Sentara RMH Medical Center
Community Health Needs Assessment
2015

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Sentara RMH Medical Center 2015 Community Health Needs Assessment

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I. Introduction

Sentara RMH Medical Center has conducted a community health needs assessment of the area that we serve. 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 local health departments, the school system, social services, community health centers, free clinics, local governments, and many others. The report also includes findings from community focus groups and interviews 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.

Our previous Community Health Needs Assessment, completed in 2012, 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.

Sentara RMH Medical 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 RMH Medical Center
2015
Community Health Needs Assessment

Community Description

Community Description

Sentara RMH Medical Center (SRMH) serves residents of these counties and independent cities: Rockingham, Harrisonburg, Page, Shenandoah, Augusta, Staunton and adjoining communities*. About 88% of the hospital's inpatients reside in this area. 2014 patient origin is shown in the map below.

Sentara RMH Service Area
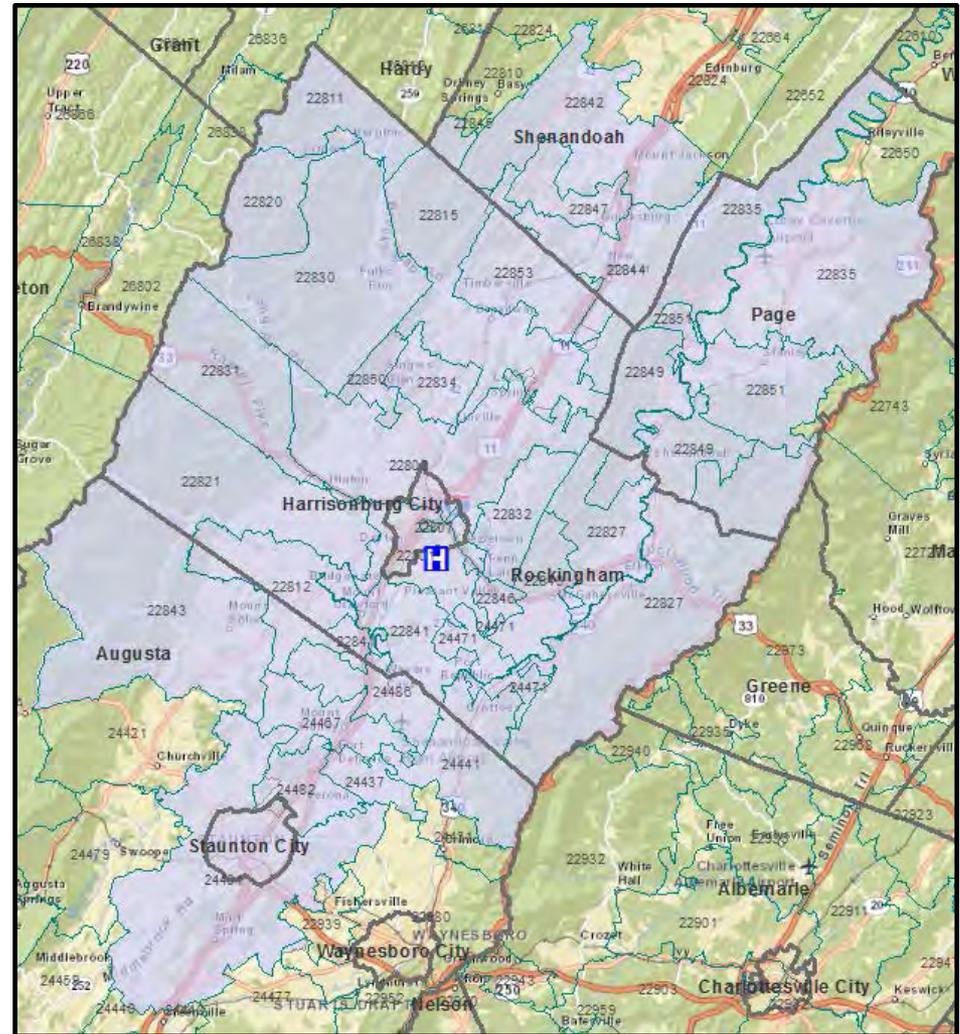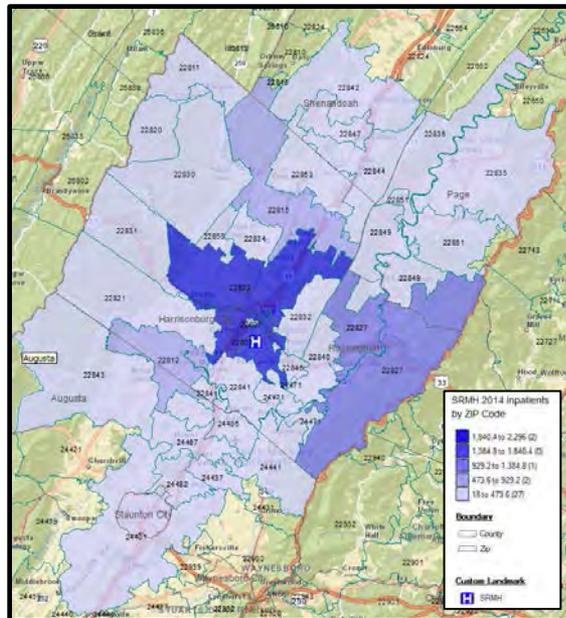
* Sentara RMH receives patients from several zip codes in West Virginia, due to the small percentage they are not reflected in this document but will benefit from the assessment.

Area-wide Key Demographic Characteristics

DEMOGRAPHIC CHARACTERISTICS				
	Selected Area	Virginia	USA	
2010 Total Population	211,714	8,001,055	308,745,538	
2015 Total Population	219,206	8,374,075	319,459,991	
2020 Total Population	228,101	8,770,743	330,689,365	
% Change 2015 - 2020	4.1%	4.7%	3.5%	
Median Household Income	$47,179	$66,172	$54,001	

POPULATION DISTRIBUTION						
Age Distribution						
Age Group	2015	% of Total	2020	% of Total	Virginia 2015 % of Total	USA 2015 % of Total
0-14	35,972	16.4%	36,318	15.9%	18.6%	19.1%
15-17	8,070	3.7%	8,274	3.6%	3.8%	4.0%
18-24	34,345	15.7%	34,810	15.3%	10.1%	9.9%
25-34	25,778	11.8%	27,182	11.9%	13.5%	13.3%
35-54	51,768	23.6%	51,067	22.4%	27.2%	26.3%
55-64	27,204	12.4%	28,610	12.5%	12.8%	12.7%
65+	36,069	16.5%	41,840	18.3%	14.0%	14.7%
Total	219,206	100.0%	228,101	100.0%	100.0%	100.0%

EDUCATION LEVEL				
Education Level Distribution				
2015 Adult Education Level	Pop Age 25+	% of Total	Virginia % of Total	USA % of Total
Less than High School	11,335	8.0%	5.0%	5.9%
Some High School	14,314	10.2%	7.3%	8.0%
High School Degree	49,599	35.2%	25.4%	28.1%
Some College/Assoc. Degree	30,190	21.4%	27.1%	29.1%
Bachelor's Degree or Greater	35,381	25.1%	35.2%	28.9%
Total	140,819	100.0%	100.0%	100.0%

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- **The area's 2015 total population is 219,206, with projected growth of 4.1% over the next five years.**
  - This rate of growth is lower than Virginia (4.7%) and higher than the U.S rate of 3.5%.
- **The median household income is lower than the state and US income.**
- **16.5% of the population, or 36,069, is over the age of 65.**
  - This is a higher percent compared to Virginia at 14.0% and the U.S at 14.7%.
  - The 65+ age group is expected to grow 16.0% from 2015 to 2020 in the SRMH Service Area. This is less than the VA growth of 21.0% and the U.S. growth of 17.7%.
- **18.2% of the population age 25+ does not have a high school degree.**
  - This is a higher percentage compared to Virginia at 12.4% and the U.S. at 13.9%.

Area-wide Key Demographic Characteristics, Cont.

- **The projected growth of females, child bearing age (15-44) is 3.2%**, which is higher than the state (1.4%) and the U.S. (1.2%).
- **25.9% of the population has a household income below $25,000.**
  - This is higher than Virginia at 17.9% and the U.S. at 23.5%. 200% of the current Federal Poverty Level for a family of four is $48,500.
- **8.3% of the population is Hispanic, 83.8% is non-Hispanic white, 4.4% is non-Hispanic black, 1.5% is non-Hispanic Asian/Pacific Islander, and 1.8% is other.**

	2015	2020	% Change	Virginia % Change	USA % Change
Total Male Population	106,015	110,386	4.1%	4.8%	3.6%
Total Female Population	113,191	117,715	4.0%	4.7%	3.4%
Females, Child Bearing Age (15-44)	47,669	49,187	3.2%	1.4%	1.2%

HOUSEHOLD INCOME DISTRIBUTION

	Income Distribution		
2015 Household Income	HH Count	% of Total	Virginia % of Total	USA % of Total
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<$15K	11,772	14.1%	9.5%	12.7%
$15-25K	9,927	11.9%	8.3%	10.8%
$25-50K	22,531	26.9%	20.6%	23.9%
$50-75K	16,447	19.7%	17.3%	17.8%
$75-100K	10,134	12.1%	12.8%	12.0%
Over $100K	12,813	15.3%	31.4%	22.8%
Total	83,624	100.0%	100.0%	100.0%

RACE/ETHNICITY

	Race/Ethnicity Distribution		
Race/Ethnicity	2015 Pop	% of Total	Virginia % of Total	USA % of Total
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White Non-Hispanic	183,761	83.8%	62.9%	61.8%
Black Non-Hispanic	9,738	4.4%	18.9%	12.3%
Hispanic	18,293	8.3%	9.0%	17.6%
Asian & Pacific Is. Non-Hispanic	3,364	1.5%	6.2%	5.3%
All Others	4,050	1.8%	3.0%	3.1%
Total	219,206	100.0%	100.0%	100.0%

City and County Data

Area	Population and Age							
	2015 Population	Projected 2015-2020 % Change in Total Pop.	2015 % of Total Pop. that is age 65+	Projected 2015-2020 % Change in Pop. age 65+	2015 % of Total Pop. that is age 0-17	Projected 2015-2020 % Change in Pop. age 0-17	2015 % of Female Pop. that is age 15-44	Projected 2015-2020 % Change in Female Pop. age 15-44
Augusta	74,505	2.3%	19.4%	15.8%	19.8%	-4.5%	33.1%	1.6%
Page	23,906	1.0%	20.1%	13.5%	20.0%	-4.2%	33.9%	-0.2%
Rockingham	78,606	3.7%	17.9%	16.6%	22.2%	-1.1%	35.9%	4.1%
Shenandoah	43,114	3.5%	20.6%	15.4%	20.9%	-0.2%	32.9%	2.1%
Harrisonburg city	52,880	7.1%	8.1%	19.1%	17.4%	9.2%	63.2%	4.0%
Staunton city	24,828	4.8%	21.4%	15.2%	19.2%	7.5%	37.7%	1.5%
Total	297,839	3.8%	17.4%	15.9%	20.1%	0.2%	39.8%	2.8%
Virginia	8,374,034	4.7%	14.0%	21.0%	22.4%	2.1%	39.3%	1.4%
United States	319,459,991	3.5%	14.7%	17.7%	23.2%	0.6%	38.8%	1.2%

- Harrisonburg City population is expected to grow at a faster pace (7.1%) than the other jurisdictions in the service area.
- The service area has a higher percentage of 65+ residents than Virginia and the U.S., except for the Harrisonburg city area (8.1%).
- Harrisonburg City will experience a higher percentage growth (9.2%) in the pediatric population than rest of the jurisdictions.
- Harrisonburg City has substantially higher female population of childbearing age (15-44) at 63.2%, than rest of the service area.

City and County Data, Cont.

Area	Race and Ethnicity			Income and Education	
	2015 % of Pop.: Black, Non-Hispanic	2015 % of Pop.: Asian / Pacific Island, Non-Hispanic	2015 % of Pop.: Hispanic Ethnicity (Any Race)	% of Households with Income Below $25,000	% of Pop age 25+ that did not Graduate from High School
Augusta	3.9%	0.6%	2.5%	19.7%	14.1%
Page	2.2%	0.4%	2.1%	26.9%	25.7%
Rockingham	1.8%	0.7%	6.2%	21.5%	18.1%
Shenandoah	2.0%	0.7%	6.7%	22.8%	16.1%
Harrisonburg city	6.9%	3.9%	19.4%	33.7%	18.5%
Staunton city	12.1%	1.2%	3.1%	30.8%	15.5%
Total	4.1%	1.3%	7.1%	24.4%	17.2%
Virginia	18.9%	6.1%	9.0%	17.9%	12.4%
United States	12.3%	5.1%	17.6%	23.5%	13.9%

- Staunton City has the highest percentage of the African American, Non-Hispanic population (12.1%) than the rest of the service area.
- Harrisonburg city has the predominant portion of the Asian, Non-Hispanic and Hispanic population of (3.9% and 19.4% respectively).
- Harrisonburg and Staunton cities have the greater percentage of households with lower income levels below $25,000.
- The percentage of population age 25 and older that has not graduated from high school is significantly higher in Page County than the rest of the service area.
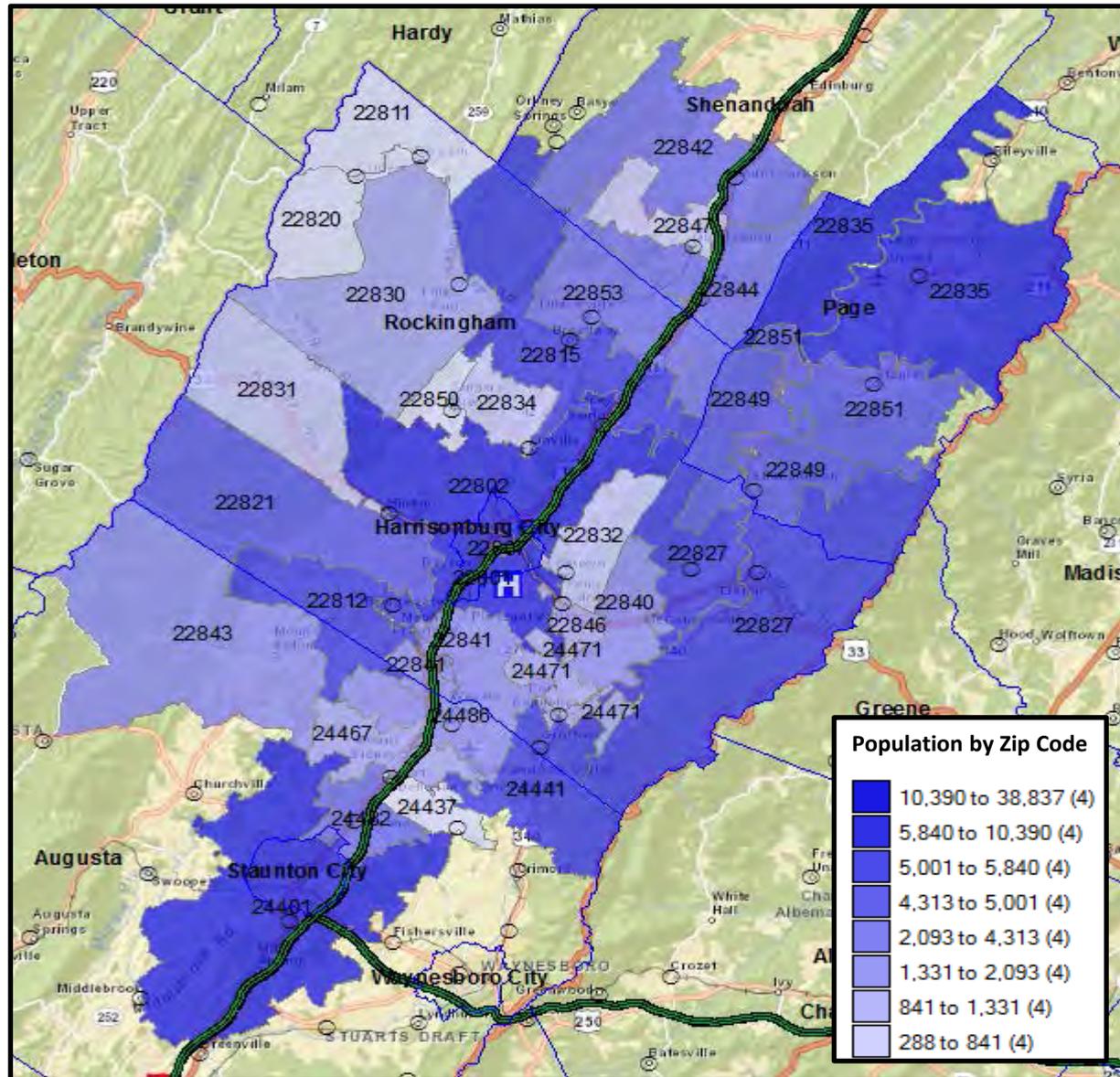
Key Demographic Data by Zip

| City/County | Zip Code | Zip City | Total Pop | | % Change 2015-2020 | % 65+ | | Pop Density / Sq Mile | % of Households with Income Below $25,000 | % of Pop 25+ without High School Diploma | % of Service Area Pop |
			2015	2020		2015	2020				
Harrisonburg	22801	Harrisonburg	38,837	41,858	7.8%	10.9%	12.0%	1247	30.3%	9.5%	17.7%
Staunton\	24401	Staunton	37,511	38,984	3.9%	21.3%	23.6%	261	28.4%	10.1%	17.1%
Harrisonburg	22802	Harrisonburg	28,147	30,036	6.7%	13.4%	14.8%	303	26.9%	10.2%	12.8%
Page	22835	Luray	11,668	11,758	0.8%	22.7%	25.0%	77	24.9%	12.7%	5.3%
Rockingham	22827	Elkton	10,390	10,548	1.5%	18.0%	20.4%	62	25.0%	11.8%	4.7%
Rockingham	22812	Bridgewater	9,013	9,270	2.9%	19.7%	21.0%	210	19.1%	5.6%	4.1%
Rockingham	22815	Broadway	8,603	9,002	4.6%	16.8%	18.9%	103	23.3%	12.2%	3.9%
Rockingham	24441	Grottoes	6,321	6,485	2.6%	15.1%	17.7%	138	27.8%	15.1%	2.9%
Harrisonburg	22807	Harrisonburg	5,840	5,926	1.5%	0.6%	0.7%	9389	63.0%	10.0%	2.7%
Page	22851	Stanley	5,796	5,843	0.8%	17.3%	19.6%	118	32.9%	19.5%	2.6%
Rockingham	22821	Dayton	5,667	5,772	1.9%	16.2%	17.8%	67	21.0%	7.1%	2.6%
Page	22849	Shenandoah	5,086	5,148	1.2%	17.1%	19.7%	93	25.2%	13.7%	2.3%
Rockingham	22853	Timberville	5,001	5,140	2.8%	18.9%	21.2%	123	27.9%	15.6%	2.3%
Shenandoah	22842	Mount Jackson	4,935	5,012	1.6%	19.6%	22.5%	66	25.9%	12.6%	2.3%
Augusta	24482	Verona	4,838	4,738	-2.1%	16.9%	19.2%	255	20.0%	8.5%	2.2%
Shenandoah	22844	New Market	4,542	4,656	2.5%	25.0%	28.1%	93	28.9%	12.3%	2.1%
Rockingham	22840	Mc Gaheysville	4,313	4,466	3.5%	16.2%	19.3%	170	12.7%	5.7%	2.0%
Augusta	24486	Weyers Cave	3,852	4,097	6.4%	14.3%	16.1%	147	11.3%	7.9%	1.8%
Rockingham	22841	Mount Crawford	2,801	2,881	2.9%	18.2%	20.4%	89	17.9%	5.6%	1.3%
Augusta	22843	Mount Solon	2,440	2,426	-0.6%	18.5%	20.2%	19	19.8%	10.2%	1.1%
Augusta	24467	Mount Sidney	2,093	2,202	5.2%	19.5%	22.8%	85	14.6%	8.4%	1.0%
Rockingham	22846	Penn Laird	1,844	1,986	7.7%	19.1%	21.7%	303	12.7%	4.7%	0.8%
Rockingham	22830	Fulks Run	1,609	1,635	1.6%	17.5%	20.2%	17	25.7%	14.5%	0.7%
Rockingham	24471	Port Republic	1,433	1,444	0.8%	17.2%	20.8%	84	21.0%	7.7%	0.7%
Rockingham	22834	Linville	1,331	1,381	3.8%	16.5%	19.8%	77	22.1%	11.3%	0.6%
Rockingham	22832	Keezletown	1,082	1,124	3.9%	16.5%	20.5%	44	23.4%	10.4%	0.5%
Rockingham	22831	Hinton	894	926	3.6%	18.2%	20.2%	17	20.4%	9.9%	0.4%
Shenandoah	22847	Quicksburg	886	892	0.7%	20.4%	24.6%	47	20.8%	12.1%	0.4%
Rockingham	22850	Singers Glen	841	859	2.1%	16.5%	19.9%	83	24.6%	13.4%	0.4%
Augusta	24437	Fort Defiance	791	801	1.3%	19.8%	23.2%	64	17.8%	10.4%	0.4%
Rockingham	22811	Bergton	513	513	0.0%	22.6%	24.2%	15	27.8%	14.5%	0.2%
Rockingham	22820	Criders	288	292	1.4%	20.8%	22.6%	10	28.2%	14.4%	0.1%
Total SRMH Service Area (Virginia)			**219,206**	**228,101**	**4.1%**	**16.5%**	**18.3%**	**130**	**25.9%**	**10.2%**	
Virginia			8,374,075	8,770,743	4.7%	14.0%	16.2%	210.1	17.8%	12.3%	
USA			319,459,991	330,689,223	3.5%	14.7%	16.7%	89.8	23.5%	13.9%	

