



MEDARVA™

A Community Health Needs Assessment

Prepared for MEDARVA
(Richmond Eye & Ear Healthcare Alliance, Inc.)

2017

Table of Contents

Section	Page
Introduction	2
Executive Summary	3-6
Organizational Structure	7
Service Area and Services Provided	8-10
Methodology	11
Resources Consulted For CHNA	12
Existing Health Care Facilities and Resources	13
Part I. Community Insights Profile	14
1. Survey Respondents	15
2. Community Health Concerns	16-18
3. Community Service Gaps	19-20
4. Ideas and Suggestions for Improvement	19
5. Community Resources <ul style="list-style-type: none"> a. Affordable Health Care b. Access to Specialist Health Care c. Pervasive Health Problems d. Need for Non-Profit Health Care Facilities e. Continued Funding of Medicaid Procedures and Charity Care 	21-24
Part II. Community Indicator Profile	25
1. Health Demographic Profile	26
2. Mortality Profile	27
3. Maternal and Infant Health Profile	28
4. Preventable Hospitalization Profile	29
5. Health Professional Shortage Profile	29
6. Diabetes Management Profile	30
7. Uninsured Population	31
8. Previous Funding Projects	32
Summary of Community Needs	33
References	34

Introduction

As a result of the Patient Protection and Affordable Care Act (hereby referred to as the ACA), certain Health Care providers and facilities are required by law to assess the health needs of the communities that they serve by performing a Community Health Needs Assessment (“CHNA”) every three years. The Association of State and Territorial Health Officials (ASTHO) states that,

These assessments and strategies create an important opportunity to improve the health of communities. They ensure that hospitals have the information they need to provide community benefits that meet the needs of their communities. They also provide an opportunity to improve coordination of hospital community benefits with other efforts to improve community health.

Richmond Eye & Ear Health Care Alliance (REEHA), dba MEDARVA Healthcare has prepared this report assessing the Health Care needs of Virginia’s citizens residing in MEDARVA’s service area, with particular focus on those who are impoverished or reside in medically underrepresented communities. This report sets forth the organizational structure of MEDARVA, its service area and services, the process used and resources consulted in developing this CHNA, a description of specific community health needs by priority, existing community resources and next steps for addressing the identified needs.

MEDARVA is committed to furthering its charitable efforts and implementing reasonable programs to address the needs identified in this report.

Executive Summary

MEDARVA Healthcare, a 501(c)(3) nonprofit charitable corporation, prides itself on practicing and perfecting the art of medicine, and partnering with community organizations to help bring medical assistance and awareness to those in need.

In order to continue to better the services offered to the community, this health needs assessment was executed over the last several years by the designated Task Force outlined in the *Methodology* section.

The study focuses on the MEDARVA Greater Richmond Metropolitan service area. The counties are listed specifically further on in this report along with methodology and other service providers. The conclusions in this executive summary resulted from qualitative and quantitative finding from community resources, the “community insights profile” based on feedback from community health professionals and the “community indicator profile” based on demographic research.

Part I. Community Insights Profile

By statute, the CHNAs must take into account input from “persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health. - ASTHO

After compiling information regarding the health care needs of the communities served by MEDARVA, a set of community health indicators were identified. The indicators focus on determinants of health (economic conditions, health care access, health care affordability), prevalence of chronic conditions, and health outcomes (morbidity as measured by hospital use and mortality).

Using these determinants, the Task Force discussed key health and health care issues from the perspectives of challenges, achievements, opportunities for action, resources and priorities for action. This process was used to delineate, in order of priority, the following list of community health needs:

- Affordable health care
- Access to specialist Health Care
- Pervasive health problems
- Need for non-profit Health Care facilities
- Continued funding of Medicaid procedures and charity care

Part II. Community Indicator Profile

The community indicator profile in Part II presents several key quantitative community health indicators for the study region. To produce the profile, the Task Force analyzed data from

multiple sources including studies conducted by the Virginia Chamber of Commerce. 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, and for which there were readily available data sources. To summarize:

- *Health Demographic Profile* The study region included major counties surrounding the City of Richmond, including Henrico County and Chesterfield County. While other surrounding counties are significant, Henrico and Chesterfield are significantly larger and closer geographically to the City of Richmond. These counties share health care facilities and services. Many other surrounding counties are served by smaller entities and have sparse populations that can skew data.
- *Mortality Profile* Data shown in the Mortality Profile is from census data from 2011 and 2016. Medical data (death by cause) is from 2011, while death numbers are the most updated from 2016. All data is from the Virginia Department of Health & Vital Statistics and from the U.S. Census, 2011.
- *Maternal and Infant Health Profile* Natality profile data comes from the Virginia Department of Health and Vital Statistics and the American Community Survey (U.S. Census Data). This comprehensive information provides insight on geographical regions within the Commonwealth.
- *Preventable Hospitalization Profile* Experts have identified a defined set of conditions that are ambulatory care sensitive (ACS). Ambulatory care is often considered preventable if and when adequate primary care is available to and accessed by those in need. These factors are often affected by significant levels of poverty in urban areas, which are inversely proportional to the same factors in more affluent areas.
- *Health Professional Shortage Profile* Defined as having a shortage of primary medical care, dental or mental health professionals. There are 143,925 (12.23%) people living in an area identified as having limited access to Health Care. The Virginia Department of Health (2016, see table, p. 15) has provided data on medical care availability that serves certain populations.
- *Diabetes Management Profile* In the report area, 11,644 Medicare enrollees with diabetes have had an annual exam out of 13,616 Medicare enrollees in the report area with diabetes, or 85.52%. This is a comparable rate to the Commonwealth of Virginia. Data is also from the American Community Survey and the Virginia Department of Health and Vital Statistics. The VDOH provides more robust data on localities than the ACS shows, which is more focused on national statistics.
- *Uninsured Profile* In the report area, adults age 18 to 64 without health insurance coverage is 17.78%. This is average compared to statewide coverage. This data, also from the American Community Survey, highlights some striking differences between coverage in certain geographic areas, levels of wealth and demographics. It is worth noting that these levels will continue to fluctuate as the Affordable Care Act continues to affect insurance coverage throughout the nation and particularly statewide.

