Dartmouth-Hitchcock

ALICE PECK DAY MEMORIAL HOSPITAL
A Dartmouth-Hitchcock Affiliate

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VISITING NURSE and HOSPICE for VERMONT and NEW HAMPSHIRE
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Community Health Needs Assessment

Fiscal Year 2019

Community Input on Health Issues and Priorities, Selected Service Area Demographics and Health Status Indicators

Dartmouth-Hitchcock, Alice Peck Day Memorial Hospital, and Visiting Nurse and Hospice for VT and NH

Community Health Needs Assessment

2019

Community Input on Health Issues and Priorities,
Selected Service Area Demographics and Health Status Indicators

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Dartmouth-Hitchcock, Alice Peck Day Memorial Hospital, and Visiting Nurse and Hospice for VT and NH
Community Health Needs Assessment
2019

Executive Summary

During the period January through August 2018, a Community Health Needs Assessment was completed by Dartmouth-Hitchcock, Alice Peck Day Memorial Hospital, and Visiting Nurse and Hospice for VT and NH in partnership with Mt. Ascutney Hospital and Health Center, Valley Regional Healthcare, New London Hospital and the New Hampshire Community Health Institute. The purpose of the assessment was to identify community health concerns, priorities and opportunities for community health and health care delivery systems improvement. For the purpose of the assessment, the geographic area of interest was 19 municipalities in Vermont and New Hampshire comprising the Dartmouth-Hitchcock and Alice Peck Day primary hospital service areas with a total resident population of 69,467 people. Methods employed in the assessment included surveys of community residents made available on-line and paper surveys placed in numerous locations throughout the region; a direct email survey of key stakeholders and community leaders representing multiple community sectors; a set of community discussion groups; compilation of results from assessment activities focused specifically on behavioral health needs and gaps; and a review of available population demographics and health status indicators. All information collection activities and analyses sought to focus assessment activities on vulnerable and disproportionately served populations in the region including populations that could experience limited access to health-related services or resources due to income, age, disability, and social or physical isolation. Enhanced efforts were made to understand the needs of these populations through targeted surveys and community conversations including facilitated surveys and discussions at community suppers, a regional free clinic, homeless programs, and other community settings serving economically vulnerable residents.

The data gathered in the FY2019 CHNA is part of a continual process for considering progress and emerging community needs informed by dialogue with community members, leaders, and experience. Results from any CHNA process is inherently limited by the availability of data and by the nature of questions asked of community members. In this assessment, we intentionally asked for feedback on priorities identified by prior assessment activities - *Are these still high priorities? Has there been any improvement?* - as well as asking for input on new or emerging priorities. The table on the next page provides a summary of the highest priority community health needs and issues identified through this assessment process. Several of these priority areas have been identified as high priorities in past assessments and will continue to be a focus of community health improvement efforts. It is also important to note that ongoing community health improvement efforts focused on factors noted as being moderately well addressed will continue in order to sustain progress.

SUMMARY OF COMMUNITY HEALTH NEEDS AND ISSUES BY INFORMATION SOURCE			
Community Health Issue	**Community and Key Stakeholder Surveys**	**Community Discussion Groups**	**Community Health Status Indicators**
Access to mental health services	Access to mental health care was the highest priority issue identified in combined responses of community survey and key stakeholder survey respondents. 'People in need of mental health care' was the top underserved population identified by key stakeholders.	Identified as a high and continuing priority for community health improvement by all community discussion groups. Issues included lack of workforce / insufficient capacity. "Mental health is the big one"(local employer).	About 11% of adults in the service area report 14 or more days in the past 30 days when their mental health was not good, a measure that is correlated with depression and other chronic mental health concerns as well as overall health-related quality of life.
Access to affordable health insurance, health care services and prescription drugs	Availability of affordable health insurance was the highest priority identified by community survey respondents from a list of 28 potential priorities and was also the topic area in combination with cost of care most frequently mentioned in response to an open-ended question asking, "What one thing would you change to improve health . . ."	Community discussion groups identified health care costs and affordability of insurance as significant concerns and barrier to services including cost of co-pays, deductibles, and forgoing needed medical care because of cost	The estimated proportion of people with no health insurance has declined in the DH-APD service area from 8.2% in the last community health assessment to 7.1%.
Alcohol and drug misuse prevention, treatment and recovery	Prevention of substance misuse, addiction (#3) and access to substance misuse treatment and recovery services (#4) were top issues identified in combined responses of community survey respondents and key stakeholders.	Community discussion groups identified substance misuse issues as a high and continuing priority for community health improvement. The relationship between mental health and substance use was discussed, and the need for more effective education and prevention.	About 15% of adults in the service area reported binge drinking in the past 30 days. In 2016, the rate of all drug-related fatalities in the White River Junction Health District of VT was 16.7 per 100,000 population, a rate that has approximately doubled since 2010.
Family strengthening including parental stress and childhood trauma	Community survey respondents identified child abuse and neglect as a top priority across all age, income, and sub-regional groups. Domestic violence was also a top 10 issue identified in combined responses of community survey respondents and key stakeholders.	Discussion group participants reported concerns about the effects of parental stress, financial stress, substance use and mental health on the health and welfare of children in the community.	About 26% of children in the DH-APD service area live in households with incomes below 200% of the federal poverty level

SUMMARY OF COMMUNITY HEALTH NEEDS AND ISSUES BY INFORMATION SOURCE (continued)			
Community Health Issue	**Community and Key Stakeholder Surveys**	**Community Discussion Groups**	**Community Health Status Indicators**
Social determinants of health including affordable housing, transportation and poverty	Affordable housing was a top 10 issue identified in combined responses of community survey respondents and key stakeholders. Key stakeholders also identified lack of transportation as the top barrier to accessing services.	Community discussion groups identified transportation as a significant issue and also addressed issues of homelessness, home affordability, and related needs for being able to recruit a diverse workforce.	About 1 in 3 households have housing costs exceeding 30% of household income and 6% of households have no available vehicle. The most common type of referral from VT 211 from the service area is for housing/shelter (44% of all referrals).
Availability of primary care services	Availability of primary care services was a high priority for community respondents (#7) and about and about 1 in 10 people cited difficulty accessing primary care services in the past year.	Access to care was a general discussion topic across community discussion groups. Improvements in primary access were noted by several groups including references to the Mascoma Community Health Center as an important development.	86% of adults in the service area report having a personal doctor or health care provider, a proportion similar to VT and NH overall, as is the rate of hospital stays for ambulatory care sensitive conditions for Medicare enrollees.
Senior services including home care or assisted living services	Improved resources for senior health care services was a top 10 issue identified by community survey and key stakeholder respondents. Concerns of aging and access to home care, assisted living or hospice were frequently mentioned in written comments.	Several discussion groups identified an aging population, limited resources for seniors, 'sandwich generation' concerns and future challenges of caring for frail elders as community health concerns.	The service area population has a high and increasing proportion of seniors (17.5% are 65+), similar to NH (15.8%) and VT (17.0%) overall.
Affordable healthy food and recreational opportunities; improved environment for healthy eating, active living	Improved resources, programs or environment for healthy eating / food affordability was the 3rd most frequent topic area for responses to the question "What one thing would you change to improve health. . ."; biking/walking trails and recreation, fitness programs were the top 2 resources people would use if more available	Community discussion group topics included economic challenges of accessing healthy foods and the need for more affordable fitness and recreation options, as well as related time pressures. Dietary habits, nutrition and access to healthy foods was a common topic of community discussion group participants	About 1 in 5 adults in the DH-APD Service Area (18%) can be considered physically inactive – a rate similar to the rest of NH and VT. The estimated proportion of adults in the Upper Valley Public Health Region who are obese (17%) is significantly lower than for NH overall, while the estimated rate in the White River Junction Health District (30%) is similar to VT overall.

