsburg Landing, Inc. |
| Peninsula Youth Hockey Association | York Board of Supervisors |
| Poquoson Police Department | York County |

## 2. Community Health Concerns

Survey respondents were asked to review a list of common community health issues. The list of issues draws from the topics in *Healthy People 2020* with some refinements. The survey asked respondents to identify from the list what they view as important health concerns in the community. Respondents were also invited to identify additional issues not already defined on the list. *Exhibit 2* summarizes the results, including open-ended responses.

**Exhibit 2**
**Important Community Health Concerns Identified by Survey Respondents**

*Note: 82 of the 82 respondents answered this question. When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.*

| Answer Options | Response Percent | Response Count |
|---|---|---|
| Mental Health - Behavioral Health Conditions (e.g. depression, anxiety, etc.) | 79% | 65 |
| Heart Disease | 73% | 60 |
| High Blood Pressure / Hypertension | 73% | 60 |
| Substance Abuse (prescription or illegal drugs) | 72% | 59 |
| Obesity | 68% | 56 |
| Dementia / Alzheimer's Disease | 66% | 54 |
| Diabetes | 65% | 53 |
| Cancer | 54% | 44 |
| Alcohol Use | 51% | 42 |
| Chronic Pain | 48% | 39 |
| Stroke | 48% | 39 |
| Respiratory Diseases (e.g. asthma, COPD, etc.) | 46% | 38 |
| Violence – Domestic Violence | 46% | 38 |
| Accidents / Injuries | 43% | 35 |
| Violence – Other than domestic violence | 43% | 35 |
| Hunger | 42% | 34 |
| Tobacco Use | 42% | 34 |
| Infant and Child Health | 38% | 31 |
| Dental / Oral Health Care | 37% | 30 |
| Arthritis | 34% | 28 |
| Orthopedic Problems | 34% | 28 |
| Environmental Health (e.g. pollution, mosquito control, water quality, etc.) | 32% | 26 |
| Prenatal and Pregnancy Care | 31% | 25 |
| Neurological Conditions (e.g. seizures, multiple sclerosis, traumatic brain injury, etc.) | 29% | 24 |
| Renal (kidney) Disease | 29% | 24 |
| Intellectual/Developmental Disabilities | 28% | 23 |
| Bullying | 27% | 22 |
| Physical Disabilities | 26% | 21 |
| Drowning / Water Safety | 23% | 19 |

**Continued**

**Exhibit 2**
**Important Community Health Concerns Identified by Survey Respondents**

*Note: 82 of the 82 respondents answered this question. When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.*

| Answer Options | Response Percent | Response Count |
|---|---|---|
| Infectious Diseases | 22% | 18 |
| Sexually Transmitted Diseases | 21% | 17 |
| Autism | 20% | 16 |
| Teen Pregnancy | 20% | 16 |
| HIV/AIDS | 17% | 14 |
| Other Health Problems (see below) | 18% | 15 |

| Response # | Other Health Concerns (Open-Ended Reponses) |
|---|---|
| 1 | • Access to specialty care.<br>• Uninsured. |
| 2 | • All are important to those who are facing them. Gaining Access to Services to address these needs is the challenge |
| 3 | • Frail elders in unsafe situations, negligence and poor nutrition. Keeping elder persons in their home with community support. |
| 4 | • Geriatric outpatient services, comprehensive pain management to include psych services |
| 5 | • I think all of these are important health issues, but rather than checking them all, check the ones that are of highest concern. Again, all are important. The most important and urgent issue currently is violence and, as a subset, those conditions that lead to violence such as substance abuse, mental health, child development and generational poverty. Bullying and obesity are also urgent matters. |
| 6 | • Issues associated with aging-social isolation, unable to drive to doctor appointments |
| 7 | • Lack of Mental Health for acute and chronic care |
| 8 | • lack of regular medical preventive care for many residents. |
| 9 | • Other Health Problems-the growing danger of antibiotic resistant bacteria.<br>• The items selected are health issues that seem to be more prevalent. An aging population and growing numbers of obese individuals raises concerns and incidences of all the other health issues occurring. |
| 10 | • Sexual abuse is not listed; it is a serious health problem. All these I checked, homeless and those with no ID's have a serious problem getting help. |
| 11 | • Sexual assault both on college campus and off. We have seen a very big increase in clients in the last two years. |
| 12 | • The general conditions of seniors; particularly the “old old”. |
| 13 | • The jurisdictions of Greater Williamsburg are in need of valid and easy-to-understand education regarding Mental Health. The community at-large would benefit from information on the high prevalence of mental health disorders which would help de-stigmatize the issue, and give people resources on where to turn for help. Also, due to the shortage among the mental health workforce, there is a need for additional training for primary care providers, at all credential levels, to be able to identify, diagnose, treat, and/or make referrals for their patients needing mental health care. |

| | |
|---|---|
| 14 | • They are all important and usually interrelated, so it's difficult to isolate any one of the above. For example, poor diet and lack of proper nutrition is an issue here, as opposed to "hunger" outright, and, as you are aware, has many side effects. |
| 15 | • VersAbility Resources serves people with a wide array of disabilities throughout the Hampton Roads region. My responses reflect the health concerns faced by people with disabilities. |

## 3. Community Service Gaps

Survey respondents were asked to review a list of community services that are typically important for addressing the health needs of a community. Respondents were asked to identify from the list any services they think need strengthening in terms of availability, access, or quality. Respondents were also invited to identify additional service gaps not already defined on the list. *Exhibit 3* summarizes the results, including open-ended responses.

**Exhibit 3**
**Important Community Service Gaps Identified by Survey Respondents**

*Note: 80 of the 82 respondents answered this question. When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.*

| Answer Options | Response Percent | Response Count |
|---|---|---|
| Mental Heath - Behavioral Health Services | 64% | 51 |
| Aging Services | 60% | 48 |
| Care Coordination and Transitions of Care | 56% | 45 |
| Services for Vulnerable Populations (e.g. uninsured/underinsured, migrant workers, homeless, etc.) | 54% | 43 |
| Health Care Insurance Coverage | 53% | 42 |
| Services for Caregivers | 53% | 42 |
| Health Promotion and Prevention Services | 48% | 38 |
| Substance Abuse Services | 45% | 36 |
| Chronic Disease Services (e.g. diabetes, high blood pressure, etc.) | 44% | 35 |
| Transportation Services | 43% | 34 |
| Food Safety Net (e.g. food bank, community gardens, school lunches, etc.) | 40% | 32 |
| Long Term Care Services | 39% | 31 |
| Chronic Pain Management Services | 38% | 30 |
| Self-Management Services (e.g. nutrition, exercise, taking medications) | 38% | 30 |
| Dental / Oral Health Care Services | 34% | 27 |
| Home Health Services | 34% | 27 |
| Social Services | 31% | 25 |
| Veterans Services | 28% | 22 |
| Cancer Services (e.g. screening, diagnosis, treatment, etc.) | 25% | 20 |
| Primary Care Medical Services | 25% | 20 |
| Domestic Violence Services | 24% | 19 |
| Public Health Services | 24% | 19 |
| Specialty Care Medical Services (cardiologists, oncologists, etc.) | 23% | 18 |
| Early Intervention Services for Children | 19% | 15 |
| School Health Services | 19% | 15 |
| Hospice Services | 18% | 14 |
| Intellectual/Developmental Disabilities Services | 16% | 13 |
| Public Safety Services | 16% | 13 |
| Family Planning Services | 14% | 11 |
| Maternal, Infant and Child Health Services | 14% | 11 |
| Environmental Health Services | 11% | 9 |