Conclusion

The Greater Richmond Area features localities with different issues concerning both health care and economic strength that can benefit from the services of MEDARVA's unique and multifaceted services and through its surgery center. This CHNA identified five primary health needs in the communities served by MEDARVA: affordable health care; access to specialist health care; pervasive health problems; need for non-profit health care facilities; and continued funding of Medicaid procedures and charity care.

MEDARVA is committed to continuing its current efforts to meet its communities' health needs and to implementing new programs along with building on current programs to help address the five primary health needs identified in this CHNA. To address these needs, within the last three years MEDARVA has started utilizing its resources to meet many of the community's health needs. In 2015, MEDARVA launched its own free pre-K vision and hearing screening program to increase access to care for children and to help them see and hear as well as possible during their first few years of school. Since its inception, the program has screened more than 3,500 children and found that about 20 percent needed a referral to an eye or hearing specialist. Additionally, 1 in 4 children had a vision impairment significant enough to affect learning.

Low vision has also been a focus as MEDARVA has launched Virginia's only full-time, private low vision center. The center provides comprehensive low vision exams to not only those with insurance, but individuals who are referred to the program and need assistance. Along with screenings, the center provides occupational therapy services to patients who need to learn how to use special low vision equipment.

Free colon screenings have also been a service provided by MEDARVA during the last two years. More than 50 individuals have received free colonoscopies through the program. The free colon screenings were part of a partnership between MEDARVA, Colon & Rectal Specialists, Access Now, Crossover Ministries, and Hitting Cancer Below the Belt.

Other organizations that MEDARVA supports in an effort to meet the health needs of the community include: Crossover Ministries, Hitting Cancer Below the Belt, The Health Brigade, Goochland Free Clinic, Charles City Free Clinic, Care-A-Van, Cheryl Watson Free Clinic, Powhatan Free Clinic, Crossover Ministries, and Appomattox Health and Wellness Center.

MEDARVA launched its own pre-k vision and hearing screening program, which provides free screening tests to preschools and elementary schools ensuring that students are ready for their first year of school.

MEDARVA, which has seen growth in both revenue and charitable donations since the beginning of the recent economic recession, aims to be an example for similar healthcare providers for how it consistently strives to increase access to excellent specialty medical care and improve the health needs of the residents in its communities.

As a result of the research and priorities in this CHNA, MEDARVA Board of Directors, and medical staff, MEDARVA will develop and initiate an implementation plan to address the community health needs identified in this CHNA.

Organizational Structure of MEDARVA

MEDARVA is a Virginia Nonstock Corporation that is tax-exempt pursuant to IRC Section 501(c)(3). MEDARVA provides charitable services directly to the community and through its operating affiliate Stony Point Surgery Center (SPSC), a specialty outpatient surgical hospital located in Richmond, Virginia. MEDARVA holds a controlling interest in SPSC and manages SPSC's day-to-day operations.

MEDARVA's predecessor was the Richmond Eye & Ear Hospital, which closed its inpatient acute care hospital in June 2002 and transferred its operations to SPSC. The 127 employees of SPSC are included among the nearly 350,000 working in Virginia's nonprofit sector, the state's second largest industry.¹

¹ Lester M. Salamon, Stephanie Lessans Geller, and S. Wojciech Sokolowski, Virginia's Nonprofit Sector: An Economic Force, Nonprofit Economic Data Bulletin Number 32, September 2008.

MEDARVA Service Area and Services Provided

MEDARVA Stony Point Surgery Center (SPSC) is a licensed outpatient surgery hospital and Medicare/Medicaid certified ambulatory surgery center located at 8700 Stony Point Parkway, Suite 100, Richmond, Virginia 23235. MEDARVA's highly trained professional staff and physicians utilize advanced technology to perform surgery in the 30,000 square foot modern ambulatory surgery center. The center has eight operating rooms and five special procedure rooms.

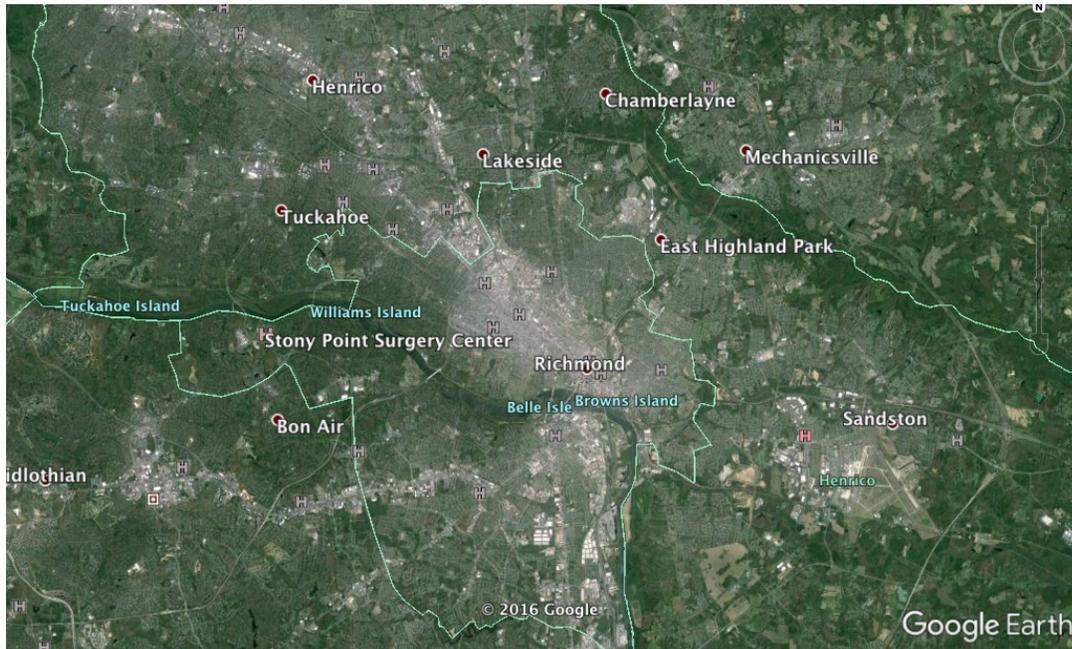
MEDARVA SPSC is a full service outpatient surgical hospital, unaffiliated with a larger health system, that offers excellent care in orthopedics, general and vascular surgery, gynecology, plastic and reconstructive surgery, colon/rectal surgery, ophthalmology, retina surgery, otolaryngology and podiatry, as well as other surgical specialties. MEDARVA also offers leading interventional spine and pain management services to the region. MEDARVA provides experienced clinical care in the areas of pediatric surgery and the subspecialties of pediatric urology, pediatric ophthalmology and pediatric otolaryngology.

