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Assessment Introduction

Central Vermont Medical Center (CVMC) conducted a Community Health Needs Assessment (CHNA) in 2016 to gain understanding of the health status of central Vermont and identify areas of need in our community. This assessment was designed to fulfill the requirements outlined by the 2010 Federal Patient Protection and Affordable Care Act that mandates all not-for-profit, tax-exempt hospitals to conduct a CHNA every three years and adopt an implementation plan. A collaborative Steering Committee was formed in November 2015 to provide guidance throughout this CHNA process. The Steering Committee was comprised of health care leaders and public health officials from around the central Vermont region to represent a broad cross-section of CVMC’s health care community.

Our mission at Central Vermont Medical Center is to work collaboratively to meet the needs and improve the health of the residents of central Vermont. Periodic assessment of community health needs is a critical component to this mission for developing new strategic plans for the future. CVMC offers a full spectrum of comprehensive inpatient and outpatient care services with 24/7 emergency care, cancer care at National Life Cancer Treatment Center and Adult Primary Care, Hematology & Oncology, Rehabilitative Therapy, Woodridge Rehabilitation & Nursing, and 23 medical group practices. As a medical center, CVMC realizes its responsibility is to not only address health problems as they occur, but to also play an active role in anticipating and preventing health problems before they happen in the community.

We would like to acknowledge the labors of the many devoted organizations and efforts underway in our community. As the largest provider of health care in the region, CVMC believes maintaining alliances at all levels in the community is of the utmost importance. Aligning our goals with local, state, and federal organizations helps to remove silos, reduce redundancy, clarify our purpose and ultimately, improve our effectiveness.

A significant resource is our participation in the University of Vermont Health Network that began in October 2011. This affiliation with the University of Vermont Medical Center, Champlain Valley Physicians Hospital, Elizabethtown Community Hospital, and Alice Hyde Medical Center under the University of Vermont Health Network has enabled us to better coordinate and improve the care we deliver to patients while making the best use of our collective resources. Our communities expressed the importance of formally affiliating our community hospital with a tertiary care, teaching facility. The benefits of this alliance remain impressive in the area of financial economies and clinical quality improvement projects. We place high value on our membership in the University of Vermont Health Network.

It was necessary throughout this assessment to consider environmental factors, access to healthcare, healthy lifestyle choices, and other socioeconomic factors that form the foundation of the central Vermont communities. The combination of this information with healthcare-specific data resulted in an assessment and community-wide health improvement plan to address the following health issues:

- Drug Abuse
- Mental Health
- Tobacco Use
- Healthy Diets
- Youth Participation in Physical Activities
Methodology

Our Community Health Needs Assessment was completed using both qualitative and quantitative research techniques. Initially, members of the CVMC Steering Committee gave verbal reports on the issues they believed to be most pressing in their organizations or in the general central Vermont community. From there, the Steering Committee reviewed the recommended list of health and socioeconomic indicators provided by the Vermont Department of Health (VDH) and gathered data pertaining to population demographics, access to health services, maternal and child health, health status and prevention, and social-environmental measures to evaluate these concerns. This secondary research coupled with the Steering Committee’s concerns allowed significant conclusions to be drawn and CVMC’s priority health needs to be selected.

Qualitative Data

Steering Committee: We invited a wide variety of public health professionals, community leaders, human service providers and CVMC staff members to serve as a Steering Committee throughout our CHNA process. Meetings were held late in 2015 and early in 2016 for the committee members to deliberate over all community health concerns and review pertinent data and information. The Steering Committee developed a list of the most pressing community health needs to be recommended as the priorities for this CHNA. This list was then voted on by CVMC leadership, community leaders, clinical providers and others. The needs addressed in this report are those which received the highest percentage of votes. The committee consisted of members from the following organizations who were designated “the voice of the community” and charged with communicating the challenges confronting the larger central Vermont population.

- Washington County Mental Health Services
- Central Vermont Home Health & Hospice
- People’s Health & Wellness Clinic
- U-32 High School
- Central Vermont Council on Aging
- Family Center of Washington County
- Central Vermont New Directions Coalition
- Central Vermont Regional Planning Commission
- Green Mountain United Way
- Vermont Department of Health
- Central Vermont Medical Center Leadership
- Central Vermont Medical Center Medical Staff
- Central Vermont Medical Center Community Health Team

Community Reports: At the outset of this project, the Steering Committee reviewed and reevaluated a number of past reports in an effort to draw meaningful conclusions from our current data. In 2013, CVMC collaborated with Green Mountain United Way, Washington County Mental Health Services, Central Vermont Home Health & Hospice, the People’s Health & Wellness Clinic, U-
32 High School, the Central Vermont Council on Aging and the Barre District of the Vermont Department of Health to carry out Community Needs Assessments for Central Vermont Medical Center. Review of that report and current data allowed us to evaluate areas of community progress as well as regression and recognize which of our current needs were similar to those identified in 2013. Using the trends that were identified, a determination was made as to where additional resources are essential and what methods have proven to be effective in addressing needs in the past.