**Continued on the following page**

**Exhibit 3**
**Important Community Service Gaps Identified by Survey Respondents**

*Note: 80 of the 82 respondents answered this question. When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.*

| Answer Options | Response Percent | Response Count |
|---|---|---|
| Hospital Services (e.g. inpatient, outpatient, emergency care, etc.) | 11% | 9 |
| Physical Rehabilitation | 11% | 9 |
| Pharmacy Services | 9% | 7 |
| Workplace Health and Safety Services | 3% | 2 |
| Other Services (see responses below) | 10% | 8 |

| Response # | Other Service Gaps (Open-Ended Reponses) |
|---|---|
| 1 | • Access to services through remote technology<br>• Palliative Care and patient care navigation and advocacy |
| 2 | • Affordable, accessible adult day programs |
| 3 | • Companion care that is affordable for those who do not qualify for Medicaid but are still considered low income. |
| 4 | • If one does not have an ID, getting the services I checked off is almost impossible to get. |
| 5 | • Lack of adequate financial resources for the services listed directly impact availability and access. |
| 6 | • Many of these are in place, concerns are with affordability and quality of services provided. |
| 7 | • MAT- medication Assisted treatment for individuals who are chemically dependent particularly in the area of opioids and alcohol. |
| 8 | • The Health Care Insurance coverage needs fixing, since a lot of people still "fall through the cracks", are not covered properly, and have high deductibles and monthly premium costs. A number of seniors, who are solely on Social Security, cannot afford Assisted Living, etc. at $5,000 a month, and must age in place in their own apartment. |

## 4. Vulnerable/At-Risk Populations or Geographic Regions in the Community

Survey respondents were asked if there are particular populations within the community who are vulnerable/at-risk for health concerns or difficulties obtaining health services. Respondents were also asked if there are particular neighborhoods or geographic regions within the community where residents may be vulnerable/at-risk for health concerns or difficulties obtaining health services. *Exhibit 4* provides summary results. Please see *Appendix A, Exhibits A1 and A2* for detailed responses.

**Exhibit 4**
**Vulnerable/At Risk Populations Identified by Survey Respondents**

| *Respondents identified vulnerable/at risk populations within the following categories (displayed in alphabetical order, not by rank/percent). See Appendix A, Exhibit A1 for 55 detailed responses.* | *Respondents identified vulnerable/at-risk populations residing within the following places (displayed in alphabetical order, not by rank/percent). See Appendix A, Exhibit A2 for 36 detailed responses.* |
|---|---|
| • Children<br>• Disabled<br>• Elderly<br>• Ethnic/Racial Minorities<br>• Homeless<br>• Low Income<br>• Residents with Behavioral Health Conditions (mental health and substance abuse)<br>• Residents without Transportation<br>• Residents who have been Victims of Violence<br>• Uninsured/Underinsured<br>• Unemployed/Underemployed<br>• Veterans | • City of Hampton<br>• City of Newport News<br>• City of Williamsburg<br>• James City County<br>• York County<br>• Areas with Lower Socioeconomic Status<br>• Areas designated as Medically Underserved Areas or Health Professional Shortage Areas<br>• Rural Areas with Less Supports<br>• Hotels (for low income families)<br>• Mobile Home Communities |

## 5. Health Assets in the Community

Survey respondents were asked to identify health assets within the community that promote a culture of health. Respondents were also asked to identify health assets that the community needs, but may be lacking. *Exhibit 5* provides summary results. Please see *Appendix A, Exhibits A3 and A4* for detailed responses.

**Exhibit 5**
**Health Assets in the Community as Identified by Survey Respondents**

| *Respondents identified existing assets that promote a culture of health in the following categories (displayed in alphabetical order, not by rank/percent). See Appendix A, Exhibit A3 for 61 detailed responses.* | *Respondents identified assets that the community needs, but may be lacking, in the following categories (displayed in alphabetical order, not by rank/percent). See Appendix A, Exhibit A4 for 49 detailed responses.* |
|---|---|
| • Biking and Walking Trails<br>• Community Organizations<br>• Community Volunteers<br>• Faith-Based Organizations<br>• Free and Charitable Clinics<br>• Hospitals and Health Systems<br>• Natural Environment<br>• Recreational Facilities<br>• Safety Net Organizations | • Access to Safe Parks and Recreation Facilities<br>• Behavioral Health Services (Mental Health and Substance Abuse)<br>• Community Services for Seniors<br>• Community Services for Low Income Residents<br>• Health Care Services for Seniors<br>• Health Care Services for Low Income Residents<br>• Primary Medical Care Services<br>• Safe, affordable Housing<br>• Specialty Medical Services<br>• Transportation Services |

## 6. Additional Ideas and Suggestions

Survey respondents were invited to share any additional ideas or suggestions for improving community health. Thirty respondents offered ideas and suggestions related to improving access to services, coordinating health services, creating educational opportunities, providing recreational activities, addressing transportation problems, addressing disparities, targeting resources to populations in need, and community collaboration. *Appendix A, Exhibit A5* provides a detailed listing of the 30 responses.

