

A Community Health Needs Assessment
Prepared for Children's Hospital of The King's Daughters
By Community Health Solutions
May 2013

PREFACE

By Management of The Children's Hospital of The King's Daughters

Children's Hospital of The King's Daughters Hospital (CHKD) wishes to thank the many members of the community who assisted with our Community Health Needs Assessment (CHNA). This CHNA report includes the results of the assessment.

While CHKD has been involved in analysis and evaluations of its service market and patient population in the past in order to plan for its service offerings throughout its history, this report represents the first formal comprehensive community health needs assessment conducted by CHKD.

CHKD defined community for the purposes of this assessment based on the geographic region served by CHKD, its patient population and the nature of services it offers. No patients were excluded from consideration based on their ability to pay. Medical underserved areas, if any, within the geographic areas were not excluded.

This community health needs assessment was conducted during the period January 2013 through May 2013. Governmental and private agencies serving the needs of the community participated in the assessment, including agencies serving medically underserved, low income and minority populations. These agencies are listed on page 4 of this Report.

Based on the assessment, CHKD has identified the following prioritized list of community health needs:

Priority Issues

1. Child abuse
2. Childhood obesity
3. Infant mortality/morbidity
4. Health promotion and prevention

Additional Issues

- Asthma
- Behavioral health (limited to services provided for children hospitalized or receiving outpatient care for medical/surgical conditions)
- Case management services
- Intellectual and developmental disabilities (including autism)

The health needs identified in this report and CHKD's plans to address the needs are further discussed in CHKD's Implementation Plan (the Implementation Plan), which is a separate document from this Report and also available on the CHKD website at www.CHKD.org.

This Report applies to the three separately licensed facilities owned and operated by CHKD: The Children's Hospital of The King's Daughters, in Norfolk, Virginia; the Princess Anne Outpatient Surgical Facility in Virginia Beach, Virginia; and the Oyster Point Outpatient Surgical Facility in Newport News, Virginia. Each of these facilities serves the CHKD community and treats and bills patients under the name of Children's Hospital of The King's Daughters. This Report and the Implementation Plan were

adopted on May 21, 2013 by the Children's Health System, Inc. Board of Directors, the governing body for CHKD and its two outpatient surgical facilities.

The CHNA Report and the Implementation Plan are published on the CHKD website, www.CHKD.org.

The Implementation Plan discusses the many activities in which CHKD engages to address the needs identified in this CHNA Report. In addition to resources provided by CHKD, CHKD maintains lists of resources and community agencies that are available to assist individuals and families with health related services which are outside CHKD's mission and not included in the services offered by CHKD. These lists are available upon request from the CHKD Social Work Department by calling 757-668-7273.

Again, CHKD extends its thanks to all the members of its community who assisted with this assessment.

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Executive Summary

The vision of Children's Hospital of The King's Daughters (CHKD) is to "lead the region as the preferred provider of quality children's health services." With this vision in mind, CHKD commissioned Community Health Solutions to conduct this community health needs assessment (CHNA).

The study focuses on 29 localities, in both Virginia and North Carolina, identified by CHKD as its study region:

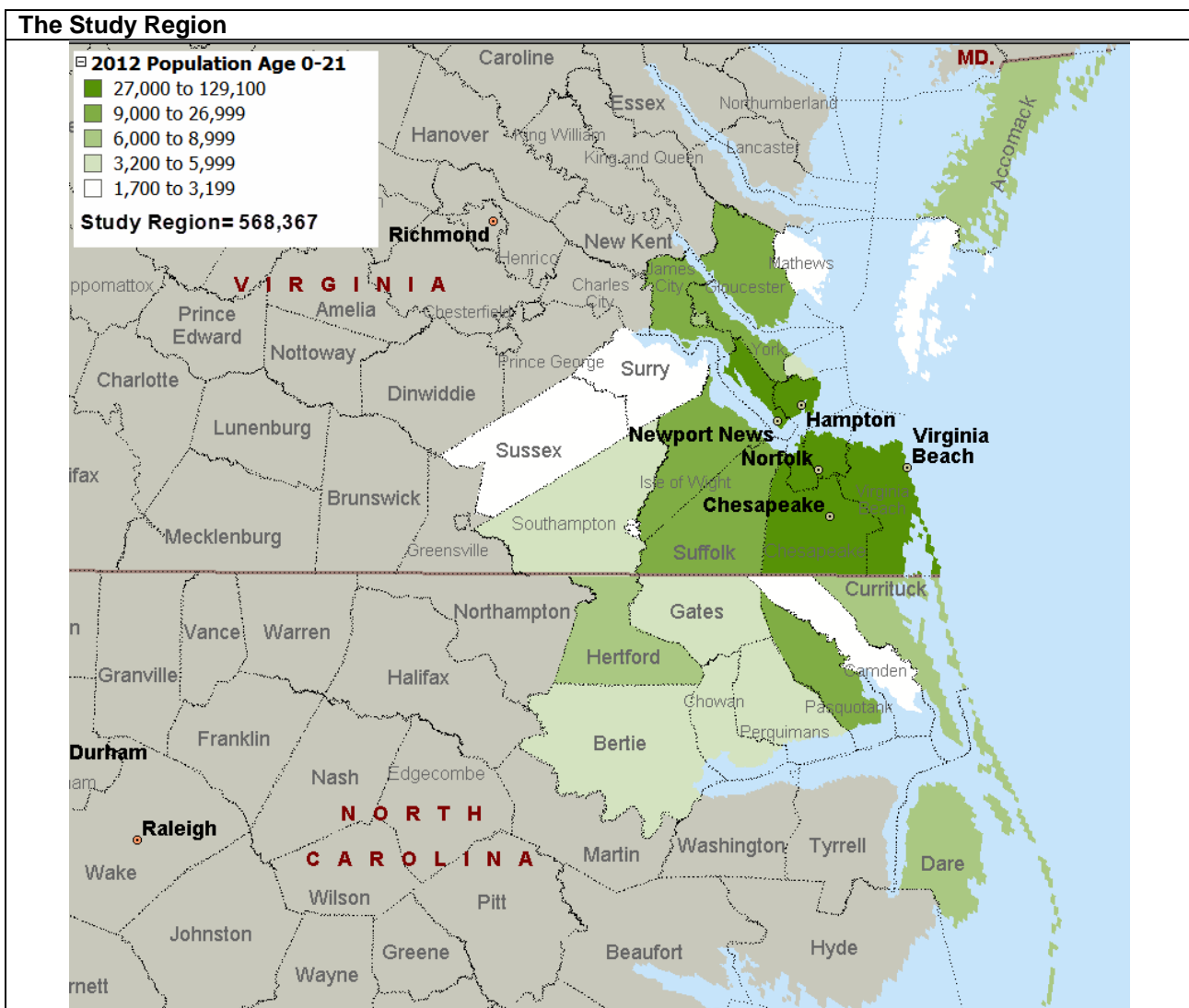
Within Virginia:

- Accomack County, Chesapeake City, Franklin City, Gloucester County, Hampton City, Isle of Wight County, James City County, Mathews County, Newport News City, Norfolk City, Northampton County, Poquoson City, Portsmouth City, Southampton County, Suffolk City, Surry County, Sussex County, Virginia Beach City, Williamsburg City and York County.

Within North Carolina:

- Bertie County, Camden County, Chowan County, Currituck County, Dare County, Gates County, Hertford County, Pasquotank County and Perquimans County.

The study region is shown in the map below. The study population for this CHNA is residents age 0-21 and their families. The results of the study include two primary components: a 'community insight profile' based on qualitative analysis of a survey of community stakeholders, and a 'community indicator profile' based on quantitative analysis of community health status indicators. This Executive Summary outlines major findings, and details are provided in the body of the report.



Part I. Community Insight Profile

In an effort to generate community input for the study, a Community Insight Survey was conducted with a group of community stakeholders identified by CHKD. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community; and
- Additional ideas or suggestions for improving community health.

The survey was sent to a group of 441 community stakeholders identified by CHKD. A total of 95 (22%) submitted a response. The respondents provided rich insights about community health in the study region. To summarize:

- The respondents identified more than twenty important health concerns such as childhood obesity, behavioral health conditions, asthma, nutrition, autism, child abuse and more.
- The respondents identified more than two dozen specific community services in need of strengthening. Commonly identified services included behavioral health services, health promotion and prevention services, early intervention services and more.

Thirty-three respondents offered open-ended responses with additional ideas and suggestions for improving community health. These responses are listed in *Appendix B* on page 43.

Part II. Community Indicator Profile

The community indicator profile in Part II presents a wide array of quantitative community health indicators for the study region. To produce the profile, Community Health Solutions analyzed data from multiple sources. By design, the analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators that provide broad insight into community health for children and families, and for which there were readily available data sources. To summarize:

- *Demographic Profile.* As of 2012, the study region included 568,367 persons age 0-21. **Compared to the Commonwealth of Virginia as a whole, the study region is more densely populated, and proportionally more Black/African American. The region also has lower income levels than Virginia as a whole.**
- *Mortality Profile.* The study region had 402 total deaths in the 0-21 age group in 2011. The leading causes of death were related to prematurity and low birth weight and sudden infant death syndrome. **The death rate per 100,000 population was higher for the study region than for Virginia as a whole.**
- *Maternal and Infant Health Profile.* The study region had 34,704 pregnancies, 25,548 total live births, and 216 infant deaths in 2011. **Compared to Virginia as a whole, the study region had higher rates of non-marital births, teen pregnancies and five-year infant mortality.**
- *Behavioral Health Hospitalization Discharge Profile.* Behavioral health hospitalizations provide another important indicator of community health status. Study region residents age 0-21 had 2,730 hospital discharges for behavioral health conditions in 2011. The leading diagnoses for these hospitalizations were affective psychoses, general symptoms, and schizophrenic disorders. **The discharge rate per 100,000 population was lower for the study region than the Virginia as a whole.**
- *Youth Health Risk Profile.* The study includes a profile of selected health risks for youth age 14-19. The estimates indicate that substantial numbers of youth in the study region have health risks related to nutrition, body weight, physical activity, tobacco and alcohol.
- *Special Education Profile.* Special education programs provide specially designed instruction to meet the unique needs of children with disabilities, including instruction conducted in the school setting, in the home, in hospitals, in institutions, and in other settings. School divisions servicing the study region provide special education programs for thousands of children with a wide range of disabilities.
- *Uninsured Profile.* **At any point in time in 2012, an estimated 36,167 (8%) children in the study region were uninsured.** The large majority of uninsured children were estimated to have income at or below 200% of the federal poverty level (FPL).

- *Medically Underserved Profile.* Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are designated by the U.S. Health Resources and Services Administration as being at risk for health care access problems. The designations are based on several factors including primary care provider supply, infant mortality, prevalence of poverty, and the prevalence of seniors age 65+. **Twenty-six of the 29 localities that encompass the study region have been fully or partially designated as MUAs/MUPs.**

Accompanying File of City/County-Level Indicators

This report includes community health indicators for the study region as a whole. A separate Microsoft Excel file contains indicators for each city/county within the study region.

Appendix A: Zip Code Level Maps

Appendix A provides a set of thematically colored maps displaying variation in selected community health indicators by zip code. The underlying data for these maps are provided in a separate Microsoft Excel file. *Please read the important note about zip code level data in the introduction to Appendix A.*

Appendix B: Community Insight Profile-Additional Ideas and Suggestions for Improving Community Health

Thirty-three survey respondents offered open-ended responses with additional ideas and suggestions for improving community health. These responses are listed in *Appendix B* on page 43.

Appendix C: Data Sources

Appendix C provides a list of the data sources used in the analysis of this report.

Part I. Community Insight Profile

In an effort to generate community input for the study, a Community Insight Survey was conducted with a group of community stakeholders identified by CHKD. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community; and
- Additional ideas or suggestions for improving community health.

The survey was sent to a group of 441 community stakeholders identified by CHKD. A total of 95 (22%) submitted a response. The respondents provided rich insights about community health in the study region. The results are summarized in the remainder of this section.

1. Survey Respondents

Exhibit I-1 below lists the organizational affiliations of the survey respondents.