The charity care provided by MEDARVA through SPSC and directly through MEDARVA operated programs helps meet the health needs of those individuals and families in central Virginia who are dealing with unemployment, lack insurance, or lack other resources that prevent them from receiving necessary surgical operations. MEDARVA provided over \$3,409,230 in direct charity care in the last two years and millions more through Medicaid payment.

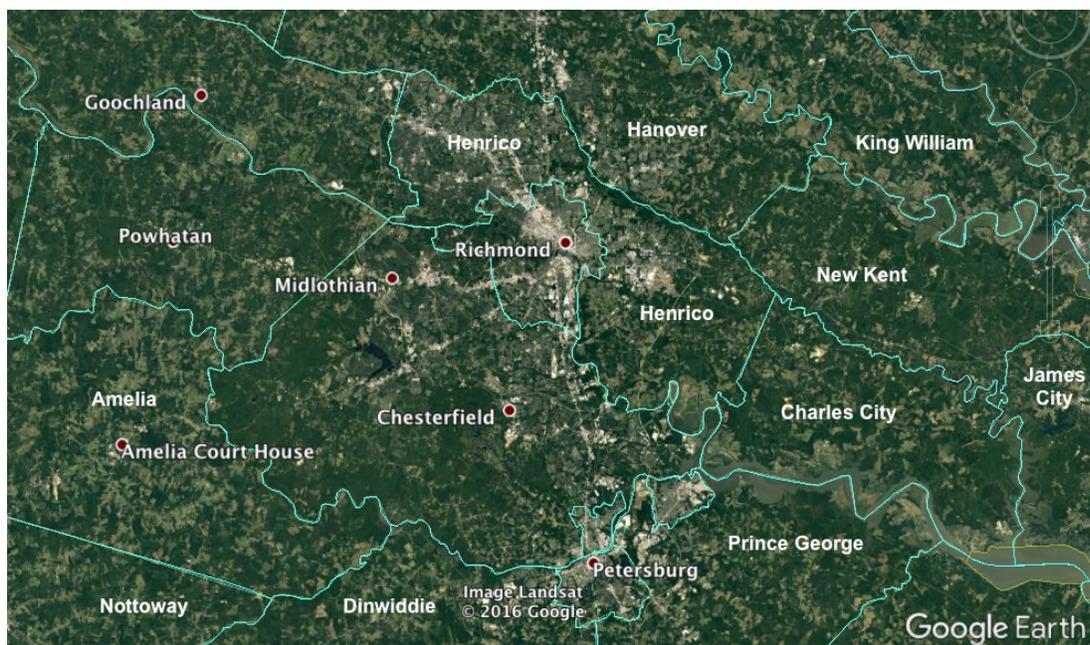
An analysis of MEDARVA patient data from the past three years indicates that MEDARVA primarily provides outpatient surgical services to patients in the Greater Richmond Metropolitan Area, which includes the following locales: Amelia County, Caroline County, Charles City County, Chesterfield County, City of Richmond, City of Petersburg, City of Hopewell, City of Colonial Heights, Cumberland County, Dinwiddie County, Goochland County, Hanover County, Henrico County, King and Queen County, King William County, Louisa County, New Kent County, Powhatan County, Prince George County, and Sussex County. MEDARVA's services also include the cities of Fredericksburg, Williamsburg, and Emporia.

Maps of Service Area

Map of Richmond Metro Area with neighborhoods and Hospitals indicated by "H"



Map of Richmond and Surrounding Counties



Charitable Care and Financial Assistance Policy

MEDARVA SPCS's mission is to provide the best care to every patient every day. As part of that commitment, the organization appropriately serves patients in difficult financial circumstances and offers financial assistance to those who have an established need to receive emergency or medically necessary medical services. SPSC's policy is to provide emergency care to stabilize patients, regardless of their ability to pay. SPSC's policy serves to establish and ensure a fair and consistent method for the review and completion of requests for charitable medical care to patients in need.

Patients who want to apply for financial assistance or who have been identified as potentially eligible for financial assistance are informed of the application process either before receiving services if the facts suggest potential eligibility or after the billing and collection process has begun. All patients/guarantors who receive a Financial Statement application must complete and return an application, along with the following documents that serve as the minimum information necessary to process an application for financial assistance:

- Proof of application for a Medical Assistance Program such as Medicaid, as applicable
- Proof of household income (pay stubs for the past ninety days)
- A copy of 3 most recent bank statements from all banking or credit union institutions of the household
- A copy of the 2 most recent tax returns, including all schedules of patient, spouse, or any person who claims the patient as a tax dependent
- Full disclosure of claims and/or income from personal injury
- In the event that the above items do not exist, the facility may require external verification confirming the presented facts

Health Assessment Methodology

MEDARVA's executive committee appointed a Task Force to serve as the CHNA Task Force to facilitate its assessment of the needs of the communities served and to report to the Executive Committee.