**Quantitative Data**

**Review of Relevant Publications:** CVMC staff and the Steering Committee evaluated the surrounding community using relevant reports presented by state and federal agencies, as well as local non-profit organizations including:

a. Centers for Disease Control and Prevention  
b. Green Mountain Transit Authority  
c. Vermont Department of Health  
d. Vermont Department of Financial Regulation  
e. U.S. Census Bureau  
f. U.S. Department of Health and Human Services  
g. U.S. Department of Commerce  
h. Voices for Vermont’s Children

Information gathered from secondary research was compiled into comparative data sets of health indicators to reveal disparities between Washington County and state averages. In certain circumstances, data was only available in the terms of Barre Health Service Area (HSA), which includes all of Washington County and four outlying Orange County towns. As this area falls under CVMC’s service area, data reports from the Barre HSA were considered sufficient alternatives to assessing the health of our community in the case that Washington County data was not available. It is noted throughout this report when the Barre HSA is used as replacement to the Washington County definition of our community.
Our Service Area

Central Vermont Medical Center primarily serves the region of Washington County, VT with an estimated 2015 population of 58,612 people living in 20 towns in over 695 square miles. In addition to Washington County, CVMC’s service area includes a few outlying towns in Orange County: Brookfield, Orange, Washington, and Williamstown. For the purpose of this assessment, we have chosen mainly to focus our data collection and analysis on the Washington County population.

Washington County is Vermont’s third most populous county after Chittenden County and Rutland County. Washington County has a population density of 87 persons per square mile, notably higher than the statewide average of 68 persons per square mile. Washington County is comprised of unique towns and cities, each with its own history and personality. These towns vary from rural areas with less than 1,000 residents to city centers with as many as 9,052 residents in Barre City.

Central Vermont Medical Center is located in Berlin, just minutes from Vermont’s capital city, Montpelier. The population and urban resources of Washington County are concentrated in Barre, Berlin, Montpelier, Waterbury, Northfield and Waitsfield, all adjoining centers of industry. Employment
is dominated by insurance and government agencies in Montpelier, manufacturing and granite-related industries in Barre, health care in Berlin, education in Northfield, and commerce in Warren, Waitsfield, and Fayston. Central Vermont Medical Center is one of Vermont’s top 10 service firms and one of Vermont’s top 10 largest employers. Other major employers in Washington County include the State of Vermont, National Life Group, Washington County Mental Health Services, Cabot Cooperative Creamery, Keurig Green Mountain, BlueCross/Blue Shield of Vermont and Norwich University.

**U.S. Census Data (2010 Census) for Our Service Area**

<table>
<thead>
<tr>
<th>Town Name</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barre City</td>
<td>9,052</td>
</tr>
<tr>
<td>Barre Town</td>
<td>7,924</td>
</tr>
<tr>
<td>Berlin</td>
<td>2,887</td>
</tr>
<tr>
<td>Cabot</td>
<td>1,433</td>
</tr>
<tr>
<td>Calais</td>
<td>1,607</td>
</tr>
<tr>
<td>Duxbury</td>
<td>1,337</td>
</tr>
<tr>
<td>East Montpelier</td>
<td>2,576</td>
</tr>
<tr>
<td>Fayston</td>
<td>1,353</td>
</tr>
<tr>
<td>Marshfield</td>
<td>1,588</td>
</tr>
<tr>
<td>Middlesex</td>
<td>1,731</td>
</tr>
<tr>
<td>Montpelier</td>
<td>7,855</td>
</tr>
<tr>
<td>Moretown</td>
<td>1,658</td>
</tr>
<tr>
<td>Northfield</td>
<td>6,207</td>
</tr>
<tr>
<td>Plainfield</td>
<td>1,243</td>
</tr>
<tr>
<td>Roxbury</td>
<td>691</td>
</tr>
<tr>
<td>Waitsfield</td>
<td>1,719</td>
</tr>
<tr>
<td>Warren</td>
<td>1,705</td>
</tr>
<tr>
<td>Waterbury</td>
<td>5,064</td>
</tr>
<tr>
<td>Woodbury</td>
<td>906</td>
</tr>
<tr>
<td>Worcester</td>
<td>998</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59,534</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town Name</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brookfield</td>
<td>1,246</td>
</tr>
<tr>
<td>Orange</td>
<td>1,072</td>
</tr>
<tr>
<td>Washington</td>
<td>1,039</td>
</tr>
<tr>
<td>Williamstown</td>
<td>3,389</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,746</strong></td>
</tr>
</tbody>
</table>