**Exhibit I-1.
Reported Organization Affiliation of Survey Respondents¹**

ABC Community Empowerment Center	Edmarc Hospice for Children
ABS Technology Architects	Elizabeth City Pasquotank Public Schools (4)
Accomack County Department of Social Services	Endeppence Center, Inc. (2)
Beach Health Clinic	First Home Care
Bertie County Schools	ForKids, Inc. (2)
Chesapeake Community Services Board	Ghent Area Ministry
Chesapeake Health Department (3)	Girl Scouts
Chesapeake Public Schools	Hampton City Schools
Child Development Resources	Hampton Health Department
Children's Hospital of the King's Daughters(2)	Infant & Toddler Connection of Crater District
Children's Hospital of the King's Daughters CAP Advisory Board	Infant & Toddler Connection of Norfolk
Children's Hospital of the King's Daughters Development Advisory Board (2)	Infant/Toddler Connection of Portsmouth
CHIP of South Hampton Roads	Intercounty Childcare Connection
City of Chesapeake (2)	Isle of Wight County
City of Suffolk Parks and Recreation	Isle of Wight Department of Social Services (3)
City of Virginia Beach - Human Services	James City County Police
Coastal Virginia Developers	James City County Social Services
Commonwealth Catholic Charities	Mathews Family YMCA
Community Care Plan of Eastern North Carolina	Middlesex Department of Social Services
Currituck County Department of Social Services	Newport News Police Department
Davenport & Co, LLC	Newport News Public Schools
DePaul Medical Center	Norfolk Community Services Board
Development Corp.	Norfolk Victim Witness
Down Syndrome Association of Hampton Roads	Obici Healthcare Foundation

¹ Ninety-one (91) of the 95 survey respondents answered this question.

Exhibit I-1. (continued) ²

Old Dominion University School of Nursing	Suffolk Police Department
Parent Infant Program on the Shore	Suffolk Victim/Witness Services
Pariser Dermatology Specialists	SunTrust Bank
Pendleton Child Service Center	The King's Daughters
Portsmouth Health District	Three Rivers Healthy Families
Portsmouth Public Schools	Tidewater Physical Therapy, Inc.
Prevent Child Abuse Hampton Roads	Verizon Communications
Riverside Shore Memorial Hospital	Victim Services Unit
Ronald McDonald House Charities of Norfolk	Vidant Roanoke-Chowan Hospital
Sentara Norfolk General Hospital	Virginia Cooperative Extension
Smithfield Police Department	Walmart
Southampton County Department of Social Services	YMCA
Southampton Memorial Hospital	YMCA of South Hampton Roads
Special Needs Association of Parents	York-Poquoson Sheriff's Office
St. Mary's Home	York-Poquoson Social Services
Suffolk Department of Social Services	<i>Unknown Organization (4)</i>

² *Ninety-one (91) of the 95 survey respondents answered this question.*

2. Community Health Concerns

Survey respondents were asked to review a list of potential community health issues for children and families. The list of issues draws from the topics in *Healthy People 2020* with some refinements. The survey asked respondents to identify from the list what they view as important health concerns in the community. Respondents were also invited to identify additional issues not already defined on the list. *Exhibit I-2* summarizes the results.

Exhibit I-2.

Important Community Health Concerns Identified by Survey Respondents

Answer Options	Response Percent	Response Count
Childhood Obesity	72%	68
Behavioral Health Conditions (other than substance abuse)	61%	58
Asthma	60%	57
Nutrition	60%	57
Autism	59%	56
Child Abuse	50%	47
Disabilities-Intellectual and Developmental	46%	44
Physical Activity	43%	41
Dental Care/Oral Health	42%	40
Substance Abuse- Illegal Drugs	41%	39
Teen Pregnancy	40%	38
High Risk Pregnancies and Birth Outcomes (low weight births, pre-term births, infant mortality)	36%	34
Crime/Violence	34%	32
Tobacco Use/Exposure	34%	32
Substance Abuse-Alcohol	33%	31
Disabilities-Physical	32%	30
Diabetes	26%	25
Sexually Transmitted Diseases	22%	21
Neurological Disorders (seizures, multiple sclerosis)	21%	20
Substance Abuse-Prescription Drugs	21%	20
Injuries (other than spinal cord and brain, including sports injuries)	19%	18
Immunizations/Infectious Diseases	19%	18
Cancer	17%	16
Brain Injuries	15%	14
Environmental Quality	14%	13
Respiratory Diseases (other than asthma)	11%	10
Patient Safety	8%	8
Spinal Cord Injuries	7%	7
Orthopedic Problems	6%	6
Chronic Pain	5%	5
<i>Other Health Problems (list in box below)</i>	9%	9

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

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Exhibit I-2. (continued)

Open-Ended Responses	
1.	Fetal alcohol syndrome (2)
2.	All of these are important health issues for the children of the community in which I live.
3.	1) All those in the list above are important to our community but I have chosen the ones that are more of a concern. 2) We also have food allergy issues.
4.	I am going with under 18 on age. Much different issues at 15 than at 0-6.
5.	I have singled out these two [Child Abuse and Childhood Obesity] as major problems because there is stigma attached to both which results in serious funding needs. "More acceptable" health problems get more attention & money.
6.	It is essential that all practitioners who immunize children enter this information in VIIS (Virginia Immunization Information System) to ensure comprehensive, complete immunization records of all children, no matter how many different providers they may have seen.
7.	Severe Food Allergies
8.	1) Today's parents do not understand the importance of continuing to immunize children so that childhood diseases do not return or children do not get diseases in adulthood that can be prevented. 2) Having and seeing a PCP on a regular basis - parents do not see the need and/or do not have the funds."

3. Community Service Gaps

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

**Exhibit I-3.
Important Community Service Gaps Identified by Survey Respondents**

Answer Options	Response Percent ³	Response Count
Behavioral Health Services (including mental health, substance use and intellectual disability)	79%	70
Health Promotion and Prevention Services (including nutrition and exercise)	42%	37
Early Intervention Services for Children	40%	36
Dental Care/Oral Health Services	37%	33
Transportation Services	37%	33
Case Management Services	34%	30
Crime/Violence Prevention and Support Services	34%	30
Health Care Coverage	32%	28
Family Planning Services	30%	27
Housing Services	28%	25
Maternal, Infant & Child Health Services	28%	25
Disability Services	27%	24
Social Services	26%	23
Food Safety Net	25%	22
School Health Services	19%	17
Respite Care Services	18%	16
Primary Health Care Services	17%	15
Home Health Services	15%	13
Public Health Services	15%	13
Physical Rehabilitation (including physical therapy, occupational therapy, speech language pathology)	14%	12
Chronic Disease Services (including screening and early detection)	12%	11
Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	12%	11
Environmental Health Services	11%	10
Translation Services	11%	10
Durable Medical Equipment and Assistive Devices	10%	9
Cancer Services (screening, diagnosis, treatment)	9%	8
Long Term Care Services	9%	8
Hospital Services (including emergency, inpatient and outpatient)	8%	7
Pharmacy Services	8%	7
Hospice Services	6%	5
Injury Prevention Services	5%	4
Chronic Pain Management Services	1%	1

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

Continued on next page...

³ Eighty-nine (89) of the 95 survey respondents answered this question.

Exhibit I-3. (continued)

Open-Ended Responses	
1.	Access for parents of children who have been sexually or physically abused, and have or have not been through CHKD's Child Abuse Center or Emergency Room, to receive assistance locating a competent therapist specially trained in those particular areas.
2.	Addiction and prevention of addiction.
3.	Behavioral health crisis intervention/stabilization services.
4.	Immunizations
5.	Mental health in general.
6.	Most children are Medicaid/FAMIS eligible but may not have completed application so access limited.
7.	Need a nurse at every school.
8.	Parent Education and Support
9.	Periodic and consistent screening for developmental delays and social/emotional/behavior problems from an early age, using some sort of screening instrument. (This may be covered in item 10, above - Early Intervention Services)
10.	Public health services for men.
11.	Strengthening also needs to take place in terms of education.
12.	There is a significant gap in Developmental Pediatricians to serve the Hampton Roads area. The wait time is well over 6 months for an initial visit.

Part II. Community Indicator Profile

This section of the report provides a quantitative profile of the study region based on a wide array of community health indicators. To produce the profile, Community Health Solutions analyzed data from multiple sources. By design, the analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators that provide broad insight into community health for children and families, 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 within the study region affected by specific health concerns. In addition, the results can be used alongside the Community Insight Survey results and the zip code level maps to help inform action plans for community health improvement. This section includes nine profiles as follows:

1. Health Demographic Trend Profile
2. Health Demographic Snapshot
3. Mortality Profile
4. Maternal and Infant Health Profile
5. Behavioral Health Hospitalization Discharge Profile
6. Youth Risk Factor Profile
7. Special Education Profile
8. Uninsured Profile
9. Medically Underserved Profile

1. Health Demographic Trend Profile

Trends in health-related demographics are instructive for anticipating changes in community health status. Changes in the size of the population, age of the population, racial/ethnic mix of the population, income status and education status can have a significant impact on overall health status, health needs and demand for local services.

As shown in *Exhibit II-1*, as of 2012, the study region included an estimated 1,950,746 people, 568,367 of whom were age 0-21. The 0-21 population is expected to remain stable through 2017. Focusing on racial/ethnic background, the population is projected to grow for all racial/ethnic groups with the exception of the Black/African American group, which is projected to remain steady.

**Exhibit II-1.
Health Demographic Trend, 2010-2017**

Indicator	2010 Census	2012 Estimate	2017 Projection	% Change 2012-2017
Total Population	1,927,430	1,950,746	1,840,188	-6%
Total Population Age 0-21	574,505	568,367	576,302	1%
Population Density (per Sq Mile)	264.8	268.0	252.8	-6%
Population 0-21 by Age Group				
Children Age 0-2 #	74,433	74,665	76,440	2%
Children Age 3-5 #	74,447	74,265	75,511	2%
Children Age 6-11 #	146,906	146,643	150,040	2%
Children Age 12-14 #	73,431	73,610	75,835	3%
Children Age 15-17 #	79,595	77,430	78,023	1%
Adults Age 18-21 #	125,693	121,754	120,453	-1%
Population Age 0-21 by Race/Ethnicity				
Asian	15,516	15,724	16,437	5%
Black/African American	208,239	204,622	205,279	0%
White	298,812	295,069	299,511	2%
Other or Multi-Race	51,938	52,952	55,075	4%
Hispanic Ethnicity ⁴	42,688	43,314	44,804	3%

Source: Community Health Solutions analysis of data from Alteryx, Inc.

⁴ Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

2. Health Demographic Snapshot

Community health is driven in large part by community demographics. The age, sex, race, ethnicity, income and education status of a population are strong predictors of community health status and community health needs. *Exhibit II-2* presents a snapshot of key health-related demographics of the study region.

As of 2012, the study region included an estimated 568,367 residents age 0-21. Compared to the Commonwealth of Virginia as a whole, the study region is more densely populated, and proportionally more Black/African American. The region also has lower income levels than Virginia as a whole. *Note: Maps 1-9 in Appendix A show the geographic distribution of the population by zip code.*

**Exhibit II-2.
Health Demographic Snapshot, 2012**

Indicator		Study Region	Virginia
Population	Total Population Age 0-21	568,367	2,335,785
Age	Children Age 0-2	74,665	306,161
	Children Age 3-5	74,265	311,180
	Children Age 6-11	146,643	622,289
	Children Age 12-14	73,610	310,633
	Children Age 15-17	77,430	319,232
	Adults Age 18-21	121,754	466,290
Sex	Female Population Age 0-21	275,726	1,142,637
	Males Population Age 0-21	292,641	1,193,148
Race/Ethnicity	Asian Population Age 0-21	15,724	131,876
	Black/African American Population Age 0-21	204,622	507,205
	White Population Age 0-21	295,069	1,448,000
	Other or Multi-Race Population Age 0-21	52,952	248,704
	Hispanic Ethnicity ⁵ Population Age 0-21	43,314	257,305
Income	Low Income Family Households (Households with Income < \$35,000)	497,915	2,016,492
Population Age Rates			
Population	Population Density (pop. per sq. mile)	268.0	202.3
Age	Children Age 0-2 pct. of Total Pop. Age 0-21	13%	13%
	Children Age 3-5 pct. of Total Pop. Age 0-21	13%	13%
	Children Age 6-11 pct. of Total Pop. Age 0-21	26%	27%
	Children Age 12-14 pct. of Total Pop. Age 0-21	13%	13%
	Children Age 15-17 pct. of Total Pop. Age 0-21	14%	14%
	Adults Age 18-21 pct. of Total Pop. Age 0-21	21%	20%
Sex	Female Pop. Age 0-21 pct. of Total Pop. Age 0-21	49%	49%
	Male Pop. Age 0-21 pct. of Total Pop. Age 0-21	51%	51%
Race/Ethnicity	Asian Pop. Age 0-21 pct. of Total Pop. Age 0-21	3%	6%
	Black/African American Pop. Age 0-21 pct. of Total Pop. Age 0-21	36%	22%
	White Pop. Age 0-21 pct. of Total Pop. Age 0-21	52%	62%
	Other or Multi-Race Pop. Age 0-21 pct. of Total Pop. Age 0-21	9%	11%
	Hispanic Ethnicity Pop. Age 0-21 pct. of Total Pop. Age 0-21	8%	11%
Income	Per Capita Income	\$27,597	\$34,307
	Median Household Income	\$54,867	\$64,118
	Low Income Family Households (Family Households with Income < \$35,000) pct. of Total Family Households	22%	19%

Source: Community Health Solutions analysis of data from Alteryx, Inc.