Source: Truven/Market Expert

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Race & Ethnicity by Zip

City/County	Zip Code	Zip City	Total Pop 2015	Total Pop 2020	% White NonHisp	% Black NonHisp	% Hispanic	% Asian NonHisp	% Other NonHisp
Harrisonburg	22801	Harrisonburg	38,837	41,858	73.4%	4.2%	16.4%	3.7%	2.3%
Staunton\	24401	Staunton	37,511	38,984	84.2%	9.4%	2.8%	1.1%	2.4%
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Rockingham	22812	Bridgewater	9,013	9,270	92.0%	1.8%	4.3%	0.3%	1.6%
Rockingham	22815	Broadway	8,603	9,002	92.3%	1.0%	4.9%	0.4%	1.4%
Rockingham	24441	Grottoes	6,321	6,485	90.4%	2.2%	5.0%	0.4%	1.9%
Harrisonburg	22807	Harrisonburg	5,840	5,926	83.6%	4.8%	3.4%	6.4%	1.7%
Page	22851	Stanley	5,796	5,843	96.0%	0.7%	1.9%	0.3%	1.1%
Rockingham	22821	Dayton	5,667	5,772	93.1%	0.7%	5.1%	0.3%	0.8%
Page	22849	Shenandoah	5,086	5,148	94.4%	1.8%	1.9%	0.5%	1.4%
Rockingham	22853	Timberville	5,001	5,140	91.5%	1.1%	5.5%	0.1%	1.8%
Shenandoah	22842	Mount Jackson	4,935	5,012	86.2%	1.4%	10.0%	0.6%	1.8%
Augusta	24482	Verona	4,838	4,738	86.6%	8.1%	3.1%	0.7%	1.4%
Shenandoah	22844	New Market	4,542	4,656	89.2%	1.0%	8.0%	0.6%	1.3%
Rockingham	22840	Mc Gaheysville	4,313	4,466	89.4%	3.5%	4.7%	0.7%	1.7%
Augusta	24486	Weyers Cave	3,852	4,097	86.5%	1.5%	9.7%	0.6%	1.7%
Rockingham	22841	Mount Crawford	2,801	2,881	90.1%	1.8%	6.4%	0.7%	0.9%
Augusta	22843	Mount Solon	2,440	2,426	94.8%	1.3%	2.9%	0.2%	0.9%
Augusta	24467	Mount Sidney	2,093	2,202	95.4%	0.6%	2.8%	0.1%	1.1%
Rockingham	22846	Penn Laird	1,844	1,986	88.1%	2.2%	6.5%	1.6%	1.7%
Rockingham	22830	Fulks Run	1,609	1,635	97.9%	0.1%	1.0%	0.1%	0.9%
Rockingham	24471	Port Republic	1,433	1,444	93.5%	1.2%	3.6%	0.5%	1.3%
Rockingham	22834	Linville	1,331	1,381	94.9%	1.0%	2.8%	0.5%	0.8%
Rockingham	22832	Keezletown	1,082	1,124	88.1%	1.3%	8.5%	0.6%	1.6%
Rockingham	22831	Hinton	894	926	96.1%	0.7%	1.6%	0.1%	1.6%
Shenandoah	22847	Quicksburg	886	892	91.8%	1.8%	4.9%	0.2%	1.4%
Rockingham	22850	Singers Glen	841	859	96.3%	0.4%	2.1%	0.5%	0.7%
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Rockingham	22811	Bergton	513	513	98.2%	0.0%	0.2%	0.0%	1.6%
Rockingham	22820	Criders	288	292	98.3%	0.0%	0.7%	0.0%	1.0%
Total SRMH Service Area (Virginia)			**219,206**	**228,101**	**83.8%**	**4.4%**	**8.3%**	**1.5%**	**1.9%**

Source: Truven/Market Expert

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ZIP Code Data – Total Population

Source: Truven/Market Expert

ZIP Code Data –Population Density

Source: Truven/Market Expert

ZIP Code Data – % of Households with Income below $25,000

Source: Truven/Market Expert

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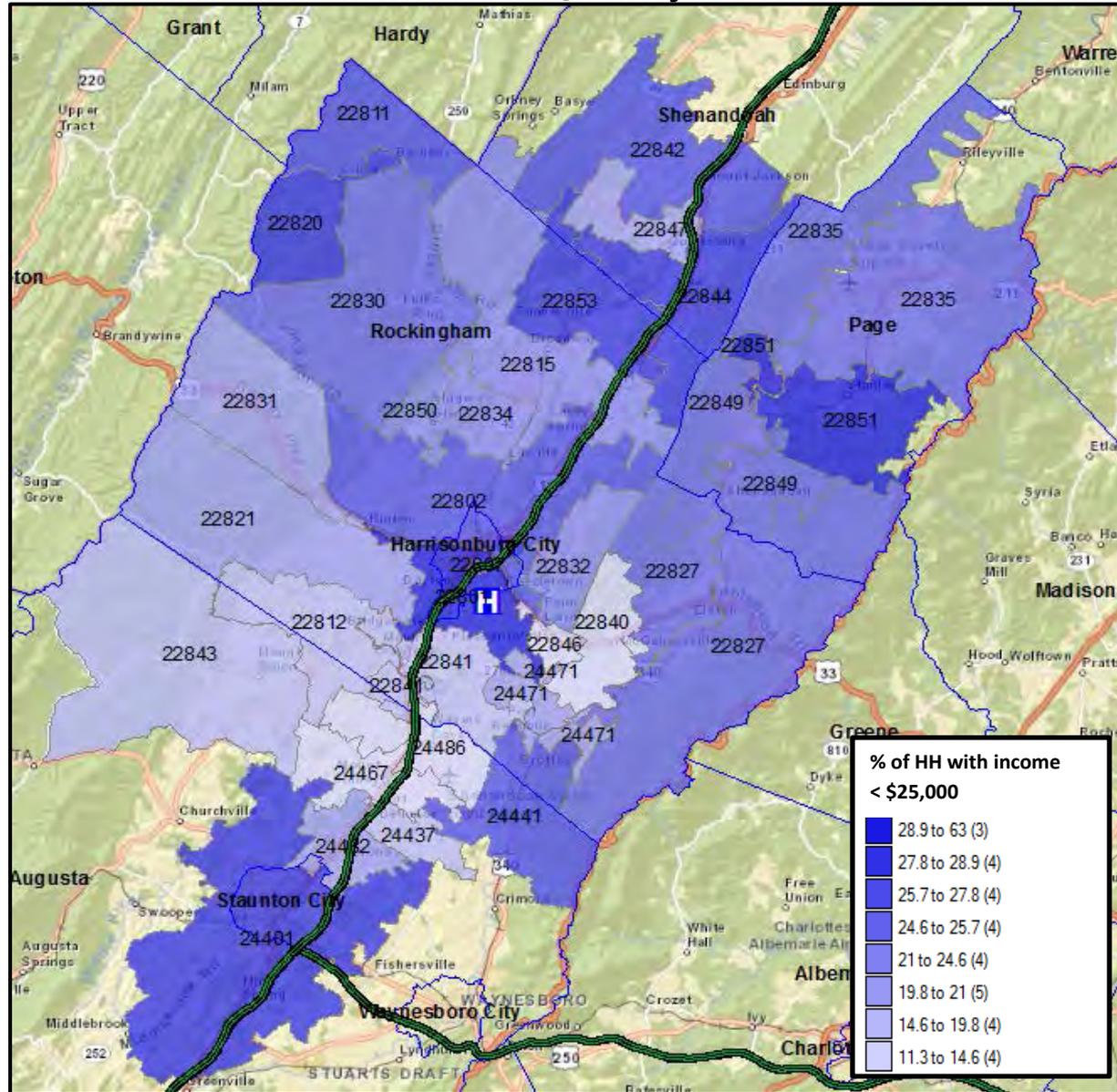
Block Group Data: Hispanic Population

Hispanic Pop
by Block Group

- 356 to 1,224 (15)
- 157 to 356 (15)
- 92 to 157 (15)
- 63 to 92 (15)
- 41 to 63 (15)
- 29 to 41 (15)
- 21 to 29 (17)
- 14 to 21 (17)
- 1 to 14 (17)

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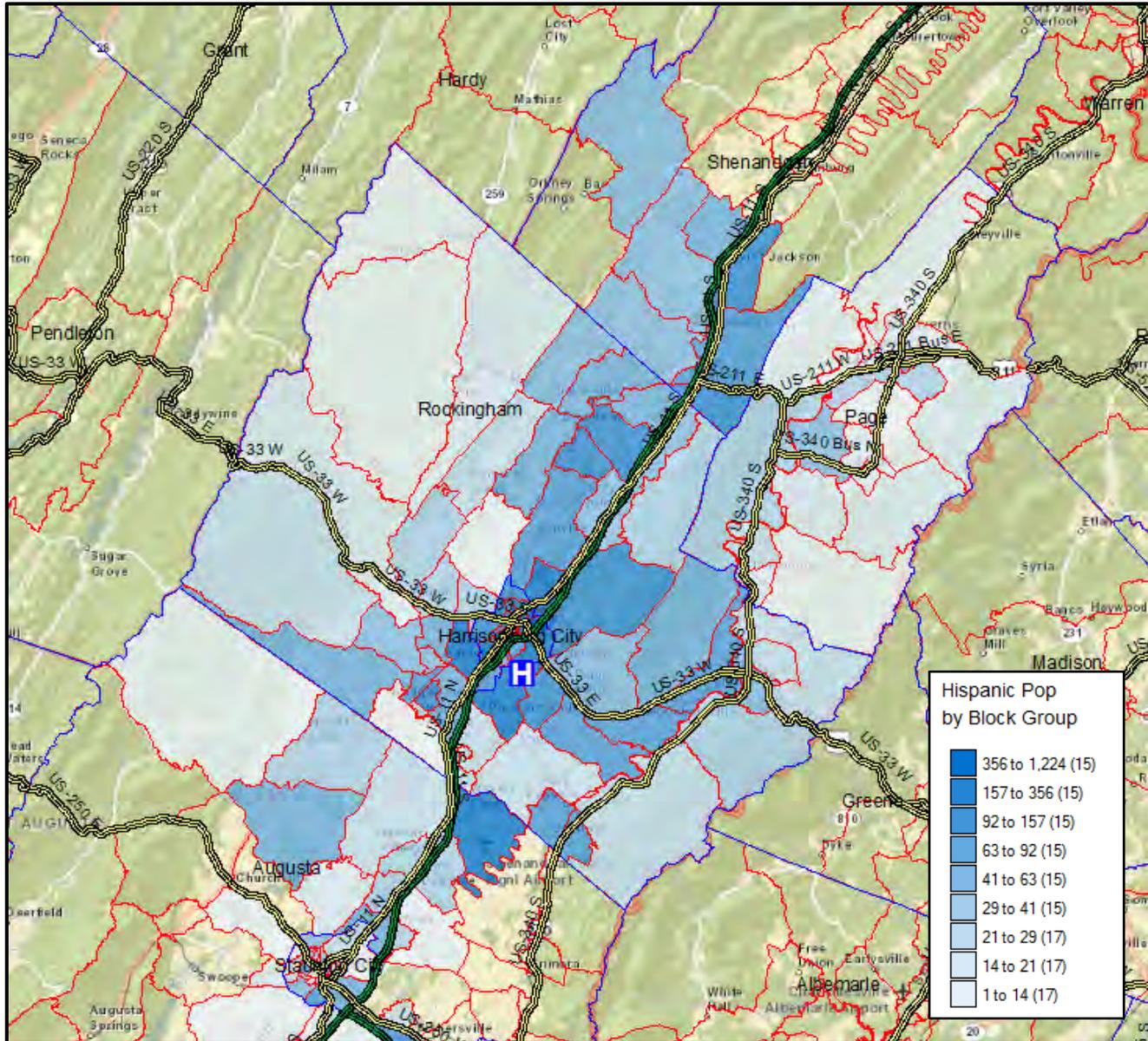
Block Group Data: Black Non-Hispanic Population

Black Non-Hispanic Pop by Block Group

■ 121 to 516 (26)	
■ 55 to 121 (27)	
■ 21 to 55 (29)	
■ 10 to 21 (29)	
■ 0 to 10 (30)	

Source: Truven/Market Expert
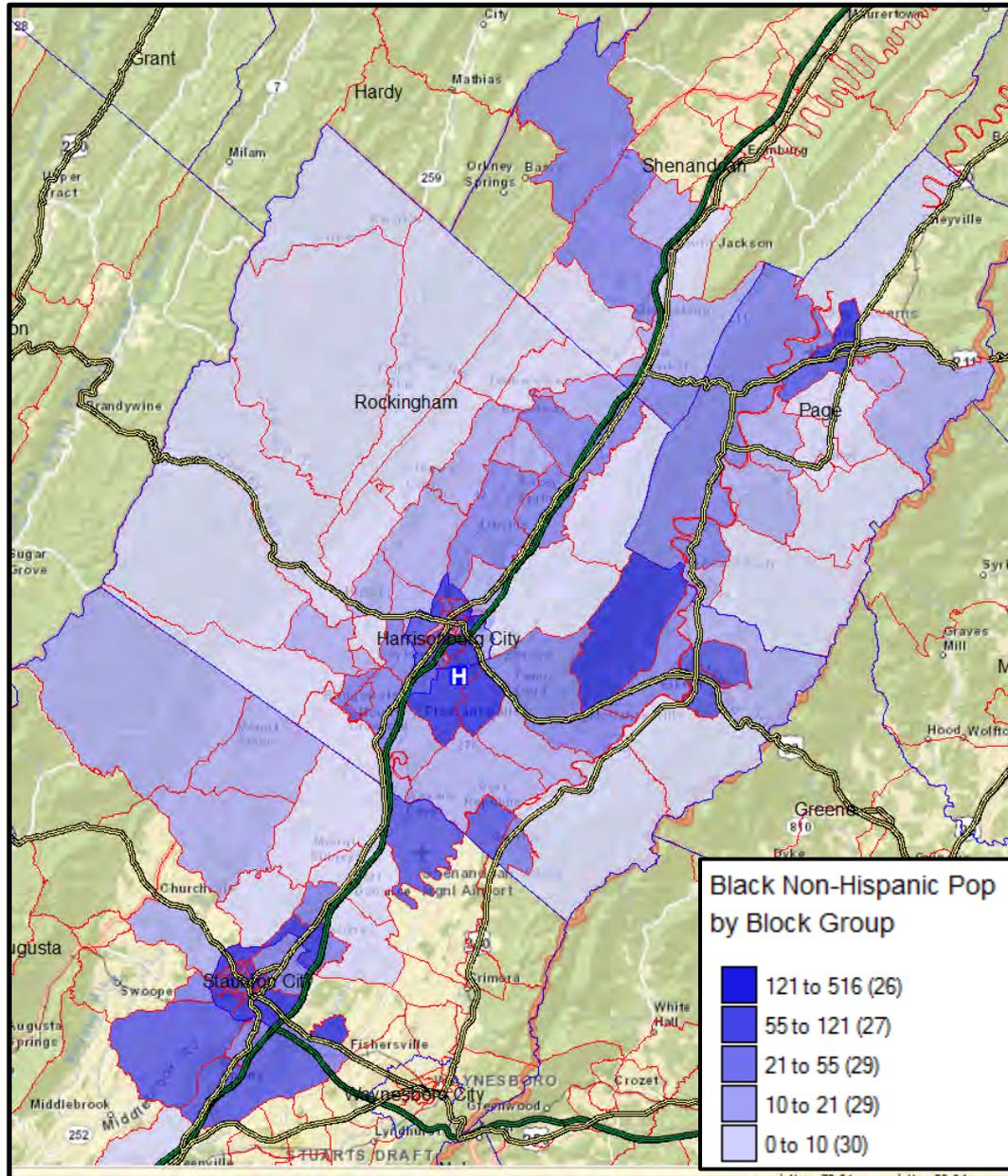
ZIP Codes Included in SRMH Area

ZIP Code	ZIP Name	ZIP Code	ZIP Name
22801	Harrisonburg	22843	Mt. Solon
22802	Harrisonburg	22844	New Market
22803	Harrisonburg*	22846	Penn Laird
22807	JMU	22847	Quicksburg
22811	Bergton	22848	Pleasant Valley*
22812	Bridgewater	22849	Shenandoah
22815	Broadway	22850	Singers Glen
22820	Criders	22851	Stanley
22821	Dayton	22853	Timberville
22827	Elkton	24401	Staunton City
22830	Fulks Run	24402	Staunton City*
22831	Hinton	24437	Ft.Defiance
22832	Keezletown	24441	Grottoes
22833	Lacey Springs*	24463	Mint Springs*
22834	Linville	24467	Mt.Sidney
22835	Luray	24469	New Hope*
22840	McGaheysville	24471	Port Republic
22841	Mt. Crawford	24482	Verona
22842	Mt. Jackson	24486	Weyers Cave

*Denotes PO Boxes

Health Status Indicators Report
Prepared for Sentara RMH Medical Center
By Community Health Solutions
September 2015

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Introduction

This document presents a health status indicators report for Sentara RMH Medical Center. The report was commissioned by Sentara Healthcare and Sentara RMH Medical Center, and produced by Community Health Solutions.

The study presents health status indicators for each of two overlapping regions of interest to Sentara RMH Medical Center. The Zip Code-Level Study Region includes a population of 223,600 people residing in one of 32 zip codes. The Locality-Level Study Region includes a population of 295,256 people residing in six localities which contain the Zip Code-Level Study Region. The six localities include four counties - Augusta, Page, Rockingham and Shenandoah - and the cities of Harrisonburg and Staunton. 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 each of the six localities were identified by Sentara RMH Medical Center as part of the Zip Code-Level study region.

Locality-Level Study Region	Zip Code-Level Study Region
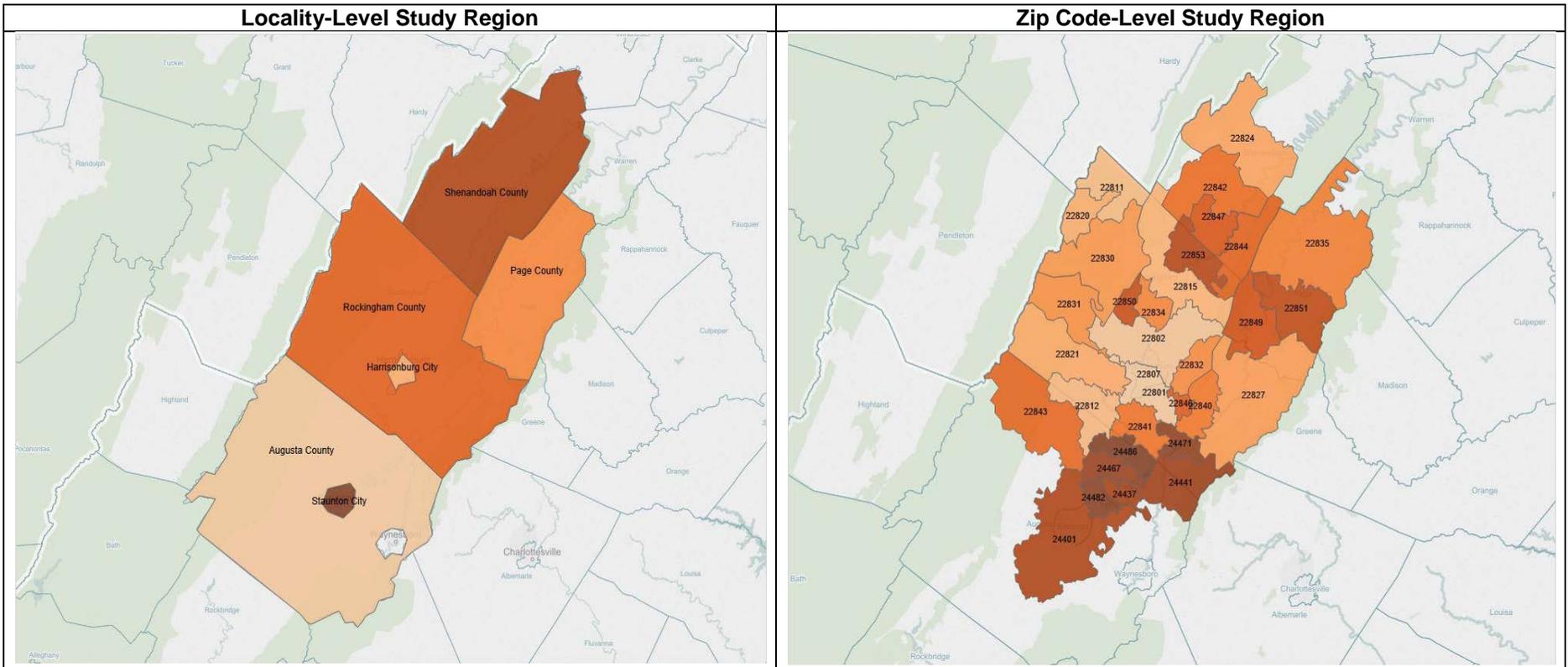
The study draws upon multiple data sources to present nine health indicator profiles in the following categories:

1. Mortality Profile
2. Maternal and Infant Health Profile
3. Preventable Hospitalization Profile
4. Behavioral Health Hospitalization Profile
5. Adult Health Risk Profile
6. Youth Health Risk Profile
7. Uninsured Profile
8. Cancer Profile
9. Communicable Disease 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, along with a table of Zip Code-Level indicators. *Appendix B* provides detail on the methods used to produce the indicators.

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.

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.)

As shown in *Exhibit 1A. Mortality Profile* **(2013):**

- In 2013 there were 2,718 deaths in the Locality-Level Study Region, and 1,969 deaths in the Zip Code-Level Study Region.
- The leading causes of death in 2013 in both study regions were malignant neoplasm, heart disease, cerebrovascular disease, chronic lower respiratory disease and unintentional injury.
- The age-adjusted death rates for the Locality-Level Study Region were at least five percent higher than the state rates for Unintentional Injury, Alzheimer's, Nephritis and Nephrosis, Suicide, Chronic Liver Disease and Parkinson's Disease. Rates for other conditions were near or below the state-level rates.

As shown in *Exhibit 1B. Mortality Trend (All Ages, 2011-2013):*

- From 2011 to 2013 there was an upward trend in total death counts for both the Locality-Level and Zip Code-Level Study Regions, and Virginia as whole.
- Focusing on specific causes, both regions showed upward trends in death counts due to Heart Disease, Unintentional Injury, and Nephritis and Nephrosis deaths.
- Focusing on death rates for the top 10 leading causes of death, the Locality-Level Study Region showed an upward trend in age-adjusted death rates for Unintentional Injury and Nephritis and Nephrosis.

As shown in *Exhibit 1C. Premature Mortality Trend* **(Age<75, 2011-2013):**

- Consistent with conventions in the field, premature mortality can be defined as deaths that occur before age 75.
- The Exhibit shows mortality for all ages compared to mortality for the population under age 75.
- Five conditions rank higher as causes of premature death than as causes of death for all ages: Unintentional Injury, Suicide, Diabetes, Chronic Liver Disease, and Septicemia.