**Total** 66,280
## Demographic Indicators (2014 data)

<table>
<thead>
<tr>
<th></th>
<th>Washington County</th>
<th>Vermont</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White persons</td>
<td>96.0%</td>
<td>95.0%</td>
</tr>
<tr>
<td>Black persons</td>
<td>0.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>American Indian/Alaska Native persons</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Asian alone</td>
<td>0.9%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino Origin</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Education Attainment, persons age 25+</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High school grad or higher</td>
<td>93.7%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Bachelor's degree or higher</td>
<td>39.0%</td>
<td>35.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Income</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income</td>
<td>$58,293</td>
<td>$54,447</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>11.0%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Unemployment rate (April, 2015 data)</td>
<td>3.4%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Washington County and State QuickFacts

### Washington County Age Distribution

<table>
<thead>
<tr>
<th>Age</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A key to preventing and managing chronic diseases in a cost-effective way is consistent access to high quality primary care. According to the Vermont Department of Health’s 2014 Physician Census, Washington County has a primary care physician supply of 76.5 per 100,000 people. This level is considered an inadequate supply by the Vermont Department of Health because it falls slightly short of the Department’s recommended level of 78 primary care physicians per 100,000 people. Insurance is also a factor affecting access to high quality primary care. The chart below illustrates the recent favorable shift in the percentage of our HSA covered by health insurance.

![Uninsured population chart](image)

*Source: Vermont Dept of Financial Regulation, 2014 Household Health Insurance Survey*

The following chart illustrates the primary type of insurance coverage carried by Vermont residents. Unfortunately, while the number of uninsured has decreased, the number of residents covered by Medicaid has increased dramatically. Medicaid payment for services falls below the cost of providing those services, so this is a trend CVMC is closely monitoring.

![Primary Type of Insurance Coverage Vermont Residents, 2014](image)

*Source: Vermont Dept of Financial Regulation, 2014 Household Health Insurance Survey*
Priority Health Needs

In this section, we will discuss the needs which we have selected for this report. Select data will be presented and existing resources will be highlighted.

Drug Abuse

Drug and alcohol use has a significant impact on the health and wellness of CVMC community members. Substance use disorders, especially opioid use disorders, have been at the forefront of the media and the Governor’s agenda for the last several years. Vermont was recently recognized by the National Safety Council as one of four states that are “making progress” in treating the opiate epidemic. Since 2013, the number of Medicaid patients being treated for opioid addiction with buprenorphine in our community has increased from 225 to 328.

The chart below shows the national average of drugs used in the past month:

![Past-Month Use of Selected Illicit Drugs](https://www.drugabuse.gov/publications/drugfacts/nationwide-trends)
The following chart shows the percentage of adults in Vermont and nationally who report having used marijuana within the past month.

![Adult Marijuana Use Chart]


The following chart shows the percentage of high school students in Washington County who report having used marijuana within the past month.

![High School Student Marijuana Use Chart]

Source: Vermont Youth Risk Behavior Survey 2015

According to the most recent Vermont Youth Risk Behavior Survey, only 27% of high school students in Washington County thought people their age greatly risked harming themselves, physically, or in other ways, if they smoked marijuana regularly. Even though we continue to see the percentage of youth using marijuana decline, this is still concerning considering the unknown long-term effects of regular marijuana use by youth.
There are numerous programs actively working in Washington County to educate youth and prevent substance abuse. It is important to make note in this report that personal choices made by individuals often have the predominant influence on their health.

Existing community resources for drug users and those affected by drug use:

- Central Vermont Substance Abuse Services: Located in Berlin, CVSAS is the designated substance abuse service agency providing alcohol and other drug outpatient and intensive outpatient treatment services for the adults and adolescents of the greater Washington County area.

- People’s Health & Wellness Clinic: Located in Barre, the free clinic provides primary health care and wellness education to uninsured and underinsured residents of the greater central Vermont region.

- BAART Behavioral Health Services: The BAART clinic in Berlin offers Methadone and Suboxone Treatment as a part of their drug addiction rehabilitation and treatment program. In addition to drug addiction treatment, BAART provides mental health and primary care services.

- Washington County Mental Health Services: A comprehensive community mental health center located on the CVMC campus in Berlin that provides services for adults with mental illnesses, children and adolescents with serious emotional disturbances, and people with developmental disabilities.

- Green Mountain United Way: A non-profit organization working with local groups to encourage communities to plan, support and learn about strategies that support healthy lifestyles.

- Turning Point Center of Central Vermont: Located in Montpelier, the center offers peer support, sober recreation and educational opportunities to guide individuals through recovery from alcohol and drug addiction.

- Washington County Youth Service Bureau: The Bureau provides prevention, counseling, and support programming to empower and enrich the youth and families in Washington County.