⁵Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

3. Mortality Profile

As shown in *Exhibit II-3*, the study region had 402 total deaths in the 0-21 age group in 2011. The leading causes of death were related to prematurity and low birth weight (51) and sudden infant death syndrome (24). The death rate per 100,000 population was higher for the study region than for Virginia as a whole. *Note: Maps 10-12 in Appendix A show the geographic distribution of deaths by zip code.*

**Exhibit II-3.
Mortality Profile (Age 0-21), 2011**

Indicators	Study Region	Virginia
Total Deaths Age 0-21		
<i>Deaths by All Causes</i>	402	1,337
Deaths by Top 10 Causes		
Disorders Related to Short Gestation (Prematurity) and Low Birth Weight, Not Elsewhere Classified Deaths (Infant)	51	149
Sudden Infant Death Syndrome	24	62
Fetus Affected by Maternal Complications of Pregnancy Deaths (Perinatal)	9	23
Other Ill-Defined and Unknown Causes of Mortality (Infant)	8	34
Motor Vehicle Traffic Accidents Deaths	6	20
Suffocation Deaths	4	14
Congenital Malformations, Deformations and Chromosomal Abnormalities Deaths (Perinatal)	2	13
Edward's Syndrome Deaths (Infant)	2	18
Homicide Deaths	2	7
Unintentional Injury Deaths	1	2
Total Deaths by Age Group		
Total Deaths Age 0-2	240	758
Total Deaths Age 3-5	11	37
Total Deaths Age 6-11	18	84
Total Deaths Age 12-14	10	40
Total Deaths Age 15-17	34	105
Total Deaths Age 18-21	89	313
Death Rates by Age Group		
Total Deaths per 100,000 Pop. Age 0-21	70.2	56.7
Total Deaths per 100,000 Pop. Age 0-2	324.1	243.6
Total Deaths per 100,000 Pop. Age 3-14 ⁶	13.3	12.8
Total Deaths per 100,000 Pop. Age 15-17	43.0	32.0
Total Deaths per 100,000 Pop. Age 18-21	70.7	67.7

Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

⁶ The 3-5, 6-11, and 12-14 age groups were combined because the total number of cases in the study region for these age groups were too small to calculate rates for each group individually.

4. Maternal and Infant Health Profile

As shown in *Exhibit II-4*, the study region had 34,704 pregnancies, 25,548 total live births, and 216 infant deaths in 2011. Compared to Virginia as a whole, the study region had higher rates of non-marital births, teen pregnancies and five-year infant mortality. *Note: Maps 13-16 in Appendix A show the geographic distribution of births by zip code.*

**Exhibit II-4.
Maternal and Infant Health Profile, 2011**

Indicators	Study Region	Virginia
Counts		
Total Pregnancies	34,704	132,429
Induced Terminations of Pregnancy	7,960	23,635
Natural Fetal Deaths	1,196	6,269
Total Live Births	25,548	102,525
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	2,241	8,204
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	3,156	13,500
Non-Marital Births	10,935	36,390
Total Teenage (age 10-19) Pregnancies	3,016	9,630
Live Births to Teens Age 10-19	1,962	6,572
Live Births to Teens Age 18-19	1,444	4,807
Live Births to Teens Age 15-17	497	1,708
Live Births to Teens Age <15	21	57
Total Infant Deaths	216	685
Rates		
Live Birth Rate per 1,000 Population	13.2	12.7
Low Weight Births pct. of Total Live Births	9%	8%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	12%	13%
Non-Marital Births pct. of Total Live Births	43%	35%
Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population	24.2	18.6
Five-Year Average Infant Mortality Rate per 1,000 Live Births) 2007-2011	8.8	7.0

Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

5. Behavioral Health Hospitalization Discharge Profile

Behavioral health (BH) hospitalizations provide another important indicator of community health status. *Exhibit II-5* shows study region residents age 0-21 had 2,730 discharges for behavioral health conditions in 2011. The leading diagnoses for these hospitalizations were affective psychoses (1,576), general symptoms (239), and schizophrenic disorders (226). The discharge rate per 100,000 population was lower for the study region than the Virginia as a whole. *Note: Map 17 in Appendix A shows the geographic distribution of behavioral health hospitalization discharges by zip code.*

**Exhibit II-5.
Behavioral Health Hospitalization Discharges(Age 0-21), 2011**

Indicators	Study Region	Virginia
BH Discharges by Age Group		
<i>All Ages 0-21</i>	2,730	12,266
Total BH Discharges Age 0-2	168	739
Total BH Discharges Age 3-5	44	197
Total BH Discharges Age 6-11	396	1,474
Total BH Discharges Age 12-14	481	2,196
Total BH Discharges Age 15-17	694	3,390
Total BH Discharges Age 18-21	947	4,270
BH Discharges by Top 10 Diagnoses		
Affective Psychoses ⁷	1,576	7,368
General Symptoms ⁸	239	1,233
Schizophrenic Disorders	226	552
Other Nonorganic Psychoses	156	487
Depressive Disorder, Not Elsewhere Classified	128	799
Adjustment Reaction	112	628
Hyperkinetic Syndrome of Childhood	84	181
Neurotic Disorders	44	291
Disturbance of Conduct, Not Elsewhere Classified	32	112
Disturbance of Emotions Specific to Childhood And Adolescence	13	58
BH Discharge Rates by Age Group		
Total BH Discharges Per 100,000 Population Age 0-21	476.7	520.0
Total BH Discharges Per 100,000 Population Age 0-2	226.8	237.5
Total BH Discharges Per 100,000 Population Age 3-5	59.4	62.4
Total BH Discharges Per 100,000 Population Age 6-11	270.3	234.0
Total BH Discharges Per 100,000 Population Age 12-14	656.7	703.2
Total BH Discharges Per 100,000 Population Age 15-17	878.2	1,034.4
Total BH Discharges Per 100,000 Population Age 18-21	752.8	923.5

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc and North Carolina Patient Data System from Truven Analytics provided by CHKD. See Appendix C for details.

⁷ Includes major depressive, bipolar affective and manic depressive disorders.

⁸ This diagnosis includes symptoms, signs, abnormal results of laboratory or other investigative procedures, and ill-defined conditions regarding which no diagnosis classifiable elsewhere is recorded.

6. Youth Health Risk Factor Profile

This section examines selected health risks for youth age 14-19. The selected indicators involve nutrition, physical activity and weight-related risks. These particular risks have received increasing attention as the child and youth population has become more sedentary, more prone to unhealthy eating and more likely to develop unhealthy body weight. The long-term implications of these trends are serious, as these factors place children at higher risk for unhealthy body weight and related chronic conditions both now and in adulthood. Tobacco use and alcohol use are also important risk factors for youth.

Exhibit II-6 shows estimates indicating that substantial numbers of youth in the study region have health risks related to nutrition, weight, physical activity, tobacco and alcohol. *Note: Map 18 in Appendix A shows the geographic distribution of estimated overweight and obese youth by zip code.*

**Exhibit II-6.
Youth Health Risk Factors (Synthetic Estimates) (Age 14-19), 2011**

Indicators	Study Region Estimates (count)	Study Region Estimates (percent)
Estimated youth age 14-19	155,322	100%
Less than the Recommended Intake of Vegetables	137,526	89%
Less than the Recommended Intake of Fruit	132,423	85%
Overweight or Obese ⁹	46,911	30%
At least One Drink of Alcohol at least One Day in the Past 30 Days	44,563	29%
Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	38,899	25%
Tobacco in the Past 30 Days	29,985	19%
No Physical Activity in the Past Week	23,870	15%

Source: Community Health Solutions estimates based on secondary sources. See Appendix C for details.

7. Special Education Profile

Special education programs provide specially designed instruction to meet the unique needs of children with disabilities, including instruction conducted in the school setting, in the home, in hospitals, in institutions, and in other settings. School divisions servicing the study region provide special education programs for thousands of children with a wide range of disabilities.

On the following pages, *Exhibit II-7* shows a number of children age 0-22 in localities that encompass the study region received special education in the 2010/2011 school year. For a more detailed description, visit the Virginia Department of Education and Public Schools of North Carolina web pages at http://www.doe.virginia.gov/special_ed/index.shtml and <http://ec.ncpublicschools.gov/reports-data/child-count>.

⁹ For children and adolescents (aged 2–19 years), the BMI value is plotted on the CDC growth charts to determine the corresponding BMI-for-age percentile. Overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

**Exhibit II-7.
Special Education Enrollment, (Age 0-22), Virginia Localities 2010-2011**

Indicators	VA	Accomack County	Chesapeake City	Franklin City	Gloucester County	Hampton City	Isle of Wight County	James City County ¹⁰	Mathews County	Newport News City	Norfolk City
Total Children in Special Education, by Disability											
Autism ¹¹	11,703	32	338	10	40	238	55	n/a	**	270	373
Deaf Blindness	25	0	**	0	0	**	0	n/a	0	0	0
Developmental Delay	10,425	53	359	13	50	148	25	n/a	**	339	427
Emotional Disturbance	9,589	24	382	11	51	246	42	n/a	**	319	243
Hearing Impairments	1,473	**	41	0	**	30	**	n/a	**	30	17
Intellectual Disabilities	9,934	40	205	18	54	229	41	n/a	**	280	354
Multiple Disabilities	3,325	15	105	13	11	29	**	n/a	10	53	188
Other Health Impairments	28,703	117	1,698	19	53	549	111	n/a	26	584	571
Orthopedic Impairments	905	**	22	0	**	17	**	n/a	0	13	12
Severe Disability	465	0	**	0	**	15	**	n/a	0	**	**
Specific Learning Disability	56,971	198	2,573	79	269	998	281	n/a	71	1,381	1,723
Speech or Language Impairments	28,974	94	1,101	25	160	408	92	n/a	38	604	696
Traumatic Brain Injury	390	**	**	0	**	10	**	n/a	0	14	11
Visual Impairments	618	**	15	**	**	18	**	n/a	0	13	11

Source: Community Health Solutions analysis of 2010-2011 Virginia Department of Education Special Education Child Count data.

**Counts are not provided where n < 10. Study region totals are not provided given the missing data.

¹⁰ See Williamsburg City (School District data on Children Age 0-22+ in Special Education includes Williamsburg City and James City County children)

¹¹ Can include certain areas under Autism Spectrum Disorder.

Exhibit II-7. (continued)
Special Education Enrollment, (Age 0-22), Virginia Localities 2010-2011

Indicators	VA	Northampton County	Poquoson City	Portsmouth City	Southampton County	Suffolk City	Surry County	Sussex County	Virginia Beach City	Williamsburg City	York County
Total Children in Special Education, by Disability											
Autism ¹²	11,703	12	22	103	21	106	**	**	654	113	123
Deaf Blindness	25	0	0	0	0	**	0	0	**	0	0
Developmental Delay	10,425	39	17	143	13	130	**	**	589	136	77
Emotional Disturbance	9,589	**	14	106	22	84	10	14	484	64	62
Hearing Impairments	1,473	**	**	16	**	13	**	0	69	19	**
Intellectual Disabilities	9,934	16	15	147	32	134	10	33	332	61	56
Multiple Disabilities	3,325	**	**	105	**	51	**	0	121	31	29
Other Health Impairments	28,703	65	61	249	33	438	23	30	1,729	308	286
Orthopedic Impairments	905	**	**	17	**	**	0	0	40	**	**
Severe Disability	465	0	0	23	0	**	0	0	47	0	0
Specific Learning Disability	56,971	93	60	689	151	642	50	60	3,602	468	350
Speech or Language Impairments	28,974	40	53	332	93	115	18	40	1,285	333	214
Traumatic Brain Injury	390	**	0	**	**	**	**	**	19	**	**
Visual Impairments	618	0	**	**	0	**	**	**	24	**	**

Source: Community Health Solutions analysis of 2010-2011 Virginia Department of Education Special Education Child Count data.
 ** Counts are not provided where n < 10. Study region totals are not provided given the missing data.

¹² Can include certain areas under Autism Spectrum Disorder.

Exhibit II-7. (continued)
Special Education Enrollment, (Age 0-22), North Carolina Localities 2010-2011

Indicators	VA	Bertie County	Camden County	Chowan County ¹³	Currituck County	Dare County	Gates County	Hertford County	Pasquotank County	Perquimans County
Total Children in Special Education, by Disability										
Autism ¹⁴	11,703	7	39	16	30	28	17	21	77	15
Deaf Blindness	25	0	0	0	0	0	0	0	0	0
Developmental Delay	10,425	56	10	14	34	30	28	28	69	33
Emotional Disturbance	9,589	4	3	11	8	22	25	4	56	7
Hearing Impairments	1,473	3	0	0	0	11	2	1	3	2
Intellectual Disabilities	9,934	95	7	46	14	29	18	79	49	14
Multiple Disabilities	3,325	1	2	7	6	12	3	1	16	3
Other Health Impairments	28,703	24	20	27	56	84	26	109	109	13
Orthopedic Impairments	905	0	0	0	0	8	0	3	1	0
Severe Disability	465	--	--	--	--	--	--	--	--	--
Specific Learning Disability	56,971	161	75	163	163	130	141	148	284	127
Speech or Language Impairments	28,974	51	84	34	49	149	45	29	221	61
Traumatic Brain Injury	390	2	0	0	0	3	0	0	1	0
Visual Impairments	618	0	1	2	0	0	0	2	2	0

Source: Community Health Solutions analysis of 2010-2011 Public Schools of North Carolina Special Education Child Count data.