# Appendix A. Detailed Community Survey Responses

**Exhibit A1. Vulnerable/At-Risk Populations in the Community**

*Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.*

| | **Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties? obtaining health services?** |
|---|---|
| 1 | • (I'm on the Bon Secours Community Health Needs Assessment Advisory Board, so I have information that I may have had otherwise.) The low income population and those who do not speak English well are particularly vulnerable. The biggest issue seems to be transportation to any kind of health services. The low income population is also particularly vulnerable because of poor eating habits, resulting in obesity, high blood pressure, and diabetes. It is difficult to afford nutritious food when you can barely afford food of any kind. |
| 2 | • Single, unattached adults with various health, mental health and/or substance abuse histories, with low incomes and poor work histories as a result are in a "catch 22" situation they cannot get out of. |
| 3 | • Aging<br>• Low income residents |
| 4 | • Aging<br>• People with substance/alcohol use disorders and behavioral health issues<br>• Working poor<br>• Rural families<br>• Veterans |
| 5 | • Both the direct victim, and the children who witness domestic violence are at risk for long term health issues.<br>• Sexual assault victims should have access to an advocate and a specialized sexual assault nurse examiner when they are brought to the emergency room and should not be further traumatized by asking them to go to another city. |
| 6 | • Both the uninsured and underinsured<br>• The elderly on fixed incomes. |
| 7 | • Co-occurring serious mental illness and mental health and/or substance use disorder; especially those who earn too much money to qualify for Medicaid but not enough to pay for their own insurance. I am quite concerned what will happen to the individuals who are currently covered under GAP insurance when the pilot project ends. |
| 8 | • Dental services for nursing home residents is unobtainable due to lack of facilities that can accommodate wheelchairs and lack of payment.<br>• Psych services for pain management has been lacking for years in this area.<br>• Outpatient geriatric primary care; many primary care practices are not equipped to handle geriatric patients and geriatric syndromes. They don't have the time, training and expertise for this population. |
| 9 | • Elderly/Aged<br>• Mental Health<br>• Physical and Developmental Disabilities |
| 10 | • Frail elders who have no family or unreliable family to support them. Especially persons with chronic disease, who have visual and cognitive impairment. Medication management is a huge area of difficulty for these persons. |
| 11 | • Homeless families |
| 12 | • Homeless population, human sex trafficked females. The City of Williamsburg and James City County refuse to accept they exist, and the uninsured/underinsured. |
| 13 | • Indigents<br>• Individuals with no insurance or poor plans. |

| Exhibit A1. Vulnerable/At-Risk Populations in the Community | |
|---|---|
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| **Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties? obtaining health services?** | |
| | • Geriatrics |
| 14 | • Individuals in a poverty situation |
| 15 | • Low income |
| 16 | • Low income populations-both elderly and transient<br>• Uninsured residents |
| 17 | • Low income teenagers |
| 18 | • Low income<br>• Seniors with limited income<br>• Single adults with no children<br>• Mobile home dwellers<br>• Families living in hotels |
| 19 | • Low income<br>• Uneducated<br>• Mentally disabled(ill) population |
| 20 | • Lower income<br>• Elderly populations<br>• Those who speak a foreign language are most vulnerable to not getting services they need or understanding what they need to do to take care of their health needs at home. |
| 21 | • Low-income<br>• Seasonally employed persons face significant challenges to securing affordable health insurance and therefore preventive health care including mental health care. |
| 22 | • Many older individuals are in need of safe, affordable housing and lack transportation resources to enable them to access health care.<br>• Health care providers also need to become more aware of the importance of social determinants in achieving successful health outcomes long term. |
| 23 | • Many patients that are Medicaid eligible fail to renew their services causing lapses in insurances. Others are unaware of Medicaid transportation services and miss appointments. Medicaid transportation requires that participants give 5 days' notice prior to appointment. This poses a problem if a patient is sick and needs a same day appointment. These patients tend to use emergency rooms or urgent care services, as they are unable to get transportation during normal business hours.<br>• Medicaid adolescents are at increased risk for anxiety and depression. Much if this is linked to family social situations (i.e. homelessness, poverty, lack of food and necessary resources). |
| 24 | • Mental health screenings and inpatient services |
| 25 | • Mental health<br>• Elderly<br>• Disabled |
| 26 | • People living in poverty- especially children<br>• Seniors living alone |
| 27 | • People who are isolated and/or dealing with depression are more likely to have bad health outcomes, yet they are difficult to reach. Services for managing depression, especially in the elderly, are difficult to find. |
| 28 | • People with disabilities face inadequate access to dental care and transportation challenges in accessing health care. |

| Exhibit A1. Vulnerable/At-Risk Populations in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| **Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties? obtaining health services?** | |
| 29 | • People without access to regular health services including people who are:<br>o Unemployed or under-employed<br>o Having few or no transportation resources<br>o Living in low-income environmentally unsafe housing<br>o Limited literacy (including English speakers)<br>o A number of vulnerable people fall into more than one of these categories |
| 30 | • Residents living at or below the poverty level |
| 31 | • Senior citizens living alone<br>• Families in economically deprived communities |
| 32 | • Senior citizens<br>• Children<br>• Infants |
| 33 | • Seniors<br>• Lower income |
| 34 | • Seniors-especially those who no longer drive [and] have no family nearby |
| 35 | • Teens<br>• Homeless |
| 36 | • The city has an influx of immigrant refugees who are settling in the area. These individuals have limited or no English skills when they first arrive and have many mental health issues associated with past abuse and being so far from their home country with foreign customs they are not familiar with. |
| 37 | • The financially disadvantaged |
| 38 | • The homeless<br>• The elderly |
| 39 | • The lower income population<br>• Residents who speak English as a 2nd language<br>• Single parent households |
| 40 | • The metro system in our area is poor. This means that individual would have a difficult time getting back and forth to doctor appointments. |
| 41 | • The poor elderly |
| 42 | • The poor, the elderly and special needs populations are vulnerable to injuries from falls or untreated/undiagnosed illnesses. They also have needs related to hunger and nutrition, poverty, and suitable housing. |
| 43 | • Under-employed/unemployed<br>• Homeless<br>• Minority immigrant population<br>• Dementia / Alzheimer patients without a family support group. |
| 44 | • Underinsured and uninsured |
| 45 | • The uninsured - disjointed services. FQHC's such as SEVHS provide the primary care services but access to specialty services, procedures, diagnostic imaging are very limited and maybe nonexistent for the uninsured. |
| 46 | • The very elderly<br>• Very poor |

| Exhibit A1. Vulnerable/At-Risk Populations in the Community | |
|---|---|
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| **Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties? obtaining health services?** | |
| 47 | • Underinsured and uninsured. |
| 48 | • Uninsured and underinsured populations<br>• Elderly<br>• Mentally ill and disabled, as well as their caregivers<br>• Children<br>• Young adults. |
| 49 | • Uninsured patients in Newport News and Hampton are at risk for major health problems. They have many complex care needs and the clinics are trying but there are so many patients and the clinics do not currently have the capacity to handle the volumes. Riverside makes major donations but the other hospitals need to support as well. Patients are in and out of the hospitals for major problems and if we develop a collaborative strategy to promote health and wellness for this population we will have a major impact and save precious dollars. |
| 50 | • Uninsured<br>• Working poor and those below the poverty line (income)<br>• Elderly |
| 51 | • Urban areas that have residents that fall into the Medicaid gap. |
| 52 | • Many lower income households do not go to the doctor or take their meds putting them at greater risk for health problems. |
| 53 | • Homeless<br>• Mentally Ill<br>• Low income |
| 54 | • Young black males<br>• Poor families<br>• The mentally ill |
| 55 | • Young women with cancer especially breast cancer |