The Task Force met throughout 2016 in preparing and conducting the CHNA. The Task Force identified and reviewed numerous resources published between 2007 and 2016 (see reference list) to serve as a basis for identifying community needs including assessments of the populations, demographics and health care needs of the community as well as the credibility of the publisher. The Task Force also identified key stakeholders and organizations in the communities serviced by MEDARVA and established a process for obtaining information from these key stakeholders and organizations (described in greater detail in Section V below).

Once the Task Force gathered information from these publications, key stakeholders and organizations, the Task Force met monthly to discuss and analyze the information and its implications. Community needs and health care concerns identified by publications, key stakeholders and organizations were juxtaposed against community and individual Health Care resources to prioritize needs. The Task Force's assessment of needs and prioritization of these needs is described below in Section VI of this CHNA.

Resources Consulted in Developing the CHNA

The Task Force utilized a multi-faceted approach to assess the health needs and concern of Stony Point Surgery Center's service area. Multiple sources of public data along with community viewpoints have been incorporated into this assessment in order to showcase the service area health and Health Care landscape. A combination of the Task Force engagement, analyzing data and content analysis of the community feedback were utilized to identify key areas of priority and need.

Primary Data

Community engagement and feedback was obtained through an insights survey, outlined in Part 1. A complete list of references for the entirety of this CHNA is provided at the conclusion of the document in the References section.

Blueprint Virginia. The Virginia Chamber of Commerce and The Council on Virginia's Future, 2013.

Virginia Department of Health and Vital Statistics. 2016. Retrieved from:
<http://www.vdh.virginia.gov/Data/index.htm>

U.S. Census Data, American Community Survey. 2011. Retrieved from:
<https://www.census.gov/programs-surveys/acs/>

U.S. Census Data Quick Facts. 2016. Retrieved from: <http://www.census.gov/quickfacts/>

Secondary Data

Key sources for quantitative health related data on MEDARVA's service area included multiple public data sources on demographics, health and Health Care resources, county rankings, social/behavioral health trends and disease trends such as the US Census, US Department of Health and Human Services, Virginia Department of Health, County Health Rankings online and the Center for Disease Control and Prevention, the SPSC Certificate of Public Need for the creation of a outpatient surgery center in Goochland County and public testimony.

Existing Health Care Facilities and Resources

MEDARVA is a specialty outpatient surgical hospital serving the needs of the Greater Richmond Metropolitan Area. Other medical facilities within MEDARVA's service, which include outpatient, inpatient, acute, chronic condition and specialty care facilities include the following:

- HCA Henrico Doctors Hospitals, Forest Road and Parham Road locations
- HCA Chippenham Johnston-Willis Medical Center
- Bon Secours Memorial Regional Medical Center
- Bon Secours St. Francis Medical Center
- Bon Secours St. Mary's Hospital
- Hanover Outpatient Surgical Center
- McGuire VA Hospital
- Retreat Doctor's Hospital
- Richmond Community Hospital
- Southside Regional Medical Center
- VCU Medical Center
- Virginia Surgical Center
- Virginia Urology Center

These facilities, along with MEDARVA, are some of the community resources available to residents in MEDARVA's service area that may assist in meeting the Health Care needs identified in this CHNA.

Part I. Community Insights Profile

In an effort to generate community input to the community health needs assessment, a Community Insight Survey was conducted with a group of community stakeholders identified by Stony Point Surgery Center. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community
- Significant service gaps in the community
- Ideas for addressing health concerns and service gaps

In addition to the Community Insight Survey, MEDARVA referenced community resources to help best identify the priority community health needs.

Survey Respondents

The survey was sent to a group of 31 community stakeholders as identified by MEDARVA. Responses were received from 5 different organizations. The respondents provided a rich set of insights about community health in the study region. For additional data on health care providers in Central Virginia, see page 15.

Reported Organization Affiliation of Survey Respondents:

- Goochland Free Clinic and Family Services
- Powhatan Free Clinic
- Crossover Health Care Ministry
- Access Now
- Family Lifelines
- Fan Free Clinic

Community Health Concerns

A list of issues and community health concerns was drawn from the topics on Healthypeople.gov 2020 data, with some refinements. The top concerns in MEDARVA's service area being obesity, mental health issues, high blood pressure, diabetes and dental care. Obesity ranked in the upper twentieth percentile for Richmond City, Henrico and Chesterfield Counties - the two largest and most populous counties in the Richmond Metro Area.

The following chart is a detailed sample of 2015 health data from the City of Richmond. This data was collected across seven Health Resource Centers serving low-income communities in the City of Richmond. Similar data was not available for Henrico and Chesterfield Counties, however the Richmond data can be used as an indicator for regional health concerns.

Resource Center Service Profile (2015)	
Measure	Value
Patient Visits	
Total number of patient visits	3129
Total unduplicated number of medical patients	2237
Sexually Transmitted Infection (STI) Control	
Total number of patients screened for sexually transmitted infections (STI)	1034
Percentage of patients screened for sexually transmitted infections (STI)	46%
Total number of STI screenings	3200
Number of patients with positive STI	444
Percentage of patients with positive STI receiving treatment at Resource Centers.	78%
Family Planning	
Number of patients of childbearing age who received education regarding birth control options	857
Percentage of patients of childbearing age who received education regarding birth control options	85%
Number of patients who received a long-term method of birth control	130
Percentage of patients using long-term method of birth control who do not become pregnant within next year	100%
Cancer Prevention	
Number of patients who received a breast exam	199
Number of patients who received a pap smear	197
Chronic Disease	
Number of patients receiving blood sugar screening	66
Number of patients receiving blood pressure screening	1387
Referrals for Health and Social Services	
Number of referrals from RCHD staff for any social or community service	1577
Total number of community organizations	175
Referral and Navigation to a Medical Home	
Number of patients referred to a medical home	205
Number of patients referred to a medical home and presenting for initial appointment	95
Percent of patients referred to a medical home and presenting for initial appointment	46%
Healthcare Coverage Referrals	
Number of patients referred for assistance with enrollment in Medicaid or FAMIS	79
Community Outreach and Education	
Number of classes led or facilitated by Community Advocates	419
Average number of classes led or facilitated by 6 CAs per month	35
Number of outreach events led or facilitated by Community Advocates	456
Average number of outreach events led or facilitated by 6 CAs each month	38

Source: Virginia Department of Health

A collaborative goal of all healthcare providers and agencies across Virginia is to lead the way in improvement, access, cost, advances and quality.