-- Counts for this disability category not provided in Public Schools of North Carolina Special Education Child Count data.

¹³ Chowan County is listed as "Edenton/Chowan Schools" in the *Special Education Child Count* data for Public Schools of North Carolina.

¹⁴ Can include certain areas under Autism Spectrum Disorder.

8. Uninsured Profile

Decades of research show that health coverage matters when it comes to overall health status, access to health care, quality of life, school and work productivity, and even mortality. *Exhibit II-8* shows estimates of the number of uninsured children in the study region as of 2012. At any point in time in 2012, an estimated 36,167 (8%) children in the study region were uninsured. The large majority of uninsured children were estimated to have income at or below 200% of the federal poverty level (FPL).¹⁵ *Note: Map 19 in Appendix A show the geographic distribution of uninsured children by zip code.*

**Exhibit II-8.
Uninsured Children (Age 0-18) (Synthetic Estimates) 2011**

Indicators	Study Region
Estimated Uninsured Counts and Rate	
Total Children Age 0-18	472,151
Uninsured Children Age 0-18 All Income Levels (Percent)	8%
Uninsured Children Age 0-18 All Income Levels (Count)	36,167
Uninsured Children Age 0-18 <100% FPL	11,362
Uninsured Children Age 0-18 100-200% FPL	13,969
Uninsured Children Age 0-18 201-300% FPL	5,342
Uninsured Children Age 0-18 301%+ FPL	5,494

Source: Community Health Solutions synthetic estimates. See Appendix C for detailed methods.

¹⁵ For more information, please see: <http://aspe.hhs.gov/poverty/11poverty.shtml>

9. Medically Underserved Profile

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are designated by the U.S. Health Resources and Services Administration as being at risk for health care access problems. The designations are based on several factors including primary care provider supply, infant mortality, prevalence of poverty and the prevalence of seniors age 65+.

As shown in *Exhibit II-9*, 26 of the 29 localities that encompass the study region have been fully or partially designated as MUAs/MUPs. For a more detailed description, visit the U.S. Health Resources and Services Administration designation webpage at <http://muafind.hrsa.gov/>.

**Exhibit II-9.
Medically Underserved Areas/Populations**

Locality- Virginia	MUA/MUP designation	Census Tracts
Accomack County, Virginia	Full	10 of 10 census tracts
Chesapeake City, Virginia	Partial	8 of 41 census tracts
Franklin City, Virginia	Full	2 of 2 census tracts
Gloucester County, Virginia	Partial	1 of 8 census tracts
Hampton City, Virginia	Partial	22 of 33 census tracts
Isle of Wight County, Virginia	Full	8 of 8 census tracts
James City County, Virginia	Partial	6 of 11 census tracts
Mathews County, Virginia	Full	2 of 2 census tracts
Newport News City, Virginia	Partial	17 of 44 census tracts
Norfolk City, Virginia	Partial	31 of 80 census tracts
Northampton County, Virginia	Full	3 of 3 census tracts
Poquoson City, Virginia	None	--
Portsmouth City, Virginia	Partial	11 of 31 census tracts
Southampton County, Virginia	Full	5 of 5 census tracts
Suffolk City, Virginia	Full	28 of 28 census tracts
Surry County, Virginia	Full	2 of 2 census tracts
Sussex County, Virginia	Full	5 of 5 census tracts
Virginia Beach City, Virginia	Partial	5 of 99 census tracts
Williamsburg City, Virginia	Partial	3 of 3 census tracts
York County, Virginia	Partial	3 of 14 census tracts
Locality- North Carolina	MUA/MUP designation	Census Tracts
Bertie County, North Carolina	Full	4 of 4 census tracts
Camden County, North Carolina	Full	2 of 2 census tracts
Chowan County, North Carolina	None	--
Currituck County, North Carolina	Full	8 of 8 census tracts
Dare County, North Carolina	Full	11 of 11 census tracts
Gates County, North Carolina	Full	3 of 3 census tracts
Hertford County, North Carolina	Full	5 of 5 census tracts
Pasquotank County, North Carolina	None	--
Perquimans County, North Carolina	Full	3 of 3 census tracts

Source: Community Health Solutions analysis of U.S. Health Resources and Services Administration data.

APPENDIX A: Zip Code Level Maps for the Study Region

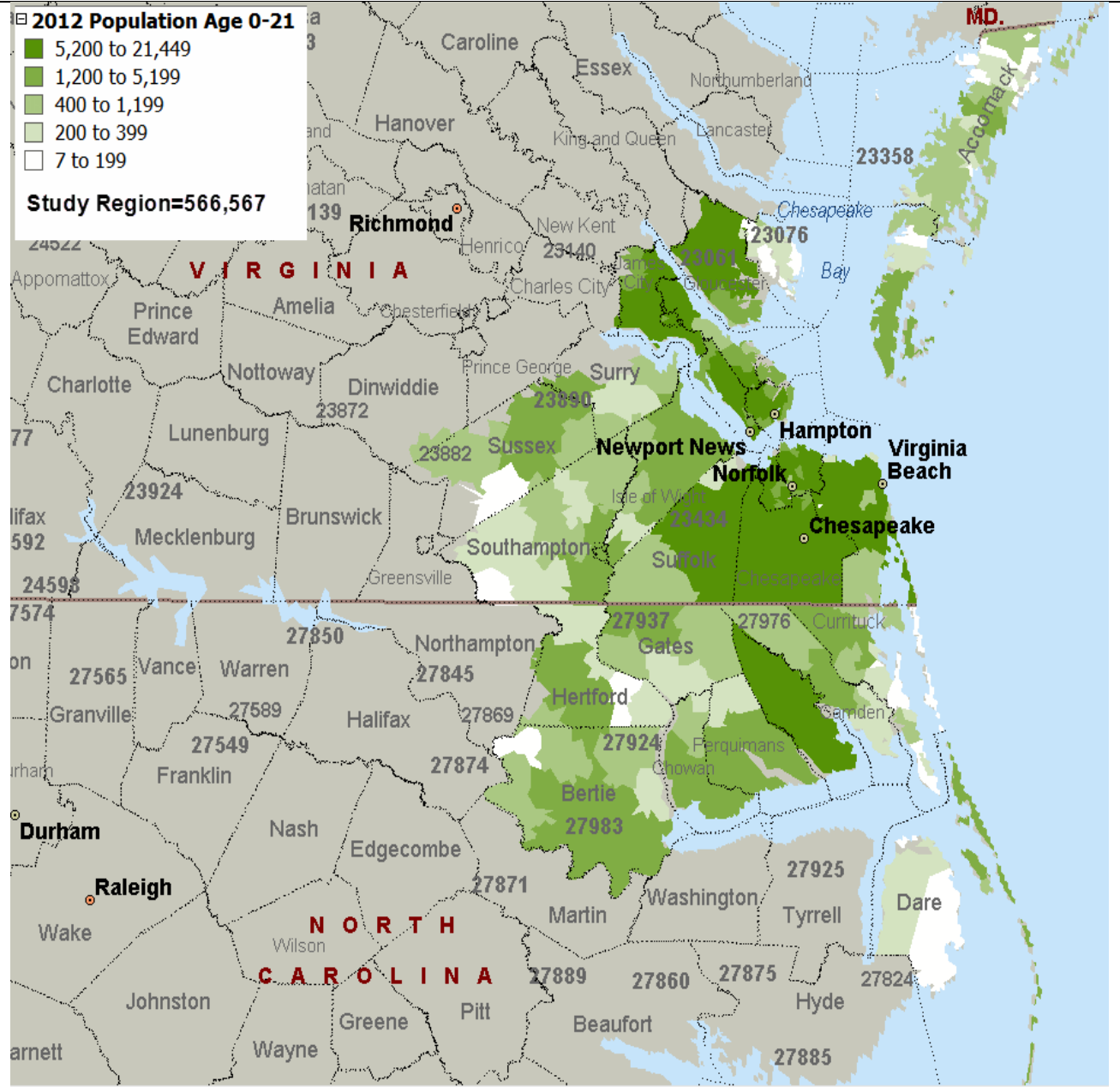
The zip code level maps in this section illustrate the geographic distribution of the study region population on key demographic and health indicators. The results can also be used alongside the Community Insight Survey (Part I) and the Community Indicator Profile (Part II) to help inform plans for community health initiatives. The underlying data for these maps are provided in a separate Microsoft Excel file. The maps in this section include the following for 2010/2011:

1. Total Population Age 0-21, 2012	11. Disorders Related to Short Gestation (Prematurity) and Low Birth Weight, Not Elsewhere Classified Deaths,
2. Asian Population (Age 0-21), 2012	12. Sudden Infant Death Syndrome (SIDS) Deaths, 2011
3. Black/African American Population (Age 0-21), 2012	13. Total Live Births, 2011
4. White Population Age (Age 0-21), 2012	14. Low Weight Births, 2011
5. Other or Multi-Race Population (Age 0-21), 2012	15. Births Without Early Prenatal Care (No Prenatal Care in the First 13 Weeks), 2011
6. Hispanic Ethnicity Population Age (Age 0-21), 2012	16. Births to Teen Mothers Under Age 18, 2011
7. Per Capita Income, 2012	17. Behavioral Health (BH) Hospitalization Discharges (Ages 0-21), 2011
8. Median Household Income, 2012	18. Estimated Youth Age 14-19 Overweight or Obese, 2012
9. Low Income Family Households (Family Households with Income <\$35,000), 2012	19. Estimated Uninsured Children Age 0-18, 2012
10. Total Deaths (Age 0-21), 2012	

Technical Notes

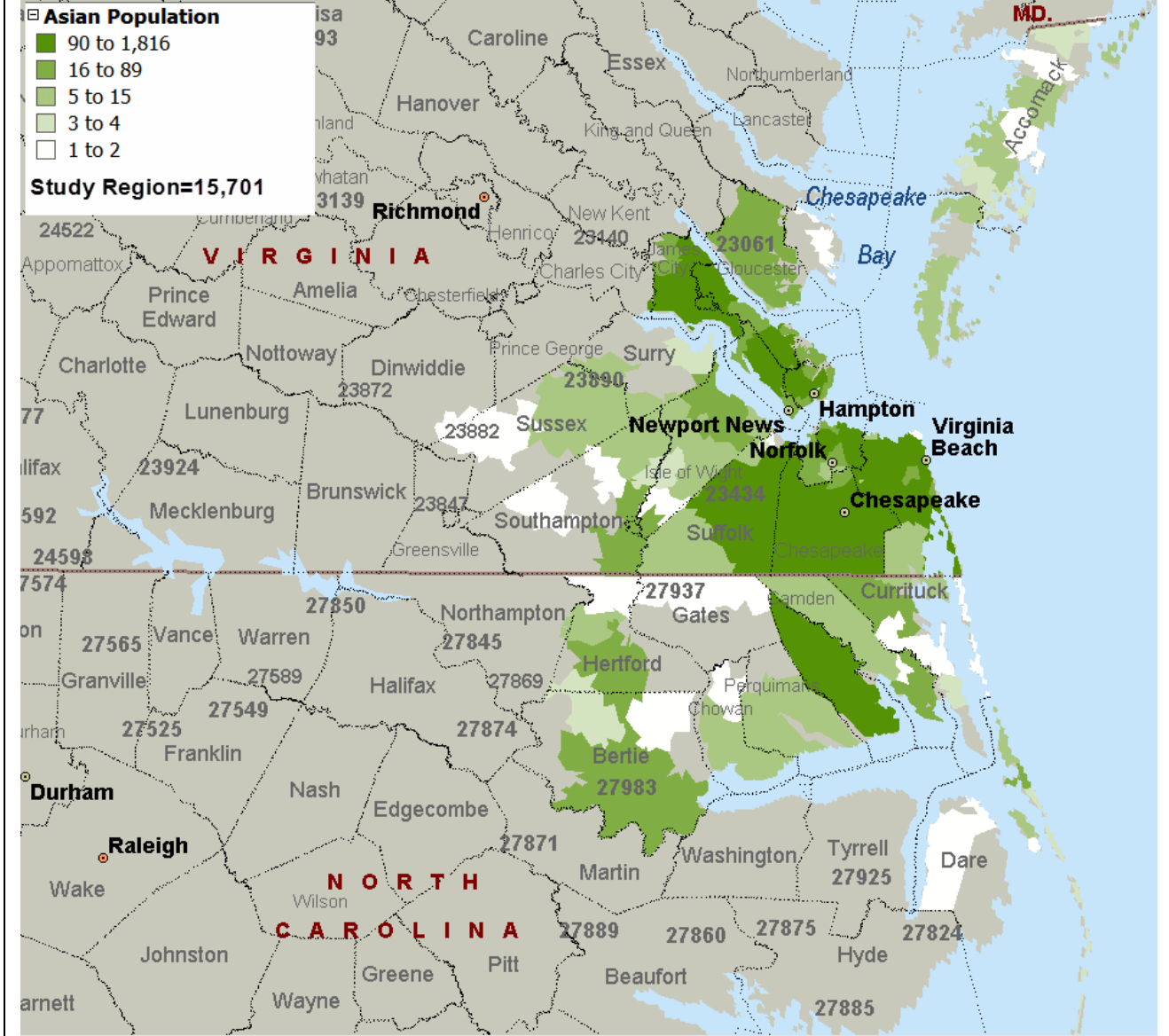
1. The zip code level analysis focuses on 191 zip codes in the Children's Hospital of The King's Daughters (CHKD) service area. Because zip code boundaries do not automatically align with city/county boundaries, there are some zip codes that extend beyond the county boundaries. Consequently, the combined zip-code-level totals for population, deaths, births, hospital discharges, etc. differ from the locality level study region totals listed throughout the body of the report.
2. With the exception of per capita income and median household income, 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 quintiles (zip code data are categorized in groups of five).

