Choosing Health

NORTHEASTERN VERMONT REGIONAL HOSPITAL

Community Health Needs Assessment 2018

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The Northeastern Vermont Regional Hospital Community Health Needs Assessment was adopted by the Senior Leadership Team on June 18, 2018

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INTRODUCTION

Northeastern Vermont Regional Hospital
Community Health Needs Assessment 2018

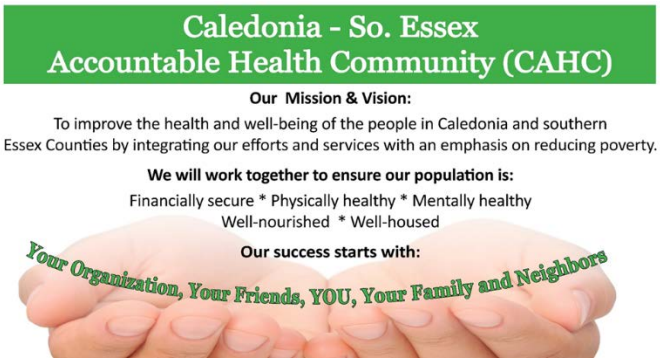
The Patient Protection and Affordable Care Act (ACA) of 2010 required all not-for-profit hospitals in the United States to conduct a community health needs assessment (CHNA) at least every three years (beginning in 2012). While NVRH regularly conducted needs assessments prior to the ACA requirement, this is the third assessment done using the ACA requirement and guidelines.

As required, the NVRH Community Health Needs Assessment includes:

- A definition of the community served
- A description of the process and methods used to conduct the assessment
- A description of how the hospital took into account input from people who represent the broad interests of the community
- A description of the health priorities and significant community health needs
- A description of the potential measures and resources

At NVRH we know healthcare alone plays a surprisingly small role in overall health. Social contributors to health like income, education, affordable housing, and access to healthy food, as well as access to medical care and mental health services all play a role in determining health. The purpose of our community health needs assessment is to identify initiatives at the individual, community, environmental, and policy level, as well as programs and services that meet our mission to improve the health of people in the communities we serve.

The 2018 CHNA builds on the foundation of the previous assessments. New this year, the CHNA will use the framework of our regional accountable health community, the Caledonia and So. Essex Accountable Health Community (CAHC). The CAHC uses the frameworks of the accountable health community model, Collective Impact, and Results Based Accountability. Likewise, the 2018 NVRH CHNA and companion Implementation Plan use these frameworks.



Additionally, the 2018 CHNA is informed by the data compiled, and the community engagement work already done by the CAHC, and the overall mission of the CAHC to reduce poverty in the region.

The Communities We Serve

Northeastern Vermont Regional Hospital is located in Vermont's Northeast Kingdom; an area known for its rugged rural beauty, and equally rugged and independently spirited people. The area is a mix of rolling hills, mountains, and river valleys.

The primary service area for NVRH is just under 30,000 people. (US Census 2010) **The Vermont Department of Health define the service area as these towns and their villages in Caledonia and southern Essex counties in northeastern Vermont:** Barnet, Burke town, Concord town, Danville town, East Haven, Guildhall, Granby, Kirby, Lunenburg, Lyndon town, Maidstone, Newark, Sheffield, St. Johnsbury town, Sutton, Victory, Walden, Waterford town, Wheelock. The major population centers are St. Johnsbury, Lyndon, and Danville. All other towns have less than 2000 people. Residents of other surrounding towns including Peacham, Gilman, Ryegate, Glover, Barton, and several others consider NVRH their community hospital.

The area is quite rural with a population density in Caledonia County of 48.1 persons per square mile and only 9.5 persons per square mile in Essex County (US Census Quick Facts). Both counties are bordered by the Connecticut River to the east.

Tables 1 – 5 display basic demographic and health and social condition data for the NVRH service area.

Table 1. Basic Demographic Data for Caledonia and Essex Counties

	Caledonia	**Essex**
Population July 2017	30,164	6,230
Age and Sex		
• % Female	50.1%	49.5%
• < 5 years of age	4.8%	4.9%
• < 18 years of age	19.7%	18.3%
• 18 - 64	56.0%	52.8%
• 65 and older	19.5%	24.0%
Race		
• White (non-Hispanic)	95.0%	95.5%
• Hispanic	1.6%	1.4%
• Black or African American	0.7%	0.7%
• All other	2.7%	2.4%

Source: U.S. Census Bureau;
https://www.census.gov/quickfacts/fact/table/essexcountyvermont,caledoniacountyvermont,US/PST045217

Table 2. Key Economic Indicators for Caledonia and Essex Counties

	Caledonia	Essex
Median household income (in 2016 dollars)[1] ($56,104 VT)	$46,931	$39,467
Person in poverty (all)[3]	14.1%	16.2%
• Single female head of household	34.8%	NA
• 18 – 64 years of age	12.5%	NA
• 65 and older	6.7%	NA
Unemployment rate March 2018 (VT 3.0%)[2]	4.2%	4.8%
Top 3 industries [3]		
• Education, healthcare, social services	29.9%	24.7%
• Retail trade	12.6%	14.1%
• Manufacturing	11.7%	15.4%
Average annual infant full time market rate in child care home (VT $167) [4]	$152	$137

1.U.S. Census Bureau; https://www.census.gov/quickfacts/fact/table/essexcountyvermont,caledoniacountyvermont,US/PST045217
2.Vermont Department of Labor, Economic, and Labor Market Information; http://www.vtlmi.info/laus.pdf
3.Northeastern Vermont Development Association; Our Communities; America Fact Finder https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
4.Agency of Human Services Community Profiles. http://humanservices.vermont.gov/ahs_community-profiles