Exhibit 1A. Mortality Profile (2013)

Indicator	Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Counts			
Deaths by All Causes	62,309	2,718	1,969
Malignant Neoplasms (Cancer) Deaths	14,348	614	433
Heart Disease Deaths	13,543	562	417
Cerebrovascular Disease (Stroke) Deaths	3,278	144	102
Chronic Lower Respiratory Disease Deaths	3,168	144	93
Unintentional Injury Deaths	2,794	135	91
Alzheimer's Disease Deaths	1,634	100	71
Nephritis and Nephrosis Deaths	1,547	73	53
Diabetes Mellitus Deaths	1,618	66	45
Influenza and Pneumonia Deaths	1,430	63	51
Suicide Deaths	1,047	51	34
Septicemia Deaths	1,464	50	39
Chronic Liver Disease Deaths	836	41	29
Parkinson's Disease Deaths	549	30	26
Primary Hypertension and Renal Disease Deaths	629	28	24
Rates	**Age Adjusted Death Rates per 100,000 Population**		
Total Deaths	720.1	723.4	--
Malignant Neoplasms (Cancer) Deaths	161.3	162.0	--
Heart Disease Deaths	155.9	145.5	--
Cerebrovascular Disease (Stroke) Deaths	38.5	36.5	--
Chronic Lower Respiratory Disease Deaths	37.2	38.0	--
Unintentional Injury Deaths	33.0	40.9	--
Alzheimer's Disease Deaths	19.6	25.5	--
Nephritis and Nephrosis Deaths	18.0	19.2	--
Diabetes Mellitus Deaths	18.3	16.9	--
Influenza and Pneumonia Deaths	16.8	16.2	--
Suicide Deaths	12.2	16.7	--
Septicemia Deaths	17.7	13.8	--
Chronic Liver Disease Deaths	8.9	11.7	--
Parkinson's Disease Deaths	6.7	7.8	--
Primary Hypertension and Renal Disease Deaths	7.2	--	--

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health and demographic data from Alteryx, Inc. See details on methods in *Appendix B*. Note: Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30.

Exhibit 1B. Mortality Trend (All Ages, 2011- 2013)

Locality-Level Study Region	Locality			Zip Code			% Change (2011-2013)		
Counts (Deaths by All Causes)	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Total Deaths (All Causes)	2,480	2,715	2,718	1,773	1,942	1,969	6%	10%	11%
Counts (Deaths by Leading 10 Causes)	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Malignant Neoplasms (Cancer) Deaths	627	625	614	453	427	433	1%	-2%	-6%
Heart Disease Deaths	546	577	562	382	397	417	3%	3%	8%
Cerebrovascular Disease (Stroke) Deaths	154	158	144	119	122	102	-1%	-6%	-14%
Chronic Lower Respiratory Disease Deaths	138	121	144	103	86	93	2%	4%	-12%
Unintentional Injury Deaths	118	129	135	77	99	91	2%	14%	17%
Alzheimer's Disease Deaths	119	115	100	91	88	71	-9%	-16%	-23%
Nephritis and Nephrosis Deaths	47	61	73	37	45	53	9%	20%	18%
Diabetes Mellitus Deaths	72	78	66	57	59	45	-1%	-8%	-25%
Influenza and Pneumonia Deaths	78	69	63	50	53	51	2%	-19%	2%
Suicide Deaths	50	42	51	40	24	34	0%	2%	-15%
Rates	**Age Adjusted Death Rates per 100,000 Population**						**Virginia**	**Locality**	**Zip Code**
Total Deaths (All Causes)	710.9	738.4	723.4	--	--	--	-3%	2%	--
Malignant Neoplasms (Cancer) Deaths	175.0	167.9	162.0	--	--	--	-5%	-7%	--
Heart Disease Deaths	150.9	155.5	145.5	--	--	--	-3%	-4%	--
Cerebrovascular Disease (Stroke) Deaths	41.9	41.7	36.5	--	--	--	-7%	-13%	--
Chronic Lower Respiratory Disease Deaths	39.3	32.1	38.0	--	--	--	-3%	-3%	--
Unintentional Injury Deaths	36.5	40.9	40.9	--	--	--	-1%	12%	--
Alzheimer's Disease Deaths	31.7	29.9	25.5	--	--	--	-15%	-20%	--
Nephritis and Nephrosis Deaths	12.5	16.1	19.2	--	--	--	2%	19%	--
Diabetes Mellitus Deaths	20.1	21.6	16.9	--	--	--	-6%	-16%	--
Influenza and Pneumonia Deaths	21.5	18.5	16.2	--	--	--	-3%	-25%	--
Suicide Deaths	16.9	13.1	16.7	--	--	--	-2%	-1%	--

Source: Community Health Solutions analysis of death record data from the Virginia Department of Health and demographic data from Alteryx, Inc. See details in methods in Appendix B. Notes: Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30.

Exhibit 1C. Premature Mortality Trend (Age<75, 2011- 2013)

	Virginia	Locality-Level Service Region		Virginia	Locality-Level Service Region
2011 Top 10 Causes of Death-All Ages (Counts)			**2011 Top 10 Causes of Premature Death-Age <75 (Counts)**		
Malignant Neoplasms (Cancer)	14,261	627	Malignant Neoplasm (Cancer)	8,390	333
Heart Disease	13,201	546	Heart Disease	4,980	184
Cerebrovascular Disease (Stroke)	3,327	154	Unintentional Injury	1,947	76
Chronic Lower Respiratory Disease	3,097	138	Chronic Lower Respiratory Diseases	1,219	64
Unintentional Injury	2,726	118	Suicide	962	44
Alzheimer's Disease	1,800	119	Diabetes Mellitus	893	38
Nephritis and Nephrosis	1,628	47	Cerebrovascular Diseases (Stroke)	968	33
Diabetes Mellitus	1,425	72	Chronic Liver Disease	588	25
Influenza and Pneumonia	1,404	78	Influenza and Pneumonia	400	19
Suicide	1,052	50	Septicemia	579	16
2012 Top 10 Causes of Death-All Ages (Counts)			**2012 Top 10 Causes of Premature Death-Age <75 (Counts)**		
Malignant Neoplasms (Cancer)	14,209	625	Malignant Neoplasm (Cancer)	8,371	343
Heart Disease	13,289	577	Heart Disease	5,117	197
Cerebrovascular Disease (Stroke)	3,390	158	Unintentional Injury	1,907	90
Chronic Lower Respiratory Disease	3,046	121	Chronic Lower Respiratory Diseases	1,206	50
Unintentional Injury	2,726	129	Diabetes Mellitus	863	41
Alzheimer's Disease	1,708	115	Suicide	956	37
Nephritis and Nephrosis	1,589	78	Cerebrovascular Diseases (Stroke)	1,080	28
Diabetes Mellitus	1,518	78	Chronic Liver Disease	701	27
Influenza and Pneumonia	1,302	69	Septicemia	551	18
Suicide	1,056	42	Influenza and Pneumonia	332	13
2013 Top 10 Causes of Death-All Ages (Counts)			**2013 Top 10 Causes of Premature Death-Age <75 (Counts)**		
Malignant Neoplasms (Cancer)	14,348	614	Malignant Neoplasm (Cancer)	8,407	312
Heart Disease	13,543	562	Heart Disease	5,272	207
Cerebrovascular Disease (Stroke)	3,278	144	Unintentional Injury	1,914	92
Chronic Lower Respiratory Disease	3,168	144	Suicide	958	47
Unintentional Injury	2,794	135	Chronic Lower Respiratory Diseases	1,229	44
Alzheimer's Disease	1,634	100	Diabetes Mellitus	886	39
Nephritis and Nephrosis	1,618	73	Cerebrovascular Diseases (Stroke)	1,014	36
Diabetes Mellitus	1,547	66	Chronic Liver Disease	709	36
Influenza and Pneumonia	1,430	63	Septicemia	641	22
Suicide	1,047	51	Nephritis and Nephrosis	573	21

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.)

As shown in ***Exhibit 2A. Maternal and Infant Health Profile* (2013):**

- In 2013 there were 2,933 live births in the Locality-Level Study Region, and 2,259 live births in the Zip Code-Level Study Region.
- In the Locality-Level Study Region, there were 179 low weight births, 711 late prenatal care births, 1,079 non-marital births, and 233 live births to teens. Comparable indicators for the Zip Code-Level Study Region included 139 low weight births, 565 late prenatal care births, 814 non-marital births, and 179 live births to teens.
- Both Study Regions had a lower rate of births overall, and a lower percentage of low-weight births than Virginia as a whole. Additionally, both Study Regions had a higher percentage of late prenatal care births than the Virginia overall.
- Focusing on infant mortality, there were 63 deaths to infants recorded for the Locality-Level Study Region from 2009 to 2013. The rate of infant mortality was below the state rate for this period.

As shown in ***Exhibit 2B. Teen Live Birth Trend* (2011-2013):**

- From 2011 to 2013 there was a downward trend in live births to teens for both the Locality-Level and Zip Code-Level Study Regions.
- This local trend reflected a statewide downward trend in live births to teens for the same period.

Exhibit 2A. Maternal and Infant Health Profile

Indicator	Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Counts			
Total Pregnancies	126,655	3,421	N/A
Induced Terminations of Pregnancy	19,724	324	N/A
Natural Fetal Deaths	4,954	164	N/A
Total Live Births	101,977	2,933	2,259
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	8,178	179	139
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	13,435	711	565
Non-Marital Births	35,289	1,079	814
Total Teen Pregnancies Ages 10-19	7,447	297	--
Live Births to Teens Age 10-19	5,316	233	179
Live Births to Teens Age 18-19	4,073	183	143
Live Births to Teens Age 15-17	1,208	49	35
Live Births to Teens Age <15	35	1	1
Total Infant Deaths 2009-2013	3,402	63	N/A
Rates			
Live Birth Rate per 1,000 Population	12.3	10.0	10.1
Low Weight Births pct. of Total Live Births	8%	6%	6%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	13%	24%	25%
Non-Marital Births pct. of Total Live Births	35%	37%	36%
Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population (age 10-19)	14.4	14.5	--
Teenage (age 18-19) Live Birth Rate per 1,000 Teenage Female Population (age 18-19)	36.4	26.6	22.7
Teenage (age 15-17) Live Birth Rate per 1,000 Teenage Female Population (age 15-17)	8.0	11.9	8.9
Teenage (age <15) Live Birth Rate per 1,000 Teenage Female Population (age <15)	0.3	--	--
Five-Year Average Infant Mortality Rate per 1,000 Live Births) 2009-2013	6.6	4.2	--

Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health and demographic data from Alteryx, Inc. See details on methods in Appendix B. Notes: Some maternal and infant indicators are not available (N/A) from VDH at the Zip Code-Level. Rates are not calculated where n<30.

Exhibit 2B. Teen Live Birth Trend (2011-2013)

Indicator	Locality			Zip Code			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Live Births to Teens Age 10-17	63	66	50	52	58	34	-30%	-21%	-35%
Rates	**Crude (unadjusted) Rates per 100,000 Population**						**Virginia**	**Locality**	**Zip Code**
Live Birth Rate per 1,000 Teenage (Age 10-17) Female Population	4.7	4.8	3.7	4.5	5.3	3.1	-30%	-21%	-31%

Source: Community Health Solutions analysis of birth record data from the Virginia Department of Health and demographic data from Alteryx, Inc. See details on methods in Appendix B.

3. Preventable Hospitalization Profile

The Agency for Healthcare Research and Quality (AHRQ) identifies a defined set of conditions (called Prevention Quality Indicators, or 'PQIs') for which hospitalization should be avoidable with proper outpatient health care. PQI measures can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care sensitive conditions." High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents.

This profile presents indicators of preventable hospitalizations based on PQI definitions for the local area compared to Virginia. 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.)

As shown in *Exhibit 3A. Preventable Hospitalization Profile* (2013):

- In 2013 there were 3,643 PQI hospital discharges for residents of the Locality-Level Study Region, and 2,782 for residents of the Zip Code-Level Study Region.
- The top five PQI discharge causes in both study regions were Congestive Heart Failure, Bacterial Pneumonia, COPD or Asthma in Older Adults, Diabetes, and Urinary Tract Infections.
- The age-adjusted PQI discharge rates for the Locality-Level Study Region were at least five percent higher than the state rates for total PQIs and for Congestive Heart Failure, Bacterial Pneumonia, Diabetes, Urinary Tract Infection, Dehydration, Hypertension, and Perforated Appendix.

As shown in *Exhibit 3B. Preventable Hospitalization Trend by Diagnosis* (2011-2013):

- From 2011 to 2013 there was an upward trend in PQI discharges for Diabetes in both the Locality-Level and Zip Code-Level Study Regions. This pattern held for both counts and rates, and was counter to an overall downward trend in PQI discharges for diabetes for the state as a whole.
- Over the same period, both study regions saw a downward trends in PQI discharges for Congestive Heart Failure, Bacterial Pneumonia, COPD or Asthma in Older Adults, and Urinary Tract Infections.

As shown in *Exhibits 3C and 3D Preventable Hospitalization Trends by Age and Race / Ethnicity* (2011-2013):

- Both study regions saw downward trends in PQI discharges by age group, with the exception of a six percent increase for 30-44 year olds. This general pattern held for both counts and rates.
- Both study regions saw downward trends in PQI discharges within racial classification groups. This general pattern also held for both counts and rates.

Exhibit 3A. Preventable Hospitalization Profile (2013)

Indicator	Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Total PQI Discharges			
Total PQI Discharges by All Diagnoses	78,768	3,643	2,782
Counts			
Congestive Heart Failure, PQI Discharges	18,239	930	697
Bacterial Pneumonia, PQI Discharges	11,867	718	526
COPD or Asthma In Older Adults (age 40+) , PQI Discharges	16,026	593	342
Diabetes, PQI Discharges	11,099	471	413
Urinary Tract Infection, PQI Discharges	8,452	391	287
Dehydration, PQI Discharges	7,743	339	264
Hypertension, PQI Discharges	2,768	111	95
Perforated Appendix, PQI Discharges	1,189	58	50
Asthma in Younger Adults, PQI Discharges	444	16	10
Angina, PQI Discharges	941	16	7
Rates	**Age Adjusted Rates per 100,000 Population**		
All Diagnoses	900.8	1,013.8	--
Congestive Heart Failure, PQI Discharges	209.1	245.1	--
Bacterial Pneumonia, PQI Discharges	136.4	196.1	--
COPD or Asthma In Older Adults(age 40+), PQI Discharges	176.3	160.3	--
Diabetes, PQI Discharges	127.1	149.4	--
Urinary Tract Infection, PQI Discharges	100.1	106.0	--
Dehydration, PQI Discharges	89.5	95.8	--
Hypertension, PQI Discharges	31.7	32.4	--
Perforated Appendix, PQI Discharges	13.7	18.0	--
Asthma in Younger Adults, PQI Discharges	5.0	--	--
Angina, PQI Discharges	12.0	--	--

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 are several patients with more than one diabetes discharge in the zip study region. Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30.

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

Indicator	Locality-Level Study Region			Zip Code-Level Study Region			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Congestive Heart Failure, PQI Discharges	966	956	930	748	753	697	-8%	-4%	-7%
Bacterial Pneumonia, PQI Discharges	1,033	941	718	773	692	526	-29%	-30%	-32%
COPD or Asthma In Older Adults (age 40+), PQI Discharges	647	544	593	452	361	342	-20%	-8%	-24%
Diabetes, PQI Discharges	436	529	471	321	406	407	-15%	8%	27%
Urinary Tract Infection, PQI Discharges	510	504	391	382	338	287	-22%	-23%	-25%
Rates	**Age Adjusted Rates per 100,000 Population**						**Virginia**	**Locality**	**Zip Code**
Congestive Heart Failure, PQI Discharges	268.5	260.3	245.1	--	--	--	-13%	-9%	--
Bacterial Pneumonia, PQI Discharges	295.9	264.8	196.1	--	--	--	-32%	-34%	--
COPD or Asthma In Older Adults (age 40+), PQI Discharges	181.1	151.0	160.3	--	--	--	-24%	-11%	--
Diabetes, PQI Discharges	138.0	167.3	149.4	--	--	--	-12%	8%	--
Urinary Tract Infection, PQI Discharges	144.7	141.6	106.0	--	--	--	-25%	-27%	--

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: Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30.

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

Indicator	Locality-Level Study Region			Zip Code Study Region			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
18-29	104	96	82	70	75	66	-23%	-21%	-6%
30-44	247	267	228	181	206	192	-21%	-8%	6%
45-64	1,010	937	858	725	660	610	-18%	-15%	-16%
65+	2,870	2,688	2,384	2,185	1,999	1,698	-20%	-17%	-22%
Rates	**Crude (unadjusted) Rates per 100,000 Population**						**Virginia**	**Locality**	**Zip Code**
18-29	183.4	169.2	140.7	134.9	160.2	136.2	-24%	-23%	1%
30-44	477.6	527.4	447.1	488.2	563.9	520.9	-21%	-6%	7%
45-64	1,289.9	1,198.2	1,091.5	1,323.4	1,202.9	1,103.1	-19%	-15%	-17%
65+	6,324.9	5,762.3	5,161.6	6,846.5	6,117.3	5,223.5	-23%	-18%	-24%

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: Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30.

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

Indicator	Locality-Level Study Region			Zip Code-Level Study Region			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Asian	4	3	2	4	2	2	-11%	-50%	-50%
Black/African American	191	159	160	154	134	133	-16%	-16%	-14%
White	3,920	3,692	3,299	2,906	2,692	2,353	-22%	-16%	-19%
Other	61	78	38	48	62	34	14%	-38%	-29%
Hispanic Ethnicity	55	56	53	49	50	44	-30%	-4%	-10%
Rates	**Crude (unadjusted) Rates per 100,000**						**Virginia**	**Locality**	**Zip Code**
Asian	--	--	--	--	--	--	-16%	--	--
Black/African American	1,607.5	1,373.4	1,204.0	1,641.3	1,495.0	1,295.0	-17%	-25%	-21%
White	1,477.4	1,403.5	1,257.0	1,485.5	1,412.5	1,232.7	-22%	-15%	-17%
Other	426.5	545.5	255.7	396.1	517.5	273.5	9%	-40%	-31%
Hispanic Ethnicity	304.0	326.2	283.0	314.7	342.1	274.2	-31%	-7%	-13%

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: Because of data limitations it is not possible to calculate age-adjusted rates for the Zip Code-Level Study Region. Rates are not calculated where n<30. The "other' racial category may include cases where the race is unknown.

4. Behavioral Health Profile

Behavioral health services are typically defined to include services for people whose lives are affected by mental health conditions, substance use disorders, or intellectual and other developmental disabilities. From this perspective, behavioral health is another important indicator of community health status.

This profile presents indicators of preventable hospitalizations based on PQI definitions for the local area compared to Virginia. 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.) This analysis includes records of discharges from Virginia hospitals only.

As shown in ***Exhibit 4A. Behavioral Health Hospitalization Profile*** **(2013):**

- In 2013 there were 2,071 behavioral health discharges for residents of the Locality-Level Study Region, and 1,577 for residents of the Zip Code-Level Study Region.
- The leading six causes of behavioral health hospitalization in both study regions were Affective Psychoses (by a wide margin), Schizophrenic Disorders, Depressive Disorder, Alcoholic Psychoses, Drug Psychoses and Alcohol Dependence Syndrome.
- In both study regions, the behavioral health discharge rates were at least five percent higher than the state rates for Affective Psychoses, Drug Psychoses and Other Organic Psychotic Conditions – Chronic.

As shown in ***Exhibit 4B. Behavioral Health Hospitalization Trend by Age Group*** **(2011-2013):**

- From 2011 to 2013 there was a downward trend in both counts and rates of behavioral health discharges in both the Locality-Level and Zip Code-Level Study Regions, conversely, there was an upward trend for Virginia as a whole.
- For the Locality-Level Study Region, the counts and rates of behavioral health discharges declined for children age 0-17, and adults age 18-29 and 30-44.   Counts and rates increased slightly for the segment age 45-64, and remained stable for the segment age 65+.
- For the Zip Code-Level Study Region, counts and rates declined for children, but increased for all other age groups.

As shown in ***Exhibit 4C. Behavioral Health Hospitalization Trend by Payer*** **(2011-2013):**

- From 2011 to 2013, for both the Locality-Level and Zip Code-Level Study Regions, counts of behavioral health hospitalizations declined slightly for Medicaid, and declined more substantially for privately insured individuals. Counts increased for the Medicare population for both study regions.

Exhibit 4A. Behavioral Health Hospitalization Profile (2013)

Indicator	Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Counts-BH Discharges			
Total BH Discharges by All Diagnoses	56,147	2,071	1,577
Counts-BH Discharges by Diagnosis			
Affective Psychoses, BH Discharges	26,709	1,135	822
Schizophrenic Disorders, BH Discharges	8,136	277	216
Depressive Disorder, Not Elsewhere Classified, BH Discharges	3,503	119	90
Alcoholic Psychoses, BH Discharges	4,037	99	79
Drug Psychoses, BH Discharges	2,121	85	66
Alcohol Dependence Syndrome, BH Discharges	2,391	76	67
Adjustment Reaction, BH Discharges	2,271	70	44
Other Nonorganic Psychoses, BH Discharges	2,133	55	45
Other Organic Psychotic Conditions-Chronic, BH Discharges	795	50	36
Neurotic Disorders, BH Discharges	1,207	33	19
Non Dependent Abuse of Drugs, BH Discharges	600	16	11
Drug Dependence, BH Discharges	816	15	12
Rates	**Crude (unadjusted) Rates per 100,000 Population**		
All Diagnoses	680.8	703.6	706.9
Affective Psychoses, BH Discharges	323.9	385.6	368.5
Schizophrenic Disorders, BH Discharges	98.7	94.1	98.6
Depressive Disorder, Not Elsewhere Classified, BH Discharges	42.5	40.4	40.3
Alcoholic Psychoses, BH Discharges	49.0	33.6	35.4
Drug Psychoses, BH Discharges	25.7	28.9	29.6
Alcohol Dependence Syndrome, BH Discharges	29.0	25.8	30.0
Adjustment Reaction, BH Discharges	27.5	23.8	19.7
Other Nonorganic Psychoses, BH Discharges	25.9	18.7	20.2
Other Organic Psychotic Conditions-Chronic, BH Discharges	9.6	17.0	16.1
Neurotic Disorders, BH Discharges	14.6	11.2	--
Non Dependent Abuse of Drugs, BH Discharges	7.3	--	--
Drug Dependence, BH Discharges	9.9	--	--

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B. Notes: Rates are not calculated where n<30.

