New River Valley Community Health Assessment

HEALTH IMPROVEMENT IMPLEMENTATION STRATEGY
FY 2022-2024







Contents

| Carilion New River Valley Medical Center Health Improvement Implementation Strategy | 3 |
|---|----|
| Executive Summary | 3 |
| Community Served | 3 |
| Implementation Strategy Process | 5 |
| Prioritized List of Significant Health Needs Identified in the 2021 NRVCHA | 6 |
| CNRV Action Plan | 7 |
| Commitment to Mission | 7 |
| Diversity, Equity and Inclusion | 7 |
| Community Partnerships | 7 |
| Community Grants | 8 |
| Priority Areas To Be Addressed | 9 |
| Priority Area: Mental Health | 9 |
| Priority Area: Socioeconomic Factors | 10 |
| Priority Area: Health Behaviors | 11 |
| Other Initiatives Supporting a Culture of Community Health | 12 |
| Priority Areas Not Being Addressed | 12 |
| Implementation and Measurement | 13 |
| About Us | 14 |
| Appendices | 15 |
| Appendix 1: Community Health Assessment Team | 15 |
| Appendix 2: Community Health Need Prioritization Worksheet | 16 |

Carilion New River Valley Medical Center Health Improvement Implementation Strategy

Executive Summary

Every three years, Carilion New River Valley Medical Center (CNRV) conducts the New River Valley Community Health Assessment (NRVCHA) to determine focus areas across the region ¹. Through this collaborative process, we assess the needs of the community, prioritize them and develop a response to selected issues. The purpose of this implementation plan is to describe how CNRV plans to address the community health needs identified in the 2021 NRVCHA.

Community Served

The New River Valley, home to CNRV, is composed of the independent City of Radford and the counties of Floyd, Giles, Montgomery and Pulaski. It is nestled among the Blue Ridge and Appalachian Mountains in Southwest Virginia. The Valley is home to two universities, Virginia Tech and Radford University, and New River Community College. Their presence enriches the local culture and workforce. A rich mix of urban and rural communities, the New River Valley boasts scenic views and thriving communities complete with restaurants, arts and culture offerings, and an abundance of outdoor recreation and relaxation opportunities².

The New River Valley has many small-town communities, each with a different feel and array of resources. These small towns vary greatly in the demographic and economic make-up of the residents who live there. Each locality is unique, with their own specific resources and challenges. The presence of the universities particularly impacts their home communities' diversity, resources, workforce, housing market, health needs and societal structure.

The service areas for Carilion Clinic's Community Health Assessments (CHAs) are determined by 70-80% of unique patient origin of the hospital in each respective market. Focus is placed on areas that are considered Medically Underserved Areas and Health Professional Shortage Areas.

The service area for the 2021 NRVCHA includes the City of Radford and the counties of Floyd, Montgomery, Pulaski and Wythe, with secondary data included for Giles County. It is important to note that Giles County is partly served by Carilion Giles Community Hospital (CGCH) located in Pearisburg, Virginia. Giles County is not included as part of the service area for the 2021 NRVCHA because CGCH also conducted its own CHA of Giles County and Monroe County, West Virginia, concurrently. Giles County data are included in secondary data so complete data for the New River Valley will be available in this report. Please note that while Wythe County is included in the service area, it is not traditionally considered part of the New River Valley.

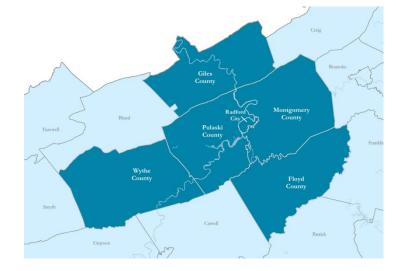
¹ Carilion Clinic began conducting Community Health Assessments prior to the IRS adoption of the 501(r)(3) which requires not-for-profit hospitals to conduct a Community Health Needs Assessment (CHNA) every three years. While meeting the CHNA requirement, Carilion maintains the longstanding formal name, Community Health Assessment, for our process and associated reports.

² Virginia's New River Valley: A Natural Fit. Retrieved from: https://www.newrivervalleyva.org/

In fiscal year 2020, CNRV served 41,423 unique patients. Patient origin data revealed that during this year, 79.42% of patients served by CNRV

lived in the following localities:

- Montgomery County (30.39%)
- Pulaski County (16.38%)
- City of Radford (14.20%)
- Floyd County (7.04%)
- Wythe County (6.84%)
- Giles County (4.57%)



The target population for Carilion Clinic's CHA projects consists of underserved/vulnerable populations disproportionately impacted by the social determinants of health, including poverty, race/ethnicity, education, access and/or lack of insurance. Populations are examined across the different life cycles, including parents of children and adolescents, women of child-bearing age, adults and the elderly. They are also studied across various race and ethnic groups and income levels. All patients are included in this assessment regardless of insurance payments or financial assistance eligibility.