Table 3. Key Housing Indicators for Caledonia and Essex Counties

	Caledonia	Essex
Housing units (July 2016)[1]	16,129	5.094
Median value owner-occupied housing (2012-2016)[1]	$164,200	$123,800
Median gross rent (2012 – 2016)[1]	$745	$686
Households that spend 30% or more of their income on housing (VT 37%)[2] (By Hospital Service Area)		36%

1.U.S. Census Bureau; https://www.census.gov/quickfacts/fact/table/essexcountyvermont,caledoniacountyvermont,US/PST045217
2.Agency of Human Services Community Profiles. http://humanservices.vermont.gov/ahs_community-profiles

Table 4. Key Food Security Data for Caledonia and Essex Counties

	Caledonia	Essex
Enrollment in 3 Squares (50.9% VT)	53.4%	49.1%
Enrollment in WIC (St J District Office) VT 12,856		912
Food Insecurity Overall	12.1%	13.3%
Children	17.0%	18.7%
# of schools with Universal Free Meals	3	2
# of summer meal sites	8	5
# of senior meal sites	6	2

American Community Survey 2015
Hunger Free Vermont; Summer Meals for Kids & Teens; Hunger Free Vermont; Kids Eat Up Universal School Meals
Feeding America. Map the Meal Gap 2018. http://www.feedingamerica.org/research/map-the-meal-gap/2016/overall/VT_AllCounties_CDs_MMG_2016.pdf
Northeast Kingdom Council on Aging: http://nekcouncil.org/wp-content/uploads/2017/09/Lets-Do-Lunch-Meal-Site-Locations-1.pdf

Table 5: Health Indicators for the NVRH Hospital Service Area

Health Indicators for the NVRH Hospital Service Area	Indicator	Data Source	Hospital Service Area	Vermont
Access to Health Services	Percent of Vermonters with health insurance	American Community Survey	93%	94%
	Primary Care Provider FTEs per 100,000 Vermonters – Physicians (MD and DO)	Healthcare Workforce Census	68	75
	Mental Health professional FTEs per 100,000	Healthcare Workforce Census	198	342
	Primary Care Provider FTEs per 100,000 Vermonters - Dentists	Healthcare Workforce Census	34	38
Mental Health and Substance Use	Percent of adults with a depressive disorder	BRFSS	21%	22%
	Percent of adolescents in grades 9-12 who made a suicide plan	YRBS	11%	12%
	Rate of suicide deaths per 100,000 Vermonters	Vital Statistics	23	14
	Percent of adults who smoke cigarettes	BRFSS	19%	18%
	Percent of adolescents in grades 9-12 who smoke cigarettes	YRBS	17%	11%
	Percent of adult smokers who attempted to quit smoking in the past year	BRFSS	49%	49%
	Percent of adults who binge drank in the last month	BRFSS	14%	18%
	Percent of adolescents in grades 9-12 binge drinking in the past 30 days	YRBS	16%	16%
	Percent of adolescents in grades 9-12 who used marijuana in the past 30 days	YRBS	16%	22%
	Rate of Opioid-related fatalities per 100,000 Vermonters (by county of residence at death)	Vital Statistics	7	12
Physical Activity, Nutrition and Obesity	Percent of adults age 20 and older who are obese	BRFSS	31%	28%
	Percent of adults age 20 and older who are overweight	BRFSS	35%	34%
	Percent of adolescents in grades 9-12 who are obese	YRBS	12%	12%
	Percent of children age 2-5 (in WIC) who are obese	WIC	12%	14%
	Percent of adults meeting aerobic physical activity guidelines	BRFSS	52%	59%
	Percent of adolescents in grades 9-12 meeting physical activity guidelines	YRBS	21%	23%
	Percent of adults who do NOT eat 5 fruits & vegetables per day	BRFSS	82%	80%
	Percent of adolescents in grades 9-12 who do NOT eat 5 fruits & vegetables per day	YRBS	77%	76%

Immunizations	Percent of children age 19-35 months receiving recommended vaccines (4:3:1:4:3:1:4);	NIS/IMR	67%	76%
	Percent of adults age 65 and older who receive annual flu shot	BRFSS	59%	59%
	Percent of adults age 65 and older who ever had pneumococcal vaccine	BRFSS	78%	77%
Chronic Disease: Screening, Morbidity, Mortality and Associated Indicators	Percent of adults with asthma	BRFSS	11%	11%
	Percent of adults with chronic obstructive pulmonary disease (COPD)	BRFSS	6%	6%
	Percent of female adults age 50-74 receiving breast cancer screening	BRFSS	78%	79%
	Incidence of breast cancer per 100,000 females	Cancer Registry	NA	130%
	Percent of female adults age 21-65 receiving cervical cancer screening	BRFSS	86%	86%
	Percent of adults age 50-75 receiving colorectal cancer screening	BRFSS	73%	71%
	Incidence of colorectal cancer per 100,000	Cancer Registry	NA	36
	Incidence of lung cancer per 100,000	Cancer Registry	NA	65
	Percent of adults with hypertension	BRFSS	28%	25%
	Percent of adults with a cholesterol check in past 5 years	BRFSS	70%	76%
	Percent of adults with high cholesterol	BRFSS	38%	34%
	Percent of adults with cardiovascular disease	BRFSS	9%	8%
	Coronary heart disease death rate per 100,000	Vital Statistics	138	115
	Stroke death rate per 100,000	Vital Statistics	24	36
	Percent of adults tested for high blood sugar in last three years	BRFSS	52%	52%
	Percent of adults with diabetes	BRFSS	9%	8%
Quality of Life	Percent of adults whose health is fair or poor	BRFSS	13%	13%
	Percent of adults with poor physical health	BRFSS	10%	11%
	Percent of adults with poor mental health	BRFSS	9%	11%
	Percent of adults who rarely get emotional support[1]	BRFSS	7%	8%
	Overall satisfaction with life (out of 5)[2]	GNHUSA	4.2*	4.2