- CVMC Integrative Family Medicine - Montpelier offers a program centered around establishing healthy habits: *Mindfulness Based Stress Reduction*.

- In several CVMC practices, behavioral counselors are available to help promote healthy lifestyles.

- The CVMC Community Health Team can be a resource for assessing readiness for change and coordinating follow-up care, counseling and support for those who wish to seek further assistance.
Mental Health Support

According to a recent study conducted by the National Institute of Mental Health, almost half of all Americans have experienced a mental disorder at some point in their lives and almost 30% suffer from one in any given year.

Depression can be a debilitating condition for all ages and may not always be easily recognized. A variety of screening tools have been developed and successfully used to screen for depression. Although not all individuals who are depressed will consider suicide, screening and awareness of a suicidal ideation is also an important component of treatment by both medical and mental health professionals.

The Vermont Department of Health notes that in recent years, more than 100 Vermonters have died by suicide each year. Vermont’s rates of suicide, calculated as the number of deaths by suicide per 100,000 people, are higher than the national averages. Vermont rates of suicide are also higher than the rates of neighboring states and the New England Region. The overall rate for the past 10 years has been increasing. Deaths by suicide in Vermont appear to follow national patterns. More men die by suicide than women. Firearms are the method used for nearly two-thirds of the deaths by suicide.

![Vermont Suicide Rate Graph]

**Tobacco Use**

The Vermont Department of Health reports that about one-third of low income and uninsured Vermont adults smoke. To meet the challenges of keeping Vermont one of America's healthiest states, we track, measure, report on, and apply data in order to achieve our shared goals for improving public health. Vermont Quit partners at CVMC, has partnered with local employers such as BlueCross BlueShield of Vermont and Capstone Community Action. Also, in person group workshops are available onsite at CVMC. We feel strongly that in-person support can improve the odds of a tobacco user successfully quitting.

**Adult Tobacco Use**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>21%</td>
</tr>
<tr>
<td>2002</td>
<td>20%</td>
</tr>
<tr>
<td>2003</td>
<td>19%</td>
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<td>2004</td>
<td>18%</td>
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<td>2005</td>
<td>17%</td>
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<tr>
<td>2006</td>
<td>16%</td>
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<tr>
<td>2007</td>
<td>15%</td>
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<tr>
<td>2008</td>
<td>14%</td>
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<tr>
<td>2009</td>
<td>13%</td>
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<td>2010</td>
<td>12%</td>
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<td>2011</td>
<td>11%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>9%</td>
</tr>
<tr>
<td>2014</td>
<td>8%</td>
</tr>
</tbody>
</table>


**High School Student Tobacco Use**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>25%</td>
</tr>
<tr>
<td>2002</td>
<td>20%</td>
</tr>
<tr>
<td>2003</td>
<td>15%</td>
</tr>
<tr>
<td>2004</td>
<td>10%</td>
</tr>
<tr>
<td>2005</td>
<td>5%</td>
</tr>
<tr>
<td>2006</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Source: Vermont Youth Risk Behavior Survey 2015*
Existing community resources for tobacco users:

- Central Vermont Home Health & Hospice: Maternal Child Health provides prenatal health care and postpartum home visits to promote health, education, early detection and disease management to expectant mothers, infants and children living in central Vermont.

- Care Net Pregnancy Center of Central Vermont: Non-medical facility offering pregnancy, abortion, adoption and parenting education.

- Vermont WIC: Federal program designed to provide nutritious foods and education to income-eligible pregnant women, women who are breastfeeding or women who have a newborn, infants, or children up to age 5 who are nutritionally or medically at risk.
Healthy Diets

A healthy diet is one that helps to maintain or improve overall health. A healthy diet provides the body with essential nutrition: fluid, adequate essential amino acids from protein, essential fatty acids, vitamins, minerals and adequate calories. The requirements for a healthy diet can be met from a variety of plant-based and animal-based foods. A healthy diet supports energy needs and provides for human nutrition without exposure to toxicity or excessive weight gain from consuming excessive amounts. Where lack of calories is not an issue, a properly balanced diet (in addition to exercise) is also thought to be important for lowering health risks, such as obesity, heart disease, type 2 diabetes, hypertension and cancer.*

Poor diets are often cited as a major factor in the nation’s obesity epidemic. Today, two-thirds of U.S. adults and nearly one in three children struggle because they are overweight or suffer from obesity. The effects of the nation’s obesity epidemic are immense: taxpayers, businesses, communities and individuals spend hundreds of billions of dollars each year due to obesity, including nearly $200 billion in medical costs. Obesity is the reason that the current generation of youth is predicted to live a shorter life than their parents. The Barre HSA has a higher rate of overweight adults than the Vermont statewide average.