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

Indicator	Locality-Level Study Region			Zip Code-Level Study Region			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
All Ages	2,134	2,145	2,071	1,631	1,589	1,577	4%	-3%	-3%
0-17	121	133	108	82	86	76	-2%	-11%	-7%
18-29	497	479	474	323	358	388	10%	-5%	20%
30-44	620	631	581	425	481	449	2%	-6%	6%
45-64	708	696	720	476	490	540	4%	2%	13%
65+	188	206	188	119	167	124	2%	0%	4%
Rates	**Crude (unadjusted) Rates per 100,000 Population**						**Virginia**	**Locality**	**Zip Code**
All Ages	726.7	734.6	703.6	741.2	741.9	727.1	3%	-3%	-2%
0-17	196.6	222.5	179.1	184.7	198.7	173.7	-2%	-9%	-6%
18-29	876.4	844.1	813.5	622.3	764.6	800.8	8%	-7%	29%
30-44	1,198.9	1,246.5	1,139.2	1,146.4	1,316.7	1,218.2	2%	-5%	6%
45-64	904.2	890.0	916.0	868.9	893.0	976.5	3%	1%	12%
65+	414.3	441.6	407.0	372.9	511.0	381.5	-1%	-2%	2%

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: Rates are not calculated where n<30. Data are not reported where age is unknown.

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

Indicator	Locality-Level Study Region			Zip Code-Level Study Region			% Change (2011-2013)		
Counts	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**Virginia**	**Locality**	**Zip Code**
Medicaid	453	391	444	364	291	359	10%	-2%	-1%
Medicare	506	619	609	382	468	450	8%	20%	18%
Private	675	650	509	500	468	367	-2%	-25%	-27%
Self-Pay/Uninsured	482	459	478	370	343	377	15%	-1%	2%

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: Insufficient total payer population data exist to produce rates. Data are not reported where payer is unknown.

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 5A. Adult Health Risk Factor Profile*** **(2014)**, substantial numbers of adults have lifestyle health risks related to nutrition, weight, physical inactivity, tobacco and alcohol. As shown in ***Exhibit 5B, Adult Health Risk Factor Profile by Demographic Group*** **(2014):**

- The prevalence of Diabetes is estimated to be higher among Black/African Americans and individuals in older age groups.
- The likelihood of going without a dental visit in the past 12 months is estimated to be higher among adults classified as Black/African American, Hispanic Ethnicity, or older than age 29.
- The prevalence of overweight/obesity is estimated to be higher among adults classified as Black/African American or in the 45-64 age group.
- Please note that these estimates reflect general patterns based on statistical analysis of multiple years of survey data. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Additionally, the Locality-Level Region and Zip Code-Level Region percent estimates are the same, because the same model was applied to both study regions.

Exhibit 5A. Adult Health Risk Factor Profile (2014-Estimates) [1]

Indicator Estimates-Counts		Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Estimated Adults age 18+		6,393,583	235,059	178,483
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	5,114,866	189,131	140,748
	Overweight or Obese	3,964,021	151,729	116,414
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	3,068,920	118,704	90,837
	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	39,200	29,630
	Smoker	1,214,781	37,651	27,162
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	2,237,754	84,435	64,116
	High Blood Pressure (told by a doctor or other health professional)	1,918,075	73,159	54,483
	Arthritis (told by a doctor or other health professional)	1,534,460	60,671	45,646
	Diabetes (told by a doctor or other health professional)	575,422	21,913	16,617
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	1,214,781	48,302	35,939
	Fair or Poor Health Status	1,022,973	36,599	26,875
Behavioral Health Risk Factors	Dissatisfied with Their Life	359,536	16,506	N/A
	Frequent Mental Distress	457,497	17,161	N/A
	Inadequate Social or Emotional Support	412,372	21,679	N/A
Estimates-Percent of Adults Age 18+				
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	80%	80%	79%
	Overweight or Obese	62%	65%	65%
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	48%	50%	51%
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	18%	17%	17%
	Smoker	19%	16%	15%
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	35%	36%	36%
	High Blood Pressure (told by a doctor or other health professional)	30%	31%	31%
	Arthritis (told by a doctor or other health professional)	24%	26%	26%
	Diabetes (told by a doctor or other health professional)	9%	9%	9%

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[1] State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Review *Appendix B* for full details.

Indicator Estimates-Counts		Virginia	Locality-Level Study Region	Zip Code-Level Study Region
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	19%	21%	20%
	Fair or Poor Health Status	16%	16%	15%
Behavioral Health Risk Factors	Dissatisfied with Their Life	6%	7%	N/A
	Frequent Mental Distress	7%	7%	N/A
	Inadequate Social or Emotional Support	6%	9%	N/A

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.

Exhibit 5B. Adult Health Risk Factor Profile by Demographic Group (2014-Estimates) [2]

Indicator	Locality-Level and Zip Code-Level Study Region			
Estimates- **Percent of Adults Age 18+**	Diabetes (told by a doctor or other health professional) %	No Dental Visit in the Past Year %	Overweight or Obese %	Smokers %
Race/Ethnicity				
Asian	N/A	N/A	N/A	N/A
Black/African American	13%	29%	71%	18%
White	6%	19%	60%	15%
Hispanic Ethnicity	7%	28%	59%	16%
Sex				
Male	10%	22%	70%	20%
Female	8%	20%	61%	15%
Age Group				
Age 18-29	3%	14%	55%	21%
Age 30-44	7%	23%	65%	19%
Age 45-64	10%	23%	72%	17%
Age 65+	17%	27%	64%	12%

Indicator	Virginia			
Estimates- **Percent of Adults Age 18+**	Diabetes (told by a doctor or other health professional) %	No Dental Visit in the Past Year %	Overweight or Obese %	Smokers %
Race/Ethnicity				
Asian	N/A	N/A	N/A	N/A
Black/African American	13%	30%	68%	21%
White	6%	20%	57%	17%
Hispanic Ethnicity	7%	29%	56%	18%
Sex				
Male	10%	23%	71%	22%
Female	8%	21%	62%	17%
Age Group				
Age 18-29	3%	16%	53%	22%
Age 30-44	7%	24%	64%	21%
Age 45-64	10%	25%	71%	18%
Age 65+	17%	29%	62%	13%

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[2] State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Review *Appendix B* for full 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 6A. Youth Health Risk Factor Profile* **(2014)**, substantial numbers of youth have lifestyle health risks related to nutrition, weight, alcohol, mental health, physical inactivity, and tobacco. As shown in *Exhibit 6B, Youth Overweight / Obesity Profile by Demographic Group* **(2014),** the prevalence of overweight / obesity is estimated to be higher among youth classified as Black/African American, Hispanic, and male.
- Please note that these estimates reflect general patterns based on statistical analysis of survey data. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Additionally, the Locality-Level Region and Zip Code-Level Region percent estimates are the same, because the same model was applied to both study regions.

Exhibit 6A. Youth Health Risk Factor Profile (2014-Estimates) [3]

Indicator Estimates-Counts		Virginia	Locality-Level Study Region	Zip Code-Level Study Region
High School Youth Age 14-19				
Total Estimated High School Youth Age 14-19		*654,462*	*26,305*	*21,091*
Risk Factors	Met Guidelines for Fruit and Vegetable Intake	54,707	2,126	1,702
	Overweight or Obese	179,050	6,674	5,299
	Not Meeting Recommendations for Physical Activity in the Past Week	363,586	14,242	11,389
	Used Tobacco in the Past 30 Days	118,572	4,884	3,866
	Have at least One Drink of Alcohol at least One Day in the Past 30 Days	178,173	7,706	6,182
General Health Status	Feel Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	165,270	6,875	5,573
Middle School Youth Age 10-14				
Total Estimated Middle School Youth Age 10-14		*523,850*	*17,171*	*6,269*
Risk Factors	Met Guidelines for Fruit and Vegetable Intake	125,285	3,903	1,435
	Not Meeting Recommendations for Physical Activity in the Past Week	178,443	11,333	2,214
	Used Tobacco in the Past 30 Days	19,192	611	139
Estimates-Percent				
High School Youth Age 14-19				
Risk Factors	Met Guidelines for Fruit and Vegetable Intake	8%	8%	8%
	Overweight or Obese	27%	25%	25%
	Not Meeting Recommendations for Physical Activity in the Past Week	56%	54%	54%
	Used Tobacco in the Past 30 Days	18%	19%	18%
	Have at least One Drink of Alcohol at least One Day in the Past 30 Days	27%	29%	29%
General Health Status	Feel Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	25%	26%	26%
Middle School Youth Age 10-14				
Risk Factors	Met Guidelines for Fruit and Vegetable Intake	24%	23%	23%
	Not Meeting Recommendations for Physical Activity in the Past Week	34%	36%	35%
	Used Tobacco in the Past 30 Days	4%	4%	4%

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.

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[3] State-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Review *Appendix B* for full details.

Exhibit 6B. Youth Health Risk Factor Profile: Overweight / Obesity by Age (2014-Estimates) [4]

Race/Ethnicity	Virginia	Locality-Level and Zip Code-Level Study Region
Asian	N/A	N/A
Black/African American	34%	34%
White	24%	24%
Hispanic Ethnicity	38%	38%
Sex	**Virginia**	**Locality-Level and Zip Code-Level Study Region**
Male	26%	29%
Female	24%	22%

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.

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[4] Estimates for Virginia are provided; however, comparisons of Virginia estimates to the local estimates are not recommended for statistical reasons. Review *Appendix B* for full 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 US 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 estimates, and therefore subject to estimation error.

As shown in *Exhibit 7. Uninsured Profile* **(2014):**

- At any given point in 2014 an estimated 54,677 residents of the Locality-Level Study Region were uninsured. The comparable figure for the Zip Code-Level Study Region was 35,722.
- The estimated number of uninsured children age 0-18 was 4,723 in the Locality-Level Study Region, and 4,465 in the Zip Code-Level Study Region. Among uninsured children, it is estimated that roughly half have family income below 200 percent of the federal poverty level, possible making them income-eligible for coverage through the state Medicaid or FAMIS program.
- The estimated number of uninsured adults age 19-64 was 49,953 in the Locality-Level Study Region, and 31, 258 in the Zip Code-Level Study Region. Among uninsured adults, it is estimated that more than half have family income below 200 percent of the federal poverty level.

Exhibit 7. Uninsured Profile (2014-Estimates)

Indicator Estimated Uninsured Counts*	Virginia	Locality-Level Study Region	Zip Code-Level Study Region
Uninsured Nonelderly Age 0-64	1,013,986	54,677	35,722
Uninsured Children Age 0-18	120,105	4,723	4,465
Uninsured Children Age 0-18 <=138% FPL	327,185	1,591	1,448
Uninsured Children Age 0-18 <=200% FPL	479,797	2,490	2,241
Uninsured Children Age 0-18 <=250% FPL	578,328	3,024	2,752
Uninsured Children Age 0-18 <=400% FPL	749,463	4,097	3,659
Uninsured Children Age 0-18 138-400% FPL	422,276	2,505	2,211
Uninsured Adults Age 19-64	893,456	49,953	31,258
Uninsured Adults Age 19-64 <=138% FPL	327,185	20,974	11,447
Uninsured Adults Age 19-64 <=200% FPL	479,797	29,531	16,786
Uninsured Adults Age 19-64 <=250% FPL	578,328	34,980	20,233
Uninsured Adults Age 19-64 <=400% FPL	749,463	44,384	26,220
Uninsured Adults Age 19-64 138-400% FPL	422,276	23,409	14,773
Estimated Uninsured Percent			
Uninsured Children Percent	6%	7%	9%
Uninsured Adults Percent	17%	27%	22%

*FPL Categories are cumulative

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.

8. Cancer Profile

This profile presents indicators of cancer counts for the Locality-Level Study Region and Virginia. The indicators are based on analysis of cancer registry and death record data provided by the Virginia Department of Health. (see *Appendix B* for details on methods.)

As shown in *Exhibit 8A. Cancer Incidence by Site* (2011):

- In 2011, there were 1,492 residents diagnosed with cancer in the Locality-Level Study Region.
- The leading sites of cancer were lung and bronchus, prostate and breast (among females only).
- The Locality-Level Study Region had a lower rate than Virginia as whole for local stage diagnoses of cancers overall; and specifically for breast (female only), lung and bronchus, melanoma and prostate cancer.

As shown in *Exhibit 8B. Cancer Deaths by Site* (2008-2012):

- From 2008-2012, there were a 3,003 cancer deaths in the Locality-Level Study Region.
- The leading sites for cancer deaths in the Locality-Level Study Region were lung and bronchus, breast (female only), prostate and colorectal.

Exhibit 8A. Cancer Incidence by Site, 2011

Indicator	Virginia	Locality-Level Study Region
Counts		
2011 Cancer Incidence -All Sites	36,322	1,492
2011 Diagnosed at Local Stage-All Sites	16,876	629
2011 Cancer Incidence -Breast (Female Only)	5,814	199
2011 Diagnosed at Local Stage-Breast (Female Only)	3,794	114
2011 Cancer Incidence -Cervical	263	0
2011 Diagnosed at Local Stage-Cervical	105	0
2011 Cancer Incidence -Colorectal	3,057	125
2011 Diagnosed at Local Stage-Colorectal	1,177	12
2011 Cancer Incidence -Lung and Bronchus	5,058	233
2011 Diagnosed at Local Stage-Lung and Bronchus	1,011	11
2011 Cancer Incidence -Melanoma	1,530	16
2011 Diagnosed at Local Stage-Melanoma	1,178	0
2011 Cancer Incidence -Oral Cavity	920	0
2011 Diagnosed at Local Stage-Oral Cavity	282	0
2011 Cancer Incidence -Ovarian	488	0
2011 Diagnosed at Local Stage-Ovarian	75	0
2011 Cancer Incidence -Prostate	5,104	204
2011 Diagnosed at Local Stage-Prostate	4,049	158
Rate (percent diagnosed at the local stage)		
2011 Diagnosed at Local Stage-All Sites pct. of Total Diagnosed	47%	42%
2011 Diagnosed at Local Stage-Breast (Female Only) pct. of Total Diagnosed	65%	57%
2011 Diagnosed at Local Stage-Cervical Cancer pct. of Total Diagnosed	40%	--
2011 Diagnosed at Local Stage-Colorectal pct. of Total Diagnosed	39%	--
2011 Diagnosed at Local Stage-Lung and Bronchus pct. of Total Diagnosed	20%	10%
2011 Diagnosed at Local Stage-Melanoma pct. of Total Diagnosed	77%	0%
2011 Diagnosed at Local Stage-Oral Cavity pct. of Total Diagnosed	31%	--
2011 Diagnosed at Local Stage-Ovarian pct. of Total Diagnosed	15%	--
2011 Diagnosed at Local Stage-Prostate pct. of Total Diagnosed	79%	77%

Source: Community Health Solutions analysis of cancer registry data from the Virginia Department of Health. See details on methods in Appendix B. Notes: Rates are not provided because record level data cannot be accessed due to patient confidentiality restrictions. Data are not available at the zip code level.

Exhibit 8B. Cancer Deaths by Site, 2008-2012

Indicator	Virginia	Locality-Level Study Region
Counts		
Five Year Total (2008-2012) Cancer Deaths, All Sites	70,400	3,003
Five Year Total (2008-2012) Cancer Deaths, Breast (Female Only)	1,297	182
Five Year Total (2008-2012) Cancer Deaths, Cervical	415	17
Five Year Total (2008-2012) Cancer Deaths, Colorectal	6,116	282
Five Year Total (2008-2012) Cancer Deaths, Lung and Bronchus	19,844	878
Five Year Total (2008-2012) Cancer Deaths, Melanoma	1,189	52
Five Year Total (2008-2012) Cancer Deaths, Oral Cavity	964	31
Five Year Total (2008-2012) Cancer Deaths, Ovarian	1,842	86
Five Year Total (2008-2012) Cancer Deaths, Prostate	3,399	120

Source: Community Health Solutions analysis of cancer registry data from the Virginia Department of Health. See details on methods in Appendix B. Notes: Rates are not provided because data to calculate rates are not readily available. Data are not readily available at the zip code level.

9. Communicable Disease Profile

This profile presents indicators of communicable disease counts for the Locality-Level Study Region and Virginia. The indicators are based on analysis of communicable disease annual reports by the Virginia Department of Health. (see *Appendix B* for details on methods.)

As shown in *Exhibit 9. Selected Communicable Diseases* **(2013):**

- In 2013, there were 774 cases of chlamydia, 110 cases of gonorrhea, 10 cases of early syphilis and eight new cases of HIV.
- The Locality-Level Study Region had a lower rate than Virginia as whole for chlamydia and gonorrhea.

Exhibit 9. Selected Communicable Disease Profile (2013)

Indicator Counts	Virginia	Locality-Level Study Region
Chlamydia Diagnoses	35,473	774
Gonorrhea Diagnoses	8,128	110
Total Early Syphilis Diagnoses	545	10
Newly Diagnosed Cases of HIV Disease	940	8
Crude Rates per 100,000 Population		
Chlamydia Diagnoses (rate per 100,000)	429.4	263.4
Gonorrhea Diagnoses (rate per 100,000)	98.4	37.4
Total Early Syphilis Diagnoses (rate per 100,000)	6.6	--
Newly Diagnosed Cases of HIV Disease (rate per 100,000)	11.4	--

Source: Community Health Solutions analysis of communicable disease annual reports from the Virginia Department of Health. See details in methods in Appendix B.
Notes: Data are not available at the zip code level. Rates are not calculated where n<30.

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 underlying data for these maps are provided in a separate Microsoft Excel file. 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 Neoplasm (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<17), 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 32 zip codes, as identified by Sentara RMH Medical Center, most of which fall within Augusta, Page, Rockingham and Shenandoah counties; and the cities of Harrisonburg and Staunton. 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 each of the six localities were identified by Sentara RMH Medical Center as part of the Zip Code-Level study region. Consequently, the combined zip-code-level totals for the maps differ from the Locality-Level Study Region totals listed throughout the body of the report.