Dartmouth-Hitchcock, Alice Peck Day Memorial Hospital, and Visiting Nurse and Hospice for VT and NH
2019 Community Health Needs Assessment

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A. COMMUNITY AND KEY STAKEHOLDER SURVEY RESULTS WITH SELECTED SERVICE AREA DEMOGRAPHICS

The total population of the primary service area of Dartmouth-Hitchcock and Alice Peck Day Memorial Hospital is 69,467 people according to the United States Census Bureau (2016), which is an increase of 4.7% or about 3,100 people since the year 2010. The 2019 Community Health Needs Assessment Survey conducted by Dartmouth-Hitchcock, Alice Peck Day and Visiting Nurse and Hospice for VT and NH yielded 2,100 individual responses of which 81% were residents of towns within the primary service area or approximately 3% of the total adult population. As shown by Table 1, survey responses were received from throughout the service area, although Lebanon is slightly over-represented among survey respondents in comparison to its proportion of the overall service area population, while Hanover and Woodstock are under-represented. It is also important to note that 2018 survey respondents were more likely to be female (76% of respondents) and older (27% age 65 years or more) compared to the overall adult population in the service area. About 97% of survey respondents identified their race as White (including respondents selecting more than one race), 1.6% Asian, 1.4% American Indian or Alaska Native, 0.6% Black or African American, and 0.2% Native Hawaiian or Other Pacific Islander; additionally 1.6% of respondents identified as Hispanic and 6% of respondents are Veterans.

Table 1: Service Area Population by Town;
Comparison to Proportion of 2018 Community Survey Respondents

	2016 Population	Zip Code*	% Service Area Population	% of Survey Respondents
DH-APD Service Area	**69,467**			
Lebanon NH	13,528	03766 03784 03756	19.5%	25.0%
Hanover NH	11,371	03755 03750	16.4%	9.0%
Hartford VT	9,758	05059 05001 05047 05088 05084	14.0%	10.2%
Enfield NH	4,557	03748 03749	6.6%	8.5%
Canaan NH	3,907	03741	5.6%	5.1%
Hartland VT	3,423	05048 05052 05049	4.9%	1.4%
Norwich VT	3,373	05055	4.9%	3.7%
Woodstock VT	2,986	05091 05071 05073	4.3%	0.6%
Grantham NH	2,963	03753	4.3%	5.4%
Plainfield NH	2,584	03781 03770	3.7%	2.7%
Thetford VT	2,576	05075 05043 05058 05074	3.7%	2.0%
Lyme NH	1,754	03768 03769	2.5%	2.5%

	2016 Population	Zip Code*	% Service Area Population	% of Survey Respondents
Orford NH	1,504	03777	2.2%	2.3%
Sharon VT	1,446	05065	2.1%	0.5%
Grafton NH	1,276	03240	1.8%	0.7%
Fairlee VT	1,057	05045	1.5%	0.9%
Piermont NH	840	03779	1.2%	0.4%
Dorchester NH	334	03266	0.5%	0.3%
Orange NH	230	03741	0.3%	Included with Canaan
Other	Claremont NH (2.5%), Cornish NH (1.3%), Windsor VT (1.3%), New London NH (1.2%), Bradford NH (0.9%), Charlestown NH (0.8%) and 84 other locations			18.9%

*Survey respondents were asked to indicate the zip code of their current local residence.

Table 2: Demographic Characteristics of Community Survey Respondents and Service Area Population

Demographic Characteristic	Community Survey Respondents	Service Area Population
Percent Female	75.7%	51.7%
Percent Age 65 plus	27.3%	17.5%
White Race Alone	95.9%	92.1%
Minority Race (including more than one race)	4.0%	7.9%
Hispanic / Latino	1.6%	2.0%
Percent with Household Income Less than $75,000	48.7%	*Median Household Income = $71,051*

Table 3 on the next page displays additional demographic and economic information for the towns of the primary service area. On this table, municipalities are displayed in order of median household income with comparison to the median household income in the region and two states overall. As displayed by the table, the median household income in the DH-APD service area overall is similar to the median household income in New Hampshire, but there is a substantial range of median household incomes in the service area from about $50,000 in Grafton, NH to over $120,000 in Lyme, NH. The proportion of households with incomes under