Implementation Strategy Process

CNRV, the New River Valley Health District (NRHD), Partnership for Access to Healthcare (PATH) and Healthy Roots NRV partnered to conduct the 2021 NRVCHA. This process was community-driven and focused on high levels of community engagement involving health and human services leaders, stakeholders and providers, the target population, and the community as a whole.

A 26-member Community Health Assessment Team (CHAT) oversaw the planning activities. The CHAT consists of:

- Health and human service agency leaders
- Persons with special knowledge of or expertise in public health
- The local health department
- Leaders, representatives or members of medically underserved populations, low-income persons, minority populations and populations with chronic disease

Please see Appendix 1 for the CHAT Directory.

Beginning in October 2020, primary data collection included a Community Health Survey and a focus group with key CHAT stakeholders. Secondary data collected include demographic and socioeconomic indicators as well as health indicators addressing access to care, health status, prevention, wellness, risky behaviors and social environment.

After all primary and secondary data collection is complete, the CHAT reviews all data and participates in a prioritization activity. Each CHAT member selects and ranks the ten most pertinent community needs. The data are combined and priorities are selected based on the highest weighted score of each need. Please see Appendix 2 to view the prioritization worksheet.

Through this process, needs are prioritized by the CHAT members according to:

- The perceived burden, scope, severity or urgency of the health need
- The importance the community places on addressing the need through survey responses and other interactions
- Their own unique perspective on the health-related needs of the community

The 2021 NRVCHA was approved by the CNRV Board of Directors and made publicly available in August 2021. The following plan was developed by the Carilion Clinic Community Benefit and Community Health and Outreach departments based on priority community health needs identified in the 2021 NRVCHA. Input on the Implementation Strategy was solicited from CHAT members, the CNRV Board of Directors, Community Health and Outreach staff and key Carilion Clinic leadership.

Prioritized List of Significant Health Needs Identified in the 2021 NRVCHA

The findings revealed 10 priority health-related issues in the community, identified by the CHAT after review of the data collected. Like-issues were grouped into categories to promote upstream and out-of-the-box thinking to address the top needs.

| Top Needs | | |
|--------------------------|--|--|
| | Access to mental/behavioral health services | |
| Mental Health | Access to substance use services | |
| | Mental health problems (general) | |
| Socioeconomic Factors | Poverty/low average household income | |
| | Affordable/safe housing | |
| | Transportation/transit system | |
| | Culture: healthy behaviors not a priority | |
| Health | Access to healthy foods | |
| Behaviors | High prevalence of chronic disease (general) | |
| | Lack of knowledge of community resources | |

CNRV Action Plan

The foundation of Carilion's response is based on the following pillars:

- Commitment to mission
- Diversity, equity and inclusion
- Community partnerships
- Community grants

We will continue to respond to community health needs in innovative ways, including:

- Ensuring access to state-of-the-art health care close to home
- Creating and implementing community-wide strategies to reduce barriers, coordinate resources and enhance community strengths
- Providing community-based health and wellness programming

Commitment to Mission

Commitment to community service is evident at all levels of the organization. In 2020, Carilion committed more than \$116 million toward activities that improve community health and social determinants of health. Carilion's commitment to community health is evidenced by a population health infrastructure including the Community Benefit and Community Health and Outreach departments dedicated to assessing and addressing community needs. These departments lead the community health improvement process, CHAs, the system's community grant process, community health education, community benefit collection and neighborhood health initiatives. With staff at the system level and at each community hospital, we work with each hospital's Board of Directors to create health improvement strategies. A Community Benefit Council provides oversight for Carilion Clinic as a whole, overseeing and strategically guiding Carilion's community health improvement work and community benefit strategy, collection and submission. Investing in community health is one component of Carilion Clinic's Vision 2025 strategic plan, showing an enduring commitment to improving the region's health.

Diversity, Equity and Inclusion

Carilion Clinic established the Office of Diversity, Equity and Inclusion in early 2021. With a focus on health equity and social justice, the office will collaborate with community leaders to better understand and address social and economic factors that influence health in our region, while also promoting diversity, equity and inclusion within the health system.