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.
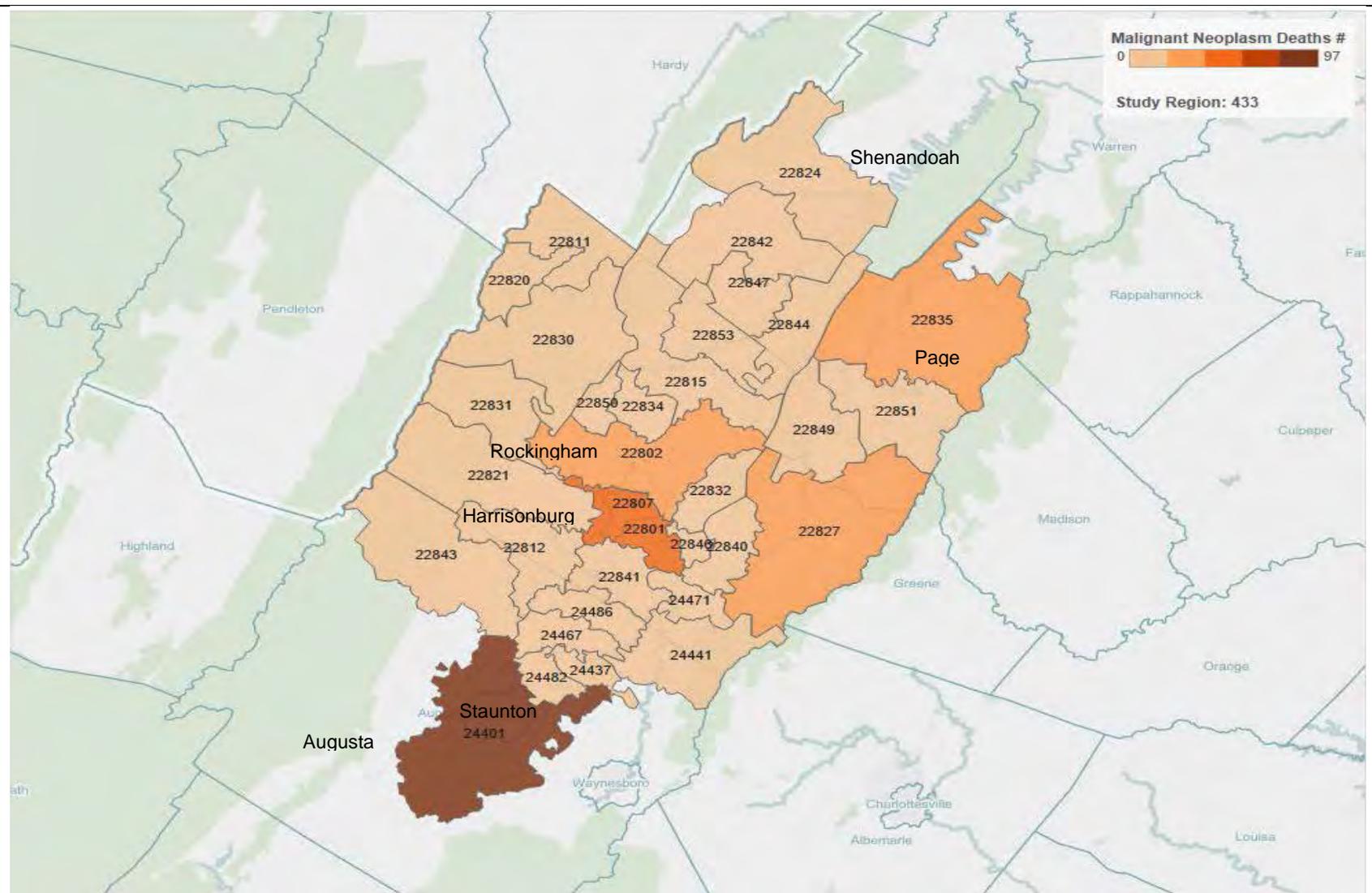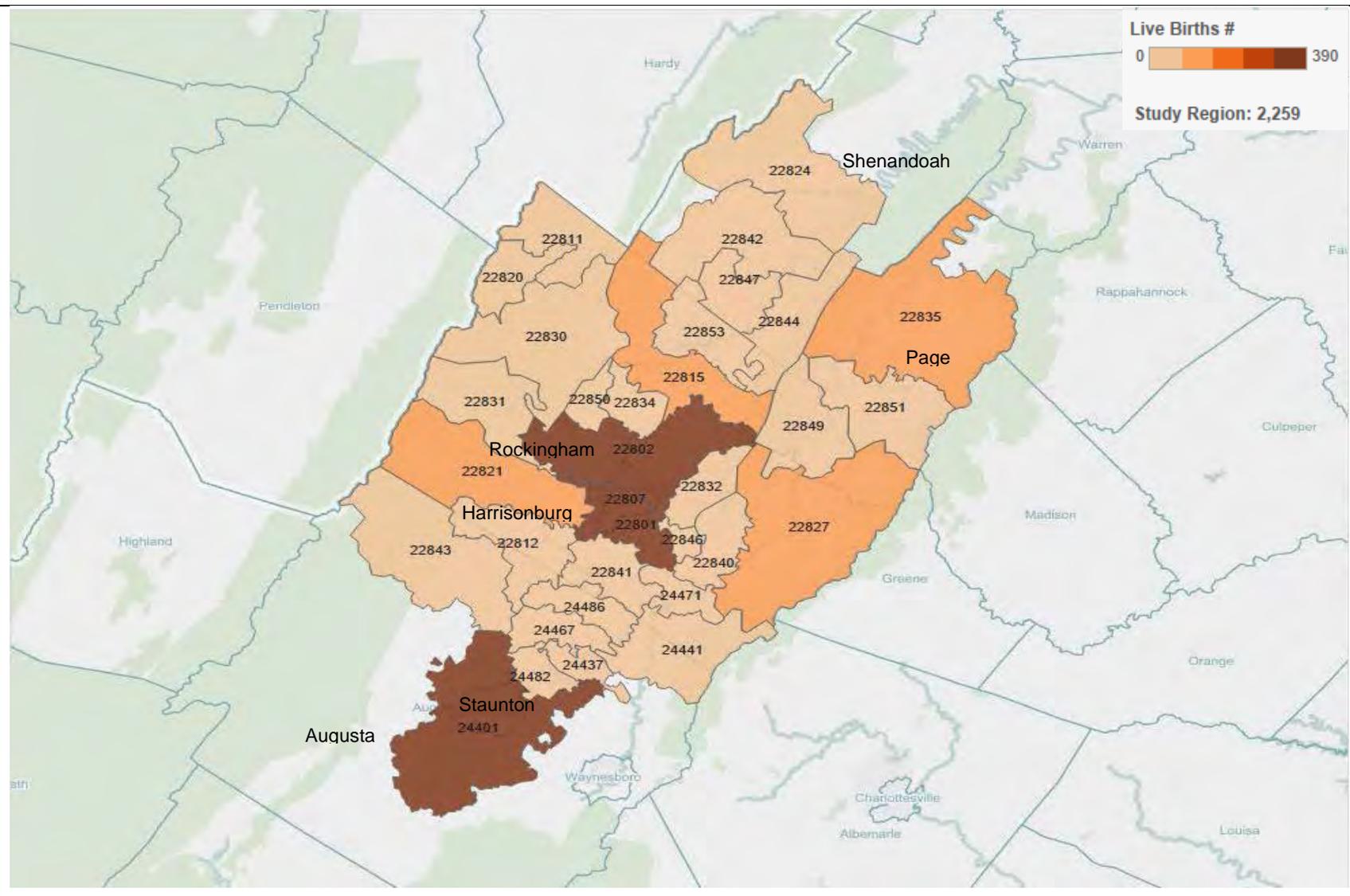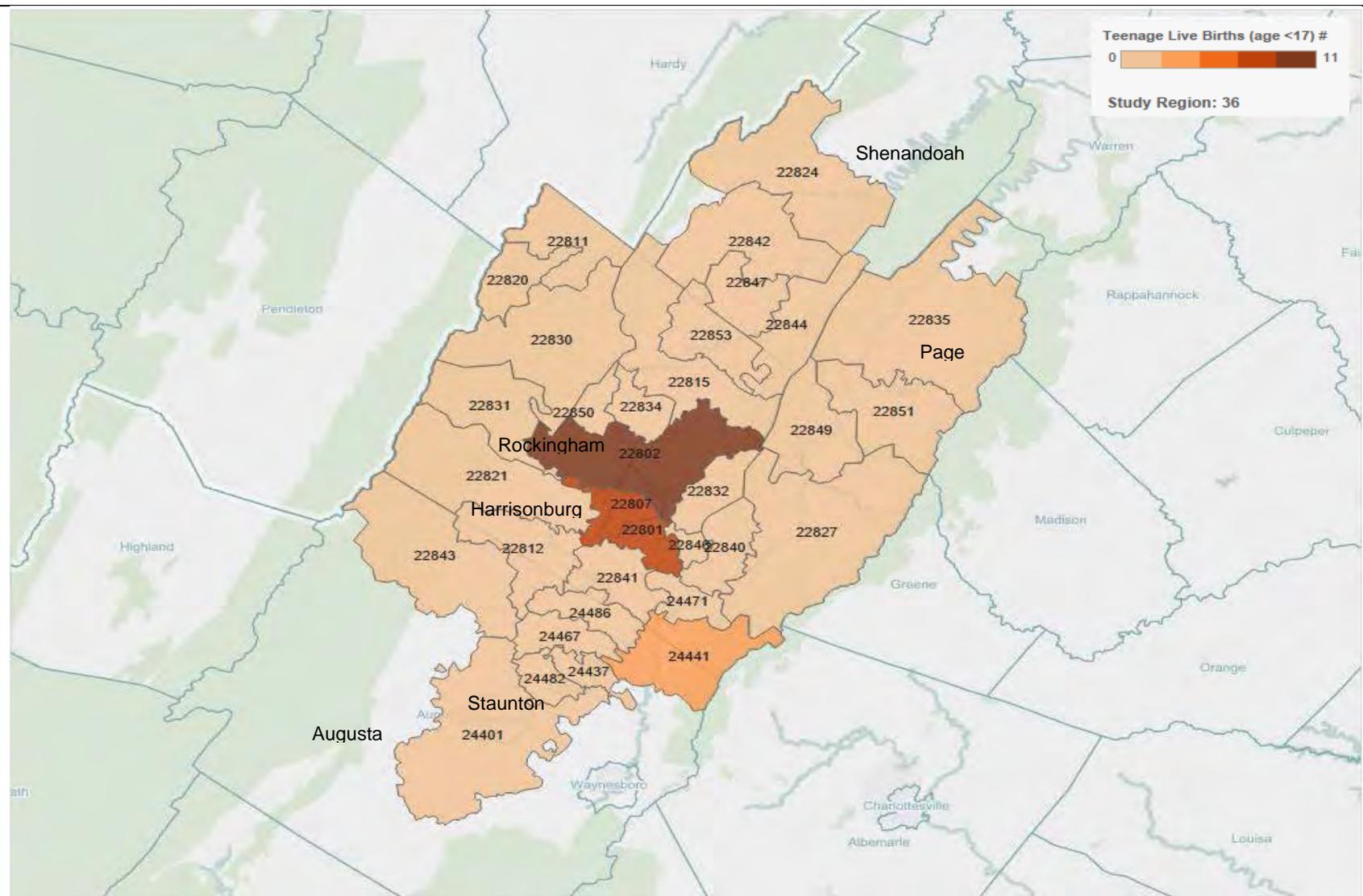
Map 1: Total Deaths, 2013
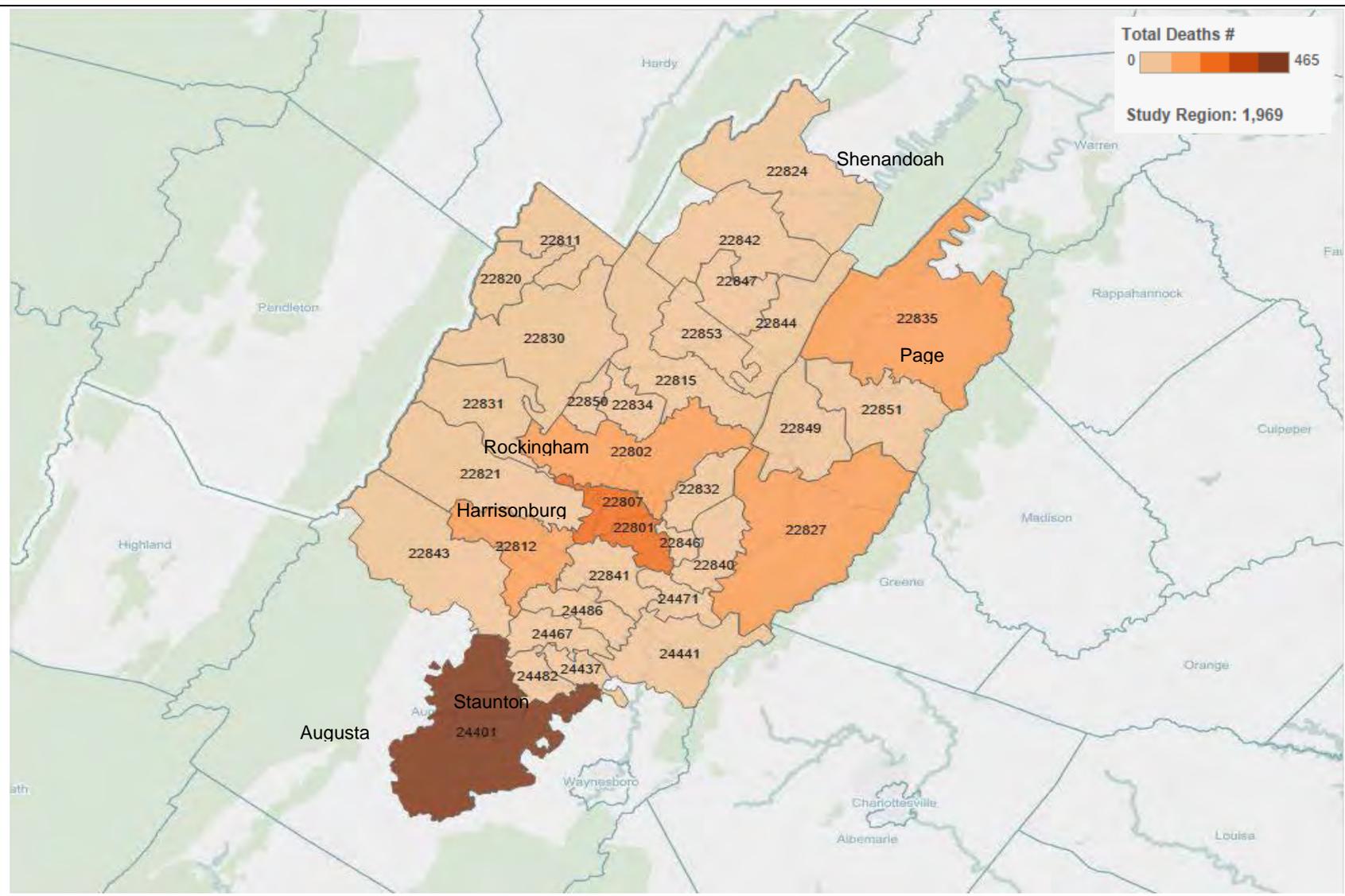
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no recorded deaths for zip code 22807.

Map 2: Heart Disease Deaths, 2013
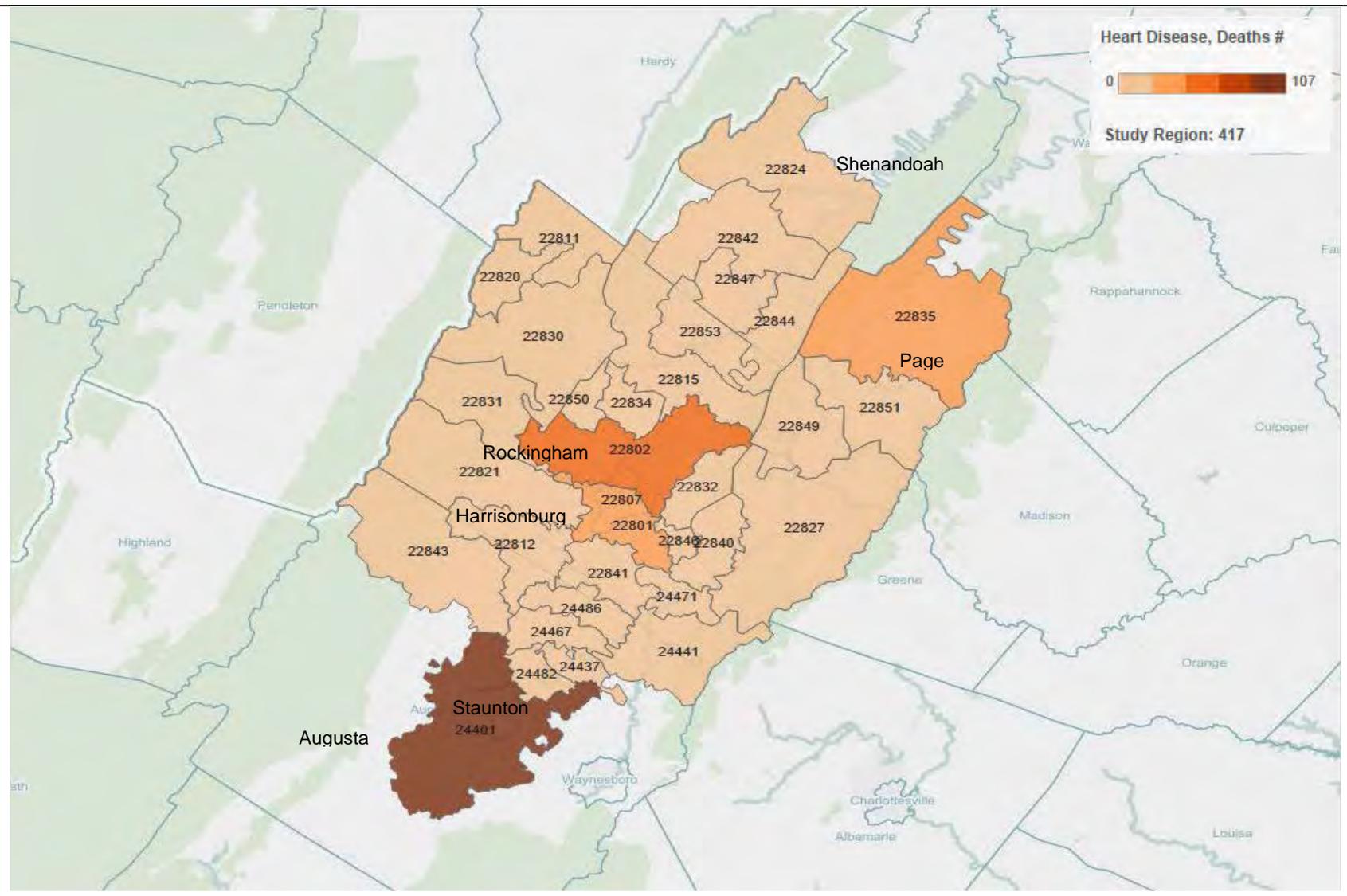
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported heart disease deaths for zip codes 22807, 22820, and 22850.

Map 3: Cerebrovascular Disease (Stroke) Deaths, 2013
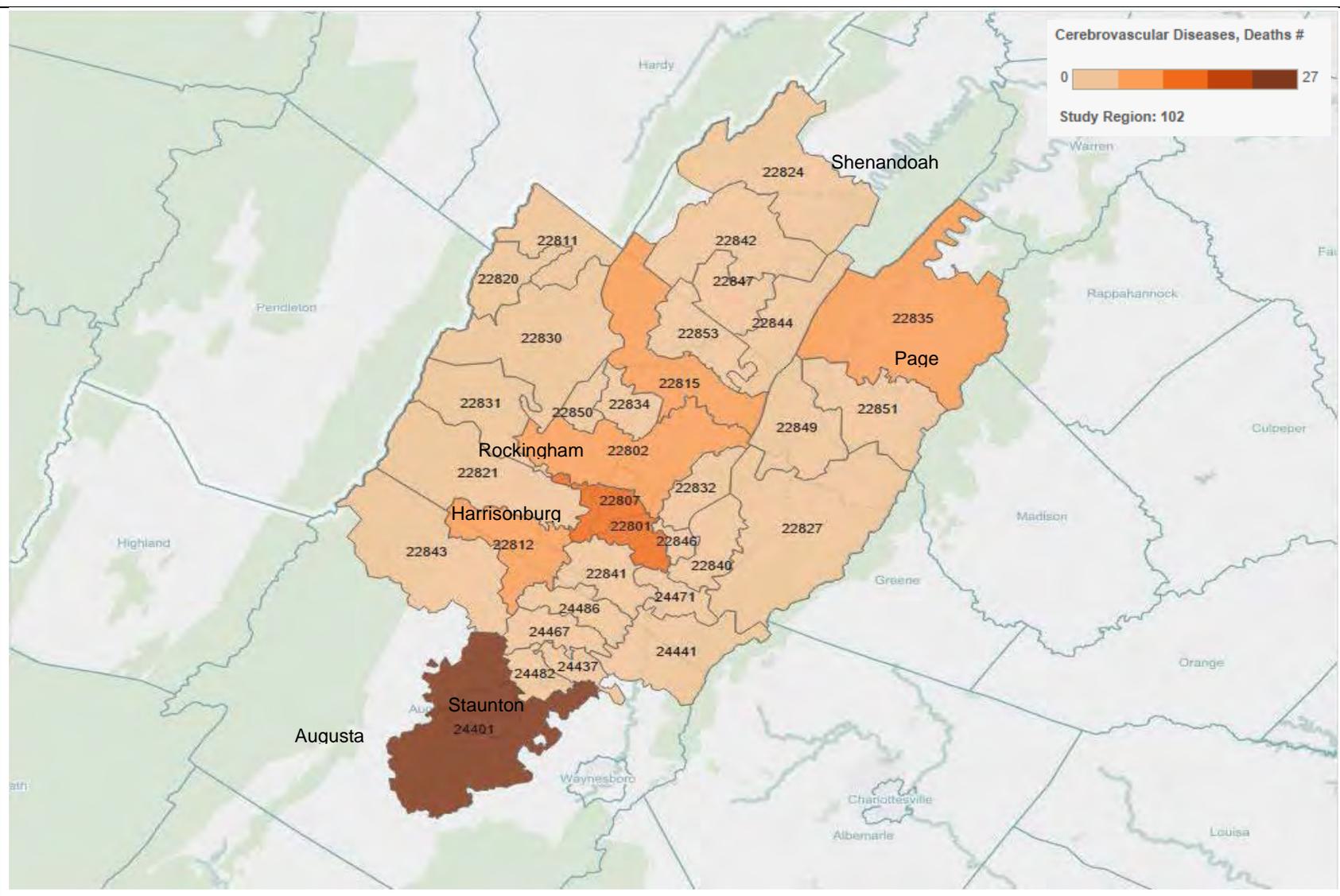
Source: Community Health Solutions analysis of death record data from the Virginia Department of Health. See details in methods in Appendix B. Notes: There were no reported stroke deaths for zip codes 22807, 22811, 22820, 22830, 22832, 22846, 22847, 22850, 24437, 24467, 24471, 24482, and 24486.

Map 4: Malignant Neoplasm (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 codes 22807 and 22820.

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. Notes: There were no reported live births for zip code 22807.

Map 6: Total Teenage Live Births (age <17), 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 22807, 22811, 28820, 22830, 22831, 22832, 22834, 22840, 22841, 22843, 22846, 22847, 22850, 22853, 24401, 24437, 24467, and 24471.

Map 7: Total Prevention Quality Indicator (PQI) Hospitalization Discharges, 2013
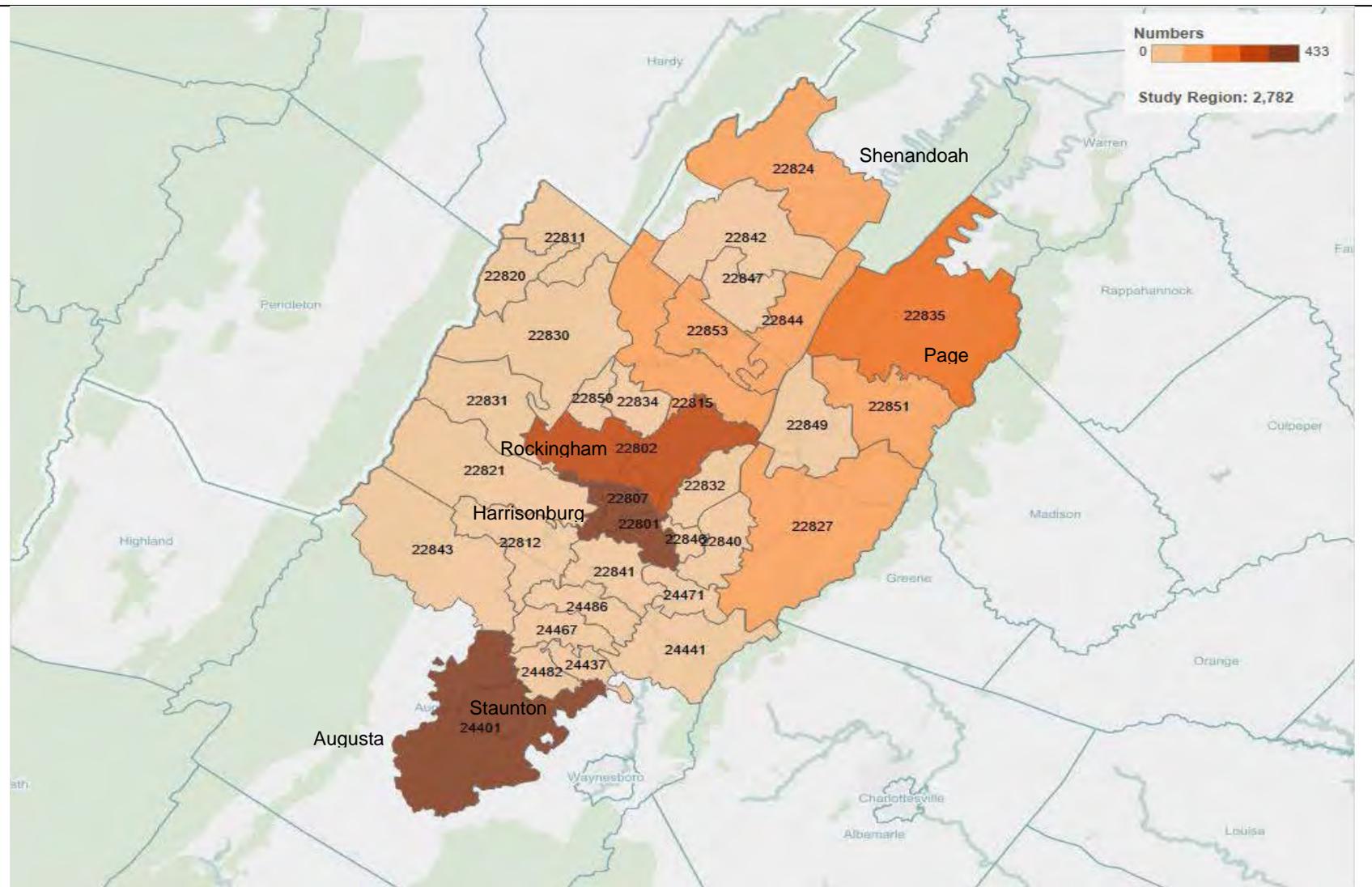
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix B. There were no reported PQI discharges for zip code 22840.