![Adult Obesity Graph](image)

*Source: Vermont Dept. of Health Source, Behavioral Risk Factor Surveillance System, 2015 BRFSS Data*

Existing community resources:

- **Vermont Food Education Every Day (FEED):** A collaborative Farm to School program that works with schools and communities to raise awareness about healthy food, good nutrition and the role of Vermont farmers and farms. The Barre Town Middle and Elementary School participates in a farm to school program that cultivates a link between the classroom, cafeteria, community and local farms.

- **Food Works at Two Rivers Center:** A non-profit, farm-based agricultural education and training center in Montpelier that provides subsidized distribution of local food to people throughout the community.

- **The U-32 High School,** located in Montpelier, serves the communities of Worcester, Calais, Middlesex, East Montpelier, and Berlin. It has been operating a farm to school program since 2002, purchasing from local sustainable family farms and involving students in school gardens, composting, in-class education and cooking demonstrations.

- **Community Connections:** A local nonprofit that runs afterschool programs in Montpelier public schools. After identifying the need to get students more physically active in 2006, Community Connections has coordinated the Safe Routes to School program in Montpelier with events to encourage students to walk or bike to school.
Youth Participation in Physical Activities

In 2011, Centers for Disease Control and Prevention Pediatric Nutrition Surveillance showed that 12.9% of Vermont children ages 2-5 were obese, up slightly from 12.2% in 2010. This is among children in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The early childhood obesity prevalence in WIC has been stubbornly hovering between 12% and 14% since 2000.

The most important primary prevention strategies for early childhood obesity are exclusive breastfeeding for the first six months of life, and the establishment of healthy patterns of eating and physical activity.

Approximately 20% of Vermonters participate in no leisure time physical activity. This percentage has remained stable since 2002. Adults spend long hours, mostly sitting, at work and arrive home only to sit in front of televisions or computers to relax. The rural nature of Vermont and its poor “active transportation” infrastructure (i.e. incomplete or inadequate sidewalks, bicycle facilities, public transit) results in Vermonters needing to spend additional time sitting in cars to get to where they need or want to go. Busy lifestyles with limited opportunities to be active in “everyday lives,” plus a culture that supports screen time for “recreation” has resulted in low rates of physical activity for all. We believe that encouraging youth to engage in physical activities at an early age can help them establish routines they will carry into adulthood which include physical activity.

![Teens with more than 2 hours of daily "screen time"

Note: “Screen time” is defined as watching TV, playing video games, or using the computer for fun, including activities such as Xbox, PlayStation, Nintendo, iPod touch, Facebook, and the Internet on school days but not related to school or work use.
Source: Vermont Dept. of Health Source, Population Indicators and Performance Measures, 2015 YRBS Data

17
Implementation Plan

The following implementation plan outlines the logistics and remedies concerning the priority areas agreed upon by the CVMC Steering Committee.

At Central Vermont Medical Center, we collaborate with other non-profits, businesses, community leaders, and governmental agencies to provide a variety of programs and educational offerings intended to improve the health of the communities we serve. Our affiliation, beginning in 2011 with the University of Vermont Medical Center, Champlain Valley Physicians Hospital Medical Center, Elizabethtown Community Hospital, and Alice Hyde Medical Center, under the University of Vermont Health Network, has increased our reach and capabilities as the primary medical center in central Vermont. This connection with the University of Vermont Health Network has been a significant step in promoting regional strategic planning, improving access to local care, enhancing information technology, and encouraging joint quality and clinical initiatives. Together, our organizations have worked to align with the state and federal health care reform agendas that promote enhanced integration and build upon our existing clinical partnerships.

A number of CVMC staff members serve on boards of other mission-related community organizations and planning groups such as the Vermont Blueprint for Health, Central Vermont Health Care Coalition, Central Vermont Substance Abuse Services, Green Mountain United Way, People’s Health & Wellness Clinic, Vermont Dietetic Association, Vermont Ethics Network, Vermont Medical Society Board, and many more. This implementation plan points to and acknowledges the valuable work of many efforts already underway throughout the county to address community health.

Our Community Health Team has discussed regional strategies that are working, gaps that remain, and opportunities for improvement. Based on these recommendations, we have developed the following measures to address those areas for improvement that require more attention and collaboration.

Drug Abuse

**Why address it?**

By addressing barriers to treatment and collaborating with community partners, CVMC will potentially decrease the prevalence of drug abuse, thus decreasing the number of safety and health concerns associated with it. CVMC is working with community partners including the Vermont Department of Health Alcohol and Drug Abuse Program, Washington County Mental Health Services, Central Vermont Substance Abuse Services and Central Vermont Addictive Medicine to increase access to care and support transitions of care as individuals move through the treatment cycle. It is important that community members have knowledge of the resources that are currently available to them.