Map 1: Total Population Age 0-21, 2012



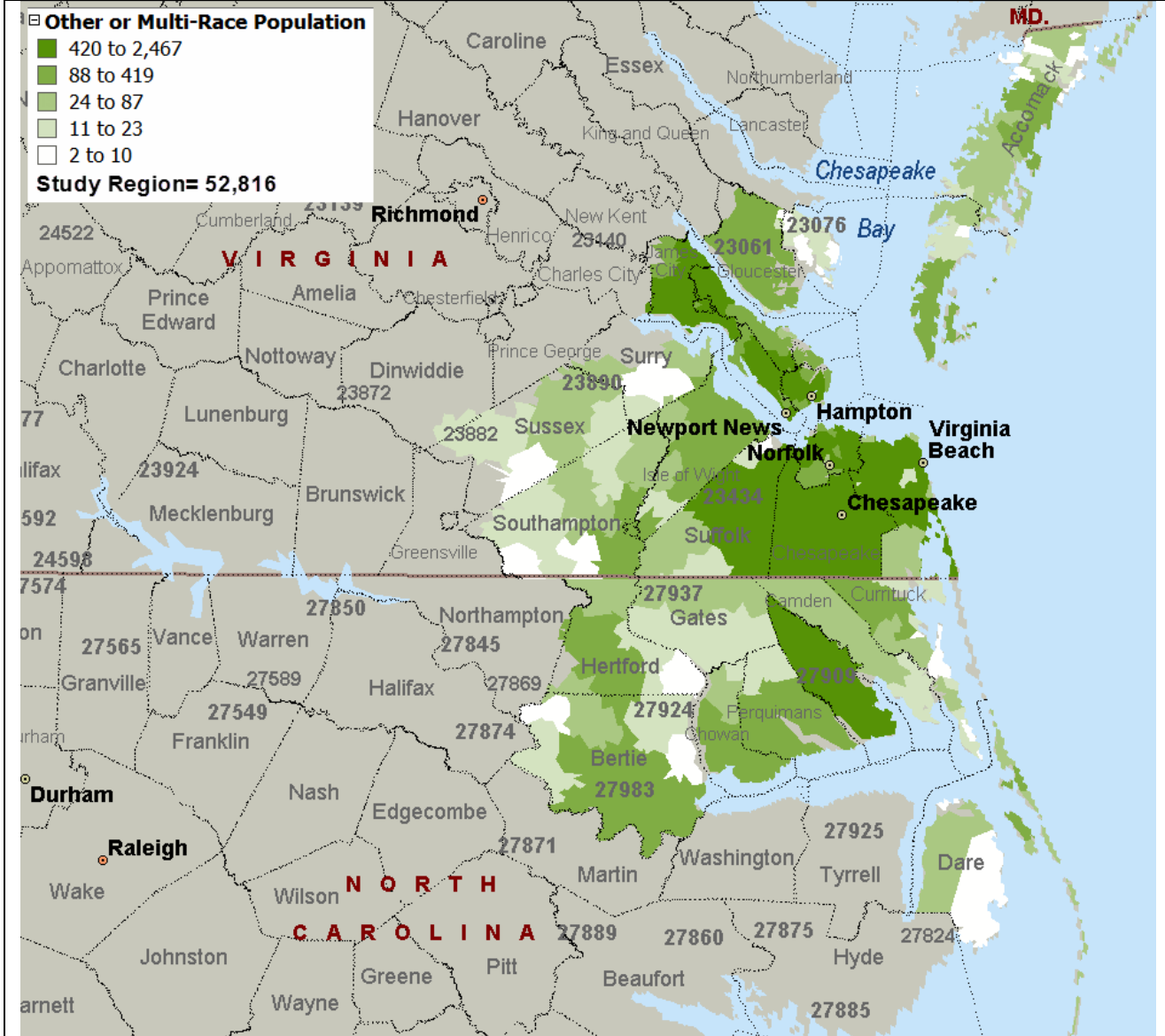
Source: Community Health Solutions analysis of data from Alteryx, Inc.

Map 2: Asian Population (Age 0-21), 2012



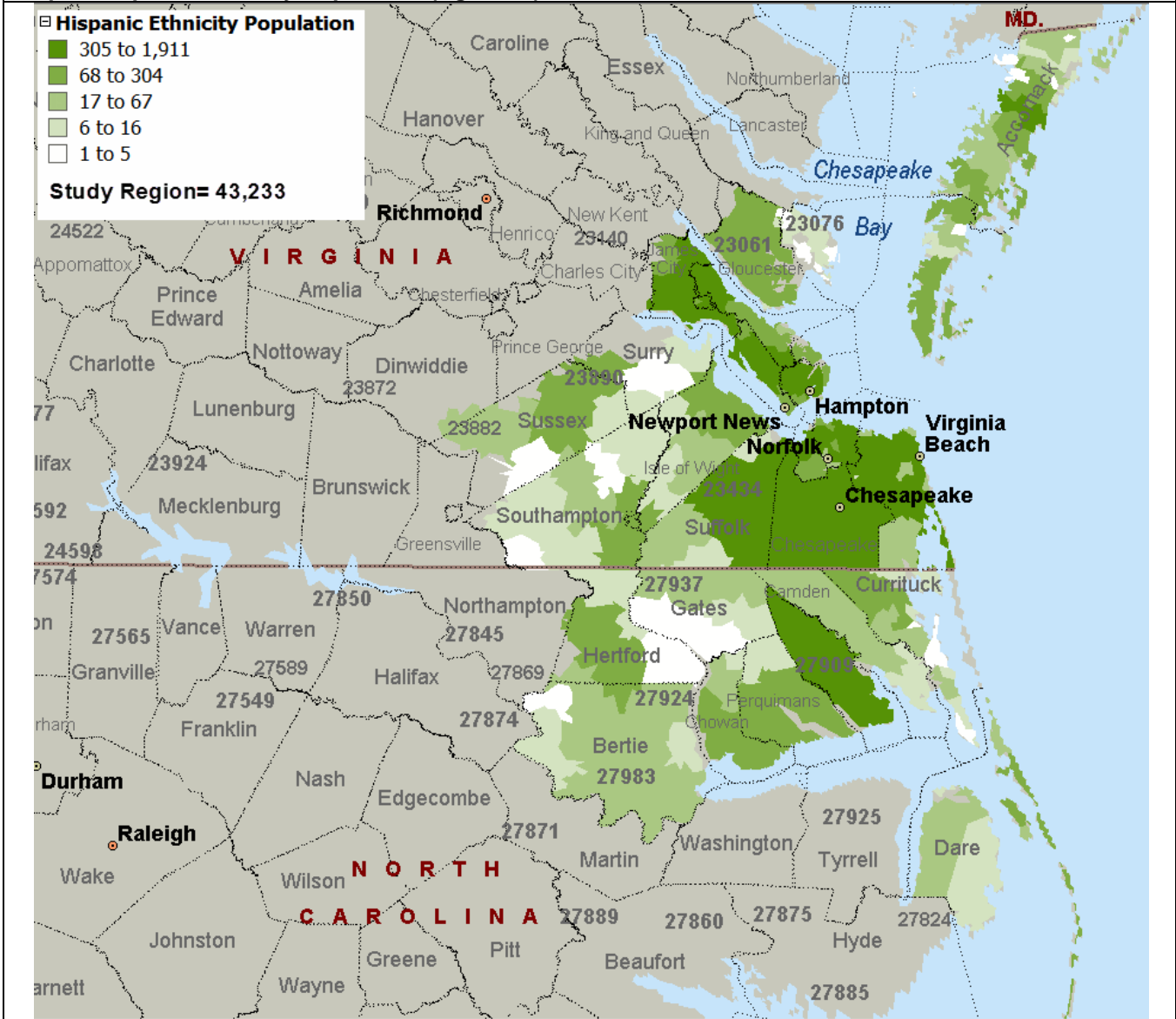
Source: Community Health Solutions analysis of data from Alteryx, Inc.

Map 5: Other or Multi-Race Population (Age 0-21), 2012



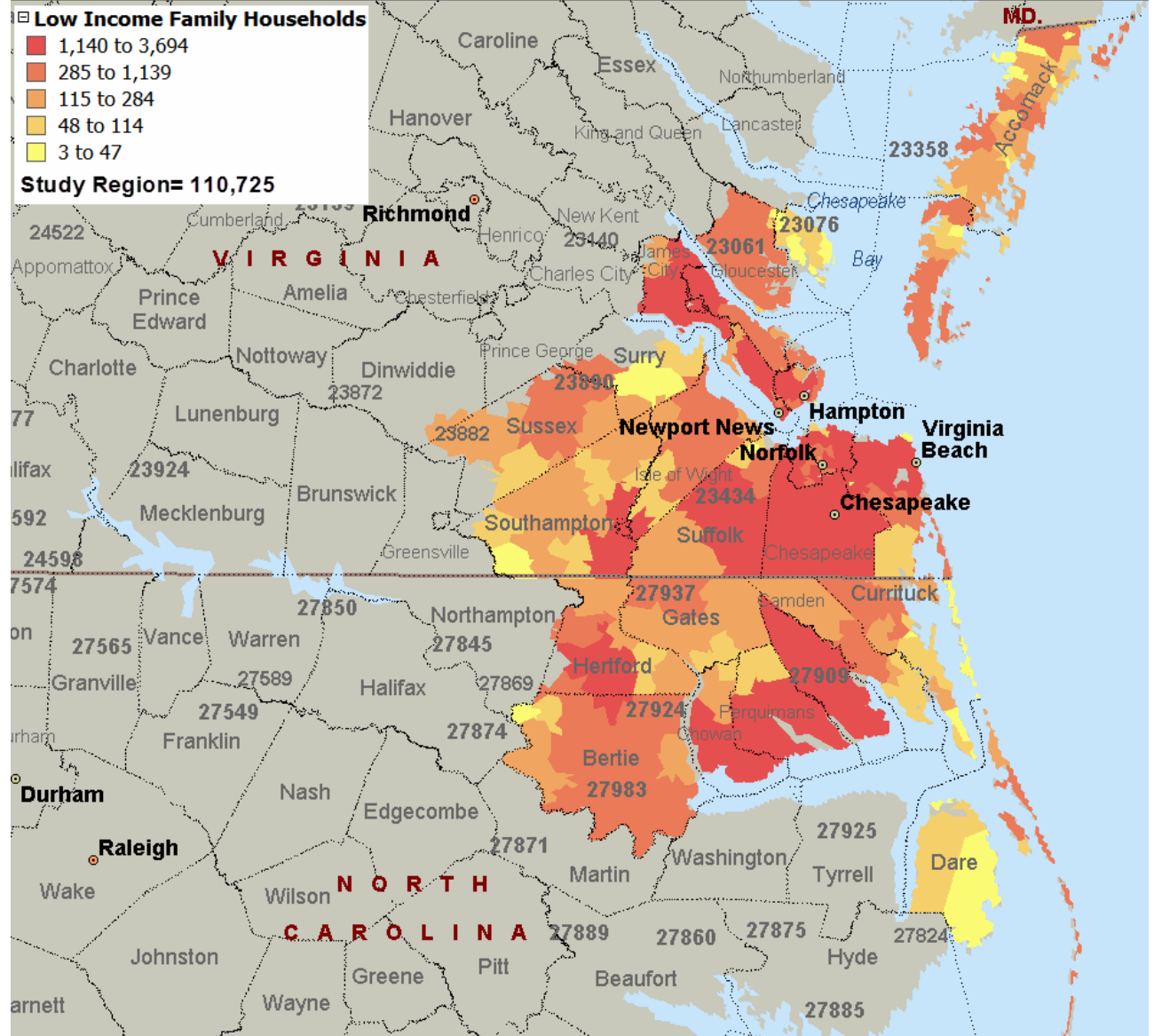
Source: Community Health Solutions analysis of data from Alteryx, Inc.