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. There were no reported Behavioral Health discharges for zip codes 22820, 22847, 22850.

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
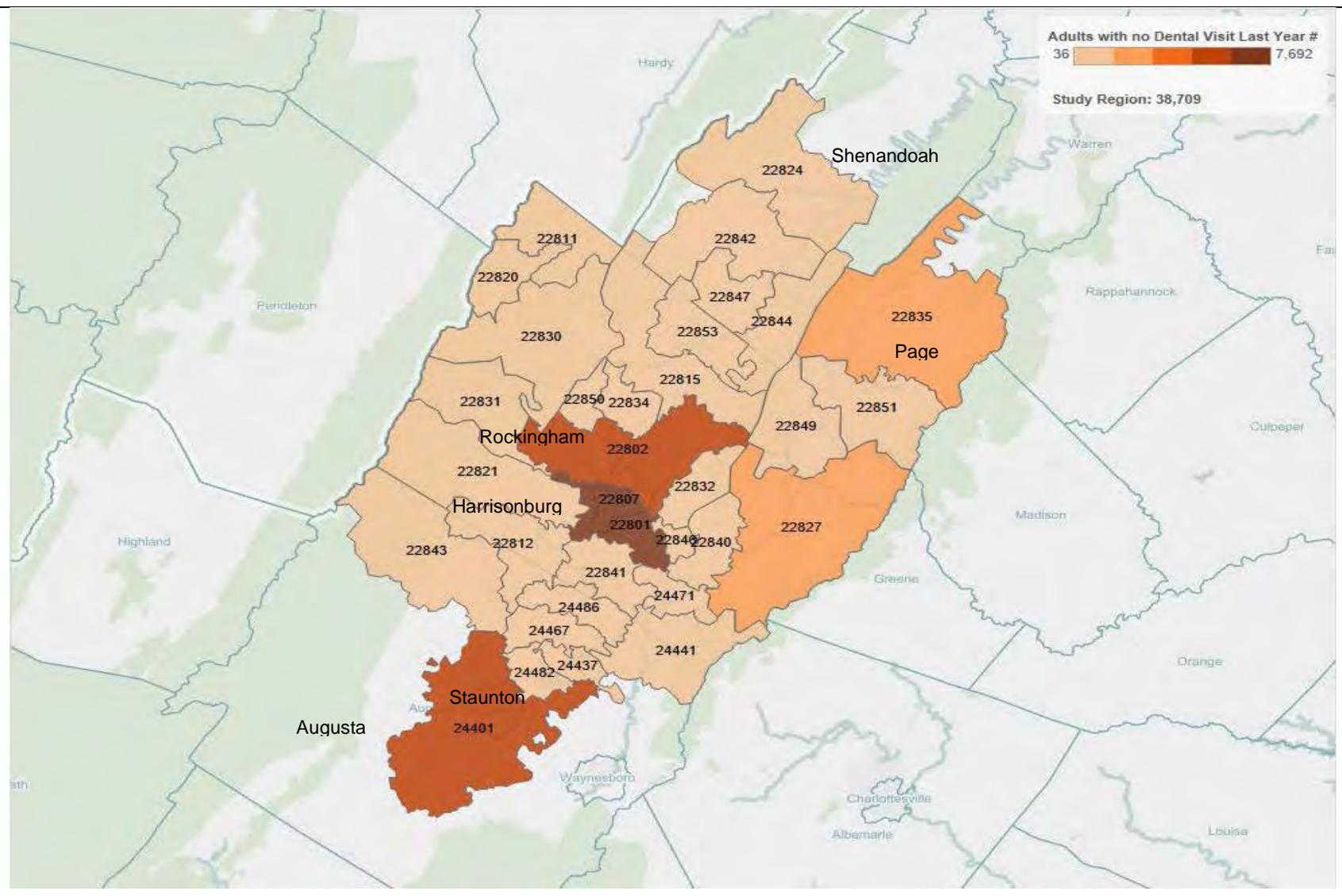
Adults with no Dental Visit Last Year #
36 [   ] 7,692

Study Region: 38,709

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
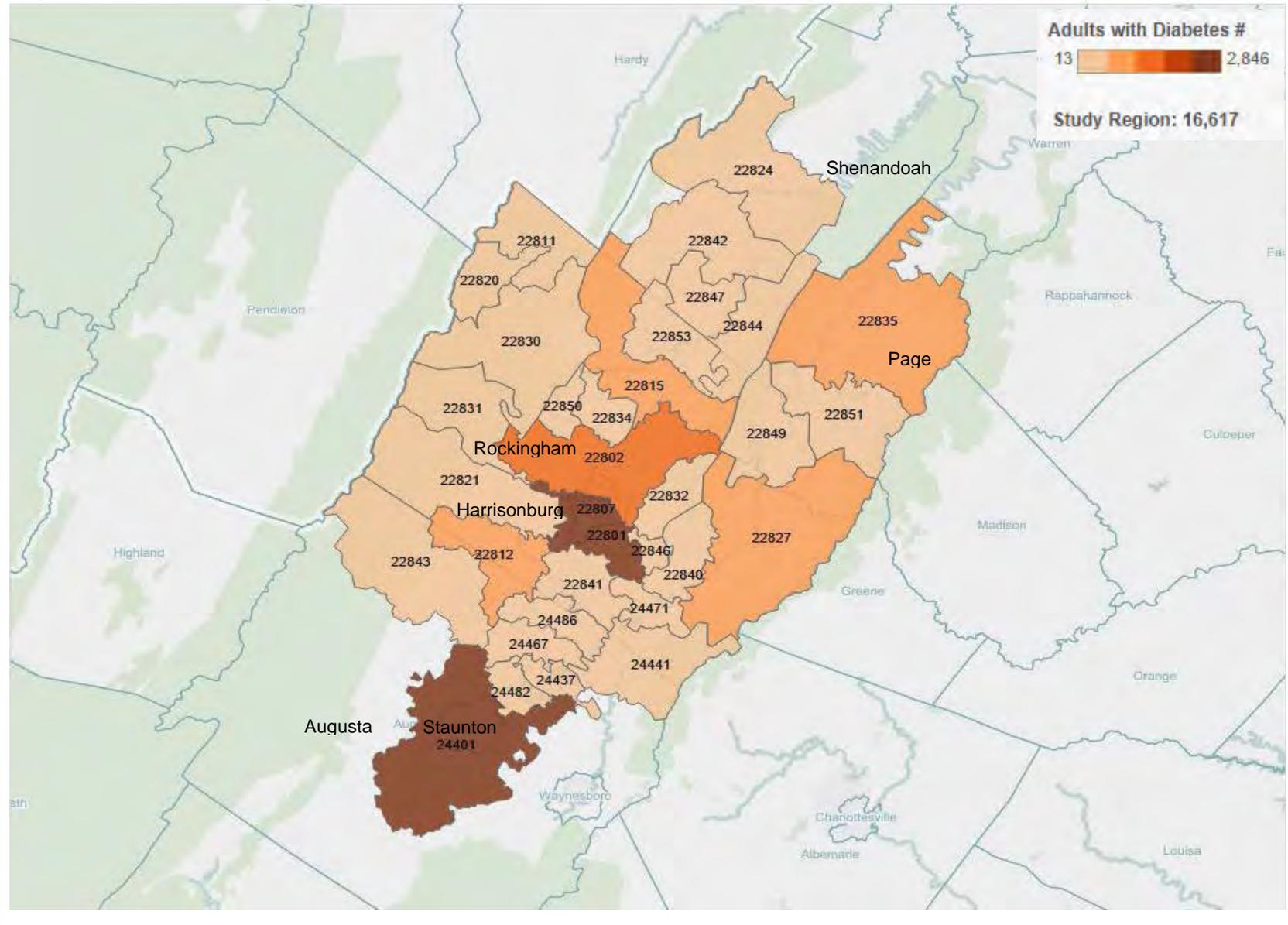
Adults with Diabetes #
13 — 2,846

Study Region: 16,617

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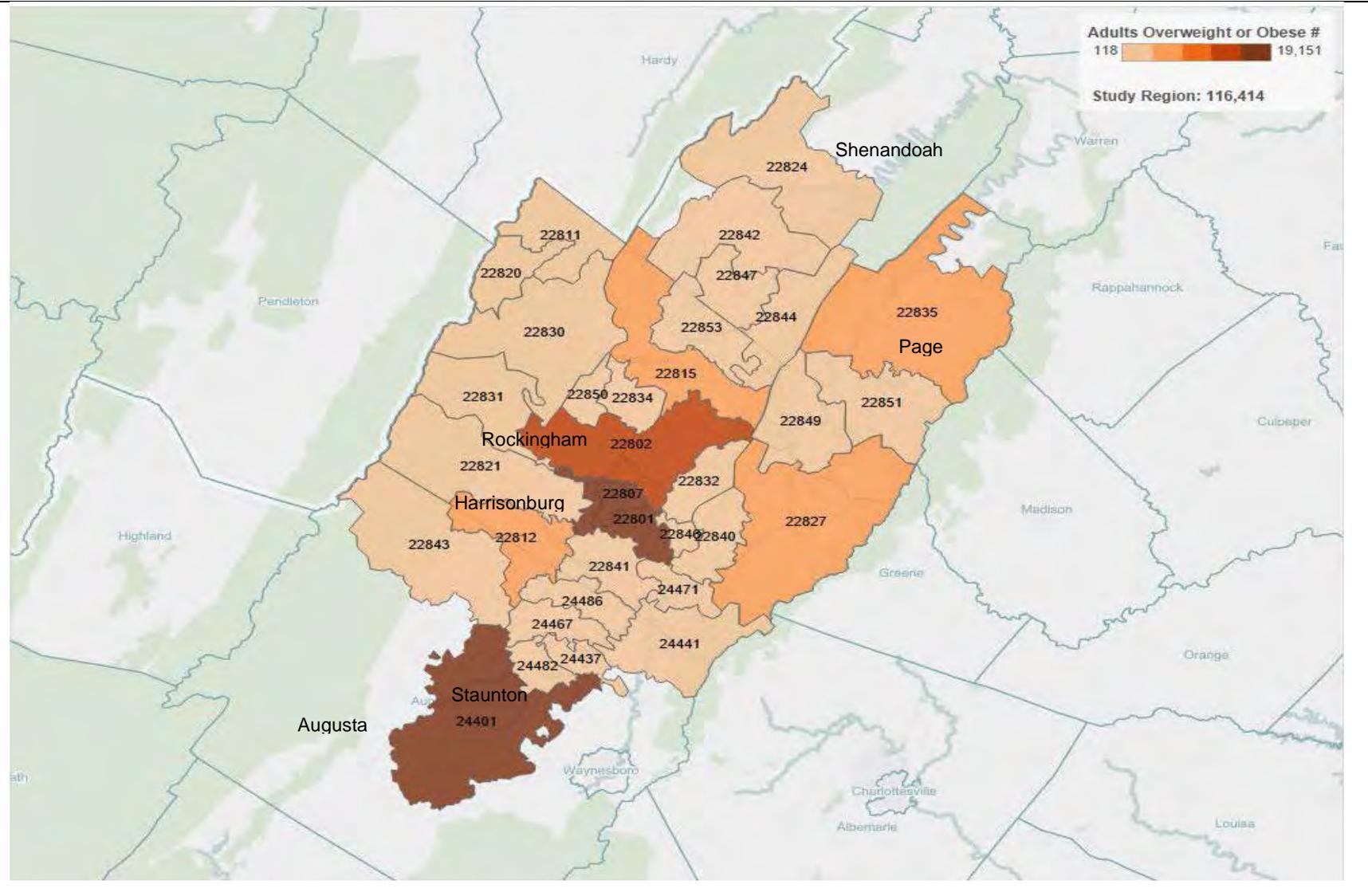
Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix B.

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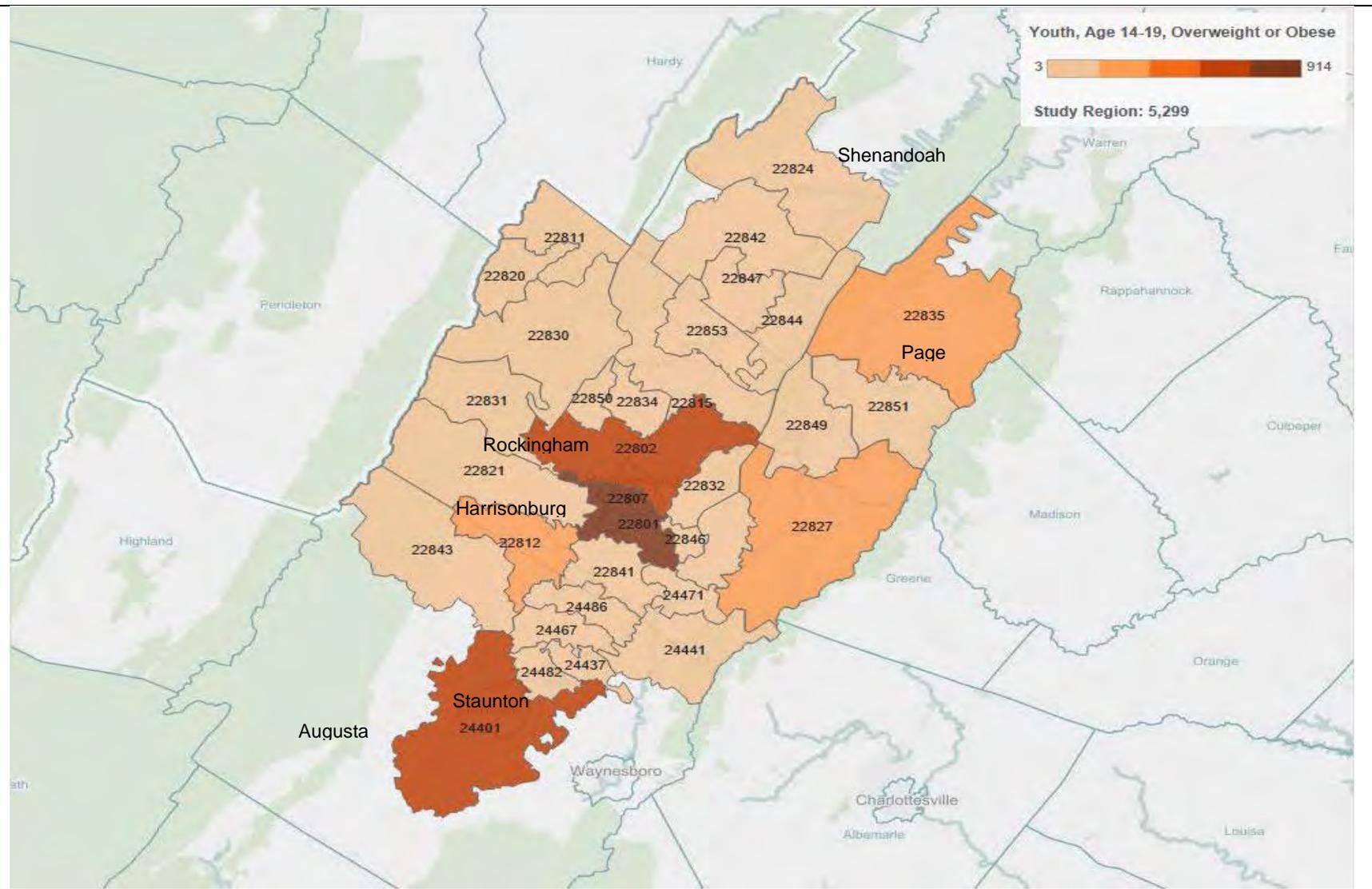
Youth, Age 14-19, Overweight or Obese

3 — 914

Study Region: 5,299

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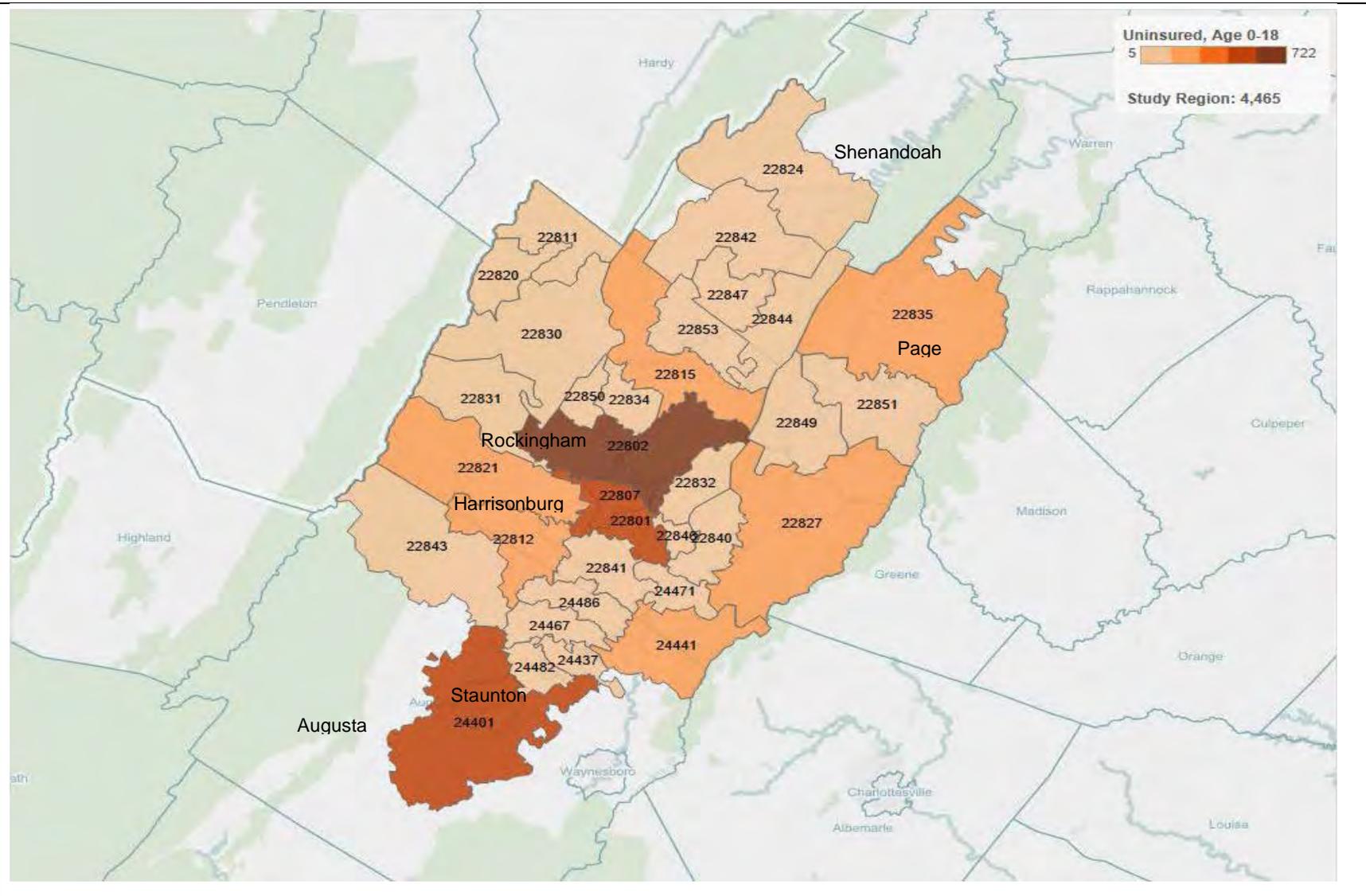
Source: Estimates of uninsured are based on Community Health Solutions analysis of U.S. Census Bureau Small Area Health Insurance Estimates (2013) and demographic data from Alteryx, Inc. See Appendix B. Data Sources for details.

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

Uninsured, Ages 19-64

26 ▭ 6933

Study Region: 31,258

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.