| Exhibit A2. Vulnerable/At-Risk Regions in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| | |
| **Are there particular neighborhoods or geographic regions within the community where the resident population may vulnerable or at risk for health problems or difficulties obtaining health services?** | |
| 1 | • All of the areas in my service area that are listed as MUA's - medically underserved and HPSA's. |
| 2 | • All of the very low economic census tracts in Hampton, James City County, Williamsburg and Newport News. |
| 3 | • All the lower SES neighborhoods. |
| 4 | • Any of our woods have so many homeless, low budget hotels |
| 5 | • Any place where the population is impoverished. |
| 6 | • Buckroe / Phoebus areas |
| 7 | • Census tracts: 502.4, 505, 506 Lackey area of York County |
| 8 | • Downtown Newport News and Hampton are particularly at risk and have less adequate understanding of their chronic disease, less trust of the healthcare system and are at particular risk for poor nutrition, safety and ability to care for themselves. |
| 9 | • Grove |
| 10 | • Grove<br>• Chickahominy Road<br>• Other low income areas |
| 11 | • Grove<br>• East End of Newport News for cancer screenings like mammograms |
| 12 | • Grove<br>• Lackey<br>• Chickahominy Road<br>• Centerville Road<br>• Any place in the James City or York Counties that have limited access to public transportation |
| 13 | • It varies, but there are lower socio-economic areas that are more impacted with more serious and chronic health issues for a number of reasons. |
| 14 | • Lackey<br>• Grove |
| 15 | • Low income seniors in any neighborhood throughout the region. Perception that in some neighborhoods all are wealthy, but that's not accurate. There are needy seniors in all areas. Some areas definitely have concentrations of low income populations:<br>o Grove area<br>o Chickahominy Haven |
| 16 | • Lower income |
| 17 | • Lower income areas |
| 18 | • Newport News<br>• Rural areas with less supports |
| 19 | • Newport News<br>• Hampton |
| 20 | • Newport News residents |
| 21 | • Nursing homes and long term health care facilities<br>• Southeast Community<br>• Northwest Community (Denbigh) |
| 22 | • Residents in the East-end of Newport News |

| Exhibit A2. Vulnerable/At-Risk Regions in the Community | |
|---|---|
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| **Are there particular neighborhoods or geographic regions within the community where the resident population may vulnerable or at risk for health problems or difficulties obtaining health services?** | |
| | • Parts of Downtown Hampton, particularly zip code 23661 |
| 23 | • Southeast Newport News |
| 24 | • Southeast Newport News<br>• Sections of Hampton |
| 25 | • Southeast Newport News,<br>• Grove area of James City County (and upper Newport News)<br>• Lackey area of York County<br>• Williamsburg/JCC areas that must depend on public transportation. The buses stop too early and don't go far enough for them to obtain some needed health services. |
| 26 | • Southeast portion of Newport News |
| 27 | • Southeastern area of Newport News |
| 28 | • The areas that are underserved tend to be those with lower socioeconomic status. |
| 29 | • The east and north ends of the city have more elderly and low-income individuals. |
| 30 | • The east end of Newport News. |
| 31 | • The metro system in our area is poor. This means that individual would have a difficult time getting back and forth to doctor appointments. |
| 32 | • The mobile home community located at 214 Wythe Creek Road has needs for enhanced services related to poverty, hunger, substance abuse, particularly among the elderly and special needs populations. |
| 33 | • The poorer communities:<br>o Grove in James City County<br>o East End in Newport News<br>o North End in York |
| 34 | • The Southeast Community of Newport News is at major risk for health problems and some of the patients fall in the gaps. Once they are hospitalized for emergencies, they are back in the communities and very often care is not coordinated well from hospital to community. Patients lack health care literacy, they do not trust the health care systems and as a result they only seek health care when desperate. In addition, there are many mental health issues and there must be an answer to solving some of the mental health problems. We have not solved the bed issue for patients needing to be hospitalized and they end up on the streets and sometimes doing violent crimes.<br>• The Denbigh section or the northern area of Newport News is developing a reputation for needing help must like the southeast of Newport News. People are uninsured, and they live in poverty. For both groups even if they work, they are living in poverty at the minimum wage.<br>• Hampton has pockets of the same and the collaborative strategy must address the health of the population. The Health Departments seem to be limited in what they provide and this issue needs to be addressed. (Health Dept. Services vs. Needed Services) |
| 35 | • Downtown Newport News<br>• Hampton |
| 36 | • South of Mercury Blvd |

| Exhibit A3. Health Assets in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| **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. In your view, what are the most important health assets within the community?** | |
| 1 | • Three health networks |
| 2 | • A place where wildlife can be protected |
| 3 | • AA<br>• Al Anon<br>• Capital Trail<br>• Freedom Park |
| 4 | • Any walking or biking trail. |
| 5 | • Bike trails<br>• Walking trails<br>• Beaches. |
| 6 | • Built and Natural resources<br>• Programs (obesity, diabetic management) |
| 7 | • Church<br>• People |
| 8 | • Clean air and water<br>• Recreational opportunities |
| 9 | • Clinics that serve the uninsured/underinsured for an affordable cost. |
| 10 | • Community Health Foundation,<br>• Parks and Recreation facilities- parks, trails, facilities in James City County<br>• Community pools<br>• Jamestown Beach<br>• VA Cooperative Extension programs<br>• Groups like Beyond Boobs!, Erase the Need<br>• Nonprofit community organizations |
| 11 | • For the low income population, the most needed/important health assets are the institutions and the people who work/volunteer there.<br>• Our community has the highest level of food insecurity in the state of Virginia, which tells me that our poverty rate is very high. These individuals can't be concerned with walking trails and beaches when they have other more important needs (health assets) not being met. |
| 12 | • FQHC<br>• Free Clinics |
| 13 | • Free clinics<br>• Great hospitals<br>• Nonprofit health organizations (CDR,Beyond Boobs!,Bacon Street, the four free clinics)<br>• Cancer medical professionals and facilities<br>• YMCAs and Rec centers |
| 14 | • Hospital systems<br>• Health department<br>• Social services<br>• Community centers |