Source: Vermont Department of Health; http://www.healthvermont.gov/ia/CHNA/HSA/atlas.html

[1] Source: Vermont Department of Human Services, Community Profiles. http://humanservices.vermont.gov/ahs_community-profiles

[2] Gross National Happiness USA; Report for Caledonia, Orleans, and Essex Counties in Vermont 2017

FTE = Full Time Equivalent

BRFSS = Behavioral Risk Factor Surveillance Survey

YRBS = Youth Risk Behavior Survey

GNHUSA = Gross National Happiness Survey (*Caledonia only; 3.0 in Essex)

Process and Methods
A Community Health Needs Assessment Steering Committee was formed in January 2018. The Steering Committee's responsibility was to provide guidance and support for engaging and collecting input from community stakeholders, and review and analyze data and other relevant information to assess service area needs and gaps. Steering Committee members also provided primary and secondary source data generated by their respective organizations.

Steering Committee Members:
Laural Ruggles, NVRH Director Community Health Improvement
Debra Bach, St. Johnsbury District Office Director, Vermont Department of Health
Meg Burmeister, Executive Director, Northeastern Vermont Council on Aging
Cheryl Chandler, NVRH Regional Prevention Partnership Coordinator
Kari White, Director of Quality Initiatives, Northern Counties Health Care, Inc.
Suzanne Legare-Belcher, District Field Director, VT Agency of Human Resources
Paul Bengtson, CEO, Northeastern VT Regional Hospital
Cathy Boykin, NVRH Board of Trustees

Secondary source data for this needs assessment was provided by a variety of sources. A complete list of secondary sources reviewed for this assessment is included as an Appendix. Secondary source data collection started in December 2017 and ended in May 2018.

Focus Groups: Focus groups were held at two area meal sites and with Reach Up participants at the Northeast Kingdom Community Action (NEKCA) Parent-Child Center in St. Johnsbury. The focus groups at the meal sites centered on issues important to seniors as identified by the Vermont State Plan on Aging 2017; financial issues, care coordination, housing, and transportation. The Reach Up participants were asked questions about barriers to finding employment or better employment. In addition to the focus group questions, all participants completed a short, written survey to rate their health priorities. The results are summarized in Table 6.

Surveys: The NVRH Corporators, representing the residents in the communities we serve, completed an online survey to compare their health priorities with their perceived priorities of the greater community. Town clerks in the southern Essex towns in the NVRH service area were asked to distribute paper surveys regarding transportation on Town Meeting Day. Only two towns, Maidstone and Granby agreed to make the survey available to residents. Only Maidstone returned completed surveys. NVRH Prevention Services conducted a Community Survey of Lyndon residents in early 2018 to determine public support for local and state policy changes such as creating no smoking zones in public places and raising the legal age to purchase tobacco products to 21. The NEK Council on Aging asked the transportation survey questions to callers for four days in May. The Vermont Department of Health collected transportation surveys from Gilman Meal Site the last week in May 2018. The results of all the surveys are summarized in Table 6.

Additional community input was gathered by and/or generated by *Experts with Special Knowledge* and is summarized in that section of the CHNA.

Community Input

Using a health equity approach, where health equity means all people have a fair and just opportunity to be healthy, the State of Vermont identified health inequities by race, and ethnicity, gender, age, sexual orientation, disability, and socio-economic status as populations that need special attention. However, due to low numbers data stratified by most of these groups is simply not available for our region.

"I would like a job where I can learn new skills and show people my skills."
Participant, NEKCA Parent Child Center

Although both the population and the percentage of those in poverty are declining for Caledonia and Essex Counties (Source: Vermont State Data Center), we also know that based on the most often used proxy for socio-economic status - income – our region is well below the average and median income compared to the rest of Vermont.

"Taxes are high, insurance is expensive, heating a home is expensive." Participant, Burke Senior Meal Site

Additionally, data shows that the population of Vermont, and our region, is aging faster than other states. (Source: VT State Health Plan DRAFT 2018) Thus, once again **low-income families, and older adults were identified as our most vulnerable**; consequently, primary source data collection targeted groups of low-income parents and older adults.

Primary source data collection started in January 2018 and ended in May 2018. A summary is shown in Table 6. Graphic presentation of some of the data is included in the Appendix.

Figure 1. Visual depiction of the words in Table 6.

Table 6. Summary of Primary Source Data Collection.

Location	Date	# of People	Facilitator	Target Population	Summary of Results
Focus Groups					
West Burke Meal Site	April 2018	N=8; all female	Laural Ruggles; Beth Hetzelt	Older adults	Primary issue – financial security Transportation (if you don't have a car); fuel other housing costs (taxes); would like to know more about resources available in the community
Darling Inn Meal Site	April 2018	N= 3; 2 female	Laural Ruggles; Debra Bach	Older adults	Excellent knowledge of resources: RCT, Faith in Action, Council on Aging. Active socially and physically. No food issues.2 year wait for senior housing
Parent Child Center; Reach Up	May 2018	N=11; 8 female	Laural Ruggles; Cheryl Chandler	Low income parents	**Barriers to Employment:** RCT is not reliable for getting to a job; never on time; RCT is great for other transportation. Childcare is not available for evening shifts; Childcare is excellent in Vermont; fully subsidized. **Housing:** Varying opinions on availability of housing. **Other:** Concerns that other people do not know about all the available resources
Surveys					
Senior Help Line; transportation	May 18	N = 7	Council on Aging	Older adults	3 people reported not having reliable transportation. All 3 identified "more taxis" as a possible solution
Senior Meal Site; transportation	May 2018	N = 10	Vermont Department of Health	Older adults	90% (9 out of 10) reported they had reliable transportation.
Maidstone, VT Town Meeting, transportation	March 2018	N = 22	Laural Ruggles	Maidstone Residents	100% reported they had reliable transportation
NVRH Corporators; health priorities	Winter 2018	N = 50	Laural Ruggles (Survey Monkey)	NVRH stakeholders	60% rated access to healthcare as the most important to health; followed by education, healthy food, crime/safety, livable wage
Town of Lyndon; tobacco policies	January 2018	N = 243	Tennyson Marceau (Survey Monkey)	Lyndon Residents	Strong support for public policies banning smoking in public areas of the town; 60% supported raising the smoking age to 21 (except for those in the military)