**Current initiatives**

- Continue expanding Screening Brief Intervention and Referral to Treatment (SBIRT) model into seven medical homes throughout the CVMC Medical Group Practices. Increase communication and integrated care at each medical home with four master’s level behavioral health counselors, offering onsite counseling services with documentation in their medical record.
• Continue Screening Brief Intervention and Referral to Treatment (SBIRT) model in our Women’s Health Clinic at CVMC. Increase communication and integrated care with immediate access to a licensed behavioral health counselor for interventions.
• Continue Screening Brief Intervention and Referral to Treatment (SBIRT) model in our Emergency Department at CVMC. Two master’s level behavioral health clinicians offer immediate interventions for patients scoring positive for drug use behaviors with an option to engage in free brief treatment.
• Continue expanding Screening Brief Intervention and Referral to Treatment (SBIRT) model to our inpatient units at CVMC. One master’s level behavioral health counselor could offer immediate interventions for patients scoring positive for drug use behaviors with an option to engage in free brief treatment.
• The Central Vermont Community Response Team (CVCRT) continues to meet monthly to provide wraparounds for pregnant and parenting women. This team is represented by 16 community agencies in Washington County and provides case management, advocacy and assistance to women in overcoming barriers to health and wellbeing.
• Clinical oversight of clinical interventions, ongoing training and support to medical staff, quality improvement and data management.
• Development of clinical intervention tools for medical providers to use during brief interventions and give to patients as resources.
• Continue to coordinate efforts with Central Vermont Addiction Medicine (CVAM): The staff of the Central Vermont Medication Assisted Treatment (MAT) Team has been working with the staff at CVAM to ensure that there is no wait list for individuals who are seeking MAT. Currently, most new patients are seen and inducted on buprenorphine or methadone in less than 48 hours.
• Continue work with the Central Vermont Opiate Addiction Steering Committee, which is working with the United Way to develop a comprehensive online resource for individuals and families struggling with addiction. This will also serve as a tool for educating community members, and will contain information about prevention efforts around central Vermont.

Advance action

• Expand facilitation and leadership of the Washington County Substance Abuse Regional Partnership Committee to identify barriers to treatment and gaps in services. This multidisciplinary team, consisting of physicians, drug treatment facilities leadership, drug counselors, ADAP representatives, and our community mental health agency, meets monthly at CVMC to strengthen Washington County’s response to our current drug epidemic.
• Continue development of parenting groups in conjunction with Treatment Associates and Central Vermont Addiction Medicine.
• Expand supports for patients under the age of 18 that may be in need of medication-assisted treatment.
• Engage practitioners: By increasing the MAT Team support, we are hopeful that we can encourage more practitioners to provide MAT to their patients.
• Ongoing education: By continuing with the Office Based Opioid Treatment (OBOT) Learning Collaborative in conjunction with Dartmouth Hitchcock Medical Center, we can continue to educate providers on new forms of treatment, which will help improve access to care. One example of this is the use of Vivitrol, an injectable medication that blocks the opioid receptors for an individual for 30 days. Patients receiving this type of treatment can be supported by the MAT Team.
- Through promotion on hospital bulletins and media centers, ensure that the public is aware of organizations such as Central Vermont Substance Abuse Services, and online resources being created by groups such as the Central Vermont Opioid Addiction Steering Committee and Washington County Regional Substance Abuse Partnership.
- Continue development of a local safe harbor bridge program that offers 24/7 referral, screening, and assessment services for individuals needing medically assisted withdrawal and/or substance abuse treatment.
- Continue development and support of Project Safe Catch, which is a drug amnesty program that offers addicts immediate access to substance abuse treatment in lieu of an arrest or penalty.

**Mental Health**

*Why address it?*

As mentioned earlier in this report, according to a recent study conducted by the National Institute of Mental Health, almost half of all Americans have experienced a mental disorder at some point in their lives and almost 30% suffer from one in any given year. These problems typically take a toll on overall health. For example, patients diagnosed with a serious mental disorder die 25 years earlier than the general population. Care costs for mental health conditions are significant. The United States spent an estimated $201 billion on mental health disorders like anxiety and depression in 2013, according to an analysis published in The Journal Health Affairs, making it the costliest medical condition in the country.*

**Current Initiatives**

- Family Psychiatry, a CVMC Medical Group practice, adopted formal standardized depression screening for patients 12 and older.
- CVMC, in partnership with Washington County Mental Health Services, is working to integrate behavioral health practitioners into every primary care practice.
- CVMC has piloted standardized trauma screening in collaboration with Washington County Mental Health into one of its primary care practices, identifying patients with a history of trauma and connecting them with services.
- CVMC is partnering with Washington County Mental Health Services to pilot an integrated health home that promotes a model of health care that integrates the social determinants of health with specialized treatment for individuals with complex physical health, mental health, developmental and substance abuse challenges.
- CVMC, in collaboration with Washington County Mental Health Services, has developed a Doula Project to support every prenatal patient seen through Central Vermont Women’s Health. Research shows that doula labor support decreases the risk for postpartum depression.
- CVMC, in collaboration with Washington County Mental Health Services, is offering additional prenatal and postpartum support for women with a history of depression or are at risk of postpartum depression. Those services include:
  - case management
  - collaboration with other community agencies
  - prenatal yoga
  - childbirth education
  - referral to other Washington County Mental Health Services Programs and counseling
  - additional postpartum support up to one year postpartum