**Exhibit A3. Health Assets in the Community**

*Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.*

**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. In your view, what are the most important health assets within the community?**

| | |
|---|---|
| | • YMCA<br>• Parks and Recreation<br>• School system<br>• Daycare<br>• After school programs<br>• Buckroe beach<br>• Community and civic organizations |
| 15 | • Hospitals<br>• Health care systems<br>• Schools<br>• Churches |
| 16 | • Hospitals<br>• Hospice Care<br>• Walking Trails |
| 17 | • Hospitals<br>• Urgent care facilities<br>• Mental and behavioral health care facilities<br>• Parks<br>• Beaches<br>• Outdoor and Indoor entertainment areas |
| 18 | • In general, we have good medical providers.<br>• We also have access to many public parks and recreation activities that promote wellness |
| 19 | • James City County Parks and Recreation including their many parks, walking trails, and Rec Connect program.<br>• Williamsburg Area Faith in Action is a wonderful health asset for our elderly population providing needed transportation services and respite care.<br>• Williamsburg Health Foundation is a tremendous health asset for the Greater Williamsburg community providing more than $4 million a year in grants to agencies and programs like Olde Towne Medical Center and the School Health Initiative Program. |
| 20 | • Local hospitals<br>• Free clinics<br>• Human service programs that address and support health and mental health issues. |
| 21 | • Local Parks and Rec programs<br>• Area health systems<br>• AAA's<br>• Local food bank |
| 22 | • Medical professionals<br>• Walking trails<br>• Hospitals |
| 23 | • Medical specialists to serve a growing aging population.<br>• Walking and biking trails. |

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| **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. In your view, what are the most important health assets within the community?** | |
| 24 | • Mental health agencies that can provide care to those within the home. |
| 25 | • Network of Care website: wmbgcares.org<br>• Strong network of safety-net healthcare clinics, but are only serving approximately one-third of people with no health insurance. |
| 26 | • Newport News Park<br>• Noland Trail<br>• Sandy Bottom<br>• Gosnold Park,<br>• Old Sentara Fitness trail<br>• These are great resources within the community that can be utilized by residents to promote fitness and leisurely fun. |
| 27 | • Noland<br>• Sidewalks<br>• Street lights<br>• Green spaces |
| 28 | • Noland Trail<br>• Matteson Trail |
| 29 | • Noland Trail/Lion Bridge<br>• Newport News Bike Trail<br>• YMCA<br>• Riverview Park Walking Trail<br>• Hunington Park<br>• Riverside Wellness and Fitness Centers<br>• 3K and 5K Walk Run Marathon events |
| 30 | • Open areas<br>• Walking trails etc. |
| 31 | • Open, recreational spaces<br>• Bike trails |
| 32 | • Outdoor recreation opportunities<br>• Public and private gyms<br>• Community centers |
| 33 | • Outdoor safe walking and biking trails. |
| 34 | • Parish thrift shop and food pantry<br>• EMS services<br>• Health screenings and flu shots<br>• Red Cross blood drives. |
| 35 | • Parks |
| 36 | • Parks<br>• Beaches |
| 37 | • Parks<br>• Wellness centers |

| Exhibit A3. Health Assets in the Community | |
|---|---|
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| **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. In your view, what are the most important health assets within the community?** | |
| | • Beaches<br>• Libraries<br>• Churches who house peer support groups or other community health activities. |
| 38 | • Peninsula Agency on Aging's programs, esp. Eastern Virginia Care Transitions Program, Chronic Disease Self-Management, Matter of Balance.<br>• For youth- the SHIP programs.<br>• Easier access to safe biking routes, share the road enforcement. |
| 39 | • People<br>• Available<br>• Programs<br>• Natural resources |
| 40 | • Preventive health education<br>• Nutrition education<br>• Culture of wellness<br>• Unfortunately, if you are not in the "well" group and are older then the services become more scarce. |
| 41 | • Primary care, acute care, emergency care and specialty care readily available and accessible.<br>• Schools, parks, trails and organizations that promote a culture of health and provide access to and motivational incentives for healthy lifestyles. |
| 42 | • Professionals<br>• Hospitals<br>• Clinics<br>• Natural environment |
| 43 | • Quality Care (Riverside/Sentara) |
| 44 | • Quality hospital systems<br>• Public parks/beaches<br>• Foodbank<br>• CINCH |
| 45 | • Riverside Health System<br>• Riverside and Sentara Wellness Centers<br>• YMCA<br>• Noland Trail<br>• Newport News Park |
| 46 | • Sidewalks so people can walk, not the trails, they lead nowhere! |
| 47 | • The elderly tend to be uninsured or not insured enough. They tend to not seek medical care because of out of the pocket expense until they are so sick that someone else has to make the decisions for them. |
| 48 | • The integrated assets of Riverside Health System and Sentara<br>• Hampton University's Proton Therapy Center<br>• Grafton and Southeast Newport News Clinics<br>• Newport News parks and Noland Trail<br>• Peninsula Public Health<br>• PACE |

| Exhibit A3. Health Assets in the Community | |
|---|---|
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| **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. In your view, what are the most important health assets within the community?** | |
| 49 | • The two health systems<br>• Senior living communities |
| 50 | • There are numerous organizations, both public and private, along with faith-based communities who are addressing these issues.<br>• It would help to develop a better community health strategy that maximizes every entity's potential. I know that the Williamsburg Health Foundation is working on this. |
| 51 | • This area being strong in a senior population, I think we need more available places for assisted living that are affordable.<br>• More educational programs for seniors |
| 52 | • This is a beautiful area, we have lots of parks and beaches, museums.<br>• 2 major hospitals that are an asset to the community.<br>• A Community Services Board that is the 2nd largest in the state and has a full continuum of services. |
| 53 | • Trails- James City County in particular has outstanding biking/walking trails.<br>• There are many parks as well. |
| 54 | • Two hospitals<br>• Old Towne Med Centre<br>• Health provider volunteers |
| 55 | • Two hospitals<br>• Miles of bike trails<br>• Several good parks for those who can get there<br>• Recent efforts to install sidewalks<br>• Network of safety net clinics and a relatively strong group of non-profits focused on health and human services |
| 56 | • Walking and biking trails<br>• Organized activities that are close to neighborhoods that may help mitigate isolation among the elderly and those dealing with depression. |
| 57 | • Walking trail and cost effective programs at the James City County Rec. Center.<br>• Walking trails all over town.<br>• Colonial Williamsburg is a lovely place to walk.<br>• Many senior programs at the library.<br>• Programs offered by Sentara Williamsburg Regional Medical Center |
| 58 | • Walking trails and parks. If our area were more 'walkable' it may help to curb some of the health issues our residents are facing. |
| 59 | • We live in beautiful communities but people are fearful to use the many trails or natural areas due to crime.<br>• We have the Nolan Trail that seems to be safe but if you live in the Southeast, the beach is beautiful but crime, gangs etc. create a climate that affects safety. When growing up we were able to go anywhere and feel safe. Not the case anymore. |
| 60 | • Wellness Centers.<br>• Athletic programs associated with educational facilities at all levels.<br>• Chronic disease self-management programs. |
| 61 | • YMCA and similar facilities |