Additional Community Input Provided by Experts with Special Knowledge

Key Opinion Leaders: The regional Community Health Team made up of direct service providers from health and human service agencies participated in a community asset exercise at the January 2018 meeting at NVRH. They were asked 5 questions. The questions and top answers are summarized in Table 7.

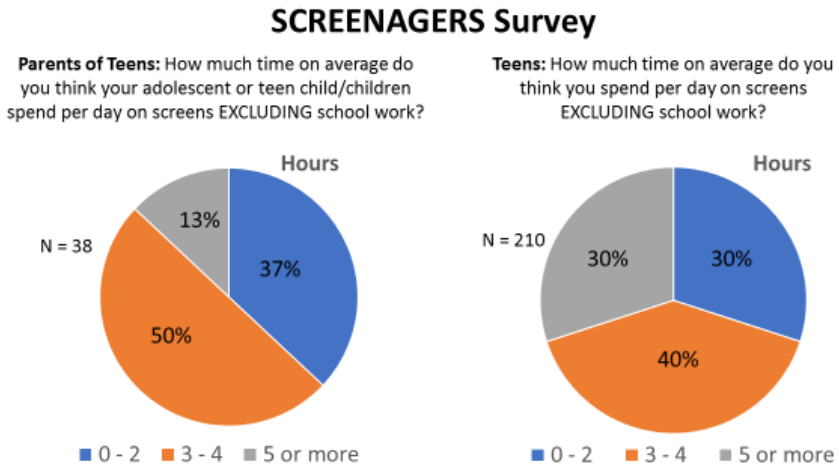
Table 7. Results of Community Asset Exercise; Community Health Team Members. N = 41

What can residents best do by themselves?
• Identify their strengths and supports; identify their needs • They can best choose their goals, priorities, and needs, and what is best for their families and themselves
What do they need organizations to do?
• Advocate for them/with them in unfamiliar and intimidating institutions/agencies • Understand and recognize resources available to them
What can organizations do best?
• Collaborate!
What can we stop doing because people can do it by themselves?
• Work harder than they are willing to work themselves • Make decisions for them
What can we offer residents to support their actions?
• Teach self-management tools/skills

Grassroots Community Organizing: Several years ago, the Center for Agricultural Economy, based in Hardwick, spent a year learning about the larger challenges around food access, equity, and independence from community members, low-income neighbors, and faith-based communities. That ground work resulted in the formation of the Northeast Kingdom Organizing (NEKO) - *a regional network of partners who believe that working across sectors and groups is a critical approach to successfully addressing our issues of rural poverty and food insecurity.* Sponsoring members include: Caledonia Grange, St. John's Episcopal Church in Hardwick, St. Mark's Episcopal Church in Hardwick, Friends of NEKO, Center for an Agricultural Economy, Danville Congregational Church, Unitarian Universalist Congregation of St. Johnsbury, United Church of Newport, East Craftsbury Presbyterian Church.

NEKO's Issues Assembly in January 2018 identified two top issues to focus their first research campaign, now underway in 2018. Those are: Children, Youth and Families and Transportation. Learn more about NEKO at https://hardwickagriculture.org/community-programs/northeast-kingdom-organizing-neko.

Parents and Teens in the Digital Age: In the spring of 2018, the Family Place (located in the St. Johnsbury School and funded through the Vermont Promise Community) sponsored showings of the film ***Screenagers.*** Both parents of teens and the teens participated in a short survey. The results from <u>one key question</u> are summarized here.



Our Accountable Health Community – Caledonia & So. Essex Accountable Health Community

With the leadership of NVRH CEO Paul Bengtson, the Caledonia and So. Essex Accountable Healthy Community (CAHC) was formally created in January 2015 when leaders from key stakeholders signed a memorandum of understanding. This created the governance structure for NVRH and our many partners to come together to create a common set of goals, share data on important health measures, and pool our talent and resources to improve health and quality of life in our region.

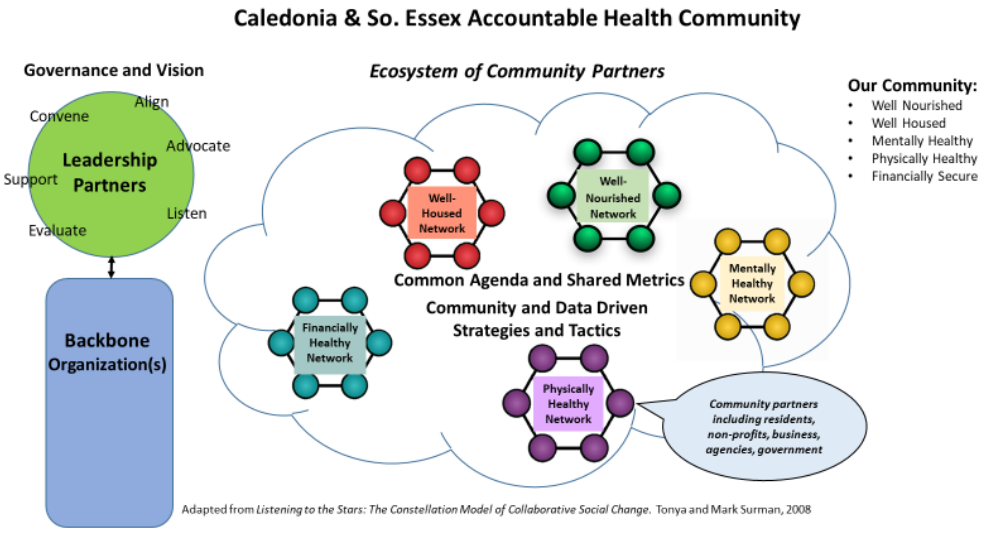
The CAHC uses the frameworks of an **Accountable Health Community, Collective Impact and Results Based Accountability**™ to maximize our collective efforts to improve the health of our region.