According to the Capital Region Collaborative (consisting of the Greater Richmond Chamber of Commerce and the Richmond Regional Planning District Commission), Richmond ranks fourth in the nation for healthy communities. Comparable cities leading the way are Austin, Texas, Raleigh, North Carolina, and Hartford, Connecticut.

Life expectancy for residents in Gilpin Court is 20 years less than for those in Westover Hills - Capital Region Collaborative

Heart disease and diabetes remain as leading causes of death in Richmond. 12.8% of the Richmond population lives below the poverty line and 11% of the population receives SNAP (Supplemental Nutrition Assistance Program; food stamps) benefits. While Richmond has (and is still) seeing a surge in interest in personal health management through better exercise and fitness programs and initiatives, this is mainly for the wealthier population. An alarming statistic, however, is that over 30% of the Richmond population is paying more than 30% of their gross income on housing costs. For all residents, middle-class or poor, this burden is oppressive and it can be presumed that the cost of living in the Richmond region is outpacing the growth of income rates in a negative manner.

According to the Virginia Chamber of Commerce, many challenges exist and plans for improvement are under way. The passage of the Affordable Care Act has resulted in rising premiums for the insured, and a goal of the Virginia Chamber is to “implement Medicaid reform and expansion to help reduce cost shifting onto insured patients and employers for the cost of treating the uninsured”. Essentially, the cost of healthcare for the insured has skyrocketed while the cost of healthcare for the uninsured has only decreased marginally. Therefore, one of the goals of Virginia health care providers is to improve the value of healthcare to citizens of the Commonwealth and the Greater Richmond Region, along with leading the way in payment reform and innovation in the health workforce.

Community Service Gaps

Survey respondents were asked to review a list of community services, which are typically important for addressing the health needs of a community. Respondents were asked to identify from the list any services they think need strengthening in terms of availability, access, or quality. The results are summarized below. When interpreting the results please note that the relative number of responses received is not a definitive measure of the relative importance of one issue compared to another.

Important Community Service Gaps Identified by Survey Respondents:

Indicator	Service Gap	Respondents
Dental Care/Oral Health	80%	12
Health Care Coverage	73%	11
Primary Health Care	60%	9
Patient Self Management (e.g. nutrition, exercise, taking medications)	53%	8
Substance Abuse	40%	6
Health Education	40%	6
Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	33%	5
Social Services	27%	4
Domestic Violence	27%	4
Aging Services	13%	2
Early Detection & Screening	13%	2
Developmental Disabilities	13%	2
Transportation Chronic Pain Management	13%	2
Maternal, Infant & Child Health	13%	2
Family Planning	13%	2
Pharmacy Services	13%	2
Home Health	7%	1
Public Health	7%	1
School Health	7%	1
Food Safety Net/Basic Needs	7%	1
Hospital Services	7%	1
Environmental Health	0%	0
Hospice	0%	0

Importance of Health Needs and Suggestions for Improving Community Health

Survey respondents were asked to rate the importance of the following community health needs as well as given the option to submit additional ideas and suggestions for improving community health status or services. One respondent provided an open-ended response in the table below.

Ideas and Suggestions for Improving Community Health

Health Need	Importance	Responses
Affordable Health Care	53%	8
Need for Non-Profit Health Care Facilities	33%	5
Continued Funding of Medicaid Procedures and Charity Care	33%	5
Access to Specialist Health Care	14%	2
Pervasive Health Problems	8%	1

*Open-Ended Responses:

1. Medical Case Management
2. Adequate access to transportation, realistic access to diverse means of nutrition for all

Community Resources

Community resources were reviewed, analyzed and a vital part of the process of delineating the priority community health needs. The needs are broken down into categories below (listed alphabetically) along with a summary of research from the following:

Blueprint Virginia. The Virginia Chamber of Commerce and The Council on Virginia's Future, 2013.

Centers for Disease Control and Prevention. 2016. Retrieved from: <https://www.cdc.gov/>

Dartmouth Atlas of Healthcare. The Dartmouth Institute for Health Policy and Clinical Practice. The Trustees of Dartmouth College, 2016. Retrieved from: <http://www.dartmouthatlas.org/data/region/>

Indicators of Community Strength: Greater Richmond and Petersburg Region, *United Way*, July 2009.

Planning District 15: Health & Human Service Needs Assessment. *Central Virginia Health Planning Agency*. September 2007.

RVA Snapshot: A Shared Vision for our Region. Capital Region Collaborative 2016 Indicators Report.

Salamon, Lester M., Stephanie Lessans Geller, and S. Wojciech Sokolowski. Virginia's Nonprofit Sector: An Economic Force. *Nonprofit Economic Data Bulletin Number 32*, September 2008.

The Cameron Report Health Needs Assessment. *Central Virginia Health Planning Agency* September 2008.

Virginia Department of Health and Vital Statistics. 2016. Retrieved from: <http://www.vdh.virginia.gov/Data/index.htm>

U.S. Census Data, American Community Survey. 2011. Retrieved from: <https://www.census.gov/programs-surveys/acs/>

U.S. Census Data Quick Facts. 2016. Retrieved from: <http://www.census.gov/quickfacts/>

A. Affordable Health Care

One of the most pressing Health Care needs in the Greater Richmond Area is affordable Health Care. Poverty continues to be a pressing issue. In particular, a study by the United Way of Greater Richmond and Petersburg profiled issues regarding community strength for the central Virginia region. The study evaluated issues such as child health and wellbeing, education, self-sufficiency, and elder adult health and wellbeing. Several discouraging trends are illustrated in the United Way report, which are primarily focused on the City of Richmond, the location of MEDARVA.