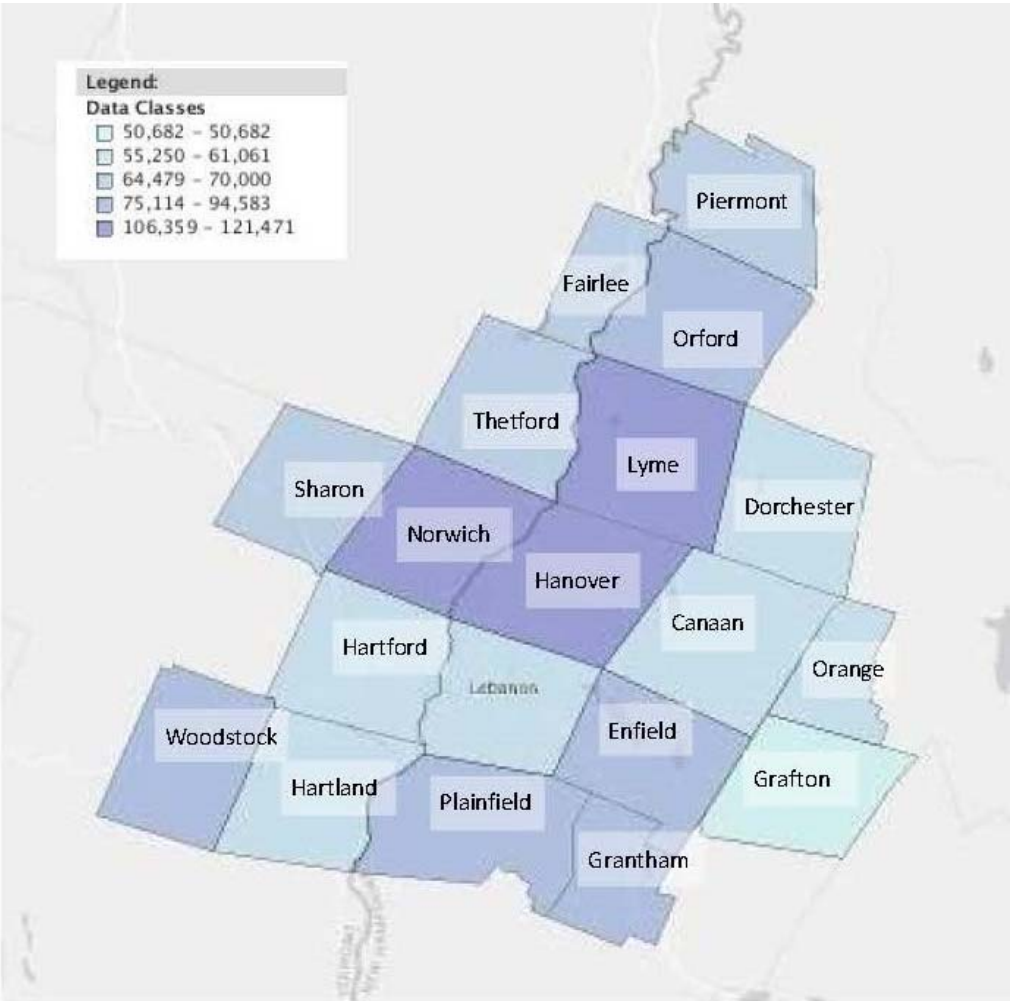
200% of the federal poverty ranges from 2.9% (Grantham, NH) to 31.7% (Dorchester, NH). Figure 1 following this table displays a map of the service area with shading depicting the median household income by town in 5 categories from low to high median household income.

Table 3: Selected Demographic and Economic Information

	Median Household Income	% with income under 200% Poverty Level	% family households with children headed by a single parent	% population with a disability
Lyme NH	$121,471	6.7%	12.7%	9.2%
Hanover NH	$113,925	15.2%	21.1%	6.7%
Norwich VT	$106,359	10.8%	26.3%	9.2%
Grantham NH	$94,583	2.9%	34.4%	9.2%
Plainfield NH	$84,700	14.8%	22.2%	8.1%
Orford NH	$76,094	20.3%	13.3%	10.2%
Woodstock VT	$75,482	11.0%	48.9%	15.8%
Enfield NH	$75,114	14.9%	23.8%	10.8%
DH-APD Service Area	**$71,051**	**19.1%**	**32.0%**	**12.5%**
Piermont NH	$70,000	15.0%	17.4%	13.6%
New Hampshire	**$68,485**	**21.7%**	**29.1%**	**12.3%**
Thetford VT	$67,888	21.9%	20.2%	9.3%
Fairlee VT	$65,905	20.0%	38.2%	10.9%
Sharon VT	$64,479	25.4%	37.0%	12.8%
Canaan NH	$61,061	21.4%	36.8%	11.0%
Hartford VT	$59,365	23.9%	36.0%	16.0%
Hartland VT	$58,804	21.0%	21.2%	13.7%
Orange NH	$57,344	20.9%	54.5%	17.4%
Lebanon NH	$56,448	25.7%	49.7%	17.1%
Vermont	**$56,104**	**28.8%**	**32.4%**	**14.0%**
Dorchester NH	$55,250	31.7%	12.9%	22.5%
Grafton NH	$50,682	24.4%	29.4%	24.9%

Figure 1 – Median Household Income by Town, DH-APD Service Area

2012-2016 American Community Survey; Map source: American Factfinder



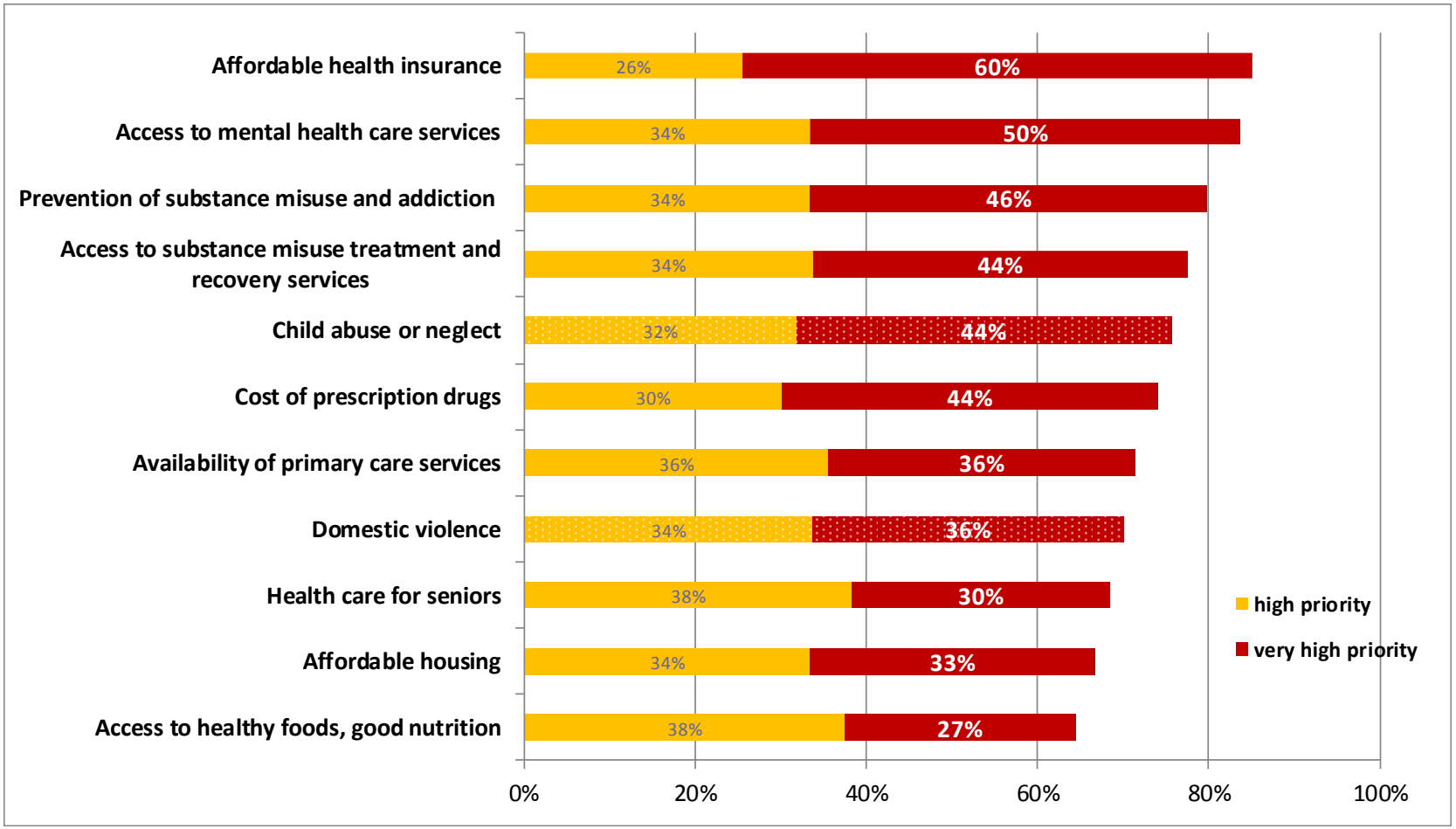
1. Most Important Community Health Issues Identified by Community Survey Respondents