Zip Codes	Adults age 18+ and Overweight or Obese #	Adults age 18+ Smokers #	Adults age 18+ with Diabetes (told by a doctor or other health professional...)	Adults age 18+ with No Dental Visit in the Last Year #	Cerebrovascular Diseases, Deaths #	Heart Disease, Deaths #	High school-aged youth (age 14-19) who are overweight or obese #	Malignant Neoplasms, Deaths #	Total Behavioral Health (BH) Hospitalization Discharges #	Total Deaths #	Total Live Births #	Total Prevention Quality Indicator (PQI) Hospitalization Discharges #	Total Teenage Live Births (age <17) #	Uninsured Adults Age 19-64 Total #	Uninsured Children Age 0-18 Total
22801 Harrisonburg	19,151	4,837	2,827	7,692	16	42	864	40	168	205	390	355	7	6,933	564
22802 Harrisonburg	14,818	2,850	1,551	4,822	8	44	555	37	263	184	366	320	11	3,997	722
22807 Harrisonburg	3,410	788	480	1,383	0	0	914	0	10	0	0	5	0	1,080	122
22811 Bergton	262	40	27	72	0	3	7	1	2	9	1	10	0	57	10
22812 Bridgewater	4,742	944	697	1,279	8	18	274	13	34	96	71	84	2	1,200	228
22815 Broadway	4,287	635	733	1,034	7	19	178	17	52	75	99	102	2	1,158	240
22820 Criders	118	19	13	36	0	0	3	0	0	1	1	0	0	26	5
22821 Dayton	2,804	360	433	751	1	4	110	9	24	38	84	42	1	709	163
22824 Edinburg	3,193	1,214	534	1,204	2	15	113	15	22	59	56	105	2	800	125
22827 Elkton	5,553	1,057	961	1,893	3	18	197	25	49	96	105	171	1	1,423	280
22830 Fulks Run	988	207	81	394	0	3	27	2	17	14	10	28	0	229	42
22831 Hinton	408	50	58	91	1	0	14	2	2	8	8	8	0	102	20
22832 Keezletown	692	179	163	319	0	1	29	2	1	5	8	11	0	183	34
22834 Linville	614	98	128	167	1	2	24	2	9	12	17	28	0	168	32
22835 Luray	6,194	1,957	987	2,168	10	28	198	34	57	141	110	246	1	1,493	189
22840 Mc Gaheysville	2,008	542	494	826	1	5	84	7	4	30	39	60	0	563	117
22841 Mount Crawford	1,583	425	192	608	1	4	53	5	6	24	25	31	0	387	78
22842 Mount Jackson	2,634	746	241	622	3	14	102	11	34	49	59	79	1	648	100
22843 Mount Solon	1,327	339	177	399	1	1	46	8	10	16	28	36	0	287	43
22844 New Market	2,589	902	325	904	2	17	86	14	39	70	38	107	1	586	86
22846 Penn Laird	773	168	280	330	0	8	36	5	5	32	25	30	0	212	49
22847 Quicksburg	490	142	67	111	0	3	18	2	0	8	7	8	0	125	17
22849 Shenandoah	2,728	772	253	779	1	11	92	9	21	50	49	69	1	679	100
22850 Singers Glen	449	70	117	147	0	0	16	1	0	4	13	12	0	124	24
22851 Stanley	3,037	915	274	992	4	16	103	18	24	71	71	95	1	755	106
22853 Timberville	2,474	234	432	444	3	8	95	9	21	43	45	88	0	632	119
24401 Staunton	18,963	4,184	2,846	5,908	27	107	660	97	306	465	355	433	0	4,244	445
24437 Fort Defiance	465	137	62	181	0	1	20	4	2	8	3	10	0	103	14
24441 Grottoes	3,218	546	512	966	2	9	137	17	39	58	62	81	3	869	179
24467 Mount Sidney	1,157	260	99	308	0	3	44	3	4	17	18	15	0	254	34
24471 Port Republic	745	196	121	342	0	1	27	4	6	10	13	26	0	182	35
24482 Verona	2,777	781	340	935	0	7	95	11	22	42	41	44	1	649	72
24486 Weyers Cave	1,766	568	113	600	0	5	79	9	10	29	42	43	1	399	70

APPENDIX B: Health Status Indicators Data Sources

Profile	Source
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, plus zip code-level counts 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, plus zip code-level counts were produced by Community Health Solutions.
3) Preventable Hospitalization Profile (also Appendix A. Map 7) 4) Behavioral Health Hospitalization Profile (also Appendix A. Map 8)	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2011-2013 datasets and demographic estimates from Alteryx, Inc. (2011-2013). Data include discharges for Virginia residents from Virginia hospitals reporting to Virginia Health Information, Inc. These data do not include discharges from state behavioral health facilities or federal (military) facilities. Data reported are based on the patient's primary diagnosis. Preventable Hospitalizations-The PQI 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. For more information, visit the AHRQ website at www.qualityindicators.ahrq.gov/pqi_overview.htm *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.*
5) Adult Health Risk Factor Profile (also Appendix A. Maps 9-12)	Estimates of chronic disease and risk behaviors for adults 18+ were produced by Community Health Solutions using: • A multi-year dataset (2006-2010)from the Virginia Behavioral Risk Factor Surveillance System (BRFSS).For more information on BRFSS visit: http://www.cdc.gov/brfss/about/index.htm • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Additionally, confidence intervals are not provided because the method of statistical modeling is not compatible with traditional methods of deriving confidence intervals for point estimates.

Profile	Source
6) Youth Health Risk Factor Profile (also Appendix A. Map 13)	Estimates of risk behaviors for youth age 14-19 and 10-14 were produced by Community Health Solutions using: • Data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2013). For more information on YRBSS visit: http://www.cdc.gov/HealthyYouth/yrbs/index.htm • Local demographic estimates from Alteryx, Inc. (2014). Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are provided for reference only, and direct comparisons of local estimates with state estimates are not recommended. Additionally, confidence intervals are not provided because the method of statistical modeling is not compatible with traditional methods of deriving confidence intervals for point estimates.
7) Uninsured Profile (also Appendix A. Maps 14-15)	Estimates of uninsured nonelderly age 0-64 were produced by Community Health Solutions using: • U.S. Census Bureau Small Area Health Insurance Estimates (2013). For more information visit: http://www.census.gov/did/www/sahie/data/index.html. • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, prior year locality-level rates were used to predict current year counts and rates, with adjustments for local demographics. Confidence intervals are not provided because the method of statistical modeling is not compatible with traditional methods of deriving confidence intervals for point estimates. Additionally, populations in group living quarters (e.g. colleges) and undocumented populations may not be adequately addressed in this model.
8) Cancer Profile	Community Health Solutions analysis of: • 2008-2012 (five year total for cancer data by site) Virginia Department of Health death record data; • 2011 Virginia Department of Health Cancer Registry data.
9) Communicable Disease Profile	Community Health Solutions analysis of 2013 Virginia Department of Health annual surveillance report data.

IV. Community Insight

Community insight has been obtained through a survey of key stakeholders and focus groups. Findings are available on pages that follow.

Community Stakeholder Survey Results 2015: The Most Important Health Challenges in the Community					
ALPHABETICAL	%		BY SELECTION	%	Rankings
Adult Obesity	71	1	Adult Obesity	71	1
Alcohol Use	51	8	Substance Abuse -- illegal drugs	68	2
Alzheimer's Disease	43	13	Childhood Obesity	63	3
Arthritis	15	28	Diabetes	63	3
Asthma	17	27	Mental Health Conditions (other than depression)	32	3
Autism	28	19	Depression	58	6
Cancer	48	11	Heart Disease	52	7
Childhood Obesity	63	3	Alcohol Use	51	8
Chronic Pain	22	23	Teen Pregnancy	51	8
Dental Care/Oral Health -- Adult	42	14	Substance Abuse -- prescription drugs	49	10
Dental Care/Oral Health -- Pediatric	28	19	Cancer	48	11
Depression	58	6	Tobacco Use	46	12
Diabetes	63	3	Alzheimer's Disease	43	13
Domestic Violence	34	18	Dental Care/Oral Health -- Adult	42	14
Environmental Quality	14	29	High Blood Pressure	40	15
Heart Disease	52	7	Infant and Child Health	35	16
High Blood Pressure	40	15	Prenatal & Pregnancy Care	35	16
HIV/AIDS	9	35	Domestic Violence	34	18
Infant and Child Health	35	16	Autism	28	19
Infectious Diseases	12	31	Dental Care/Oral Health -- Pediatric	28	19
Injuries	12	31	Intellectual/Developmental Disabilities	28	19
Intellectual/Developmental Disabilities	28	19	Stroke	28	19
Mental Health Conditions (other than depression)	63	3	Chronic Pain	22	23
Neurological Disorders (seizures, Multiple Schlerosis)	12	31	Orthopedic Problems	18	24
Orthopedic Problems	18	24	Physical Disabilities	18	24
Physical Disabilities	18	24	Sexually Transmitted Diseases	18	24
Prenatal & Pregnancy Care	35	16	Asthma	17	27
Renal (Kidney) Disease	11	34	Arthritis	15	28
Respiratory Disease (other than asthma)	14	29	Environmental Quality	14	29
Sexually Transmitted Diseases	18	24	Respiratory Disease (other than asthma)	14	29
Stroke	28	19	Infectious Diseases	12	31
Substance Abuse -- illegal drugs	68	2	Injuries	12	31
Substance Abuse -- prescription drugs	49	10	Neurological Disorders (seizures, Multiple Schlerosis)	12	31
Teen Pregnancy	51	8	Renal (Kidney) Disease	11	34
Tobacco Use	46	12	HIV/AIDS	9	35
Other Health Problems	5	36	Other Health Problems	5	36

Community Stakeholder Survey Results 2015: Community Health Services that Need Strengthening					
ALPHABETICAL	%		BY SELECTION	%	
Aging Services	38	7	Behavioral Health Services	70	1
Behavioral Health Services	70	1	Health Care Services for the Uninsured and Underinsured	50	2
Cancer Services (screening, diagnosis, treatment)	11	26	Care Coordination and Transitions	48	3
Care Coordination and Transitions	48	3	Dental Care/Oral Health Services -- Adult	42	4
Chronic Pain Management Services	20	20	Transportation	42	4
Chronic Disease Services (including screening & early detect.)	39	6	Chronic Disease Services (including screening & early detect.)	39	6
Dental Care/Oral Health Services -- Adult	42	4	Aging Services	38	7
Dental Care/Oral Health Services -- Pediatric	23	17	Health Promotion and Prevention Services	36	8
Domestic Violence Services	23	17	Homeless Services	34	9
Early Intervention Services for Children	33	10	Early Intervention Services for Children	33	10
Environmental Health Services	5	30	Patient Self-Management Svcs (e.g. nutrition, exercise, taking medications)	33	10
Family Planning Services	20	20	Health Care Insurance Coverage (private and government)	31	12
Food Safety Net (food bank, community gardens)	28	13	Food Safety Net (food bank, community gardens)	28	13
Health Care Insurance Coverage (private and government)	31	12	Job/Vocational Retraining	27	14
Health Promotion and Prevention Services	36	8	Primary Health Care Services	27	14
Health Care Services for the Uninsured and Underinsured	50	2	Services for Family Caregivers	25	16
Home Health Services	20	20	Social Services	25	16
Homeless Services	34	9	Dental Care/Oral Health Services -- Pediatric	23	17
Hospice Services	8	28	Domestic Violence Services	23	17
Hospital Services (including emergency, in & outpatient)	3	33	Long Term Care Services	23	17
Job/Vocational Retraining	27	14	Chronic Pain Management Services	20	20
Long Term Care Services	23	17	Family Planning Services	20	20
Maternal, Infant & Child Health Services	17	25	Home Health Services	20	20
Patient Self-Management Svcs (e.g. nutrition, exercise, taking medications)	33	10	School Health Services	20	20
Pharmacy Services	5	30	Public Health Services	19	24
Physical Rehabilitation	5	30	Maternal, Infant & Child Health Services	17	25
Primary Health Care Services	27	14	Cancer Services (screening, diagnosis, treatment)	11	26
Public Health Services	19	24	Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	9	27
School Health Services	20	20	Hospice Services	8	28
Services for Family Caregivers	25	16	Workplace Health and Safety Services	6	29
Social Services	25	16	Environmental Health Services	5	30
Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	9	27	Pharmacy Services	5	30
Transportation	42	4	Physical Rehabilitation	5	30
Workplace Health and Safety Services	6	29	Hospital Services (including emergency, in & outpatient)	3	33
Other Community Health Services	3	33	Other Community Health Services	3	33

Question 1: *What are the important health problems in your community?*
Additional Comments

- Obesity, whether adult or childhood, is a growing problem in our area and the country as we are less active with physical work and spend too much time in front of the TV, computer or smart phone screen which contributes greatly to diabetes. We have a large college age population substance abuse is a continuing problem.

- As we serve the homeless in the many shelters, one of the biggest problems we deal with is clients have definite mental/physical problems but they have no ideas or finances as to how to take care of their issues, we do offer them treatment and if needed offer referrals to specialists. There are many that are in need of dental care but the options, for the uninsured/unemployed, are few.

- Brain Injuries

- You could check all of the ones listed but I have attempted to list the ones having a greater impact on the community

- Teen Dating Violence, Intimate Partner Violence

- Our biggest problem is that we don't have many specialty practices in this county. Thus when our Free Clinic staff tries to refer patients outside the area for care, we are often turned down because the doctors don't want to help people from outside their own locality. Since we work with low-income families, our patients always have financial barriers to getting all the health services they need.

- As a business we work diligently to provide weekly health information to our employee group. Our insurance coverage includes paid preventative care and checks for our employees and their families. In spite of that many do not take advantage of those provided services. Somehow we have to better educate our citizenry on the importance of preventative care. We see too many persons making unwise decisions about their diets, smoking, alcohol, drug abuse, lack of sanitary habits, poor personal care, etc. Many are on government support. Can the hospital reach more of these persons through education or clinics?

- Barriers to access to care - no insurance, under-insured, language barriers, cultural barriers.

- I selected those items which I believe are not only important but also overlooked currently and/or chronic.

- These are health issues about which people in our congregation and related ministries talk to me.

- Teen substance abuse is on the rise and in the face of an increase in the use of controlled substance medication for treatment of ADHD remains a concern to most pediatric providers.

There are also very limited local resources for families with autistic children, a diagnosis that is becoming more prevalent in the communities, both amongst English and non-English speaking communities. Mental health is always an issue and many primary care providers are having to work with patients in areas that are not in their scope of practice because of a lack of mental health access for both pediatric and adult patients

- All of these issues are important. However, I choose what we see most often at our clinic. Additionally, Traumatic Brain Injury services are important and needed. I think that there is a very high level of substance abuse of both illegal and prescription drugs in our community. Unfortunately, I think that our area has become a "hot bed" for drug dealers to run their activities from, since it is a more rural area and less suspect. I have heard a lot about this topic from multiple areas, and it concerns me that these people are targeting our children. Also, I think that diabetes, heart disease, and stroke continue to be a problem for the community, a problem made much worse by growing adult obesity rates.

- Items selected are ones I run across on a regular basis through various business and community activities.

- Thousands of citizens have multiple chronic illnesses.

- I believe all the issues listed are important but the items I chose seem to create more barriers to health than some of the others in the situations I am familiar with. I easily could have checked them all as they are all issues that need to be addressed.

- There are so many physical and mental health issues facing our community today. It's seems to me obesity could lead to many of them both in adults and children. Stroke, High blood pressure, diabetes, heart attack etc.

Question 2: *Which community health services need strengthening?*
Additional Comments

- Our population in general and our community in particular has an aging populace. Caring for senior citizens is becoming unaffordable and many families have all adults in the household working at full employment making it very difficult for family members to care for aging parents or siblings.

- There are dental services available but I have heard from many people who state they cannot afford to go to the dentist.

- Again, education regarding available services in the area is crucial. With the education people would know where to go and who to turn to when they have issues and lack of insurance or monies.

- Where health services are available they need to be more affordable. The price of health service should be more readily available. Posted prices on websites should be mandatory.

- Orthopedic care

- I think we have a lack of mental health care providers, especially for those who do not speak English and also for youth.

- We have no housing available to homeless men. There is no public transit and thus locals are limited in pursuing better jobs outside the area if they don't have reliable transportation. We run a charity dental clinic that serves Medicaid patients and uninsured. However we lose $150 per uninsured dental patient that receives our charity care and so must limit the amount of charity dental care we can provide. We also provide primary care and behavioral health but are limited by the amount of funding we receive. We would like to do more of these services, including possibly a model wherein we help case manage "frequent flyer" patients for hospitals. We have met and exceeded some key goals for chronic diseases as set by the Healthy People 2020 initiative.

- Dermatology

- Our population is aging and the need for services for older adults will continue to grow. In order to meet the expectations and demand of Baby Boomers current providers will need to overhaul how services are currently provided. Our community must also be prepared to provide safety net services for the people who have outlived their resources. It will be critical for current providers to work together and combine resources in order to offer services and programs efficiently.

- These are areas of concern for persons in my congregation and in related ministries.

- We need a Hospice House. We need true rehab (with a physiatrist) We need better behavioral health services, including geri-psych inpatient, and outpatient substance abuse treatment. We need better support for caregivers. We need a colorectal surgeon.

- HCHC provides health care services for the uninsured and underinsured but the demand exceeds that supply of providers available to meet these needs. Support in the other areas mentioned above will help provide a better all-around base of services for the residents of this community. School health services may be a very viable option to addressing the shortage of pediatric providers in the community for the Medicaid insured children

- Crisis mental health services - adult and children

- Many primary care offices are staffed by aging physicians, or are in clinics where physicians are frequently coming and going. Many members of the community have expressed concerns that they are unable to establish a good rapport with a family physician, and there is often distrust. When the aging physicians retire, often people are not finding someone that they feel

comfortable with to provide them with primary care, and frequently will go without. Also, there are no endocrinology services in the area. Many diabetics are forced to travel to Augusta or UVA for care for their diabetes. We, as a community, are lacking in that area. Dermatology is another area that is lacking. If someone suspects that they may have a skin cancer, they do not feel comfortable to wait for approximately 6 months to be evaluated for this. The same is true for rashes. Often, by the time that the dermatology appointment is established, the rash has cleared up. Health coverage is a national problem. Some people have expressed that, when trying to compare costs for government insurance coverage against their private coverage, their private coverage was cancelled, forcing them into a higher rate plan. Private insurance companies have been raising rates without any explanation to the public, and blaming it on the health insurance industry, while physicians and hospitals are, at the same time, receiving less and less reimbursement from the insurers for their services.

- Support for industry for occupational work injuries. RMH has distanced itself from what the community needs, i.e. willingness to support drug/alcohol screening for workplace injuries. All major companies in the community need this support 24/7 and for years RMH has declined to provide the service.

- All areas are important, but ones noted seem to need additional attention based on issues that regularly arise in our area.

- Healthcare for under insured is a big problem. Previously, uninsured patients received their drugs from the Free Clinic, now they have insurance but their deductible is so large, they cannot afford to purchase their drugs. Fewer and fewer primary health physicians will create a significant problem for us in the future, placing greater pressure on the emergency room.

- My answers are based on what I hear from workshop participants and areas I am familiar with.

- Overall I think there are many of these services provided in our community. We need to do a better job in getting that message out to the people who need them. I simply think many people in need are just not aware of what's out there.

- Legal Services to low income persons facing critical civil legal problems that can grind them into poverty if not addressed. Many such problems have health consequences. See http://medical-legalpartnership.org/, where they observe as follows: Legal Problems are Health Problems Social determinants of health – the circumstances in which people are born, grow up, live, work, play, and age, as well as the systems designed to improve health and treat illness – have a significant impact on the health and well-being of individuals and communities. Many of these social conditions can be traced to laws that are unfairly applied or under-enforced, often leading to the improper denial of services and benefits that are designed to help vulnerable people. For example, people who are wrongfully denied nutritional supports and health insurance coverage lack critical resources that are necessary to meet their daily needs. People who live in housing with mold or rodents, in clear violation of sanitary codes, are in a physical environment that

leads to illness or exacerbates existing health conditions. Seniors who are wrongfully denied benefits, such as access to supportive services or long term care, are prevented from getting the healthcare they need. These social determinants of health all constitute health-harming legal needs and they cannot be treated effectively without some level of legal care. There are five main domains where complicated bureaucracies, wrongfully denied benefits and unenforced laws commonly impact health and require legal care: income supports and insurance; housing and utilities; employment and education; legal status; and personal and family stability.

Question 3: *The mission of Sentara Healthcare is 'We improve health every day.' At your option, please use the space below to share any additional ideas or suggestions which could help Sentara RMH Medical Center.*

- I am very pleased to see RMH open outpatient facilities in New Market, Timberville and now Bridgewater to be closer to its customer. Please staff these facilities appropriately to "improve health every day".

- I have already seen a big impact from your ED nurses who are working to prevent injuries with our Safe Kids Coalition. The Wellness Center also is an advocate to help with safety. Kudos to both for a job well done and I hope we can continue to partner with them to prevent injuries in the community.

- There exists a lack of substance abuse treatment within or community, both outpatient and inpatient, and particularly in area of detox. With patients experiencing multiple care issues, the degree of specialty within the medical community can lead to coordination issues, resulting in patients unable to resolve conflicting directions between their providers

- Sentara Healthcare does great work, and very collaborative. Thank you all.

- Sentara RMH is losing its image/reputation as a community hospital that is truly concerned with the Harrisonburg/Rockingham community and its citizens.

- I live in Rockingham County and I don't see the hospital out in the community doing public education and lifestyle training. Perhaps you are already in the schools or other settings but I think there is more you could do to improve the health of the community. Thanks for asking.

- In the past month I have heard of two (different) situations when a child had an accident (both involving falling off playground equipment) resulting in broken bones (collar bone and arm). Both families were referred to an pediatric orthopedic specialist at UVA because that specialty is not offered at SRMH. There is still such a need for geriatricians – to have a firm grasp on total care for an older adult.

- I believe SRMH does an excellent job of providing health services to our community. The new facilities at Bridgewater and Timberville could offer great opportunities to work in those

communities to improve the citizens' understanding of what services are available, how to better care for themselves, the impact of poor decisions about their health, how SRMH can work together with local agencies and companies to make the general health positively impacted. Also, would like to see a way to divert so many persons from coming to the Emergency Department by seeing someone in the outlying area in more of a walk-in medical facility.

- Spend more time focusing on Quality. Focus on satisfaction of quality employees who have good track records. We have lost a tremendous number of seasoned staff who have not felt valued and went to work for other facilities where they feel better valued. Many of the remaining seasoned staff with whom I speak feel overworked and are dissatisfied. This has led to numerous younger inexperienced staff who will likely do well in the future but has led to inadequate staffing and less than optimal patient care both inpatient and outpatient.

- Inpatient Endocrinology Services Mental Health services for "worried well" not just major mental illness (bipolar, schizo affective etc) Diabetes Prevention

- Sentara RMH is a wonderful community partner. Please continue to explore avenues for partnership as the healthcare system continues to evolve.

- Work closely with the school system and open a clinic at the high school. This will help with preventative care and family planning issues. It will also allow underserved families have greater access to health services. Great need in our community is children mental health services. Greater outreach with the schools would be beneficial. Finally any support to address obesity and poor nutritional habits would be a plus. The school system is ready to partner in all of these areas.

- Continue to strengthen service lines, ie Ortho, and grow Peds a bit more. Most complaints i hear are financial issues, rarely a care issue.

- Continue to work with the long term care providers in the community.

- I am interested in why Sentara is surveying Shenandoah County leaders when we have a hospital/health care system in place.

- Engage more with community organizations that offer services that will allow you to meet or enhance your mission.

- Sentara cannot be all things to all people so I would suspect increased collaboration is vital to provide all the services our community needs and wants.

- As a pastor I would like to know whether Sentara has any provision for helping households who have exorbitant medical expenses to have their bills reduced or develop payment plans. I really don't know what Sentara offers in this regard. I also don't know how many "medical bills" piling up among some persons in the community are from services provided by Sentara and how many come from other health service providers. The reality is that households keep all of these in one

"pile" and need to manage them comprehensively. Does Sentara provide any comprehensive evaluation of medical bills, so that households can create a plan to deal with all of these?

- As there is more aging in the community, there is a need for additional services. Many folks must do without medication in order to have food or heat for homes. They do not have funds for the necessary things in life.

- I think we could improve end of life care in our community by building a hospice house and providing better support for caregivers and better support for children of dying parents. I think we should focus on improving education of physicians/providers in how to have conversations about prognosis, treatment and end of life care. I'm proud that SRMH focuses on our community needs!