Map 6: Hispanic Ethnicity Population (Age 0-21), 2012



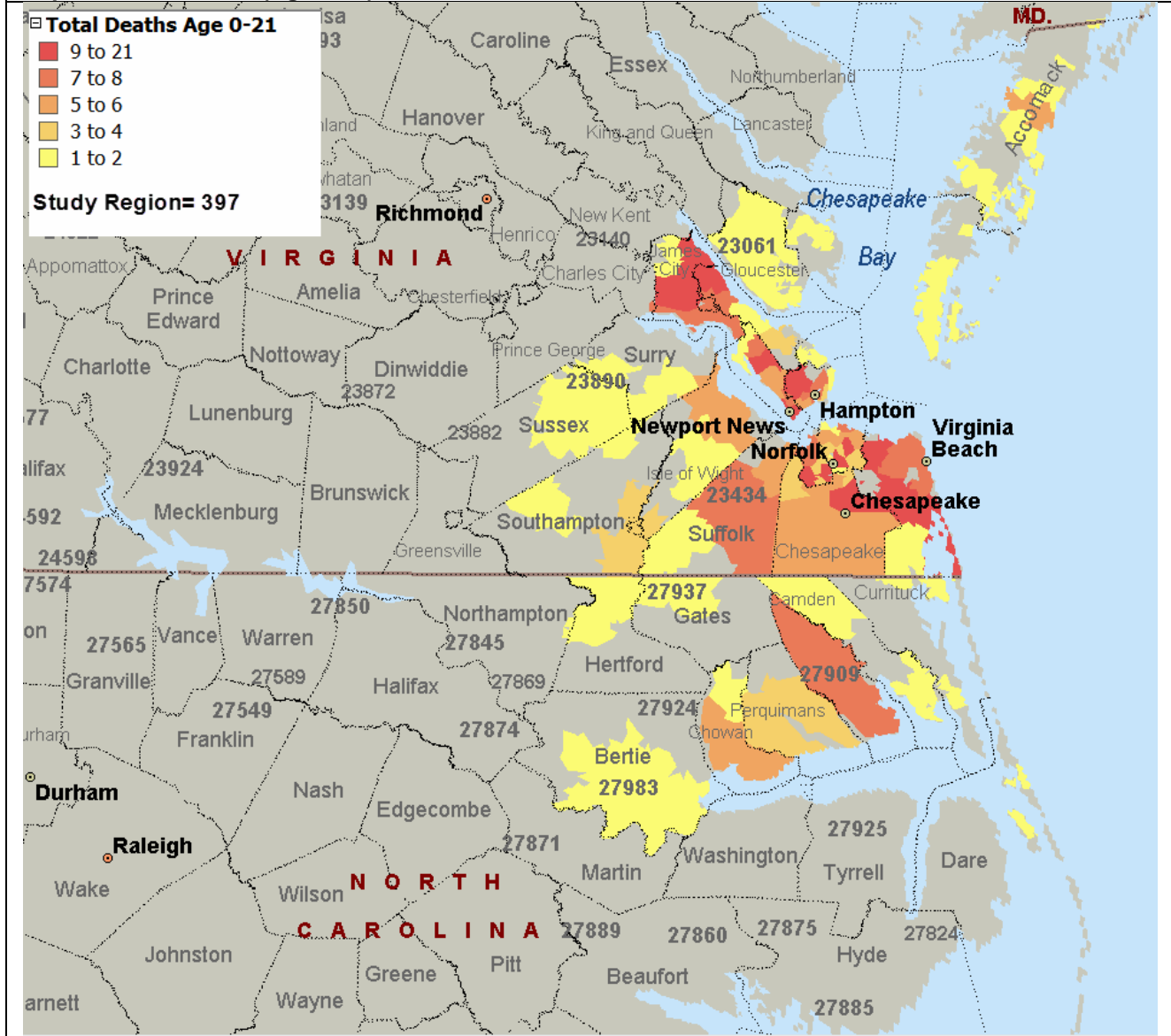
Source: Community Health Solutions analysis of data from Alteryx, Inc.

Map 9: Low Income Family Households (Family Households with Income <\$35,000), 2012*



Source: Community Health Solutions analysis of data from Alteryx, Inc.
 *Red indicates an area of higher risk on this map.

Map 10: Total Deaths (Age 0-21), 2011*

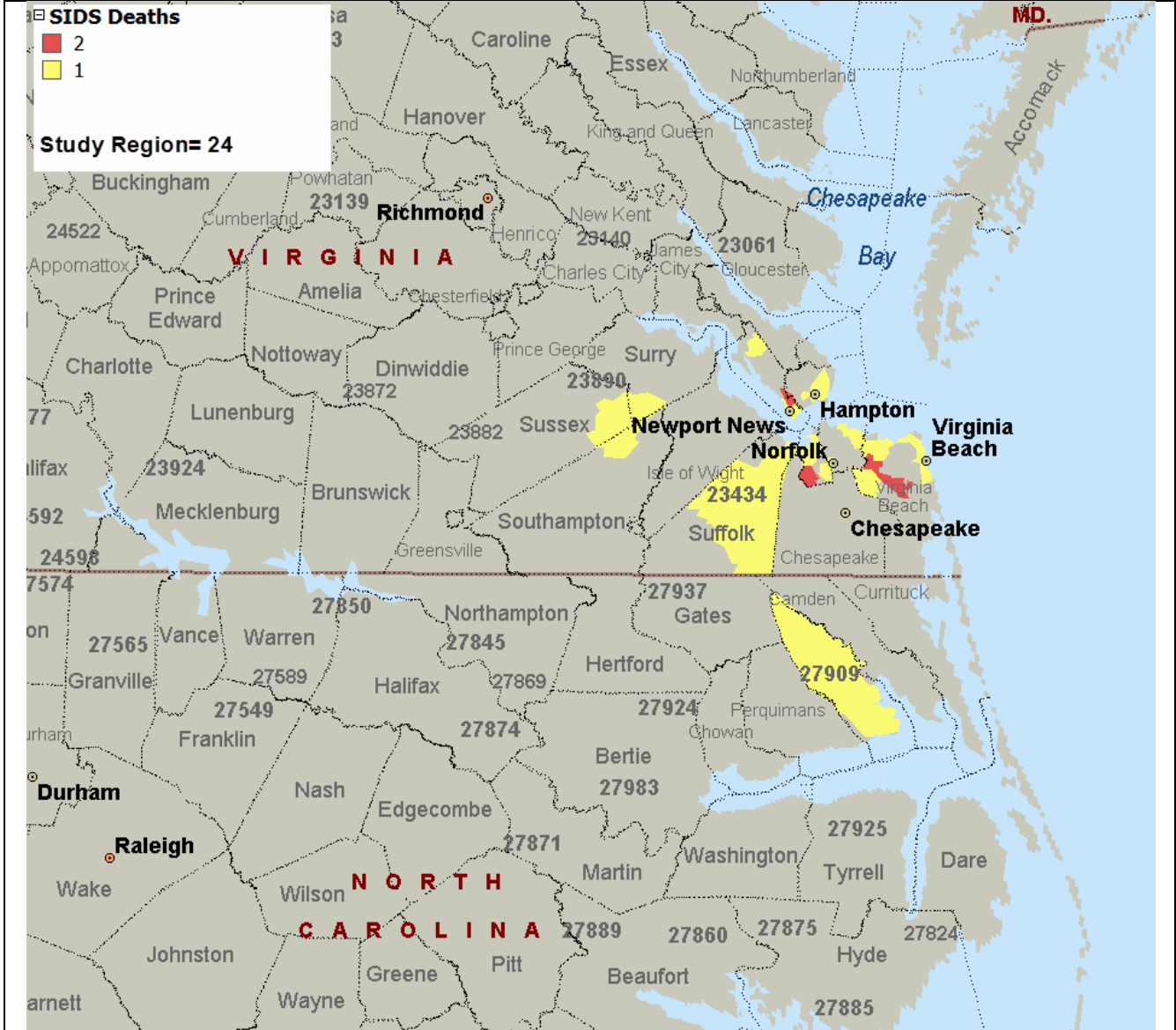


Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

* Zip codes with zero values are not displayed.

Map 11: Disorders Related to Short Gestation (Prematurity) and Low Birth Weight, Not Elsewhere Classified Deaths, 2011*

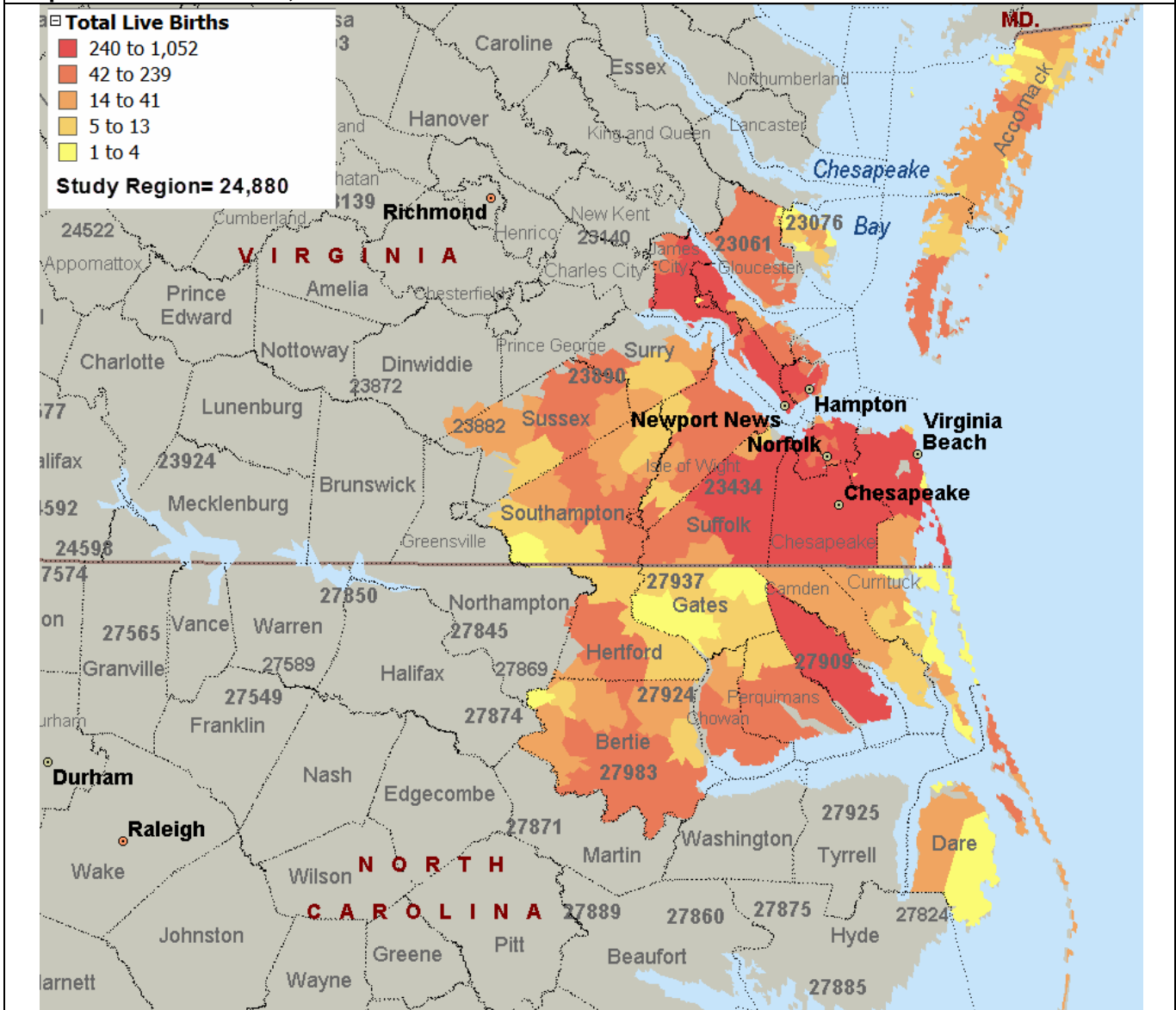
Map 12: Sudden Infant Death Syndrome (SIDS) Deaths, 2011*



Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

* Zip codes with zero values are not displayed.