Community respondents to the 2018 Community Health Needs Survey were presented with a list of 14 health-related topics that have been identified as priorities in previous community health assessments in the greater Upper Valley region of New Hampshire and Vermont. For each topic, respondents were asked to indicate the extent to which they thought it should remain a priority for community health improvement work relative to other potential priorities. A second question presented respondents with a list of 14 more topics, including an "other' write-in option, which could be considered priorities for the region. Respondents were again asked to indicate the extent to which they thought each topic should become a priority for community health improvement work relative to other potential priorities.

Chart 1 on the next page displays the top priority topics for health improvement efforts identified by community respondents. The topics displayed with solid colors are topics that had been identified in previous needs assessment. Those topics shown with dotted coloring are topics that rose to a high level priority from the second set of potential topics. The chart displays the percentage of respondents indicating the topic as a high priority or very high priority (needs are mostly unmet). Other response choices were moderate priority, somewhat low priority and low priority (needs are mostly met). The median percentage for all 28 items (half above, half below) with respect to the combined percentage of high and very high priority responses is 61%, ranging from 34% (preventing accidents and injuries) to 85% (affordable health insurance).

Affordable health insurance, access to mental health services, substance misuse prevention, treatment and recovery, and cost of prescription drugs are each top priorities from prior community health needs assessments that remain among the highest priorities. Child abuse or neglect and domestic violence are two high priorities not specifically identified in prior needs assessments, although 'strengthening and supporting families' is a related topic that was previously identified as a high priority for community health improvement efforts. Other priorities previously identified community health priorities that remain high priorities among community respondents are availability of primary care, health care for seniors, affordability of housing, and access to healthy foods, good nutrition.

Chart 1: High Priority Community Health Issues; Community Respondents



The chart displays the percentage of respondents indicating the topic is a high priority (yellow) or very high priority (red; needs are mostly unmet). Other response choices were moderate priority, somewhat low priority and low priority; needs are mostly met.

The table below displays the top community health improvement priorities identified by community survey respondents by age group. The percentages shown are the total percentages within each age group selecting the topic as a high priority or very high priority. In general, there is substantial similarity across age groups for the highest community health improvement priorities. Among respondents age 18-44 years or older, 'access to healthy foods and good nutrition' was reported as a higher priority (relatively) than other age groups, while 'cost of prescription drugs' was higher on the list for older age groups.

Table 4: COMMUNITY HEALTH IMPROVEMENT PRIORITIES
BY AGE GROUP; Community respondents

Under 45 years	n=539	45-64years	n=743	65+ years	n=483
Access to mental health care services	83%	Affordable health insurance	87%	Affordable health insurance	85%
Affordable health insurance	81%	Access to mental health care services	86%	Prevention of substance misuse and addiction	82%
Prevention of substance misuse and addiction	77%	Prevention of substance misuse and addiction	80%	Access to substance misuse treatment and recovery services	82%
Child abuse or neglect	73%	Access to substance misuse treatment and recovery services	78%	Access to mental health care services	81%
Access to substance misuse treatment and recovery services	73%	Cost of prescription drugs	77%	Cost of prescription drugs	79%
Access to healthy foods, good nutrition	67%	Child abuse or neglect	77%	Child abuse or neglect	77%

The table below displays the top community health improvement priorities identified by community survey respondents from different income groups. As with the previous table, the percentages shown are the total percentages within each group selecting the topic as a high priority or very high priority. There is substantial similarity across income groups. In fact, the top 6 top priorities in each group are the same with only some variation in relative order. Affordable health insurance was the top priority for the lower and middle income groups and the third highest priority in the highest income group after access to mental health care services and prevention of substance misuse and addiction.

Table 5: COMMUNITY HEALTH IMPROVEMENT PRIORITIES
BY INCOME CATEGORY; Community respondents

Less than $50,000	n=458	$50,000 to $99,999	n=615	$100,000 or more	n=546
Affordable health insurance	85%	Affordable health insurance	88%	Access to mental health care services	85%
Access to mental health care services	82%	Access to mental health care services	85%	Prevention of substance misuse and addiction	83%
Child abuse or neglect	78%	Prevention of substance misuse and addiction	78%	Affordable health insurance	82%
Prevention of substance misuse and addiction	77%	Child abuse or neglect	76%	Access to substance misuse treatment and recovery services	81%
Cost of prescription drugs	77%	Cost of prescription drugs	75%	Child abuse or neglect	74%
Access to substance misuse treatment and recovery services	76%	Access to substance misuse treatment and recovery services	75%	Cost of prescription drugs	69%

The table below displays the top community health improvement priorities identified by community survey respondents by geographic sub-regions. As with age and income, there is substantial similarity across groups by geography with the top six priorities the same. In the more wealthy towns near Dartmouth, the seventh highest priority is 'Availability of primary care services'. In Lebanon, Hartford (includes White River Junction) and the more rural outlying communities, the seventh highest priority is domestic violence.

Table 6: COMMUNITY HEALTH IMPROVEMENT PRIORITIES
BY RESIDENT LOCATION; Community respondents

Hanover, Norwich, Lyme	n=421	Lebanon, Hartford	n=557	Plainfield, Grantham, Enfield	n=263	Other Service Area Towns	n=224
Access to mental health care services	83%	Access to mental health care services	86%	Affordable health insurance	90%	Affordable health insurance	86%
Prevention of substance misuse and addiction	82%	Affordable health insurance	83%	Access to mental health care services	84%	Access to mental health care services	82%
Affordable health insurance	82%	Prevention of substance misuse and addiction	82%	Prevention of substance misuse and addiction	81%	Access to substance misuse treatment and recovery services	81%
Access to substance misuse treatment and recovery services	80%	Access to substance misuse treatment and recovery services	79%	Cost of prescription drugs	78%	Child abuse or neglect	77%
Child abuse or neglect	73%	Child abuse or neglect	77%	Child abuse or neglect	77%	Prevention of substance misuse and addiction	77%
Cost of prescription drugs	72%	Cost of prescription drugs	71%	Access to substance misuse treatment and recovery services	75%	Cost of prescription drugs	74%
Availability of primary care services	71%	Domestic violence	71%	Availability of primary care services	73%	Domestic violence	74%

Other Service Area Towns include Canaan, Orange, Orford, Grafton, Piermont, Dorchester in NH and Hartland, Fairlee, Thetford, Woodstock and Sharon in VT.