- School health services that address the primary care needs of school aged children may improve access to health services, thus decreasing the need to access the emergency room for non-emergent visits As our community grows, need to continue to evaluate the demand for a trauma level ED response, as opposed to flying the patient to UVA or Winchester.

- Build a better reputation within the community. Community members within the Shenandoah Valley trusted the RMH brand. Many of them are suspicious about Sentara, and the reputation of the hospital has become somewhat besmirched. Until Sentara is able to provide quality service and get the word out to the community, that tarnished reputation will continue to fester. The Shenandoah Valley is a very close-knit, family-based community. The community does not take well to "outsiders". One way to improve that would be to step up the emergency services. Often, community members relay a bad emergency room experience, which will spread like wildfire. It may be time to evaluate the ED staffing situation, and perhaps rework it. I am simply relaying to you the things that I have observed within my community as a healthcare provider. I, personally, have had good experiences with Sentara Healthcare, and I appreciate what you are doing to advance healthcare within the community. Keep up the good work!!

- I would love to see a continued focus on community health and collaboration with other community organizations.

- Physical access to health care (as well as to other essential services and to employment) is an issue that will require some strong local leadership that can convince the County Board of Supervisors that public transportation really IS a public responsibility. Because of federal and state transportation policies and funding formulas, public transportation really is the ONLY affordable way to address mobility needs of the many groups who need help and local government MUST be supportive for this to be even a possibility, much less a reality. Local dollars are essential and it is difficult to imagine the County putting up the amount that would be required to "draw down" federal and state dollars. Harrisonburg has a very good public transportation system and the JMU participation and funding is a major factor in their success. Could Sentara play this role in the County?

- Mission statement seems fine. Would suggest it is the underlying critical success factors that would be important to most folks. That would include improving health every day by delivering health information and services in a caring, efficient and effective fashion. Also would suggest that communications is an area for ongoing attention both at a high level with the community at large and also when an individual is interacting with the hospital and its personnel whether on a routine basis when seeking information and guidance or on a more pressing basis when a family member is in the hospital.

- Closer coordination with the Free Clinic to keep chronically ill patients out of the emergency room.

- I would like to see improved cooperation and coordination between SRMH and community based organizations and at times, more realistic expectations for what nursing staff should be able to manage.

- We need to make the ENTIRE community aware of the services not only Sentara provides, but all the social, mental and health services that are available in our community.

- Lead the discussion on preventative care and the importance of educating our population on how to lead healthier lifestyles. Few agencies and RMH react or respond to critical and acute needs and despite what most hear or see about wellness initiatives we don't see compelling enough stories or cases to change the fundamental behaviors (typically doesn't happen until people personally suffer heart attack or are diagnosed with a significant medical condition.

- We would like to explore the concept of a legal-medical partnership with Sentara Healthcare in order to better collaborate on the needs of our shared clients. See http://medical-legalpartnership.org/ generally.

FOCUS GROUP FEEDBACK

1) What are the most serious health problems in our community?
   - Poor lifestyle choices-underlying issues related to no access to healthy food, little exercise, smoking
   - Behavioral health—accessing services, available services are limited
   - Mental health issues caused by childhood trauma
   - Post-traumatic stress related to cultural diversity, past experiences from other countries
   - Drug seekers
   - Caregiver burden and caregiver stress
   - Care for dementia and alzheimer's patients
   - Means to care financially for these conditions which puts them at risk of other health concerns
   - Management of chronic health conditions, i.e. understanding, education, financial, transportation, med management, care coordination
   - Person's ability to implement actions associated with recommended care
   - Insufficient number of geriatricians
   - How to help GPs become better educated about geriatric medicine
   - Cost of care, Medicare system, reimbursement to providers, ability of MDs to be able to provide the amount of care required
   - Time associated with multidisciplinary treatment needs
   - Mental health – specifically depression
   - Lifestyle, lack of exercise, poor sleep habits, and preventative health care, economically disadvantaged populations are affected.
   - Behavioral health
   - Primary care – they wait until they have to go to ED
   - Multiple chronic conditions
   - Mental Health
   - Trauma and Mental Health for non-English speakers
   - Lack of insurance coverage – if Medicaid was expanded this would help
   - Access to dental care
   - Substance abuse and lack of treatment options as well as people who suffer from both substance abuse and mental health
   - Obesity
   - Affordable prenatal care
   - High conflict – mental health within family regarding chronic healthcare
   - Lack of advocacy for people, they don't know what questions to ask providers
   - Access to health – lack of reliable transportation
   - Lack of understanding Medicaid benefits
   - No time, cannot afford to care for themselves or families
   - Physical activity, sounds like it is getting worse

- Addiction to prescription drugs
- Lack of money/resources to buy over the counter meds, able to get to the doctor, buy groceries
- High insurance deductibles
- Obesity,
- complaints about getting healthcare and
- utilizing insurance – lack of insurance
- lack of primary care physicians in community
- Lot of healthcare issues stem around lack of education – don't know how to eat healthy, don't go to the doctor
-

2) Who/what groups of individuals are most impacted by these problems?
- Low income
- Non-English speaking, primarily female (often women alone, unable to advocate for self)
- Homeless, no stable living environment
- Those without access to internet/computers/phones
- Those unable to read or write
- Those without transportation/consistent transportation
- Middle age, first diagnosed with chronic disease
- Individuals of limited income
- Adult children/family as caregivers, especially spouse
- Isolated, homebound, institutionalized
- Hospital, the numbers would indicate that better case management is needed
- Also, VPAS. The demand for services is growing and many senior agencies are already at capacity
- Failure of senior population to have access to the technology
- Those highly anxious
- The uneducated and illiterate
- Those who fail to take responsibility for their own health, those who rely on others to tell them what to do (generational differences)
- Seniors who live in rural areas
- Children who live out of the area
- Assisted living facilities at or above capacity
- Limited or no income
- Other than English speakers
- Low income seniors
- Those lacking education
- Victims of violence/domestic violence
- People with disabilities
- Children

- People who are isolated/don't have transportation
- People who lack support
- Employers/impacted by employees who don't have support
- Homeless or living in temp housing
- Cultural expectations not understood
- Undocumented
- Unemployed or displaced persons
- The elderly
- Economically disadvantaged
- Non English speakers
- Children – one in four depressed
- Those that are underqualified for certain benefits – the working poor – a donut hole group
- Mentally ill
- Undereducated
-

3) What are the barriers to achieving good health? (Clarifying: What keeps people from being healthy?)
- Language
- Social isolation, support
- Finances
- Healthy lifestyles
- Rural areas
- Restaurant choices-Bojangles/Popeyes, healthy options not as accessible and more expensive
- Not many walkable areas, lack of sideways
- Easier to take a pill, shot than to make a lifestyle change
- Lack of Medicaid expansion
- Health care coverage difficult to navigate, coverage not consistent
- Unable to consistently reach patient (minutes run out at the end of the month)
- No or unreliable transportation
- Mental health issues
- Unsure of how small steps=gains, chronic despair
- Cognitive abilities
- Education levels, providing appropriate/understandable information to patient
- Lack of coordination of care-process is confusing for patients with need for multiple resources
- Cultural coherence
- Lack of knowledge about available community resources (chronic care management classes)

- Competing priorities for finances
- Many patients are in "survival mode"—difficult to focus on prevention
- Persons in the community who don't know where to turn
- Failure to understand the systems and how to access
- Resources that are available and how to navigate
- Lack of transportation, convenient and accessible – problems especially in the county
- Lack of an advocate
- Lack of personal responsibility
- Life style factors, choosing not to exercise, nutrition issues
- Dental and hearing resources – issue of affordability
- Denial, apathy, depression
- Lack of planning and failure to create a plan
- People not wanting to spend the resources they have saved
- The longevity of the money needed to provide the care required, given that they may live longer than anticipated
- Difficulty saving adequately for the cost of current LTC
- Cognitive ability to coordinate the transportation needed, difficulty reading bus routes
- Limited number of volunteers to support services that are available
- Do the right roles exist to help people use the systems available
- Lack of auxiliary grant beds, Medicaid beds for assisted living
- Lack of insurance
- Transportation
- Poverty
- Cultural barriers
- Fear
- Language
- Availability of services like substance abuse, high risk pregnancy
- People don't know what preventative care looks like
- Lack of good support system
- Literacy
- Violence or trauma
- High conflict – crisis
- Lack of knowledge of what their options are
- Accessibility
- Changes in payment system, people can't get colostomy supplies, people don't have a clue
- Cost – time and money
- Failure to recognize warning signs
- Not Understanding consequences of a diagnosis – or the long term impact of a diagnosis – for example diabetes

- Lack of primary care physicians and specialists in the area
- Historical norms – continuation of bad habits of growing up a certain way – i.e. the big greasy breakfast – norms of poor health behaviors
- Access to quality foods – healthy or fresh fruits and vegetables – lack of access to good quality foods
- Cost barriers – or price tradeoffs – a salad costs more than mac and cheese
- Cultural barriers – food choices based on family
- Transportation – particularly for the elderly
- Most at risk – elderly and homeless – lack of support network and people to encourage them to go to the doctor or take care of themselves
- Lack of access to sensible charity care (not ER)

4) What is being done in our community to improve health and to reduce the barriers? (Clarifying: What resources exist in the community?)
- Community Health Workers
- Chronic disease management classes
- Continuum case managers (SRMH)
- Chronic disease self-management and workshops
- Great effort through many services, opportunity to workshops and getting access to these materials (getting the materials to the seniors – seniors not paying attention until they need it)
- Lots of collaboration in community
- Politically – lack of initiatives around senior health (i.e. senior friendly task force to make sure we have a senior friendly community
- City/County recreation; retirement communities all have wellness programs; also SRMH Wellness Center programs
- Healthy Community Council
- Programs through Senior Centers; i.e. Meals on Wheels
- VPAS – helping senior to understand their benefits; working closely with social service agencies to help seniors gain access to services
- We have support services to implement but difficult to get the information to that person and that person's ability to hear it
- Case managers through insurance companies
- Different places are providing affordable care information and assistance
- Collaboration between organizations
- Early education to children about nutrition, violence prevention
- Health needs assessments
- Identifying when people are not following through, is it transportation? Identifying root cause for issues – care coordination
- Good referrals to primary care physicians
- Bike and walking paths initiatives in the community (2x)

- Employers offer benefits like reduced cost for membership at Wellness Center
- More awareness of corporate social responsibility
- Medical interpreters are being trained and are available
- Celebrating diversity – periodically, International Festival
- Hospital initiatives to go out where people are, like mobile mammography van and other such services
- Health type programs offered by organizations
- Youth sport organizations offering scholarships
- Comprehensive sex education in the schools
- More seminars and workshops to get information out there
- Suitcase clinic
- Free clinic
- Community health center
- CSB – Community Service Board
- Food pantry
- Gardens in the summer by some group
- Our Community Place
- Soup kitchens
- Outside groups doing health and awareness education – smoking cessation and other community initiatives

5) What more can be done to improve health, particularly for those individuals and groups most in need?
- Increased/easier access to mental health services (the process is very complication when services are available)
- Local substance abuse resources, with residential arm (including uninsured population)
- Care for those "just beyond primary care"—caught in the middle
- Healthy spaces places, safe space (weights, blood pressure, talk about diet, etc.), right in their community
- Increased dental resources, increased preventative care (dentists that see patients with additional financial assistance—sliding scales do not work effectively)
- Availability for dentures and hearing aides
- General DME needs (knee braces, sleep apnea machines, etc.)
- Increase ability to do home visits
- Increase collaborative efforts with Promotoras
- RMH networking to refer patients/families to services that are available. Still many in community who do not know what services are available
- Understanding of OBV vs admission status, how related to services available through Medicare, etc.
- Families being told by care managers that they can't see a social worker; role clarity issues

- MDs and office staff having information about resources in the community or at a minimum referring to a service to help
- Would help if there was a senior clearing house for services that medical offices and others could access;
- Access to information about Senior Navigator, state on-line repository for information (not always kept current)
- Hospital could collaborate better with agencies in place – help through RMH Foundation grants, etc.
- Hospital continue to work with transportation system in Harrisonburg to change routes to be more senior friendly
- Need for the hospital to better care for patients with dementia and, especially, patients with dementia and psychiatric conditions
- Teach staff on medical units how to deal with dementia patients
- Reach out to LTC facilities to provide for the needs of geripsych patients
- Working more closely with JMU and EDU to properly train students to work with older adults; include all current health care providers
- The VA often gets overlooked in regard to services available (provide day care, help in the home, etc)
- Transitional Care Team is appreciated and on the right path
- Concept of a "time bank" and home visitation
- Volunteer Department – use this group as a "train the trainer" program to educate the community
- Expand Medicaid
- Detox center/mental health
- Transportation to reach certain areas of county
- Expand city transportation to Sundays, holidays,
- More sidewalks to encourage walking
- Financial workshops
- Reduce speed limit of roads
- Substantial programs to address obesity issue
- Work more with lower income to understand health services
- People feel bullied, find ways to pay, get assistance, when they apply for financial assistance
- More collaboration
- More outreach programs to go out into the communities, instead of inviting people to hospital where they cannot get to
- What is available for the community, education, go where the people live
- Help connect people to resources
- Focus on areas with high need

- Addressing financial issues related to patients who are not the responsible parties, but their credit scores are ruined,
- ER visits – more support, redirect people, help prevent people from going back to the ED
- Better educating emergency services people, to redirect, things can be done like the medical suitcase clinic, but communication with the ED is not working, large collaboration but piece missing, include safety net providers, if all could be involved (agencies)
- We need programs that go out to the community, like Hand in Hand, Resources Mothers – they help identify issues that providers might not realize it is a problem.
- Take time to educate, don't just hand people a pill and a paper, you need to educate on diet change and exercise, people don't grasp, they say they understand when they don't, needs more follow-up.
- Additional partnering with churches and other charitable faith organizations
- Continuing to move out into the community – going to the people and taking the services to people rather than bringing them in
- More nurse case managers and more follow up with patients that are at greatest risk to make sure getting medications, doing the procedure, following healthy life-style plans
- Increasing education for patients and families as to where to get help

V. Appendix

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

Sentara Community Health Needs Assessment Implementation Strategy

2014 Implementation Strategy Progress Report

Hospital: SENTARA RMH MEDICAL CENTER

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

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

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

The quarterly report should include only <u>key</u> 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
Teen Pregnancy	1. Continue to offer Hand-in-Hand Resource Mothers program, a support and educational program for pregnant and parenting teenagers.	1. Hand-in-Hand served 108 teen parents and their babies in 2014. 1. Hand-in-Hand was one of three Resource Mothers sites statewide selected to participate in the Virginia Dept of Health & University of Virginia research study to become an evidence-based program.
	2. Continue to participate on the Healthy Community Council "Reducing Teen Pregnancy" Action Team.	2. Hand-in-Hand Coordinator participated on Action Team. 2. May 2014: National Day to Prevent Teen Pregnancy awareness activities conducted at all local high schools in the city and county.
	3. Continue to offer "Staying Connected With Your Teen" evidence-based parenting classes.	3. Two 13-week sessions offered in 2014.

Health Problem	Three Year Implementation Strategies	Progress
	4. Partner with James Madison University to implement the Personal Responsibility Education Program grant.	4. Three SRMH Community Health programs were subcontracted to provide services for the grant. 4. May 2014: Office of Minority Health "Youth Empowerment Program II" grant application submitted – application was approved but not funded.
Adult & Child Obesity	1. Continue to provide leadership to the Healthy Community Council Obesity Action Team. 1a. Continue to work with local schools to promote the Safe Routes to School Program and safe walking & biking to school. 1b. Continue to seek funding in areas of community need. 2. Continue to offer fitness and weight management programming. 3. Expand and coordinate SRMH health coaching services.	1. SRMH Community Health Manager chaired the community action team. 1a. Feb 2014: awarded 2-year VA Foundation for Healthy Youth grant to implement SRTS program activities (SRMH was also awarded this grant for 2012-2014). 1a. Aug 2014: awarded 1 year VA Dept of Transportation grant to implement additional SRTS non-infrastructure activities. 1b. Mar 2014: OASH National Prevention Partnership Awards grant submitted to conduct Health Risk Assessments and targeted follow-up for physically, socially, culturally and otherwise isolated populations – not awarded. 1b. 2014: SRMH Community Health provided free Health Risk Assessments and follow up education & coaching for 167 individuals at local subsidized housing complexes and senior centers. 2. Progressive Exercise and Right Weigh programs offered by SRMH Wellness Center. 2. Eight youth referred by H-R CSB receive scholarships to participate in the KidFIt youth weight management program. 2. Weekly community walking program In the Loop offered by SRMH Community Health. 3. Sept 2014: SRMH health coaching services evaluated, it was decided to not move forward with expansion at this time.
Diabetes	1. Continue to offer Stanford Chronic Disease Self-Management Program. 1a. Increase capacity to provide CDSMP.	1. Three CDSMP sessions offered through SRMH departments (Women's Center, East Rockingham Health Center, and Community Health), as well as 11 other community locations. 1a. March 2014: Community Health employee became certified

Health Problem	Three Year Implementation Strategies	Progress
		as CDSMP Master Trainer.
	2. Continue to seek grant and funding opportunities in area of community need.	2. Aug 2014: RMH-JMU Collaborative research project begun, consisting of the Diabetes Prevention Program and a high-intensity interval training research component.
		2. 2014: SRMH Community Health provided free Health Risk Assessments and follow up education & coaching for 167 individuals at local subsidized housing complexes and senior centers.
	3. Continue to offer fitness and weight management programming.	3. Progressive Exercise and Right Weigh programs offered by SRMH Wellness Center.
	4. Continue to provide Diabetes education through SRMH Clinical Education department.	4. 2014: Diabetes Clinical Educators began weekly diabetes clinic at SRMH South Main Health Center and biweekly clinic at East Rockingham Health Center.
	4a. Provide screenings at community events and health fairs.	4a. Screenings provided by Diabetes Clinical Educators at International Festival, Aging Gracefully conference.
Heart Disease	1. Continue to offer Stanford Chronic Disease Self-Management Program.	1. Three CDSMP sessions offered through SRMH departments (Women's Center, East Rockingham Health Center, and Community Health), as well as 11 other community locations.
	1a. Increase capacity to provide CDSMP.	1a. March 2014: Community Health employee became certified as CDSMP Master Trainer.
	2. Continue to offer Heart Check program, an individualized risk assessment screening for coronary heart disease by a cardiac RN.	2. Heart Check heart health screening and coaching session offered to patients at low or no cost.
	3. Improve hospital-to-home transitions.	3. Feb 2014: Care Transitions Steering Team established; Readmissions Improvement, Discharge Planning, and Post-Discharge Planning subcommittees established.
		3. 2014: two Continuum Care Manager RNs hired to follow high-risk chronically or complex medically ill patients from inpatient hospital stays to community or home setting.
	4. Research best practice tobacco cessation programs and explore funding opportunities to implement.	4. 2014: Tobacco cessation specialist offered individual coaching services to 14 patients.
		4. 2014:Tobacco cessation specialist offered six group coaching

Health Problem	Three Year Implementation Strategies	Progress
		classes throughout the year, including one at Friendship Industries to serve disabled and special needs adults. 4. Free smoking cessation classes were offered to all United Way partner agencies and their clients.
Cancer	1. Continue offering oral, skin, breast, and prostrate screenings.	1. Free cancer screenings offered at the SRMH Hahn Cancer Center during Breast Cancer, Prostate Cancer, and Oral Cancer awareness months. 1. 2014: 98 uninsured/underinsured women received free mammograms through the RMH Foundation free mammography program. 1. Feb 2014: CT Lung Cancer screening program implemented through SRMH Imaging Services; SRMH Community Health partnered to provide tobacco cessation coaching to program participants for free.
	2. Continue to offer mobile mammography services.	2. 2014: 2,565 patients received mammograms through mobile mammography services at 151 community locations.
	3. Increase colon health awareness.	3. Mar 2014*: Colon Health 101* offered in March during Colon Health Awareness month by Endoscopy, Community Health, and Harrisonburg Medical Associates.
	4. Research best practice tobacco cessation programs and explore funding opportunities to implement.	2014: Tobacco cessation specialist offered individual coaching services to 14 patients. 4. 2014:Tobacco cessation specialist offered six group coaching classes throughout the year, including one at Friendship Industries to serve disabled and special needs adults. 4. Free smoking cessation classes were offered to all United Way partner agencies and their clients.
	5. *NEW* Conduct Oncology Needs Assessment.	5. Sept 2014: Oncology Needs Assessment completed; results shared with Cancer Committee and other stakeholders to guide Hahn Cancer Center strategic planning.
Mental Health & Substance Abuse	1. Continue to participate on the Healthy Community Council "Integrating Health and Mental Health" action team.	1. RMH Community Health staff member participates on the action team. Action team is continuing to work on updating

Health Problem	Three Year Implementation Strategies	Progress
		the region's Mental Health Resource Directory.
	2. Continue to offer free depression screenings, inpatient consults, support groups, and educational workshops to community members.	2. SRMH Behavioral Health provides these services.
	3. Continue to provide two free counseling sessions to patients and community members affected by loss.	3. SRMH Grief & Loss services provides two free sessions to any patient or community members.
	4. Continue to employ best practice environmental strategies to reduce youth substance use.	4. The Strong Families Great Youth Coalition/SRMH Community Health implemented the following strategies in 2014: saturation patrols by law enforcement, Parents Who Host, Shout Out social media campaign, Social Norms radio/TV/movie ad campaign, and Drug Take Back Day
	5. Embed Behavioral Health Consultants at SRMH clinics to screen for mental health conditions and make appropriate referrals to behavioral health services.	5. Behavioral Health consultants at Funkhouser Women's Center and East Rockingham Health Center continue to consult and provide referral services for clinic patients.
	6. Provide leadership to the Central Shenandoah Valley Family Partnership to improve outcomes for families with substance abuse issues.	6. 2014: Specialized Treatment and Recovery Services (STARS) program provided home-based recovery services to 196 parents/caregivers.
	7. Research best practice tobacco cessation programs and explore funding opportunities to implement.	7. 2014: Tobacco cessation specialist offered individual coaching services to 14 patients. 7. 2014:Tobacco cessation specialist offered six group coaching classes throughout the year, including one at Friendship Industries to serve disabled and special needs adults. 7. Free smoking cessation classes were offered to all United Way partner agencies and their clients.
	8. Offer GrandPEAS support group for grandparents raising grandchildren .	8. 2014: Lacey Springs GrandPEAS support group continues to meet (8th year). 8. 2014: implemented second GrandPEAS support group at South River Elementary School in Grottoes.