*Source: [http://www.huffingtonpost.com/entry/highest-health-costs-mental_us_574302b8e4b045cc9a716371](http://www.huffingtonpost.com/entry/highest-health-costs-mental_us_574302b8e4b045cc9a716371)
**Advance Action**

- CVMC Pediatric practices are planning to pilot trauma screening in collaboration with Washington County Mental Health Services and the Washington County Family Center

**Tobacco Use**

*Why address it?*

Tobacco use is the leading cause of preventable death, but hundreds of Vermonters still die each year from tobacco-related diseases. Countless other lives, including those of friends and families of smokers, are touched by the negative effects of tobacco use in our state. Smoking leads to or complicates asthma, heart disease, cancer, lung diseases, stroke, low birth weight in babies, and infant mortality. The most recent prevalence of adult smoking in Vermont was 18% in 2014. This is the same as the national prevalence and equates to about 81,000 adult smokers in Vermont. In the last 25 years, there has been a gradual decline in smoking from a high of 24% in 1996.

**Current Initiatives**

- Continue to coordinate efforts with large and small local businesses. The BlueCross BlueShield of Vermont wellness coordinator has been working with the CVMC Tobacco Cessation program for several years now and offers a cessation class twice a year. Currently, we are able to assist participants with support and free nicotine replacement therapy such as gum, patches and lozenges.
- Continue to attend local employers’ wellness fairs, including: The National Life Group, Washington County Mental Health Services and Norwich University. This also serves as a tool for educating community members.

**Advance action**

- Continue to add Freshstart (tobacco cessation) leaders in order to increase cessation services to Washington County residents including outlying areas.
- Continuing education via webinar invitations through the Vermont Department of Health.
- Through promotion on CVMC/Medical Group Practices bulletins and CVMC’s web site, ensure that the general public is aware of 802Quits.org, an in-person, phone line and online support for tobacco cessation services.

**Healthy Diets**

*Why address it?*

Obesity is one of the most serious health threats facing our nation. According to the U.S. Centers for Disease Control and Prevention, more than two-thirds of American adults and one-third of American youth are now obese or overweight. Obesity-related conditions make up several of the leading causes of death in the U.S. High rates of obesity are largely responsible for the United States’ declining health outcomes and rapidly rising healthcare costs. Lack of availability and affordability of healthy food contributes to the obesity epidemic. *

*Source: http://publichealthlawcenter.org/topics/healthy-eating*
**Current Initiatives**

- Continue Fitness4Wellness pilot, CVMC Rehab and Community Health Team collaboration project. Ten-week wellness program for patients to improve their physical abilities through physical therapy as well as build new, healthier behaviors such as healthy eating through health coaching.
- Continue Winning Strategies for Weight Loss, free weekly one-hour classes, targeting people with a BMI > 30. Providing education on healthy eating, a variety of nutrition topics, activity and making better lifestyle choices. Weekly action planning is also incorporated.
- Continue YMCA Diabetes Prevention Program, a year-long program, hourly for 25 sessions. Targeted for people with pre-diabetes and/or a BMI > 25. Overall goal is to prevent developing diabetes with a population that is at high risk for this chronic disease. Focus is on modest weight loss of 7% body weight, and increasing weekly activity to 150 minutes. Statistics show a 58% reduction in developing diabetes if overall goals met.
- Continue Healthy Eating/Healthy Living for Kids, shared medical visits with a nurse practitioner and CVMC’s registered dietitian for children and their families who would benefit from better food choices and fitness practices.
- Health Care Share: In partnership with Vermont Youth Conservation Corps, CVMC provides funding for the delivery of freshly harvested, organic vegetables to 150 families in need for 12 weeks. An educational binder with information on the nutritional value and preparation of the vegetables is distributed on the initial delivery in early July. In 2015, CVMC partnered with the Vermont Food Bank and the Hunger Mountain Coop to bring produce and dry food staples to CVMC for monthly food shelves between January and June 2016. Free cooking classes were also held in CVMC’s kitchen (Learning Kitchen) in collaboration with the University of Vermont Extension Program and the Vermont Food Bank.