Community Partnerships

Carilion Clinic believes in the power of collaboration and understands that community health issues must be addressed together, with the community. To ensure lasting impact from the health assessment and community health improvement process, Carilion provides support to health coalitions that address needs across the region. Carilion also partners with multiple organizations on initiatives to improve health, wellness and the social determinants of health.

Community Grants

Carilion Clinic is committed to improving the health of the communities we serve by addressing key health priorities identified through our CHAs. Carilion fulfills this commitment in many ways, one of which is through targeted grants for community health improvement programs. Carilion provides a multitude of community grants and community health sponsorships helping local charitable organizations fulfill their missions as they relate to the health and well-being of our communities. Community grant dollars are allocated across the entire Carilion Clinic service area based on requests that align with the CHA priorities.

Priority Areas to be Addressed

Priority Area: Mental Health

Access to mental/behavioral health services; Access to substance use services; Mental health problems (general)

| Act | ions | An | ticipated Impact | Resources Committed | Со | llaboration |
|-----|-------------------------------|----|-------------------------------|------------------------------------|----|--------------------------------|
| 1) | Continue the ED Bridge | 1) | Maintain capacity for care | Financial and other assets such as | 1) | Carilion Pharmacy |
| | Program with Saint Albans | | coordination of behavioral | staff time, leadership, program | 2) | Carilion Planning and |
| | Hospital | | health services | development and evaluation, and | | Community Development |
| 2) | Explore expansion of peer | 2) | Increase success rate of | serving as convening body | | (PCD), internal administrative |
| | recovery services to Saint | | patients entering treatment | | | and behavioral health |
| | Albans | | and recovery programming | | | leadership |
| 3) | Support networks around | 3) | Maintain capacity for | | 3) | New River Valley Community |
| | mental health and substance | | collaborative programming | | | Services Board, Montgomery |
| | use in the New River Valley | 4) | Increase number of | | | County Prevention Partners, |
| 4) | Explore options for expanding | | community members trained | | | Radford Youth-Adult |
| | community abuse/overdose | | to deliver opioid overdose | | | Partnership, Pulaski County |
| | prevention and first aid | | reversal first aid | | | Prevention Coalition, The |
| | programming (REVIVE) with | 5) | Increase community member | | | Floyd County Multi- |
| | added provision of | | capacity to prevent substance | | | Disciplinary Team |
| | medication lock bags | | misuse and accidental | | 4) | Locality judicial systems |
| 5) | Continue to increase | | poisonings (including | | | (specifically area recovery |
| | community knowledge of | | overdoses) | | | courts) |
| | medication disposal | | | | 5) | NRHD |
| | sites/methods | | | | | |

Priority Area: Socioeconomic Factors

Poverty/low average household income; Affordable/safe housing; Transportation/transit system

| Actions | Anticipated Impact | Resources Committed | Collaboration | |
|---|---|--|---|--|
| Provide coalition development support to Community Foundation of the NRV (CFNRV) and participate in Healthy Roots NRV Participate in Aging in Community Leadership Team | Increase infrastructure to collaboratively address cross-cutting social issues Increase infrastructure to deliver collaborative needs-based health education programming that is easily accessible to priority/target populations | Financial and other assets such as staff time, leadership, program development and evaluation, and serving as convening body | CFNRV, Healthy Roots NRV New River/Mount Rogers Workforce Development Board, Carilion PCD | |

Priority Area: Health Behaviors

Culture: healthy behaviors not a priority; Access to healthy foods; High prevalence of chronic disease (general); Lack of knowledge of community resources

| Actions | Anticipated Impact Resources Committed | Collaboration |
|----------------------------------|---|---------------------------------|
| 1) Provide evidence-based and | 1) Increase knowledge of Financial and other assets such a | s 1) Internal clinical staff |
| needs-focused health | healthy behaviors, early staff time, leadership, program | management and PCD |
| education. Participate in | detection of chronic disease development and evaluation, an | d 2) NRV Thrive, Plenty!, Giles |
| community events such as | and health management serving as convening body | Community Garden |
| health fairs, immunizations and | strategies | 3) Healthy Roots NRV, PATH, |
| health screenings, and/or assist | 2) Increase collaborative | NRHD |
| organizations providing these | infrastructure to address to | 4) Healthy Roots NRV, PATH, |
| services. | healthy food access and | Community Health Center of |
| 2) Support local food access | knowledge of community | the New River Valley |
| coalitions and organizations | resources | 5) Internal clinical staff |
| 3) Implement the Unite Us | 3) Connect individuals to social | management and PCD |
| platform for social services | service resources and | |
| referrals and integrate with | decrease the prevalence of | |
| medical record system for | health-related social needs | |
| clinical utilization. Support | 4) Increase infrastructure to | |
| platform adoption by | deliver collaborative needs- | |
| community partners. | based health education | |
| 4) Participate in PATH and the | programming that is easily | |
| Healthy Behaviors/Healthy | accessible to priority/target | |
| Workforce sub-network of | populations | |
| Healthy Roots NRV | 5) Increase organizational | |
| 5) Explore creation of a pathway | structure to deliver | |
| for employees outside of | community health | |
| Carilion Community Health and | education, screenings and | |
| Outreach to participate in | immunizations | |
| health education, screenings | | |
| and immunizations in the | | |
| community setting | | |