An Accountable Health Community (AHC) is an aspirational *model—accountable for the health and well-being of the entire population in its defined geographic area and not limited to a defined group of patients.* Population health outcomes are understood to be the *product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors, economic circumstances and environmental factors.* An AHC supports *the integration of high-quality medical care, mental and behavioral health services, and social services* (governmental and non-governmental) for those in need of care. It also supports *community-wide prevention* efforts across its defined geographic area to reduce disparities in the distribution of health and wellness. (Source: The Prevention Institute)

Collective Impact is a structure that recognizes that large scale impact depends on increasing cross-sector alignment and learning among many organizations, where organizations actively coordinate their action and share lessons learned, and progress depends on working toward the same goal and measuring the same things (Source: Channeling Change: Making Collective Impact Work. Fay Hanleybrown, John Kania, & Mark Kramer. Stanford Social Innovation Review 2012). The CAHC uses Collaborative Action Networks (CAN) to drive the initiatives that produce results in the five outcome areas: Financially Secure, Physically Healthy, Mentally Healthy, Well Nourished, Well Housed.

Collective Impact is a framework that supports working relationships and promotes an environment of trust. Fundamental to Collective Impact and the work of the CAHC is community engagement – from outreach, to collaboration, to shared leadership and decision making.

Figure 1. A graphic illustration of the Collective Impact framework of the CAHC



Today, the CAHC includes members from healthcare, human services, housing, transportation, mental health, community action, charitable food, funders, school districts, domestic violence agency, youth services, economic development and regional planning, banks/financial organizations, town government, restorative justice, State agencies including Vermont Department of Health and Vermont Department of Human Services.

Results Based Accountability™ (RBA) asks the questions:

- How much are we doing?
- How well are we doing it?
- Is anyone better off?

The CAHC CAN's use the RBA methods of defining both population level (a measure of whether we have achieved our outcome goals for the defined population) and performance level (measure of how well a program or service is working) to measure success. Likewise, the *NVRH Community Health Needs Assessment Implementation Plan* uses RBA to measure impact and evaluate initiatives.

Priority Criteria

The purpose of our community health needs assessment is to identify initiatives at the individual, community, environmental, and policy level, as well as programs and services that meet our mission to improve the health of people in the communities we serve.

Most importantly, we know we, as a hospital, cannot do this alone. The leading criterion for priority setting for our work is the ability to work with our community partners and capitalize on our many community resources and assets.

"It (solving large scale social problems) requires a systemic approach to social impact that focuses on the relationships between organizations and the progress toward shared objectives."
John Kania & Mark Kramer, Stanford University

The CHNA data collection identified low-income families, and older adults as our most vulnerable population. Additionally, this CHNA validated (see Table 8) the objectives of the Caledonia & So. Essex Accountable Health Community that our communities will be Financially Secure, Physically Healthy, Mentally Healthy, Well Nourished, Well Housed. ***Over the next three years, NVRH will implement initiatives, and programs and services that work to meet these five objectives to improve health in the community, while intentionally addressing the underlying causes of health disparities.***

Additionally, we will prioritize solutions that:

- Maximize the unique expertise and resources of NVRH
- Have the greatest impact on our most vulnerable populations
- Have results that are enhanced by working with our community partners
- Have potential for short term impact on community health
- Reduce the long-term cost of healthcare to the community
- Are tested/proven approaches to community health improvement
- Continue to be important to people who live in our communities

Table 8. Health indicators that are concerning or where our service area is significantly worse than the Vermont aggregate. Vermont Department of Health; http://www.healthvermont.gov/ia/CHNA/HSA/atlas.html

Indicator	Data Source	Hospital Service Area	VT
Primary Care Provider FTEs per 100,000 Vermonters – Physicians (MD and DO)	Healthcare Workforce Census	68	75
Mental Health professional FTEs per 100,000	Healthcare Workforce Census	198	342
Percent of adults with a depressive disorder	BRFSS	21%	22%
Percent of adolescents in grades 9-12 who made a suicide plan	YRBS	11%	12%
Rate of suicide deaths per 100,000 Vermonters	Vital Statistics	23	14
Percent of adolescents in grades 9-12 who smoke cigarettes	YRBS	17%	11%
Percent of adolescents in grades 9-12 binge drinking in the past 30 days	YRBS	16%	16%
Percent of adolescents in grades 9-12 who used marijuana in the past 30 days	YRBS	16%	22%
Percent of adults age 20 and older who are obese	BRFSS	31%	28%
Percent of adults age 20 and older who are overweight	BRFSS	35%	34%
Percent of adults meeting aerobic physical activity guidelines	BRFSS	52%	59%
Percent of adolescents in grades 9-12 meeting physical activity guidelines	YRBS	21%	23%
Percent of adults who do NOT eat 5 fruits & vegetables per day	BRFSS	82%	80%
Percent of adolescents in grades 9-12 who do NOT eat 5 fruits & vegetables per day	YRBS	77%	76%