The most significant statistics are reflected in the comparing the percentage of total population in poverty throughout the various cities, towns, and counties in central Virginia. Although the state average saw a small increase in the percentage of total population in poverty over the last decade, it still sits at a reasonable 9.9%. However, several locales in central Virginia have a percentage of population in poverty far above this average; Richmond and Petersburg with 22.4% and 19.1% of their populations in poverty, respectively. In addition to this, the average

median household income for the City of Richmond is nearly \$20,000 below the state average and \$24,000 below the average for central Virginia's Planning District 15.

An examination of these poverty rates becomes more useful in determining Health Care needs when other factors, such as demographics and the day-to-day consequences of poverty, are evaluated. Children represent an important demographic in analyzing poverty statistics and one that typically sees higher rates of poverty in comparison to the total population. Central Virginia is no exception to this rule. The United Way's survey reported considerable increases in the number of children living in poverty in low-income areas like Richmond, which saw its rate of children in poverty jump to 32.3%. This is 10% higher when compared to the same increase in the total population).² At least part of this dramatic jump is linked by the United Way to Richmond's abnormally high percentage of children born to single mothers. At 63.5%, Richmond's rate of children born to single mothers is nearly 30% higher than the state average and is surpassed in the central region only by Petersburg's equally stunning 70.1%. These women, according to the United Way, generally "have lower incomes, lower education levels, and greater dependence on welfare assistance than married mothers."

Senior citizens, classified in this report as those over the age of 65, are another notable poverty demographic. Unlike children, the percentage of elderly people in poverty tends to be lower than that of the general population. While the percentage of impoverished elderly in central Virginia is below the state average, the City of Richmond once again far exceeds the state average, with 15% of its elderly population in poverty. The United Way also reports that Richmond leads the way in percentage of elderly citizens that live alone. That statistic is important because older adults can be "at risk for reduced quality of life if there are co-existing conditions such as poverty, lack of vehicle availability and/or illness, disease, or disability."³

These statistics on poverty in central Virginia are relevant to this CHNA because of the way poverty can influence and illustrate Health Care needs. A 2007 study by the Central Virginia Health Planning Agency assessed the health and human services needs of what they refer to as the "Planning District 15," fifteen towns or counties within the central region. An assessment of the reach and adequacy of the local Health Care infrastructure is the main focus of the study, but it also investigates poverty, insurance issues, chronic health problems and other factors that determine the quality of life for the citizens of Planning District 15.

With respect to health insurance, the Planning District 15 report indicates that one in seventeen people are without health insurance at any given time, and that more than five times that many people lack dental insurance. This report also notes that the City of Richmond is the locality with the most negative indicators involving issues of professional Health Care. While the average percentage of Planning District 15's population without health insurance is 6%, that number rises to 13% for the City of Richmond. The percentage of the population unable to receive medical care when needed sees a similar trend, with a low 5% for the District, but over 13% for Richmond. Lack of dental insurance presents another significant problem for the region. The percentage of the population in Planning District 15 without dental insurance is 34%, while the percentage of the population in the City of Richmond without dental insurance is 40%.

2

³ United Way, 31

Because these statistics deal strictly with health insurance, they only reveal some of the coverage issues for the region. However, these figures likely contribute to the region's most troubling health problems that include high blood pressure, high cholesterol, and diabetes. When asked what are the greatest barriers to obtaining Health Care, citizens cited lack of transportation, lack of funding for programs/services, and the inability to pay. Helping citizens overcome these health problems and the barriers to treatment must become one of the goals of charitable health services and nonprofit hospitals and their affiliates. Because so many lack standard health and dental insurance, alternative payment methods such as government aid and charity payers, as well as volunteer dentists and other staff become so much more important. Non-profit hospitals and their affiliates must play an important role in bringing together the resources that bring aid to those lacking insurance with urgent medical needs.

B. Access to Specialist Health Care

Examining the number of people who leave their area of residence in order to see medical specialists is also important in understanding the health needs of the region. Because of the high number of medical personnel and facilities in the Greater Richmond Area, areas such as the City of Richmond and Henrico County have low percentages of residents leaving the area for specialist care (only 11% of Richmond and Henrico County residents report leaving their localities for specialty care). However, other areas in the Planning District 15 showed dramatically higher numbers of people leaving the area due to their rural locales.⁴ For example, 68% of Charles City residents, 61% of New Kent residents 61%, and 38% of Goochland residents report leaving their localities to receive specialist medical care.

The Central Virginia Health Planning Agency's Cameron Report, which provided a health needs assessment for the region directly south of the Planning District 15, found higher numbers in the entire district of people leaving the area to seek medical specialists. Areas such as Colonial Heights, Dinwiddie, Hopewell, Petersburg, and Prince George all reported over 40% of their population leaving the area for specialist care, while Sussex County reported that 73% of its population left the area for specialist care.⁵ Hospitals such as MEDARVA that work almost exclusively with specialist doctors become invaluable to meet the needs of these large numbers of people seeking specialist care.

C. Pervasive Health Problems

The poverty and insurance statistics discussed in Section A above certainly contribute to the region's most troubling health problems which include high blood pressure, high cholesterol, and diabetes.⁶ High blood pressure represents one of the most troubling chronic health conditions. Thirty-three percent (33%) of residents in Planning District 15 reported problems with high blood pressure, while 47% of residents in Charles City and 45% of residents in the City of Richmond reported the same. The increased percentages in Charles City and Richmond may partially be attributed to the significant African-American populations in these areas. The percentage of African-American people reporting high blood pressure is at least 17% higher in every Planning District 15 locale, and the African-American population's percentage reporting

⁴ Planning District 15, 70

⁵ The Cameron Report Health Needs Assessment, Central Virginia Health Planning Agency, 68.