| Exhibit A4. Health Assets Needed in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| **Are there any health assets that the community needs, but may be lacking?** | |
| 1 | • A better system of walking, running, biking trails. |
| 2 | • Access to care is a huge issue, availability of substance abuse treatment, |
| 3 | • Access to gyms and practice time for public school student athletes. |
| 4 | • Access to specialty care and transportation is a barrier. |
| 5 | • Adequate transportation to access resources<br>• Access to safe, affordable, housing |
| 6 | • Affordable fitness centers, esp. Low cost options for seniors at the rec centers that allow them access to all programs during less busy times. |
| 7 | • Affordable public transportation with a set schedule and routes.<br>• Additional access to safety-net healthcare and the means to publicize this.<br>• Health insurance that would become available through the state expanding Medicaid. |
| 8 | • All need a better job at getting their message out to the public. |
| 9 | • Better access to mental health care for children and low-income populations. |
| 10 | • Better Mental Health Services |
| 11 | • Better transportation<br>• More dental health availability<br>• More specialty health services.<br>• More translators at health providers for those who do not speak English well |
| 12 | • Boys and Girls clubs to provide afterschool homework assistance. These such programs used to offer after school snacks and evening meals. These programs help to fill the gaps and helped to strengthen select children's positive surroundings. Tutoring programs and programs that provide free internet access to children could help at risk children increase chances of school and lifetime success. |
| 13 | • Chain grocery stores for low income areas - one is coming soon to the East End area of Newport News after many years of advocacy. |
| 14 | • Colonial Services Behavioral Health program is overwhelmed and insufficient. |
| 15 | • Community entities such as schools, churches lack educational opportunities to learn how to promote preventive health and healthy alternatives |
| 16 | • Connecting walking/bike trails (to get to downtown Hampton, safe routes to school, etc.)<br>• increased access to healthy, affordable foods (Farmers markets, grocery stores) |
| 17 | • Efficient public transportation<br>• Food access in the several food deserts<br>• Safe and affordable housing |
| 18 | • Elderly care specifically assisted living, home health care options, and long term [care]. |
| 19 | • Free or reasonable cost health clinics<br>• More walking trails |
| 20 | • Homeless services are minimal |
| 21 | • I don't like making broad statements, but a large part of the issue is lack of affordability and lack of access to the right kind of services. |
| 22 | • Invest in upgrading Newport News park with quality |

| Exhibit A4. Health Assets Needed in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| | |
| **Are there any health assets that the community needs, but may be lacking?** | |
| | • Provide more family shelters and playground equipment<br>• Provide quality bikes for guest to ride in NN Park.<br>• Provide low cost classes for families on diabetes, kidney disease, mental illness and high blood pressure training and education. |
| 23 | • Long term health care in the home |
| 24 | • Lower cost to access the community rec centers. Indigent people cannot afford to go to any type of gym |
| 25 | • Many of the poor and elderly need assistance with maintaining their homes, particularly at the mobile home community located at 214 Wythe Creek Road.<br>• Affordable medical care for the poor and family medical practices located in the city. |
| 26 | • Mental health (improving) |
| 27 | • Mental health services and professionals are in too short supply |
| 28 | • Mental health services<br>• Substance abuse counselors |
| 29 | • More bike paths<br>• Funding for all the nonprofits doing health related work<br>• Older citizen's health activities like Thai Chi classes, etc. in the parks |
| 30 | • More eye surgeons<br>• Affordable facilities for indoor exercise and work out equipment. |
| 31 | • More Medicaid Waivers so people with disabilities have resources to access services<br>• Handicapped transportation to access health assets<br>• Respite care<br>• Dentists qualified and willing to treat people with disabilities and accept Medicaid<br>• Autism-specific care and supports<br>• More choices of insurance companies to ensure competition |
| 32 | • More resources and time in our public schools dedicated to health. |
| 33 | • Not sure of the trails that are in the Hampton area. If there are none available, it would be good to see Hampton put one in. |
| 34 | • One of our elderly patients was just informed by a dermatologist that the soonest his skin condition could be evaluated was in 2017 (more than 7 months from now).<br>• There are still many parts of Williamsburg, York County and James City County that lack safe biking paths along roads. |
| 35 | • Pedestrian friendly environments which encourage people to walk to work, shop, entertainment.<br>• Lack of pedestrian amenities encourage use of cars for short travel distances. |
| 36 | • Preservation for wildlife |
| 37 | • Psychiatry for all ages, inpatient and outpatient. Counselors cannot prescribe and prescribing providers are hard to find and, unfortunately many prescribing providers have English as a second language so can be hard for the elderly and patients with their own limited English proficiency to understand. |
| 38 | • Regular preventive health care so that the first responders and hospitals are not overwhelmed with non-emergency calls. |
| 39 | • Safe exercise areas in the troubled communities like the southeast. Only now is there a grocery store due to open in a month.<br>• Safe walking areas that allow residents to walk without fear. |

| Exhibit A4. Health Assets Needed in the Community | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| | |
| **Are there any health assets that the community needs, but may be lacking?** | |
| 40 | • Sidewalks and bike travel corridors in Williamsburg/ James City County<br>• Access to health care services through schools in rural areas<br>• Affordable and timely Alcohol, substance abuse treatment and prevention and behavioral health services<br>• Care navigation and case management for all who desire it regardless of disease state, age or insurance status |
| 41 | • Sidewalks<br>• Streetlights<br>• Bike paths |
| 42 | • Specialized senior services<br>• Clinical care centers, e.g., physician offices devoted to the care of seniors |
| 43 | • Support for the frail elder population. Persons who are challenged to leave their home, have impairment in hearing and vision and understanding of the many medications and chronic diseases that they face daily. |
| 44 | • Transportation<br>• Advocacy for the very elderly and weak patients |
| 45 | • We have a very good foundation of all of the health assets needed to keep our citizens healthy, we just have to connect the facilities and the services to the people. |
| 46 | • We would benefit from more specialists in certain areas to avoid delays in care, especially neurology and pain management |
| 47 | • Williamsburg and surrounding counties have no affordable access to gyms of any kind. In particular, the James City County Recreational Center and YMCA are not affordable for lower SES families.<br>• There are abundant instructional/educational classes for kids but again for many families they are way too expensive.<br>• There is very little help for children struggling academically and most needy kids cannot afford private tutors. |
| 48 | • Agencies are out there but more community partnerships are needed. |
| 49 | • York County doesn't have bus services to transport individuals to doctor appointments or other activities. |