Other Initiatives Supporting a Culture of Community Health

| Ac | tions | An | ticipated Impact | Resources Committed | Со | llaboration |
|----|------------------------------|----|---------------------------------|------------------------------------|----|--------------------------|
| 1) | Develop Community Health | 1) | Increase deployment of | Financial and other assets such as | 1) | Carilion PCD and Finance |
| | Investment Plan | | assets for community health | staff time and leadership | | divisions |
| 2) | Further develop community | | improvement | | 2) | PCD |
| | health infrastructure | 2) | Increase in staffing to include | | 3) | PCD and Human Resources |
| 3) | Engage Carilion employees in | | peer recovery specialists, | | 4) | PCD, Health Analytics, |
| | supporting community | | community health workers | | | Human Resources |
| | partnerships | | and community benefit staff | | | |
| 4) | Leverage internal data to | 3) | Increase support for | | | |
| | identify health disparities | | community organizations | | | |
| | within employee and patient | | through employee hours | | | |
| | population | | spent meeting community | | | |
| | | | needs | | | |
| | | 4) | Improve health-related | | | |
| | | | outcomes and experiences | | | |
| | | | through targeted | | | |
| | | | interventions | | | |
| | | | | | | |

Priority Areas Not Being Addressed

It is CNRV's intent to address all identified priority health issues through the initiatives, programs and/or grants if possible.

Implementation and Measurement

Carilion utilizes multiple systems to help manage data and track outcomes of our community work.

Community health education programs and screenings will have program-level outcomes assigned based on the topic. These outcomes will be tracked with pre- and post-tests as well as through screening results. Community programs supported by Carilion grants will be responsible for reporting program outcomes regularly with grantee outcomes evaluated at least annually.

Scorecards have been developed with key secondary data points at the county level and are updated annually to track impact of community health initiatives. Carilion will track and measure impact on certain aligned indicators that contribute to the Robert Wood Johnson Foundation (RWJF) County Health Rankings. In addition to the RWJF rankings, we are utilizing a framework for viewing health and well-being through seven vital conditions. The WIN Network's Vital Conditions for Well-Being emphasize the health and well-being of people and places as a necessary component to thrive³.

Progress on initiatives described in this document will be reported to the CNRV Board of Directors twice yearly.

Please visit https://carilionclinic.org/community-health-assessments to review the 2021 NRVCHA. Learn more about Carilion Clinic Community Health and Outreach at https://www.carilionclinic.org/community-health-outreach.

This document was adopted on behalf of Carilion New River Valley Medical Center on January 25, 2022.

-

³ https://winnetwork.org/vital-conditions

About Us

Carilion Clinic is a not-for-profit, integrated health care system located among the Blue Ridge Mountains with its flagship hospital in the heart of the City of Roanoke, which serves as the largest urban hub in Western Virginia. Through a comprehensive network of hospitals, primary and specialty physician practices, wellness centers and other complimentary services, quality care is provided close to home for nearly 1 million Virginians. Carilion's roots go back more than a century, when a group of dedicated citizens came together and built a hospital to meet the community's health needs. Today, Carilion is a key institution focusing on more than health care—we are dedicated to our mission of improving the health of the communities we serve.

With an enduring commitment to the health of our region, care is advanced through clinical services, medical education, research and community health investments. Carilion believes in service, collaboration and caring for all. Through discovering and responding to our community's health needs comes the understanding that we must address health issues together to create change most effectively.