The table below displays the top community health improvement priorities identified by community survey respondents by race/ethnicity. As with other sub-group comparisons, there is substantial similarity between respondents reporting White race alone and respondents reporting race other than White. One notable difference is in the proportion of 'other than White' respondents who selected 'Discrimination based on race, ethnicity, sexual orientation or gender' as high or very high priority (71%) compared to respondents reporting White race alone (53% selected 'discrimination' as a high or very high priority).

Table 7: COMMUNITY HEALTH IMPROVEMENT PRIORITIES BY RACE/ETHNICITY; Community respondents

Minority Race (including more than one race)	n=70	White Race Alone	n=1,657
Affordable health insurance	93.8%	Affordable health insurance	84.6%
Access to mental health care services	77.8%	Access to mental health care services	83.7%
Prevention of substance misuse and addiction	77.8%	Prevention of substance misuse and addiction	80.1%
Child abuse or neglect	76.2%	Access to substance misuse treatment and recovery services	77.6%
Cost of prescription drugs	75.0%	Child abuse or neglect	75.6%
Availability of primary care services	73.4%	Cost of prescription drugs	73.4%
Access to substance misuse treatment and recovery services	73.0%	Domestic violence	70.2%
Discrimination based on race, ethnicity, sexual orientation or gender	71.0%	Availability of primary care services	70.0%

2. Most Important Community Health Issues Identified by Key Stakeholder Survey Respondents

In addition to the survey of community residents, the 2019 Community Health Needs Assessment included a similar survey sent by direct email to key stakeholders and community leaders from around the region. This activity occurred in conjunction with all the Community Health Needs Assessment partners with the survey going to 265 individuals across the greater Upper Valley region of NH and VT including the Greater Windsor region. A total of 153 completed responses were received (58%), of which 87 respondents indicated serving or being familiar with the 'Greater Lebanon/Hartford' area.

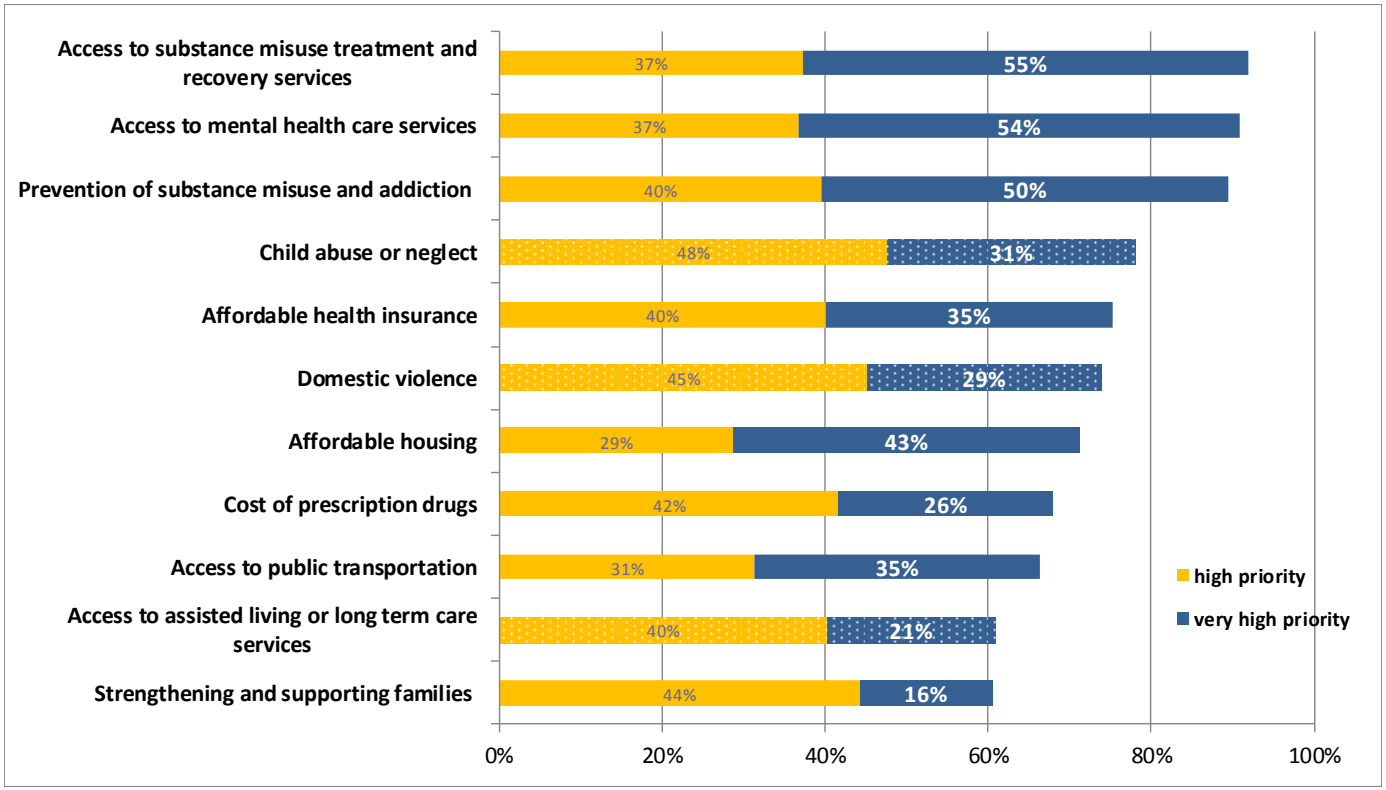
Table 8: Key Stakeholder Survey Respondents, 'Greater Lebanon/Hartford' area

Percent of Respondents	Community Sector
21.8%	Human Service / Social Service (19 respondents)
17.2%	Education / Youth Services (15)
14.9%	Mental Health / Behavioral Health (13)
13.8%	Community member / volunteer (12)
13.8%	Municipal / County / State Government (12)
12.8%	Primary Health Care (11)
9.2%	Business (8)
6.9%	Home Health Care (6)
5.7%	Medical Sub-Specialty (5)
4.6%	Public Health (4)
3.4%	Faith organization (3)
3.4%	Public Safety / Law / Justice (3)
3.4%	Fire / Emergency Medical Service (3)
2.3%	Civic / Cultural Organization (2)
1.1%	Dental / Oral Health Care (1)
1.1%	Long Term Care (1)

Respondents to the key stakeholder survey were presented with the same two lists of health-related topics: the list of topics identified as priorities in previous community health assessments in the region and a second list of topics (including 'other') that could be considered priorities for health improvement efforts in the region. The chart on the next page displays the results of these questions from key stakeholder responses. The median percentage for all 28 items (half above, half below) with respect to the

combined percentage of high and very high priority responses is 57%, ranging from 19% (preventing accidents and injuries) to 92% (access to substance misuse treatment and recovery services). Similar to community respondents, substance misuse and mental health were among the top priority issues identified by key stakeholders. However, key stakeholders were somewhat more likely to identify access to public transportation as a high priority compared to community survey respondents and somewhat less likely to identify affordable health insurance although this issue was still among the high priorities for stakeholders.