⁶ Planning District 15, 9, 10.

high blood pressure is almost twice the amount of the Caucasian population reporting problems with high blood pressure.⁷

Non-gestational diabetes, high cholesterol and obesity also represent dangerous chronic health problems in the area. While the percentage of residents in Planning District 15 reporting diabetes is around 11%, this percentage jumps up to 19% of residents in the City of Richmond, including 29% of Richmond men.⁸ High cholesterol (reported by 33% of residents in Planning District 15) and obesity (reported by 44% of residents in Planning District 15) are also chronic health problems, but these percentages of residents suffering these conditions remain consistent throughout Planning District 15, with Charles City reporting the greatest incidence of these conditions.

D. Need for Non-Profit Health Care Facilities

Despite its large number of employees, Virginia's nonprofit sector is comparatively smaller than other states its size. Virginia's population is estimated to grow 39% over the next 20 years, compared to 29% growth for the United States as a whole, with a 133% increase to the population of senior citizens.⁹ These numbers suggest that the Commonwealth would see an increase in nonprofit employment and market share due to a growing population. However, many nonprofit fields have recently seen a decline in market share, including hospitals, which are the state's second largest source of nonprofit revenue.¹⁰ Nonprofit facilities, which focus on charitable care and a continuing duty to meet the health needs of their communities, are critical to ensuring the health needs of a region are addressed. Statistics like these show the importance of the continued success and operation of Virginia not-for-profits like MEDARVA.

E. Continued Funding of Medicaid Procedures and Charity Care

Alternative payment methods such as Medicaid and charity care are critically important to meet the medical needs of those lacking insurance or other resources to obtain medical care. Children are among the most common candidates for charity care procedures, and often are beneficiaries of Medicaid more than adult demographics. In central Virginia, over one-third of all hospital discharges of children whose procedures are paid for by Medicaid, with that number jumping to 58.5% of all hospital discharges in Richmond. Ophthalmology and retina procedures such as cataract repair, mostly for elderly patients, represent the most common charity and Medicaid procedures, but other important fields such as interventional spine, otolaryngology, orthopedics, ocular plastics, colon and rectal, podiatry, and pediatric urology and dental procedures, are often funded by Medicaid or other charity care policies. The City of Richmond is unsurprisingly the largest recipient of charity and Medicaid procedures.

In order to meet the health needs of Virginia residents lacking insurance or other resources, funding of Medicaid and charity care procedures, as well as programs to ensure access to care, must continue.

⁷ Planning District 15, 71.

⁸ Planning District 15, 73.

⁹ Salamon, 1.

¹⁰ Salamon, 17, 25.

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, Medarva Health 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, which 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. In addition, the results can be used alongside the community insight survey results and the community maps to help inform action plans for community health improvement. This section includes seven profiles as follows:

- Health Demographic Profile
- Mortality Profile
- Maternal and Infant Health Profile
- Preventable Hospitalization Profile
- Health Professional Shortage Profile
- Diabetes Management Profile
- Uninsured Profile

The study region includes the service area of MEDARVA: Amelia County, Caroline County, Charles City County, Chesterfield County, City of Richmond, City of Petersburg, City of Hopewell, City of Colonial Heights, Cumberland County, Dinwiddie County, Goochland County, Hanover County, Henrico County, King and Queen County, King William County, Louisa County, New Kent County, Powhatan County, Prince George County, Sussex County. MEDARVA's service area also includes the cities of Fredericksburg, Williamsburg, and Emporia.

Health Demographic Profile

Community health is driven in large part by community demographics. The age, sex, race, ethnicity, income, education status, and employment status of a population are strong predictors of community health status, community health needs, and the demand for local service.

Indicator	Henrico County 2015	Chesterfield County 2015	Richmond City 2010	Statewide 2015
Total Population	325,155	335,687	220,289	8,382,993
Total Households	123,821	115,005	85,913	3,041,710
Male	47.2%	48.2%	47.7%	49.2%
Female	52.8%	51.8%	52.3%	50.8%
Children Age 0-17	23.2%	24.3%	18.6%	22.3%
Seniors age 65+	14.2%	13.4%	11.1%	14.2%
Asian	8.2%	3.7%	2.3%	6.5%
Black/African American	30.2%	23.5%	50.6%	19.7%
White	54.5%	62.9%	39.1%	62.7%
Hispanic Ethnicity	5.5%	8.2%	6.3%	9.0%

Area	Median Household Income
Chesterfield	\$72,514
Henrico	\$61,438
Richmond	\$41,331
Statewide	\$64,792

Source: US Census Bureau, 2016

Mortality Profile

As shown in *Exhibit II-3*, the study region had 9,492 total deaths in 2011. The leading causes of death were cancer (2,380 deaths), heart disease (1,322 deaths), infant mortality (856 deaths), and stroke (594 deaths). The Virginia Department of Health did not provide a breakdown for the age of the study region deaths, only locale.

Exhibit II-2

Total Deaths and Leading Causes of Death, 2011

Indicators	Study Region	Virginia
Total Deaths	9,492	60,325
Premature Mortality (before age 75)	4,608	26,725
Cancer Mortality	2,380	14,005
Heart Disease Mortality	1,322	8,493
Infant Mortality	856	5,432
Stroke Mortality	594	3,335
Lung Disease Mortality	471	2,894
Accident Mortality	462	2,721
Suicide	138	926
Homicide	88	393

Source: Center for Disease Control and Prevention, National Vital Statistics System: 2006-2011 Virginia Department of Health: Statewide 113 causes of death by race/sex/age and total deaths by race and city/county, 2011

Virginia Resident Mortality by Residence, 2016 (2013 Data):

	Total	White	Black
Statewide	62,309	48,798	12,167
Chesterfield County	2,115	1,735	340
Henrico County	2,570	1,968	551
Richmond City	1,866	721	1,137

Nativity Profile

The Commonwealth had 101,907 total live births in 2014. Of these, approximately 8,000 were born with low birth weight and 103,000 were born to an unmarried mother. There were 7,500 live births to teens, with a racial breakdown (black and white included only) that is indicative of poverty among certain races in particular counties.