| Exhibit A5. Additional Ideas and Suggestions | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| | |
| **Optional: Please use the space below to share any additional ideas or suggestions for improving community health.** | |
| 1 | • Access to medications via community hospitals via outpatient pharmacies that can supply generic medications at cost or just above costs to insure assess to medications post hospitalizations and f/u with primary care physicians |
| 2 | • Access to specialty care<br>• Transportation issues and congested traffic is a barrier to care. |
| 3 | • Additional crime prevention to lower the number of individuals who are killed or injured through gun violence. It seems to be getting worse. |
| 4 | • Affordable extracurricular activities for children especially in the summer<br>• Increased educational opportunities<br>• Affordable gym membership for needy families. |
| 5 | • Better coordination of home health follow-up services, integrated medical records |
| 6 | • Bring back Community Health Fair Day to include seminars, educational handouts<br>• Vans with preventive healthcare staff available to train/educate and refer clients etc.<br>• "Knowledge is power" and I believe that it will help to make our community a healthier environment! Thank you! This is exciting! |
| 7 | • Community partnership and fellowship |
| 8 | • Consider taking the resources to where the people are instead of the people having to come to the resources |
| 9 | • Doctors and their staffs should work for their patients |
| 10 | • Engage the public sector, the educational community, and the business community at a higher level to encourage collaboration to address the social determinants |
| 11 | • Find a way to end competition between two health systems and combine resources to provide better coverage for both facilities in this area. |
| 12 | • Free health screening programs for all age groups. |
| 13 | • Have free or people can volunteer their time in exchange for use of the rec centers. |
| 14 | • Hospitals, FQHC's and private providers must work together to provide overall health care services and coverage for all - uninsured, underinsured and insured. |
| 15 | • I believe I have made my point that the frail elder population does not have a presence or voice in the community. Services for this group who cannot leave their home is very limited. |
| 16 | • I would encourage health systems to promote population health by striking a balance between clinical care and utilization of non-clinical supports and services. |
| 17 | • Increased collaboration and communication among community organizations to improve the health of community members (strengthen current programs, don't reinvent or duplicate what's already being done, etc.) |
| 18 | • It isn't until every part of the community, be they health organizations working together, business, government, employers, and community volunteer organizations, etc. come together with a defined strategy and coordinated role for everyone that we will see a major change in how we approach this subject. |
| 19 | • More accessible bike paths and walking trails in James City County to encourage people to bicycle or walk to their places of work, school, church, and play. We live in a beautiful part of the country and should encourage residents to get out and walk instead of driving. |
| 20 | • More health education resources |
| 21 | • More resources are needed to support residents that are economically marginalized, particularly around general health care and dental services. |
| 22 | • Need to be prepared for rapidly growing older senior population (those 75 and older). |

| Exhibit A5. Additional Ideas and Suggestions | |
|---|---|
| *Note: The survey was conducted on a regional basis for multiple communities that fall within the Peninsula region. Survey respondents were asked to provide their perspective based on where they live, work, or both. This Exhibit lists verbatim responses from those who reported that they live or work within the Sentara Careplex study region (although in some cases, respondents also identified communities beyond the study region within their comments). See Appendix B for details.* | |
| | |
| **Optional: Please use the space below to share any additional ideas or suggestions for improving community health.** | |
| 23 | • Place greater resources (and advocate for reimbursement mechanisms) that support health education (nutrition and physical activity support), self-management support (particularly for the prevention and management of prediabetes, diabetes, obesity, and heart disease), disease prevention, and health promotion. |
| 24 | • Politicians need to invest more heavily in early childhood education services to make them available to all children regardless of ability to pay. Additionally, parents that lack the ability to parent effectively should have parenting classes more readily available. |
| 25 | • Providing individuals with accessible home health care that is affordable could save the EMS and hospital services millions each year by reducing non-emergency patients. |
| 26 | • Support for emergency preparedness.<br>• Emerging disease such as Zika. |
| 27 | • The biggest need is to have regular stakeholder's meetings with all of the community health service providers to plan, discuss and work through issues as needed to improve our overall community health. I look forward to the meeting and the discussions. |
| 28 | • The knowledge and skill level among health care workers with regard to advance care planning is poor, and this is reflected in the low percentage of residents with advance directives; it is also evident in those who receive unwanted aggressive treatments at the end of life, or the patients/families with unrealistic expectations at the end of life. |
| 29 | • There are still many disparities within the communities. We need to address the racial divide in a serious way so that when diverse members of the community show up in the ER's they are not treated as drug seekers when they are ill or ignored for whatever reason. Sickle cell anemia is a condition that causes severe pain, yet patients with this disease report they are treated poorly because they are profiled as drug seekers. We all are products of our environments and we hold certain beliefs that affect the way we view each other. We need more open dialogue to learn about each other and know what it feels like to walk in each other's shoes. The profiling affects the poor most often and we must advocate for all. Thanks for the opportunity to share my views. |
| 30 | • We need more care facilities after surgery for rehab that are not connected to aging facilities or ill patients. |

# Appendix B: Data Sources

| Section | Source |
|---|---|
| **Part I. Community Survey Results** | |
| 1) Community Survey results as shown throughout Part 1. | Community Survey results are based on Community Health Solutions (CHS) analysis of *Community Survey* responses submitted by community stakeholders. The survey was conducted as follows:<br><br>Riverside Health System and Sentara Healthcare worked collaboratively to conduct a joint community stakeholder survey for the following Peninsula region facilities:<br>• Riverside Doctors' Hospital Williamsburg;<br>• Sentara Careplex Hospital;<br>• Sentara Williamsburg Regional Medical Center; and<br>• Four Riverside Peninsula market facilities (Riverside Hampton Roads Specialty Center, Riverside Regional Medical Center, Riverside Behavioral Health Center, and Riverside Rehabilitation Institute).<br><br>The two health systems collaborated on survey-related communications, and developed the survey instrument with technical support from CHS.<br><br>Each system developed its own survey recipient list. The recipient lists were combined, and an email survey request was sent to 922 unduplicated community stakeholders on April 25, 2016. To enable assignment of responses to a particular facility's report, survey respondents were asked to identify the localities where they lived, worked, or both. A follow-up email request was sent on May 12, 2016. Additionally, Riverside Health System and Sentara Healthcare conducted outreach for community input via email, personal phone calls, and in-person at local events and meetings. The survey was closed on May 18, 2016, and a total of 163 survey responses were received. |

## Community Focus Group Session Findings

In addition to the online Community Stakeholder Survey for community insight, Sentara CarePlex Hospital carried out a series of more in-depth Community Focus Groups to obtain 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. The questions below were utilized at each focus group sessions.