Community Assets: Our Partners and Resources

Healthcare and Complimentary Health
• Northern Counties Health Care; Caledonia Home Health and Hospice and Federally Qualified Health Centers • Emergency: CALEX Ambulance Service & Danville Rescue; Lyndon Rescue, Inc. • Long Term Care: St. Johnsbury Health and Rehabilitation; The Pines: Canterbury Inn; private care providers • Dentists • Chiropractors: • Complimentary Therapy: massage; hypnosis; Reiki; acupuncture;
Human Services
• Vermont Department of Health • Vermont Department of Economic Services • Vermont Vocational Rehabilitation • Vermont Department of Corrections • Northeast Kingdom Community Action NEKCA • H.O.P.E • Umbrella, Inc. • Northeast Kingdom Youth Services • Faith In Action • St. Johnsbury Community Restorative Justice • Vermont Legal Aid
Mental Health and Substance Misuse Disorders
• Northeast Kingdom Human Services • BAART Programs • Kingdom Recovery Center • Vermont CARES (needle exchange) • DART NEK (drug abuse resistance team) • Transitional Housing: Covered Bridge, Aries House • Private therapists
Older Adults
• Northeast Kingdom Council on Aging • Riverside Life Enrichment • Good Living Senior Center
Economic Development
• Northern Community Investment Corporation NCIC • Northeastern Vermont Development Association NVDA • Northeast Kingdom Collaborative • Banks: Passumpsic Savings Bank; Community National Bank; Union Bank • Northeast Credit Union • Green Mountain United Way • Chambers of Commerce and their Members ;NEK Chamber of Commerce; St. Johnsbury; Lyndon; Burke

- Towns and Villages in the Service Area
- Businesses; retail; food and lodging; manufacturing; logging; professional services; trade services

Schools

- Public schools: St. Johnsbury Supervisory Union; Caledonia Central Supervisory Union; Kingdom East Supervisory Union; Essex Caledonia Supervisory Union
- St. Johnsbury Academy
- Lyndon Institute
- Burke Mountain Academy
- Cornerstone and Arlington Schools
- LEARN
- Thaddeus Stevens School
- Riverside School
- Good Shepherd School
- Caledonia Christian School
- Colleges: Northern Vermont University; Springfield College; Community College of Vermont
- Home school providers
- Pre-school programs and centers (including childcare centers)

Food Cycle

- Vermont Food Bank
- Farmers Markets: St. Johnsbury, Lyndon, Danville, Peacham, Burke
- Food shelves: Kingdom Community Services; Neighbors Helping Neighbors; Sheffield Community
- Center for Agriculture Economy
- Local farmers
- Local food producers
- Northeast Kingdom Waste Management District and Town Recycling Centers
- Local grocery stores and convenient stores
- Mustard Seed Soup Kitchen

Faith Based

- Churches
- Beth El Synagogue
- Karme Choling Shambhala Meditation Center
- Milarepa Center

Housing

- RuralEdge
- Habitat for Humanity
- Transitional Housing: Covered Bridge, Aries House
- Realtors
- Private landlords
- Warming Shelter

Arts and Humanities

- Catamount Arts

- Fairbanks Museum
- Libraries: St. Johnsbury Athenaeum; Cobleigh Library; Pope Memorial Library; Concord Public Library; West Burke Public Library; Peacham Library; East Burke Community Library
- Historical: St. Johnsbury History and Heritage Center; Barnet Historical Society; Burke Historical Society; Concord Historical Society; Danville Historical Society; Lyndon Historical Society; Peacham Historical Society; Sheffield Historical Society; Ben's Mill
- Kingdom County Productions
- Burklyn Arts Council
- Town Bands: St. Johnsbury, Danville, Lyndon
- Northeast Kingdom Artisans Guild
- Northeast Kingdom Classical Series
- Vermont Children's Theater

Physically Activity

- Locally Operated Fitness Centers; Yoga; Pilates; Gymnastics and Dance; Martial Arts
- Kingdom Trails
- Burke Mountain
- Lyndon Outing Club
- Youth Sports Programs: Lyndon; St. Johnsbury
- Powers Park
- Kiwanis Pool and Tennis
- Fenton Chester Ice Arena
- Golf Courses: St. Johnsbury County Club; Kirby County Club
- Lamoille Valley Rail Trail
- Paths Around Lyndon
- Caledonia Trail Collaborative
- Town Forests
- Parks and Playgrounds

Waterways for Recreation

- Lakes: Joe's Pond; Harvey's Lake; Shadow Lake – Concord
- Rivers: Passumpsic; Moose; Connecticut
- Ponds

Other Local or Regional Resources and Attractions

- Dog Mountain
- Sugar Ridge Campground and Mini Golf
- Corn Maze

Media

- The Caledonian Record
- North Star Monthly
- Northland Journal
- Vermont Broadcasting Associates: WSTJ, WKHX, WGMT
- The Point 95.7
- Kingdom Access TV