Chart 2: Community Health Improvement Priorities
Key Stakeholder Survey Respondents

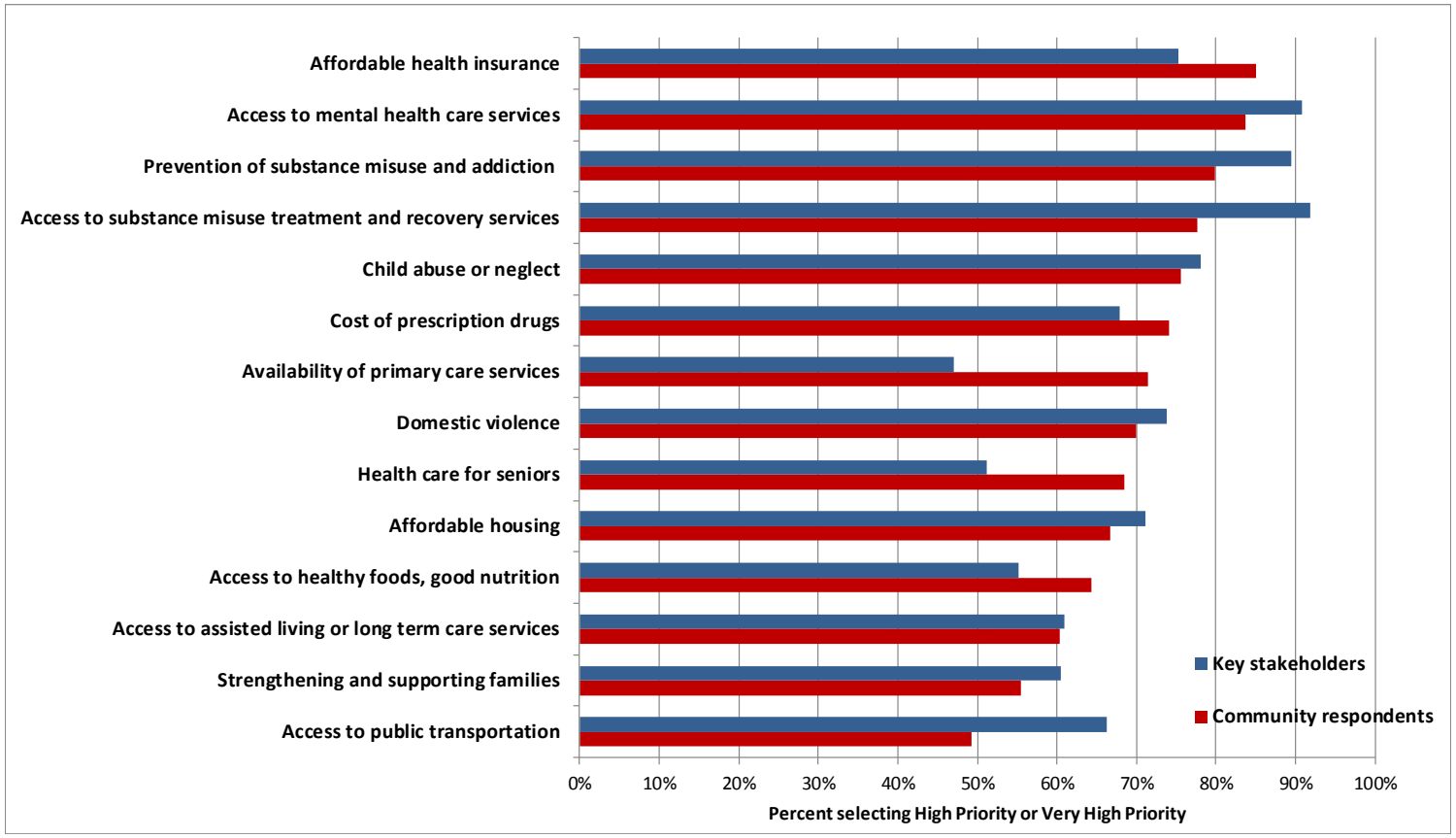


The chart displays the percentage of respondents indicating the topic is a high priority (yellow) or very high priority (blue; needs are mostly unmet). Other response choices were moderate priority, somewhat low priority and low priority (needs are mostly met).

3. Comparison of Most Important Community Health Issues; Community and Key Stakeholder Respondents

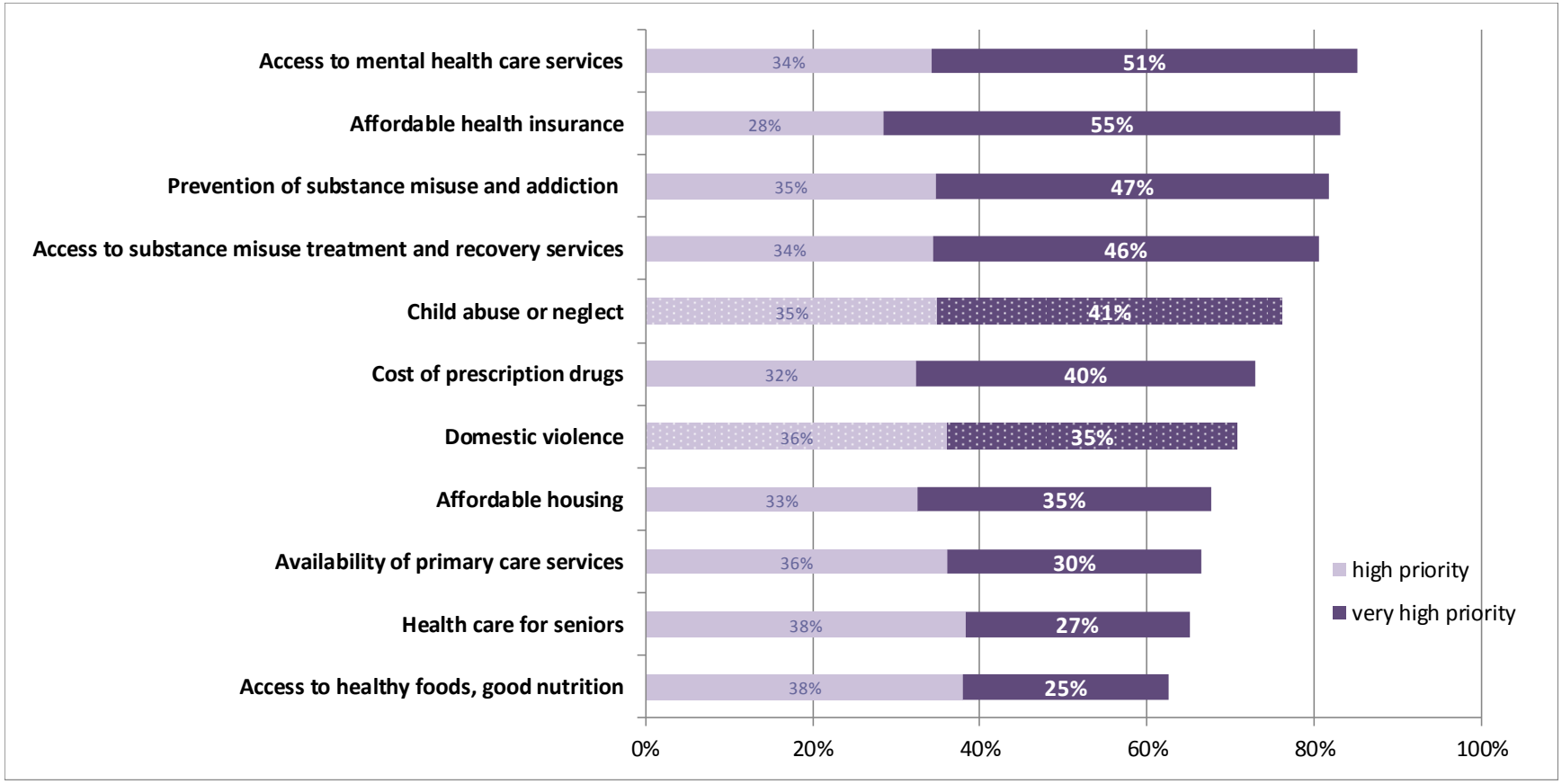
The chart below displays a comparison of the responses between community and key stakeholder surveys for the highest priority community health issues. Blue bars on the chart display the percentage of key stakeholders selecting the topic as high priority or very priority and red bars display the results from community respondents (topics are arrayed high to low according to the community respondent percentages). While there is more similarity than difference overall, a few notable variations are the relatively higher rating by community respondents of 'availability of primary care services' and lower rating of 'access to public transportation'.