CNRV is an award-winning 110-bed acute care facility offering modern medical operating rooms and state of the art technology (including advanced imaging and robotic surgery). The Level III Trauma Center treats more than 30,000 cases per year and the OB/GYN and midwifery program delivers nearly 1,200 babies per year at The Birthplace. The current medical complex includes multiple surgical and medical care practices, Carilion Children's and Carilion Clinic Saint Albans Hospital for psychiatry and behavioral medicine⁴.

⁴ https://www.carilionclinic.org/locations/carilion-new-river-valley-medical-center

Appendices

Appendix 1: Community Health Assessment Team

This list includes members that attended at least half of the CHAT meetings.

| Name | Organization | Area of Expertise |
|---------------------------------|---|--|
| Aaron Boush | Carilion Clinic | Healthcare |
| Ashley Hash | Carilion Clinic | Healthcare, Public Health |
| Andi Golusky | NRV CARES | Human Services |
| Ashley Alley | Carilion New River Valley Medical Center | Healthcare |
| Brad Epperley | Town of Christiansburg Parks and Recreation Department | Parks and Recreation |
| Erin Cruise | Radford University School of Nursing | Healthcare, Higher Education |
| J. Shannon Hammons | NRV Agency on Aging | Human Services |
| Janet Sawyers | NAMI | Behavioral Health |
| Jessica Wirgau | Community Foundation of the New River Valley | Philanthropy |
| Karen E Jones | Montgomery Co-Radford City-Floyd Co NAACP | Social Justice |
| Karim Khan | Montgomery-Floyd Regional Library | Human Services and Education |
| Kathleen Porter | University of Virginia / University of Virginia Cancer Center | Higher Education / Research |
| Kim Curtis | CHIP of NRV | Human Services and Healthcare |
| Malinda Britt | Planned Parenthood South Atlantic | Health Education |
| Michelle Brauns | Community Health Center of the NRV | Healthcare |
| Mike Wade | New River Valley Community Services | Behavioral Healthcare/Community Wellness/Prevention |
| Molly Roberts | Carilion Clinic | Healthcare, Public Health |
| Morris Fleischer | Newport-Mt. Olivet United Methodist/Giles Co. Christian Service Mission/To Our Hose Thermal Shelter for Homeless Men & Women in the NRV | Faith Community/Human Services |
| Pamela Ray | New River Health District / VDH | Public Health |
| Sophie Wenzel | Virginia Tech Center for Public Health Practice and Research/New River Health District | Higher Education/Public Health |
| Susan Dalrymple | VT Cooperative Extension | Human Services |
| Theresa J. McCann | Edward Via College of Osteopathic Medicine (VCOM) - Virginia | Healthcare Education |
| Tina King | New River Valley Agency on Aging | Human Services |
| Tonia Winn | Montgomery County HHS | Human Services |
| Virginia (Ginny) Pannabecker | Virginia Organizing | Community, Libraries, Education, Healthcare Information and Research |
| William (Bill) Flattery | Carilion Clinic | Healthcare |

Appendix 2: Community Health Need Prioritization Worksheet

Please rank from 1-10 the top 10 most pertinent community needs with 1 being the most pertinent.

| Rank | Community Issue |
|------|--|
| | Health Behavior Factors |
| | Alcohol and drug use |
| | Culture: healthy behaviors not a priority |
| | Lack of exercise |
| | Lack of health literacy / lack of knowledge of healthy behaviors |
| | Lack of knowledge of community resources |
| | Poor diet / poor eating habits |
| | Risky sexual activity |
| | Tobacco use |
| | Access to healthy foods |
| | Stress |
| | Clinical Care Factors |
| | Access to primary care |
| | Access to dental care |
| | Access to mental / behavioral health services |
| | Access to specialty care (general) |
| | Access to substance use services |
| | Communication barriers with providers |
| | Coordination of care |
| | High cost of care |
| | High uninsured / underinsured population |
| | Quality of care |
| | Social and Economic Health Factors |
| | Child abuse / neglect |
| | Community safety / violence |
| | Domestic violence |
| | Educational attainment |
| | Lack of family / social support systems |
| | Poverty / low average household income |
| | Unemployment |
| | Physical Environment Factors |
| | Air quality |
| | Affordable / safe housing |
| | Injury prevention / safety of environment |
| | Outdoor recreation |
| | Transportation / transit system |
| | Water quality |
| | Health Conditions / Outcomes |

| COVID-19 |
|--|
| Overweight / obesity |
| Mental health problems |
| Cancers |
| Diabetes |
| High blood pressure |
| Heart disease and stroke |
| High prevalence of chronic disease (general) |
| Write-in section |
| |
| |
| |
| |