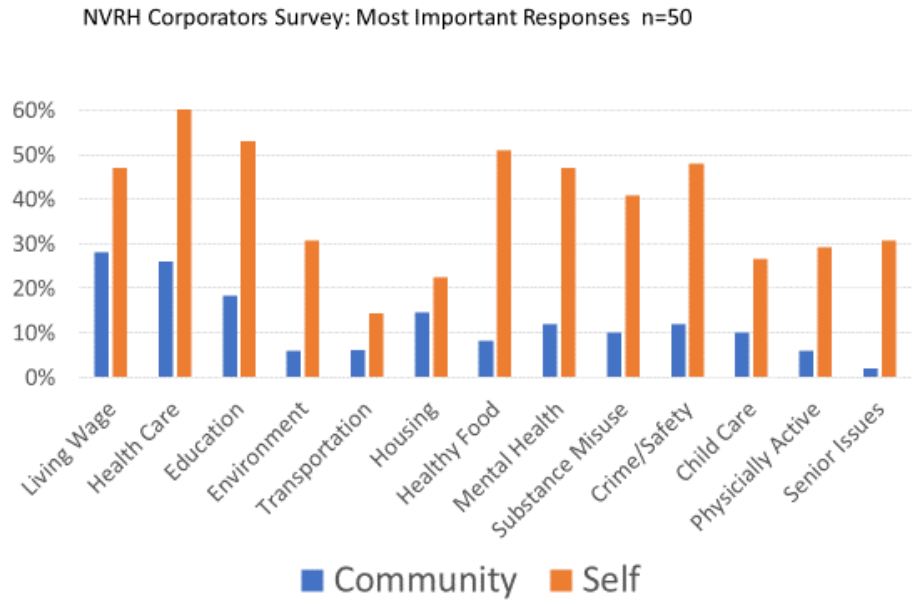
Appendix

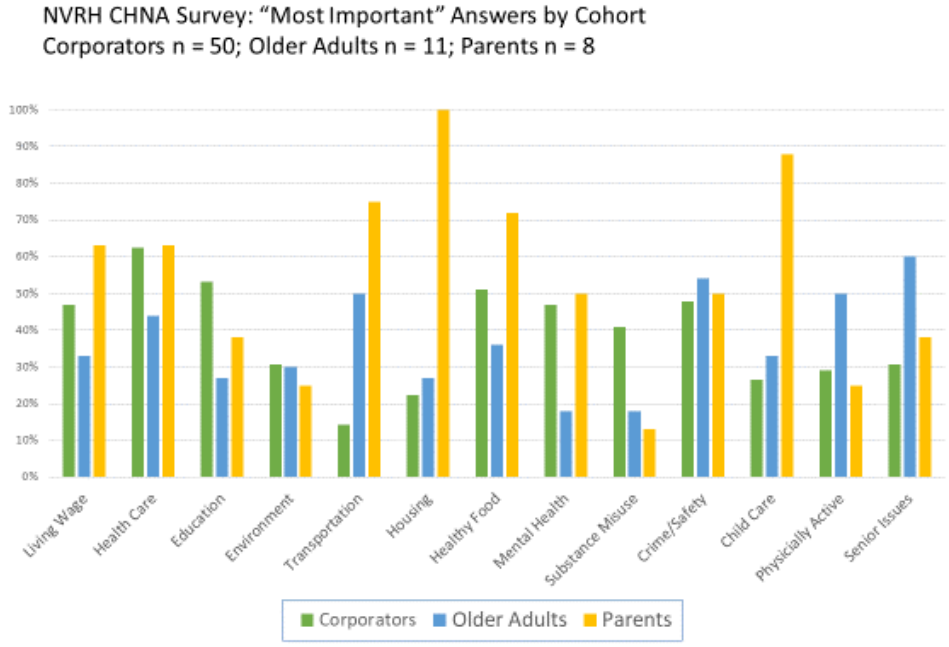
List of Secondary Data Sources and Reports Accessed for this CHNA

- Vermont State Health Plan DRAFT 2018
- Vermont Opioid Coordination Council: Initial Report of Recommended Strategies January 2018
- Happiness Survey 2017 Report on Caledonia, Essex, and Orleans County (Gross National Happiness USA)
- The Housing Survey for Professionals Serving Vermont with Substance Abuse Disorders October 2017
- Food System Plan for the NEK 2017
- Vermont Parent Survey for Caledonia County 2017
- Vermont Parent Survey for Essex County 2017
- 1305 Surveillance; Vermont Report on Chronic Disease, June 2017
- County Health Rankings; March 2018
- Vermont BRFSS 2015-2016
- Vermont YBRS 2015-2016; 2017
- Vermont State Plan on Aging 2017
- Sentinel Snapshot Vermont RWJF
- Vermont 211 Annual Report 2017
- Lyndon – Community Health Needs Assessment; UVM Student Julie Davis, 2018
- Vermont Young Adult Survey – Caledonia and Essex – 2016
- Lyndon Opinion Survey; NVRH Prevention Services 2018
- Vermont Local Opinion Leaders Survey: Regarding Alcohol, Tobacco, and Non-Medical Marijuana, Prevention and Control Policy Options, 2017
- Voices from the Field. Caledonia/Southern Essex Building Bright Futures Regional Action Plan. 2016 – 2021
- Notes from student led and student participant focus group on healthy eating at the St. Johnsbury School, April 2017
- Removing the Barriers: Improving Health Care for Adult Vermonters with Intellectual and Developmental Disabilities. 2016
- Poverty in Vermont Counties; From the Vermont State Data Center
- Population in Vermont Counties: From the Vermont State Data Center