Chart 3: Community Health Improvement Priorities
Comparison of Community and Key Stakeholder Respondents



The chart below displays the combined results from the questions on community health improvement priorities from the perspective of community and key stakeholder survey respondents. The response percentages from community respondents were given 80% weight in the computation of combined responses and the key stakeholder / community leader responses were given 20% weight. The top 11 community health priorities are displayed (from 28 total topics included on the surveys). As in previous charts, bars depicted with solid color are topics that had been identified in previous needs assessment. Those topics shown with dotted coloring (child abuse or neglect, domestic violence) are topics that rose to a high priority from the second set of potential topics.

Chart 4: Community Health Improvement Priorities
Community and Key Stakeholder Responses Combined



4. Barriers to Services Identified by Community Survey Respondents

Respondents to the FY2018 Community Needs Assessment Survey were asked, "In the past year, have you or someone in your household had difficulty getting the health care or human services you needed?" Overall, 27.7% of survey respondents indicated having such difficulty. As Chart 5 displays, there is a significant relationship between reported household income and the likelihood that respondents reported having difficulty accessing services. One third of respondents in the lowest household income category of less than $25,000 reported difficulty accessing services compared to 25% of respondents in the highest income category. It should be notedthat this association is less pronounced than in the 2016 CHNA where more than half of respondents (52%) with income less than $25,000 reported difficulty accessing services compared to 22% of those with household income of $100,00 or more.

Chart 5: Access to Services
Community Survey Responses

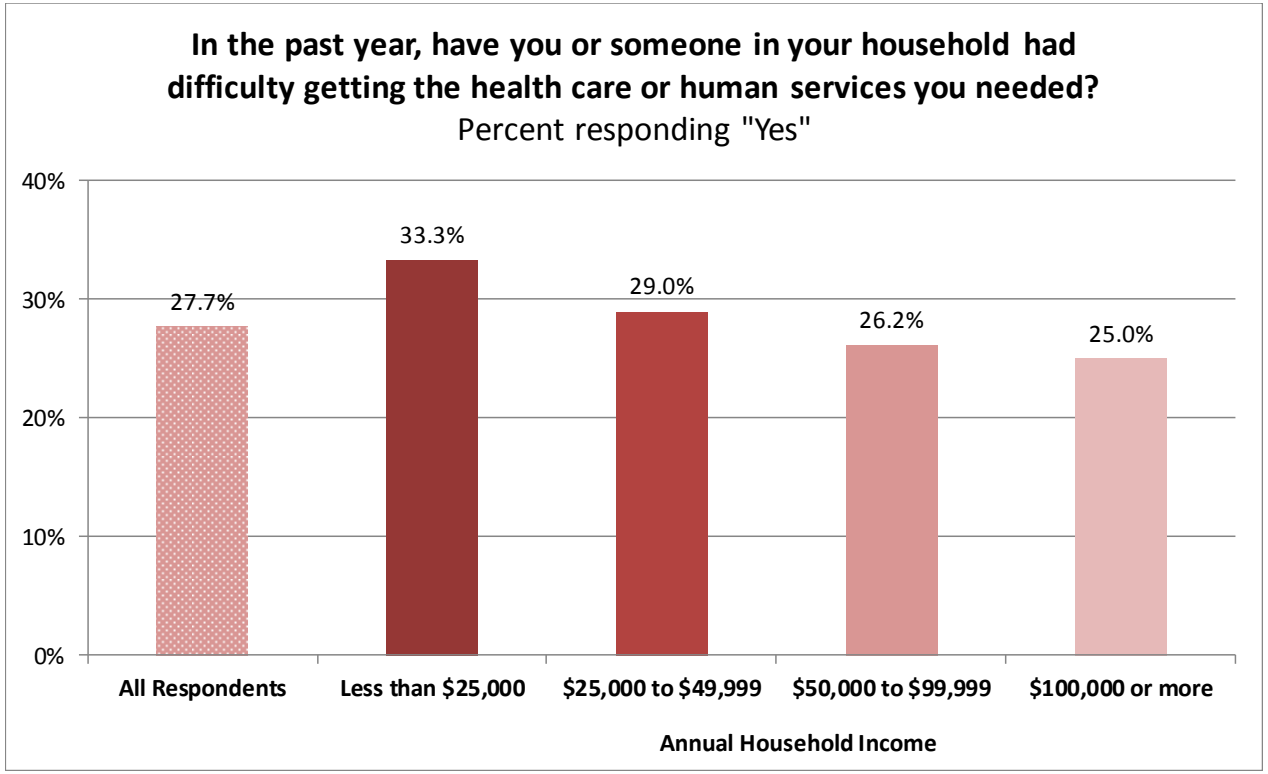
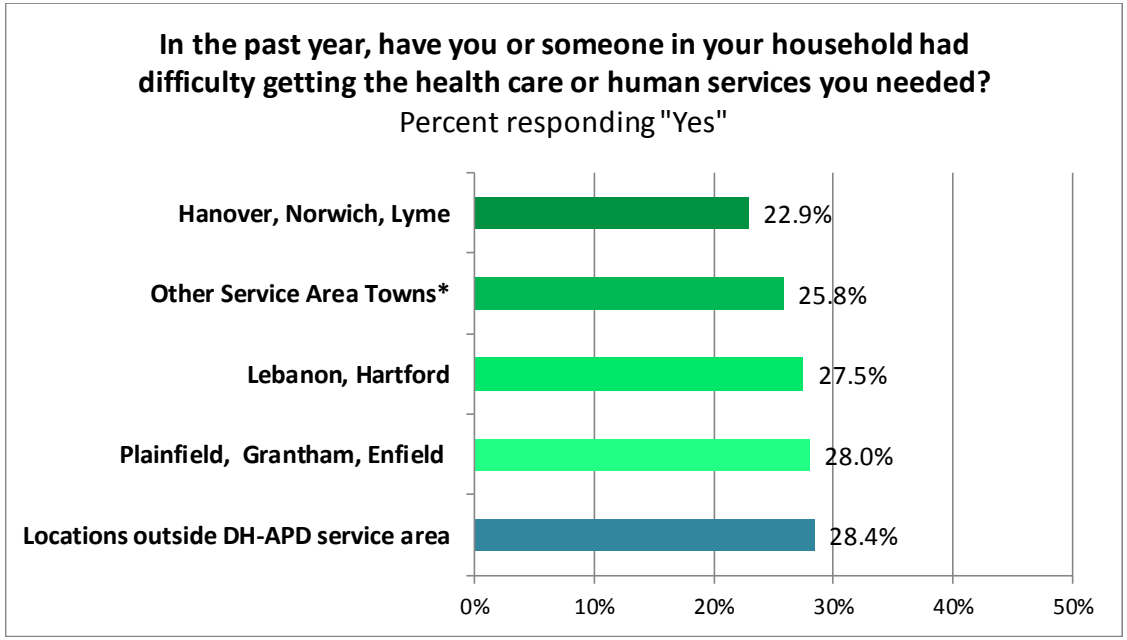