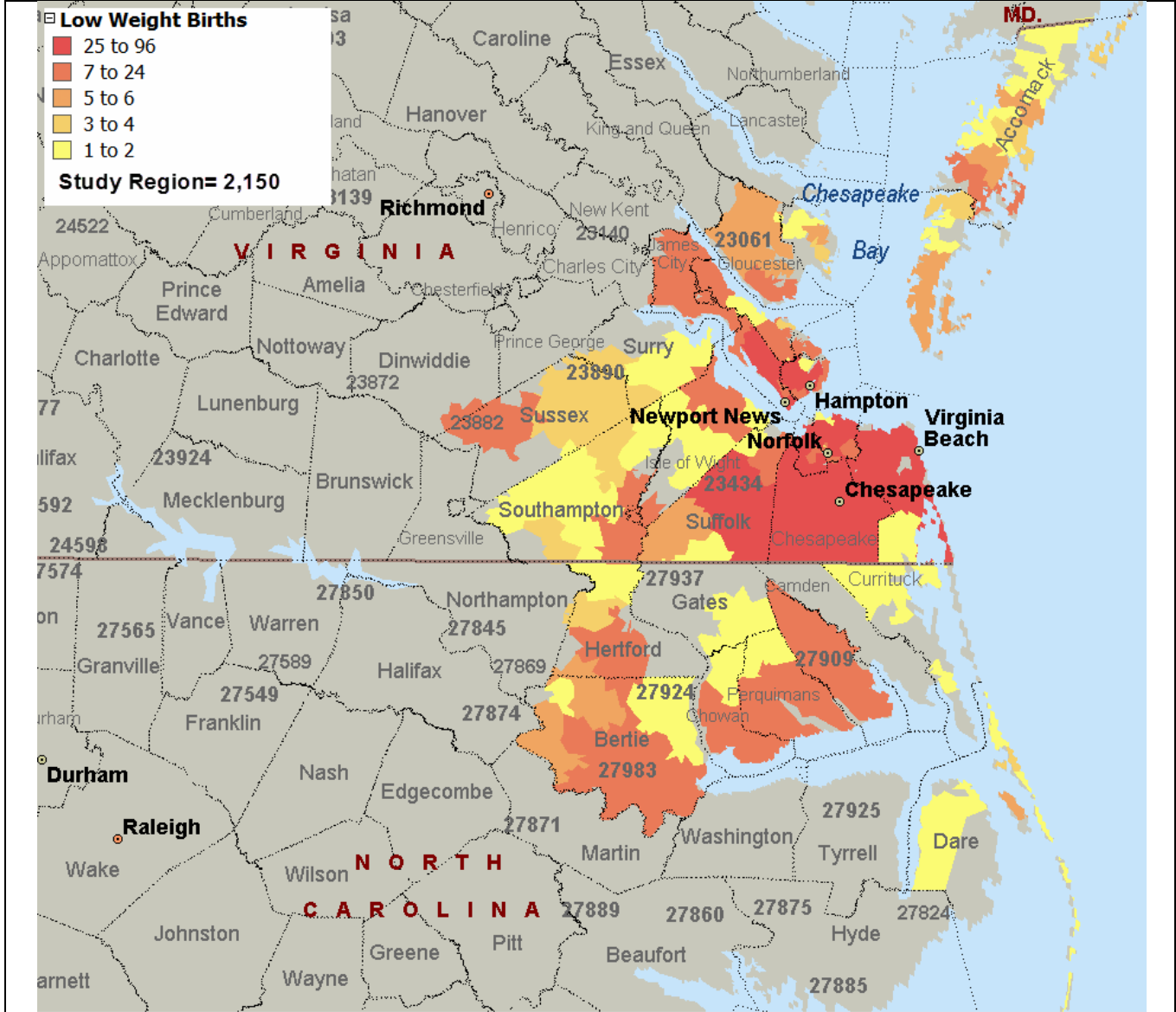
Map 13: Total Live Births, 2011*



Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

* Zip codes with zero values are not displayed.

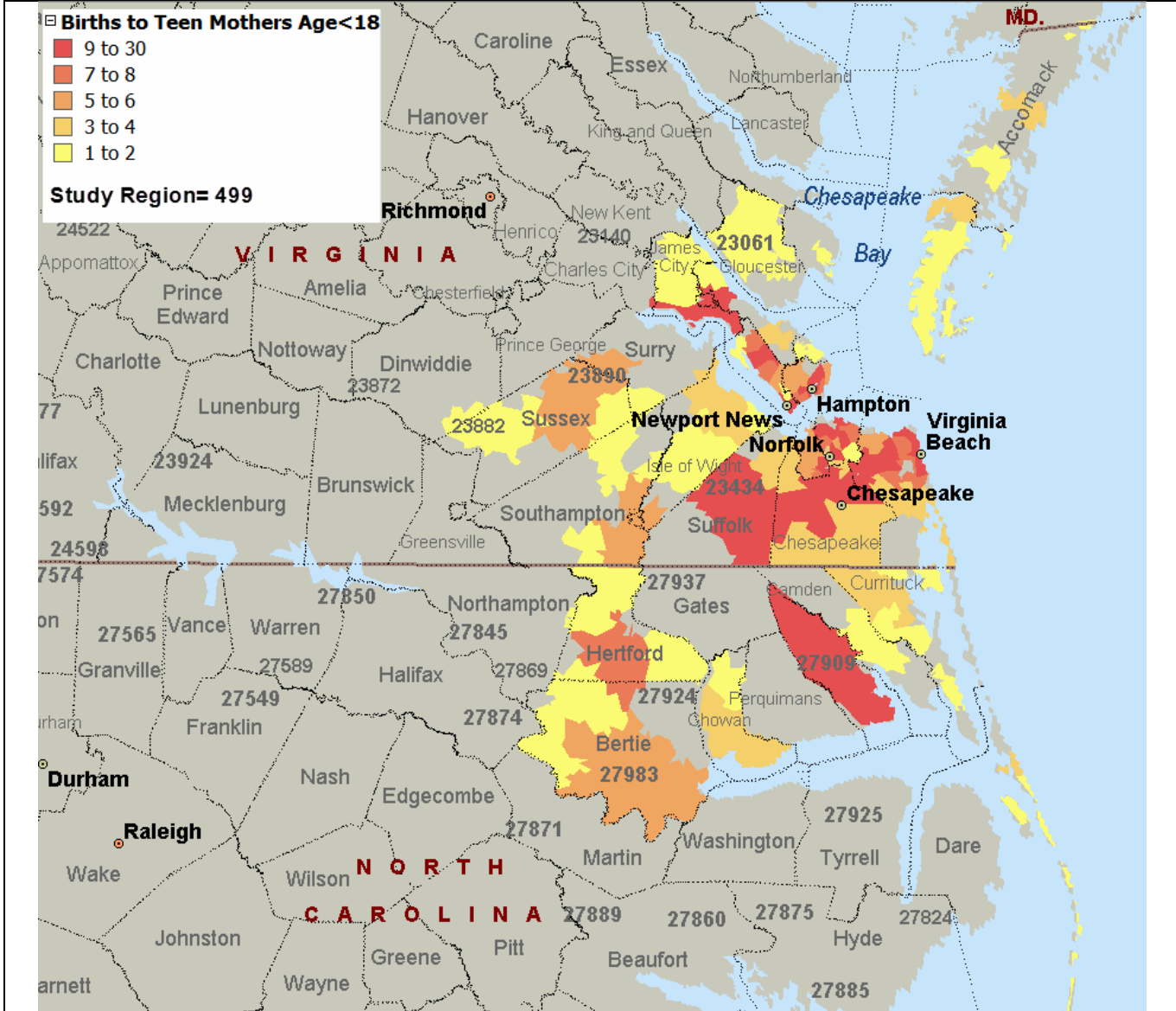
Map 14: Low Weight Births, 2011*



Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

*Zip codes with zero values are not displayed.

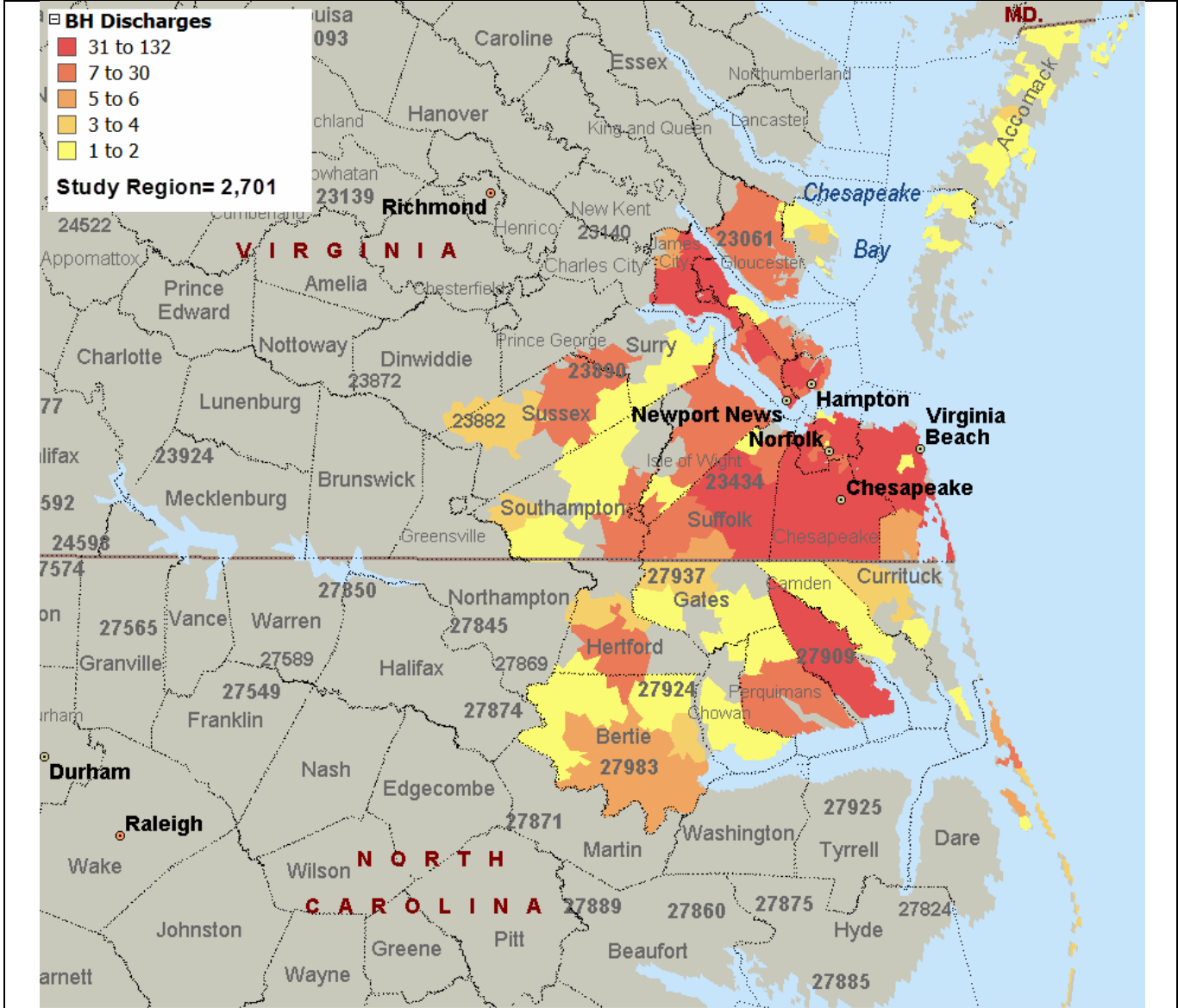
Map 16: Births to Teen Mothers Under Age 18, 2011*



Source: Community Health Solutions analysis of data from the Virginia Department of Health and North Carolina State Center for Health Statistics.

* Zip codes with zero values are not displayed.