**Advance Action**

- Implement a standardized food security tool within primary care to identify additional families that may benefit from the Health Care Share program

**Youth Participation in Physical Activities**

**Why address it?**

Nationwide, there has been an increase in overweight and obesity rates among adolescents over the last 30 years. In Vermont, approximately 13% of high school students are obese. According to the most recent Vermont Youth Risk Behavior Survey, high school students reporting 60 minutes of physical activity on all of the past seven days were less likely to be obese compared to the Vermont average. Participation in regular physical activity among the youth population results in many positive health and well-being outcomes, not only during childhood and adolescence, but also into adulthood. CVMC’s population health management goals revolve around the identification of risk factors that, if addressed early, can reduce the prevalence of chronic medical conditions later in life.

**Continue current initiatives**

- Continue offering Healthy Eating/Healthy Living for Kids. This program includes six 90-minute sessions and is offered several times per year to pre-teens and their parents. The focus is to provide basic education on healthy lifestyle changes in both eating habits and activity. Action planning is incorporated to help with setting realistic goals. Each session includes private one-
on-one time with a nurse practitioner and a dietitian. The sessions are held at the CVMC Pediatrics practices.

- Continue our panel management efforts within our CVMC Pediatric Primary Care practices to identify children that are overdue for well-child visits and provide outreach to encourage them to attend. Body mass index is calculated at each well-child visit and education is provided around the importance of physical activity for our pediatric patients.
- The CVMC School-Based Health Center is an extension of our pediatric primary care practices and operates two days each week at the Barre City Elementary and Middle School. One benefit of being embedded in the school setting is that it provides more opportunities for our pediatric clinicians to discuss and promote the importance of physical activity and how it impacts overall health and well-being with our pediatric patients.
- The annual CVMC Fun Run and Walk offers our community’s youth population an opportunity to participate in a five-mile race around Berlin Pond, the proceeds of which go to the Health Care Share program.

**Advance Action**

- Work with our two Pediatrics practices to further incorporate patient self-management goals and quality measures pertaining to increased physical activity for our pediatric patient population.
- Increase our involvement in the creation and promotion of new community programs that target youth participation in physical activities.

**Needs Identified in the CHNA not Included in this Implementation Plan**

Many other needs were identified during the research leading to this report, but due to resource limitations, CVMC has chosen to focus on the five needs which the community identified as being the highest-priority needs in our community.

As expected, our Community Health Needs Assessment identified additional determinants of health that fall outside the realm of our capabilities at CVMC. A prominent need that we are not directly addressing is Oral Health. Several of our physicians have undergone fluoride treatment training, and are able to provide this service for children up to four years of age who do not have access to dental care. However, one out of four adults in Washington County has not visited a dentist in the last year. As a medical hospital, we do not have the facilities or expertise to address this need directly. With this said, it is important that we recognize all factors that may be affecting the overall health of patients walking through our doors at CVMC. We intend to continue collaboration with community facilities such as The Health Center in Plainfield and The People’s Health and Wellness Center in Barre that offer dental care.

Other areas were identified which we have chosen to acknowledge, but not address directly as part of our strategic plan. Some of those needs were:

- Increase available housing for those in need
- Decrease teenage pregnancies
- Decrease unplanned pregnancies
- Expand services targeting the elderly in our community
- Increase the number of walking paths and/or bike lanes in our community
Evaluation of Implementation Impact
In concluding this assessment, an essential final phase will be our future evaluation of the impacts made by our implementation measures. The following statements outline the methods that we will use to assess the health impacts of the policies, plans and projects of our implementation plan.

Decrease Drug Abuse
- Assess rates of drug use in Washington County/Barre HSA via VDH data.
- Assess Washington County YRBSS data for the prevalence of drug use. Also assess the rate of students who report to be aware of the harm/risk that drug and alcohol abuse involves.

Increase Support for Mental Health
- Monitor available statistics to ensure Washington County is on par with state and national goals.

Decrease Tobacco Use
- Monitor enrollment numbers in Tobacco Cessation classes.
- Assess adult and teen rates of cigarette smoking by utilizing data available from the Vermont Department of Health.

Increase % of Individuals Consuming a Healthy Diet
- Conduct end of season survey for families who participated in CVMC Health Care Share program.

Increase Youth Participation in Physical Activities
- Monitor enrollment numbers in Healthy Eating & Healthy Living for Kids program.
- Assess the rates of youth obesity, healthy diets and physical activity in Washington County/Barre HSA via VDH data.

Report Dissemination
Upon completion, this Community Health Needs Assessment report will be made available to the public through publication on our website, www.cvmc.org, and through distribution to the Green Mountain Care Board and the Vermont Department of Health. CVMC fully believes that one of the most powerful results of this assessment will be the opportunity for our community to review and respond to the material included in this report. You may contact us at, www.cvmc.org/contact-us to request a hard copy of this report, or share any questions, comments, or concerns.