- 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?

5 focus group sessions were held in 4 month(s) 2016. The number of participants ranged from 6 to 16. When possible, representatives from the health department and other local hospitals were invited to attend the sessions.

1. Hispanic Community-joint focus group held with Bon Secours Hampton Roads
2. Senior Volunteers from Sentara CarePlex Hospital
3. Annual Community Priorities Workshop participants – Phoebus High School, Hampton, VA
4. Virginia Peninsula Chamber of Commerce-staff members
5. Virginia Peninsula Department of Health Staff members

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?** | Surprising unanimity of responses from groups listed above. In descending order of priority, the following problems were identified in the Lower Peninsula Community:<br>1. Abuse of opioids/drugs<br>2. Access to mental health resources<br>3. Obesity/Access to healthy foods<br>4. Diabetes/Cancer<br>5. Generational Violence manifested in gang and youth violence<br>6. Access to primary care providers |

| | |
|---|---|
| | 7. Getting help for the caregivers who help people<br>8. Health inequities among community members<br>9. Access of EDs for primary care needs<br>10. Redundancy of testing when going from provider to provider |
| **Who/what groups of individuals are most impacted by these problems?** | Again, there was a consistent pattern of responses solicited from the groups above:<br>1. Low income, socio-economic depressed community members<br>2. Uninsured, underinsured community members<br>3. Members of LGBTU community<br>4. Very youngest or very oldest community members<br>5. Transitional citizens |
| **What keeps people from being healthy? In other words, what are the barriers to achieving good health?** | Answers to identifying barriers were quite varied but did demonstrate some consistent responses, namely:<br>1. Cost of maintaining a healthy lifestyle. While often perceived as a choice, oftentimes these decisions were relegated to a lower priority than immediate lifestyle demands<br>2. Community members needs navigation throughout the health care journey<br>3. More effective discharge planning needed to reduce the silo mentality of current healthcare practices<br>4. Levels of education, i.e. perception was better educated population had more access and understanding of healthy choices and elimination of barriers<br>5. Age, specifically elderly do not question their medical decisions and at times are faced with conforming to contradictory instructions.<br>6. Some felt there were no solutions to the elimination of barriers, especially for those community members who do not personally prioritize and subscribe to a healthy lifestyle.<br>7. Transportation issues/proximity to services was listed for those groups not as mobile as others |
| **What is being done in our community to improve health and to reduce the barriers? What resources exist in the community?** | Responses were again somewhat consistent among all groups surveyed. Answers are listed below in no assigned priority:<br>1. Expansion of “free” clinics throughout the community guaranteeing easy access and timely availability<br>2. Enhanced education perhaps reengineered/rebranded/re-bundled to impact a particular target population<br>3. Implement wellness checks throughout the community<br>4. Continue to engage city leadership in value of healthy lifestyles. As an example, Dental Clinic in NN is 100% funded by the |

| | |
|---|---|
| | city<br>5. Increased presence of community screening events<br>6. Implement wellness program for city employees<br>7. Establish and demonstrate economic benefit of medical safety net for community members focused on efforts of all three hospitals in the region.<br>8. Schools implementing a changed dietary program focused on healthy choices<br>9. Offering of parenting education classes |
| **What more can be done to improve health, particularly for those individuals and groups most in need?** | 1. Enhanced education became a consistent theme but perhaps delivered in a 'different' package or to a specific target group<br>2. Use resources of the faith based community to broaden the healthy choice options<br>3. Establish a new mentality of entitlement where benefits are offered only after guidelines for participation are agreed to<br>4. Expand the use of navigators to help direct community members through their health care decision processes<br>5. Establish health education seminars within assisted living centers<br>6. Consider adoptions of medical economic plan where providers are compensated based on wellness and not number of procedures performed (change the paradigm of how to keep people healthy which focuses on proactive strategies versus reactive efforts)<br>7. Work to change habits and value of sound healthy decisions at the earliest of ages, i.e. reinforce in elementary school children the advantages of a healthy life style. |

## V. APPENDIX

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

**Sentara Community Health Needs Assessment Implementation Strategy**

**Progress Report for: 2016 Year End**

**CarePlex Orthopaedic Ambulatory Surgery Center**

**Quarter (please indicate): ☐First Quarter ☐Second Quarter ☐Third Quarter 2016 Year End**

In support of community health needs assessment and related implementation strategies, 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 |
|---|---|---|
| All | | |
| Problem #1<br>Uninsured/Underinsured | • Implement association with Community Health Clinics to provide after-procedure medical follow-up care resource option<br>• Partner with Local Churches, Community Centers, and Civic Leagues to sponsor a series of medical screening in collaboration with SPW Cares-a "Lot" campaign<br>• Partner with SPW to support the Drive Thru Flu Shot Program | • Continue with community outreach activates/educational series/screening activities focusing on breast health, diabetes education, and early cancer identification<br>• Continue to participate in annual Drive Thru flu campaigns to serve 250 enrollees per session |
| Problem #2<br>Obesity-Adult | • Promote offering of surgical options for treatment of morbidly obese adults by partnering with nearby medical-surgical weight loss Center | • Continue to partner with staff Bariatric surgeon to offer educational/health dietary choice education |

| Health Problem | Three Year Implementation Strategies | Progress |
|---|---|---|
| | • SCP ED has new resource center with educational materials and recommendations available to the public | to the general public. Surgeons office is doing education for all patients with a BMI>25<br>• Continue to provide educational resources in many venues<br>• Continue encourage nurse driven referrals to Diabetes Health Educator |
| Problem #3<br>Cancer | • Continue collaboration with the Hampton Roads Prostate Cancer Health Forum providing education and screening to the community, especially the un- and underinsured<br>• Work with Community Health and Prevention to provide on-site screenings and self-learning programs<br>• Continue to partner with the DGH Center and VDH to provide breast cancer screening and early treatment options<br>• Continue providing annual community education sessions re: breast cancer | • Continue to offer multiple screening/education sessions to those markets identified as high incidence of prostate cancer – namely Hampton, Portsmouth, and Western Tidewater. Collaboration will continue throughout 2017<br>• Multiple breast cancer screenings and community education events held continuously as evidence by participation/sponsorship in Relay for Life, Making Strides for Cancer, Every Women's Life, and multiple community programs. |
| Problem #4<br>Diabetes | • Evaluate Partnership with local podiatrist to offer a Foot Clinic<br>• SCH helps educate patients on resources available such as: weekly Free Diabetes Classes and monthly Diabetes Support Groups | • Multiple community education/screening events held on Campus with average attendance of 45 members. Foot health/prevention identified as subject topics.<br>• Full time diabetes educator employed to assist with patient education and development of support groups |