Nativity Profile, 2014

Nativity - Virginia 2014						
	Live Births	Low-Weight Births	Non-Marital Births	Teen Pregnancies Total	Teen Pregnancies White	Teen Pregnancies Black
Virginia	101,907	8,078	102,795	7,447	3,840	2,822
Charles City County	0	8	63	4	1	2
Chesterfield County	3,755	289	3,763	243	128	86
Goochland	5	7	185	14	8	6
Hanover County	1,504	52	936	76	55	18
Henrico County	5,887	358	4,060	222	85	117
New Kent County	2	14	192	15	7	5
Powhatan County	3	16	236	16	15	1
Richmond City	3,588	313	2,916	489	77	379

Source: Virginia Department of Health; Health Statistics 2014

Preventable Hospitalization Profile

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions, which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges indicates these high rates of hospitalizations for these conditions could represent potential gaps in access to quality outpatient services for community residents.

Prevention Quality Indicator Hospital Discharges:

Region	Medicare Enrollees	Preventable Hospital Rate
Chesterfield	26,816	48
Henrico	31,786	50
Richmond	13,780	53

Source: County Health Rankings: Preventable Hospital Stays

Health Professional Shortage Profile

This indicator reports the percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Shortages in Professional Health Care by Service Area

Report Area	Total Population	HPSA Designation Population	Underserved Population	Percent of Total Population Underserved	Percent of Designated Population Underserved
Amelia County	12,690	12,690	7,382	58.17%	58.17%
Chesterfield County	316,236	0	0	0%	no data
Goochland County	21,717	15,489	6,775	31.20%	43.74%
Hanover County	99,863	0	0	0%	no data
Henrico County	306,935	45,715	18,641	6.07%	40.78%
New Kent County	18,429	18,429	8,044	43.65%	43.65%
City of Richmond	204,214	83,552	34,063	16.68%	40.77%
Virginia	8,001,024	1,244,505	664,511	8.31%	53.40%

Source: US Department of Health and Human Services

Diabetes Management Profile

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test, which measures blood sugar levels, administered by a Health Care professional in the past year. In the report area, 11,644 Medicare enrollees with diabetes have had an annual exam out of 13,616 Medicare enrollees in the report area with diabetes, or 85.52%. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Medicare Enrollees Managing Diabetes by Service Area

Report Area	Total Medicare Enrollees	Medicare Enrollees Diabetes	Medicare Enrollees Diabetes Annual Exam	Medicare Enrollees Diabetes Annual Exam (%)
Amelia County	1,575	236	214	91.10%
Chesterfield County	28,810	3,623	3,159	87.22%
Goochland County	2,222	263	228	87.07%
Hanover County	12,232	1,469	1,297	88.36%
Henrico County	28,321	3,090	2,616	84.69%
New Kent County	2,181	353	241	68.56%
City of Richmond	11,716	1,395	1,147	82.29%
Virginia	735,612	93,855	80,473	85.74%

Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. Source geography: County.

Uninsured Population Profile

The lack of health insurance is considered a *key driver* of health status. This indicator reports the percentage of adults age 18 to 64 without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to Health Care access including regular primary care, specialty care, and other health services that contributes to poor health status.

Uninsured Adult Population by Service Area

Report Area	Total Population Age 18 - 64	Population Count Medical Insurance	Percent Population Medical Insurance	Population - No Medical Insurance	Percent Population - No Medical Insurance
Amelia County	8,006	6,166	77%	1,841	23%
Chesterfield County	198,866	167,129	84%	31,737	16%
Goochland County	12,682	11,310	89.20%	1,371	10.80%
Hanover County	60,177	52,949	88%	7,228	12%
Henrico County	195,987	162,745	83%	33,242	17%
New Kent County	11,785	9,996	84.80%	1,789	15.20%
City of Richmond	135,439	104,629	77.30%	30,811	22.70%
Virginia	5,040,485	4,170,966	82.75%	869,519	17.25%

Source: US Census Bureau: American Community Survey (2011)

Summary of Community Needs

Outlined in this CHNA, five primary needs of the greater-Richmond population were addressed. Studies showed that affordable health care was the top priority among Richmond residents, because of the recent growth in the uninsured population within the last five years. Residents living within rural areas surveyed showed to have limited access to specialist health care. Poverty and insurance statistics contribute heavily to pervasive health problems in the area. There are not enough nonprofit health care facilities in greater-Richmond to meet the needs of impoverished populations. In order to meet the primary needs of local residents, funding for Medicaid and various forms of charity care must continue.

Previous Funding

Over the past three years, the MEDARVA Corporation through its Foundation Stony Point Surgery Center have provided Charity Care and funding for various community based projects and research grants. The following is a list of community and research grants awarded since 2013.

Community Based Programs:

Challenge Discovery Projects, Inc. – Parent Child Advocate Program.
Assistive Technology Loan Fund Authority
Cross Over Ministry, Inc.
Scottish Rite Childhood Language Center at Richmond, Inc.
Special Olympics of Virginia
Virginia Voice, Inc.

Research Grants:

Virginia Commonwealth University

- Developing Technology to Restore the Sense of Smell – Olfactory Function
- Wireless Oral Electronics for Monitoring of Sodium Intake
- Effects of Postural Changes on Voice Production

University of Virginia

- Congenital Eye Malformations & Developmental Glaucoma
- 3-D Structure of Basal Tear Promoter (Lacritin)
- Sensorineural Deafness
- Molecular Imaging for Intraocular Inflammation
- Evaluation of the Safety and Efficacy of Tetracycline Derivatives in the Treatment of Geographic Atrophy due to Dry Age-Related Macular Degeneration

Eastern Virginia Medical School

- Urinary Leukotriene E4 Levels in Children with Obstructive Sleep Apnea
- Interleukins in Chronic Sinusitis
- Role of Cysteinyl Leukotrienes in Chronic Rhinosinusitis
- Ototoxicity Therapies
- Unraveling the cellular hierarchy within human tonsillar crypt epithelium and oropharyngeal squamous cell carcinoma tumors

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