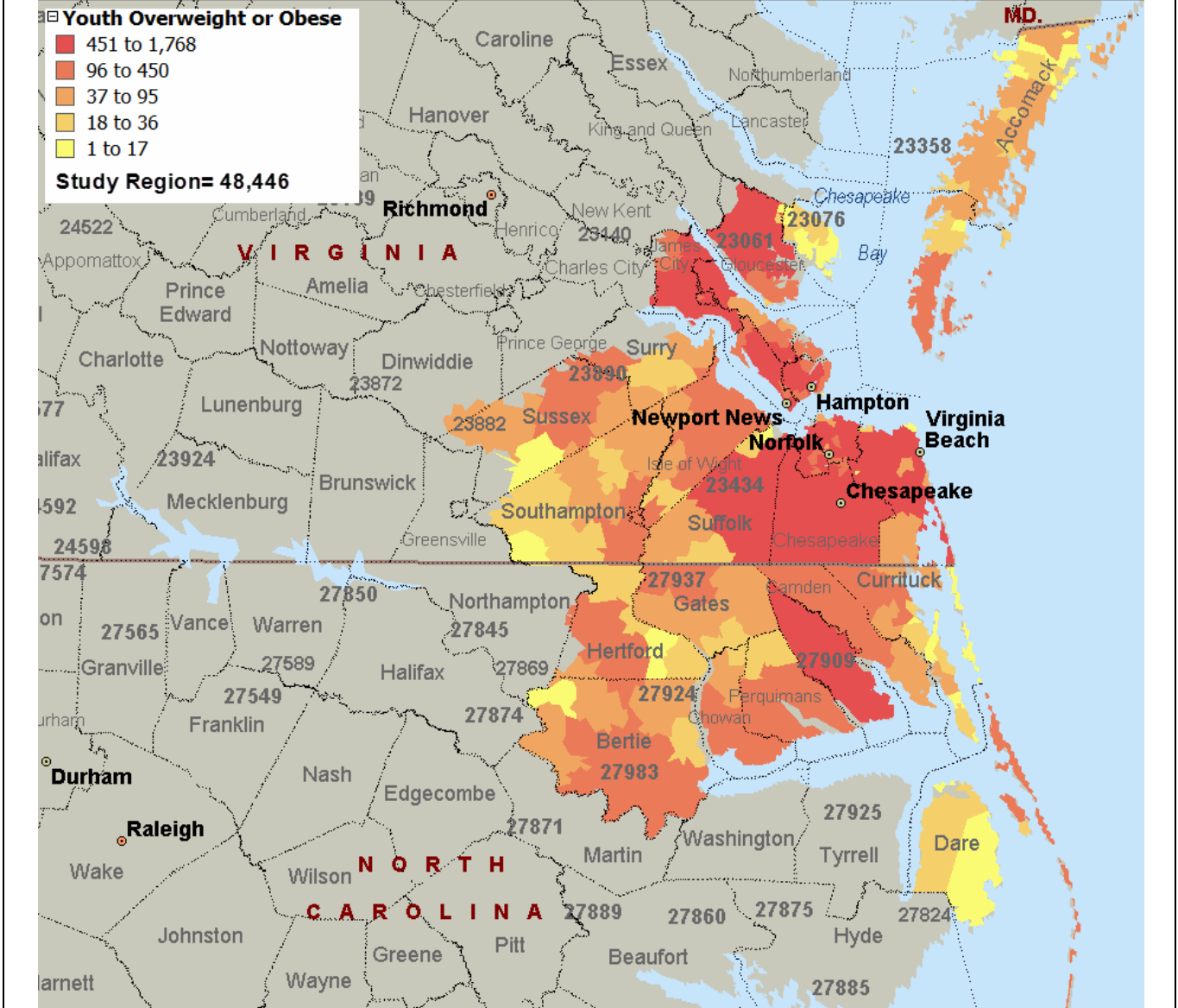
Map 17: Behavioral Health (BH) Hospitalization Discharges (Age 0-21), 2011*



Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc and North Carolina Patient Data System from Truven Analytics provided by CHKD. See Appendix C for details.

* Zip codes with zero values are not displayed.

Map 18: Estimated Youth Age 14-19 Overweight or Obese, 2012



Source: Community Health Solutions estimates based on secondary sources. See Appendix C for details.

APPENDIX B: Community Insight Profile-Additional Ideas and Suggestions for Improving Community Health

Survey respondents were given the option to submit additional ideas and suggestions for improving community health. The open-ended responses are listed below.

Additional Ideas and Suggestions for Improving Community Health	
Response	
1.	A CHKD satellite clinic would be great to serve [the] OT, PT, ST needs of the birth- age 3 years pediatric population, who live in rural communities.
2.	Active role leader in Childhood Obesity and Health Issues for our community. The YMCA is here as a partner and would welcome the opportunity to partner with CHKD.
3.	Behavioral/emotional treatment, including in-home.
4.	Care through physicians is available within the county; however the nearest hospital is several miles away. There is no public transportation. Emergency service are provided through a volunteer rescue squad for emergency transportation, however, access to specialists, radiology, or other hospital-based testing or care is difficult.
5.	Childhood Obesity continues to be a growing issue which will lead to long-term health concerns for all ages as this epidemic continues to grow. I believe there needs to be continued conversations among community resources (Health, Schools, Government, and Non-Profit Human Services) to strategically address the issues at hand and be an "Active Change Community".
6.	CHKD does a fantastic job in the community!
7.	CHKD does a wonderful job in so many areas. I think that strengthening ties with the public schools and community prevention efforts could go a long way in furthering its mission and improving the health of children and community.
8.	CHKD has a satellite office in Newport News. It would be a great service to the Middle Peninsula if an office could be opened in the Gloucester/Mathews/Middlesex area.
9.	CHKD is a leader in providing of quality health care services for children. A "leader" is also one who networks and brings together others in the community who can unite in combating a particular problem or meeting a particular need. Health care needs continue to grow and funding becomes more challenging. I believe networking will lead to more comprehensive solutions to health care issues. Health care providers in this area must work together.
10.	CHKD is one of only a few (or the only one) of the Children's Hospitals in the U.S. that does not have a dental program or pediatric dental residency program. We desperately need one to not only train new pediatric dentists, but also to provide care to the special needs population that CHKD serves.
11.	CHKD needs to increase and enhance its marketing efforts in a way to "win over" the some of the thousands of dollars that are annually donated to St Jude's. While St. Jude's remains a quality institution, I firmly believe many Hampton Roads residents do not understand the importance of having CHKD in their hometown and further, do not realize how few children from Hampton Roads actually go to St. Jude's for care. Accordingly, with proper marketing and greater awareness of CHKD, more local contributions from businesses and individuals will flow into CHKD instead of going to St. Jude's.
12.	Continue providing the excellent, quality care for all kids as you currently do regardless of insurance carrier or lack thereof.
13.	Continuing to communicate through multiple channels about the services you offer in the community.
14.	Develop strong partnerships with organizations that currently work within the community and with high risk families including public health, social services, community services board, day care networks and local school systems. A continuum of care would reduce duplication of services and allow each partner to contribute its strengths and assets in support of children's health.
15.	Further networking with other community resource providers. Collaboration to reduce duplication of efforts can increase productivity and make the limited resources in our community stretch.
16.	How to get schools to incorporate more physical activity. Also, expose students to yoga and other relaxation techniques. How to get a community to alter its eating habits, decrease fast food consumption and increase the availability of parks. i.e. students would probably love to see a zip line, a skate board park (I know that I am dreaming!).
17.	I believe CHKD has this vision in action. I see this and hear this often from parents I encounter.

APPENDIX B: (continued)

18.	I have heard of and witnessed your services for years and I applaud you. It would be helpful if your facility could offer local clinics.
19.	I live in a county quite some distance from the hospital and I am not certain people in this area realize the value of CHKD. It would be nice if there was even a monthly screening done in the area so that people saw it and heard about it and realized CHKD is for all children and not just the ones in Virginia. Beach or Norfolk.
20.	Increase the marketing budget.
21.	It would be great to see more opportunities to collaborate - and since I am in the MH field - that would be beneficial.
22.	It would be beneficial to our area if there was an increase in the availability of specialists at the Newport News office. Not all specialists are available locally and travelling to Norfolk is difficult for some families.
23.	Local providers, for residents within their community, as transportation is a barrier.
24.	1) Love the parent education sessions you do. Very helpful to the community. Need more in Western Tidewater. Parents are the key to success. Help us help the parents. Work with Healthy Families to build that program. It is key and has best practice outcomes worth replicating. 2) Give grants out to child service agencies. You raise so much money and 75% of the children in CHKD are now insured. If they are not insured you can get them insured. We need CHKD to give healthcare grants out to the agencies that are helping your hospital be profitable. Build a community endowment fund to work with the community agencies. Don't keep all that donated money for the hospital. Give back to the community with services.
25.	Many of the children in Portsmouth schools are seen by doctors or clinics at CHKD and their parents speak highly of the services provided. The biggest issue that I have been made aware of is the "wait time" to schedule an appointment with an MD at CHKD. The other issue that concerns me is that communication with the doctors is very difficult and sometimes impossible, especially when the school nurse and/or teacher feel as if they have something significant to share with a child's doctor. Having the parent sign a release form is easy, but getting a call back from the doctor is often impossible.
26.	More community visibility - a doctor spokesperson sort of like [Name of MD] used to be, <i>Ask A Nurse</i> , and more civic and board involvement by CHKD staff.
27.	None, I believe your organization does a wonderful job.
28.	Our area is in desperate need of qualified mental health services for children.
29.	Schools require physical exams of students starting school. Health Departments do not have the resources to provide free physicals. With access and transportation also being a problem, it is a real community need.
30.	Since the area has a lot of obese children, nutrition services in the community are essential, that and physical activity. I don't know if a child sits inside watching television or playing video games because of a fear that something will happen outside or the lack of opportunities for spending time performing a physical activity.
31.	This is going to be a biased response, but one of the ways to demonstrate leadership in the region as the preferred provider of quality children's health services is to partner with an academic program, such as the School of Nursing at ODU, to support the education of advanced practice nursing professionals who can aid CHKD in meeting a particular children's health service need, whether in-patient or out-patient.
32.	We have been amazed at the number of calls for children with special needs accessing respite, personal care, Medicaid waiver and child care.
33.	With EI services, CHKD does a good job. I would like better communication between EI and CHKD. We have lots of phone numbers to weed through when trying to assist our families.

APPENDIX C: Data Sources

Section	Source
Part I: Community Insight Profile	
1) Survey Respondents 2) Community Health Concerns 3) Community Service Gaps 4) Additional Ideas and Suggestions for Improving Community Health	Community Health Solutions analysis of <i>Community Insight Survey</i> responses submitted by community stakeholders.
Part II: Community Indicator Profile	
1) Health Demographic Trend Profile 2) Health Demographic Snapshot Appendix A: Maps 1-9	Health Demographic Trend Profile and Health Demographic Snapshot Profile based on Community Health Solutions analysis of population estimates from Alteryx, Inc. (2012 and 2017). Alteryx, Inc., a commercial vendor of demographic data. Note that demographic estimates may vary from other sources of local demographic indicators.
3) Mortality Profile Appendix A: Maps 10-12	2011 Mortality Profile based on Community Health Solutions analysis of: <ul style="list-style-type: none"> • Virginia Department of Health death record data; and • North Carolina State Center for Health Statistics death record data.
4) Maternal and Infant Health Profile Appendix A: Maps 13-16	2011 Maternal and Infant Profile based on Community Health Solutions analysis of: <ul style="list-style-type: none"> • Virginia Department of Health birth record data; and • North Carolina State Center for Health Statistics birth record data.
5) Behavioral Health Hospitalization Profile Appendix A: Map 17	2011 Behavioral Health Hospitalization Profile based on Community Health Solutions analysis of: <ul style="list-style-type: none"> • Patient Level Data from Virginia Health Information (VHI) (January 1-December 31, 2011) . Data include discharges for Virginia residents from Virginia community hospitals reporting to Virginia Health Information, Inc. • North Carolina Patient Data System from Truven Analytics (January 1-December 31, 2011) provided by CHKD. Data include discharges for North Carolina residents from North Carolina private and community hospitals reporting to the North Carolina Patient Data System. • Demographic data from Alteryx, Inc. (2011). <p>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.</p> <p><i>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.</i></p>

APPENDIX C: (continued)

<p>6) Youth Health Risk Factor Profile Appendix A: Map 18</p>	<p>Estimates of risk behaviors for children age 14-19 were developed by Community Health Solutions using synthetic estimation methods. In synthetic estimation, statistical modeling is used to predict local rates based on state or national survey data. Synthetic estimates are provided for planning purposes only, and are not guaranteed for accuracy. The data used to produce the estimates in this section include:</p> <ul style="list-style-type: none"> • Statewide Virginia Youth Risk Behavioral Surveillance Survey from the Centers for Disease Control (2011); • Statewide North Carolina Youth Risk Behavioral Surveillance Survey from the Centers for Disease Control (2011); and • Demographic data from Alteryx, Inc. (2012).
<p>7) Special Education Profile</p>	<p>2010-2011 Special Education Profile based on Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> • Virginia Department of Education Special Education Child Count data; and • Public Schools of North Carolina Special Education Child Count data.
<p>8) Uninsured Profile Appendix A: Map 19</p>	<p>Estimates of uninsured children were developed by Community Health Solutions using synthetic estimation methods. In synthetic estimation, statistical modeling is used to predict local rates based on state or national survey data. Synthetic estimates are provided for planning purposes only, and are not guaranteed for accuracy. The data used to produce the estimates in this section include:</p> <ul style="list-style-type: none"> • <i>Profile of the Uninsured</i> report produced for Virginia Health Care Foundation by the Urban Institute (2011); and • Demographic data from Alteryx, Inc. (2012) <p>Note that the findings in <i>Profile of the Uninsured</i> Report was used to produce estimates for both the Virginia and North Carolina geographies in the study region, as a comparable North Carolina source was not readily available.</p>
<p>9) Medically Underserved Profile</p>	<p>Medical Underserved Profile based on Community Health Solutions analysis of U.S. Health Resources and Services Administration data.</p>