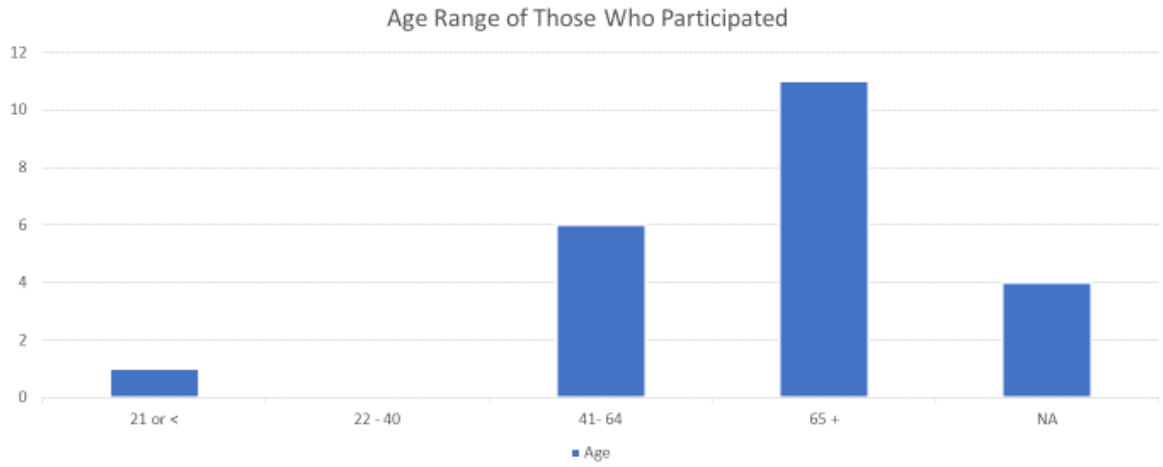
Appendix

Supplemental Information from Community Input

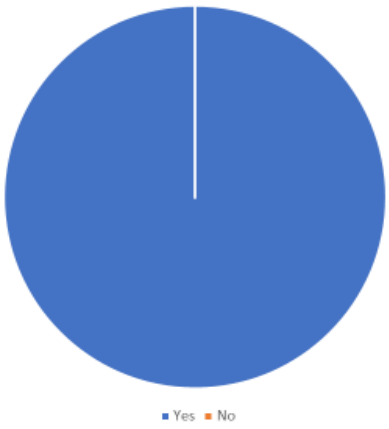




Maidstone Town Meeting n = 22

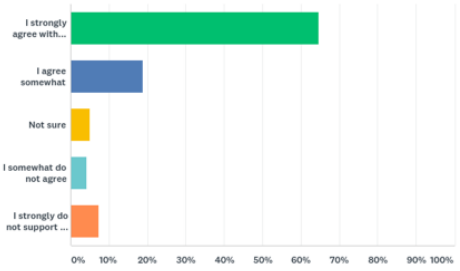


Do you have reliable transportation?



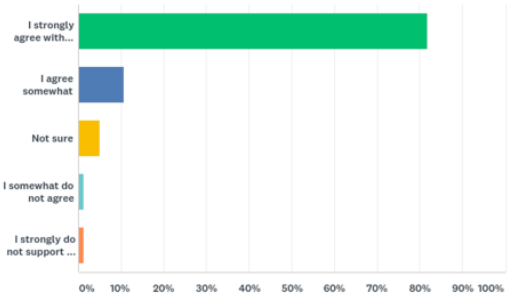
Lyndon Opinion Survey n=243

Q16 What is your opinion supporting tobacco policies that ban smoking in outdoor public areas such as parks?



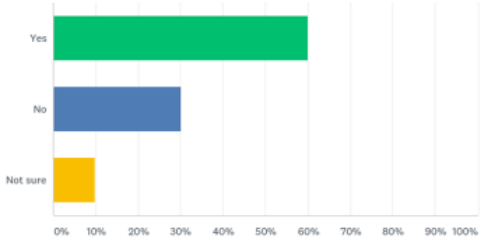
Lyndon Opinion Survey n=243

Q17 What is your opinion about supporting tobacco policies that ban smoking in entrance ways of public buildings and workplaces?



Lyndon Opinion Survey n= 243

Q20: Would you consider raising the sale age of tobacco to 21? (18 if you are in the military)



County Health Rankings
Caledonia County
2018 and 2017

	2018	2017	Vermont 2018	National Benchmark 2018	Status 2018/2017
Health Outcome	Rank 8	Rank 5			
Length of Life	Rank 8	Rank 6			
Premature Death	6,000	5,600	5,700	5,300	
Quality of Life	Rank 8	Rank 5			
Poor or Fair Health	13%	12%	13%	12%	
Poor physical health days**	3.9	3.0	3.6	3.0	
Poor mental health days**	4.0	3.4	4.0	3.1	
Low birth weight	6%	6%	7%	6%	

Health Factors	Rank 11	Rank 10			
Health Behaviors	Rank 13	Rank 11			
Adult Smoking**	18%	17%	17%	14%	
Adult Obesity	31%	28%	25%	26%	
Food environmental index	8.3	7.9	9.0	8.6	
Physical Inactivity	22%	20%	20%	20%	
Access to Exercise Opportunities	69%	53%	79%	91%	
Excessive Drinking**	19%	18%	21%	13%	
Alcohol Impaired Driving Death	54%	46%	35%	13%	
Sexually Transmitted Infections	251.8	343.4	303.4	145.1	
Teen Birth Rate	17	20	15	15	

Clinical Care	Rank 8	Rank 4			
Uninsured	5%	7%	5%	6%	
Primary Care Physicians	1,180:1	1,110:1	890:1	1,030:1	
Dentists	1,320:1	1,470:1	1,470:1	1,280:1	
Mental Health Providers	310:1	330:1	240:1	330:1	
Preventable Hospital Stays	40	36	39	35	
Diabetic Monitoring	90%	90%	91%	91%	
Mammography Screening	66%	66%	68%	71%	

Social & Economic Factors	Rank 10	Rank 10			
High School Graduation	88%	88%	88%	95%	
Some College	54%	54%	67%	72%	
Unemployment	4.1%	4.8	3.3%	3.2%	
Children In Poverty	19%	18%	14%	12%	
Income Inequality	4.2	4.2	4.4	3.7	
Social associations	14.3	14.8	13.3	22.1	
Children in Single-Parent Households	29%	31%	31%	20%	
Violent Crime Rate	142	142	121	62	
Injury Deaths	78	73	77	55	

Physical Environment	Rank 5	Rank 8			
Air pollution – particulate matter**	7.1	7.1	7.5	6.7	
Drinking Water Violations	Yes	Yes			
Severe Housing Problem	18%	18%	17%	9%	
Driving alone to work	76%	77%	76%	72%	
Long commute – driving alone	31%	31%	30%	15%	

Red = Worse than previous year
Green = Better than previous year
Blue = No change from previous year

Source: http://www.countyhealthrankings.org/