Chart 6 examines responses to this question by sub-region within the service area. Respondents from Hanover, Norwich or Lyme are somewhat less likely to report difficulty accessing services compared to respondents from other communities in the service are or from communities outside the primary service area, although the observed differences are not large.

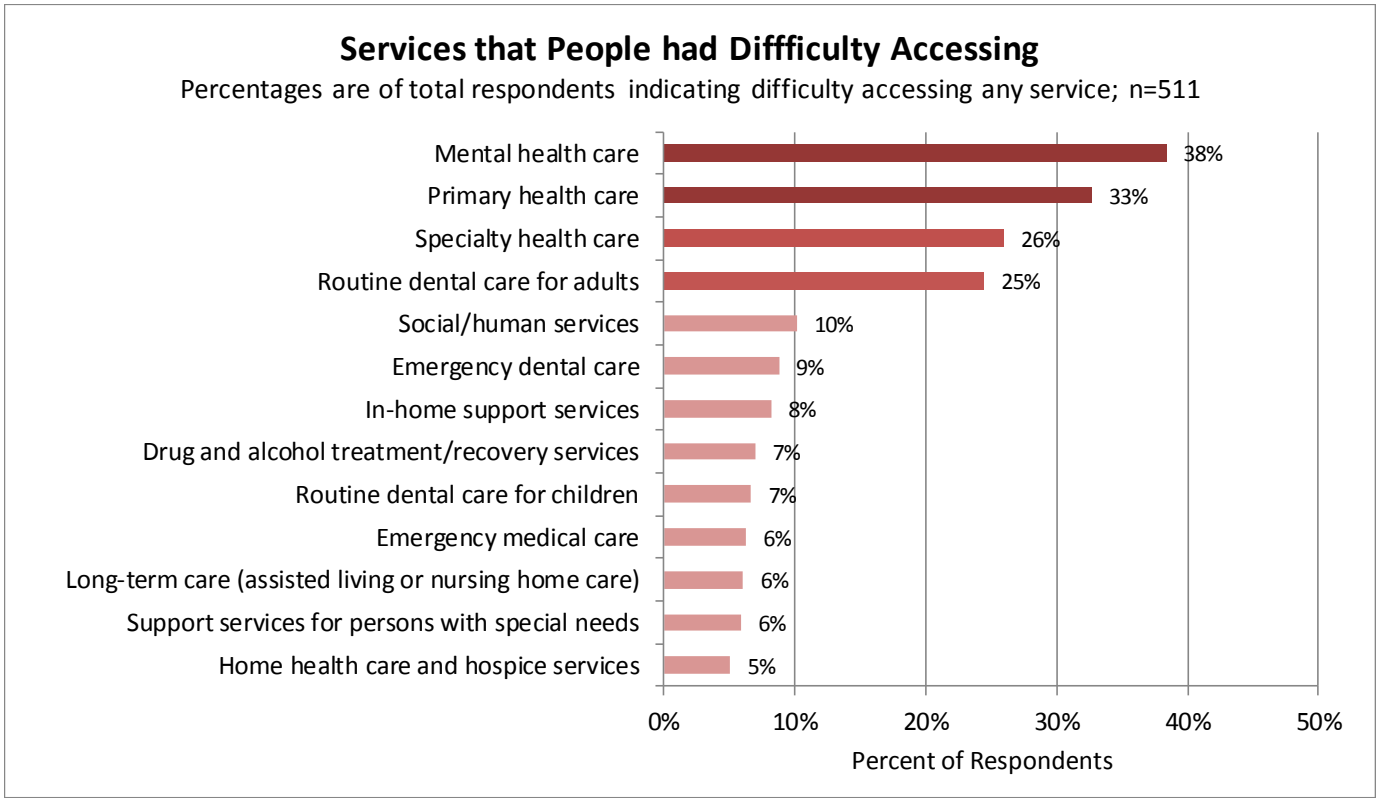
Chart 6: Access to Services by Sub-region



**Other Service Area Towns include Canaan, Orange, Orford, Grafton, Piermont, Dorchester in NH and Hartland, Fairlee, Thetford, Woodstock and Sharon in VT. In general, these are towns on the perimeter of the service area relative to Hanover-Lebanon and have lower median household incomes.*

The community survey also asked people to indicate the areas in which they had difficulty getting services or assistance. As displayed by Chart 7, the most common service types that people had difficulty accessing were mental health care (38% of those respondents indicating difficulty accessing any services); primary health care (33%); specialty health care (26%) and routine dental care for adults (25%). Note that percentages on this chart are of the subset of respondents who indicated any difficulty accessing services (27.7% of all respondents; n=511).

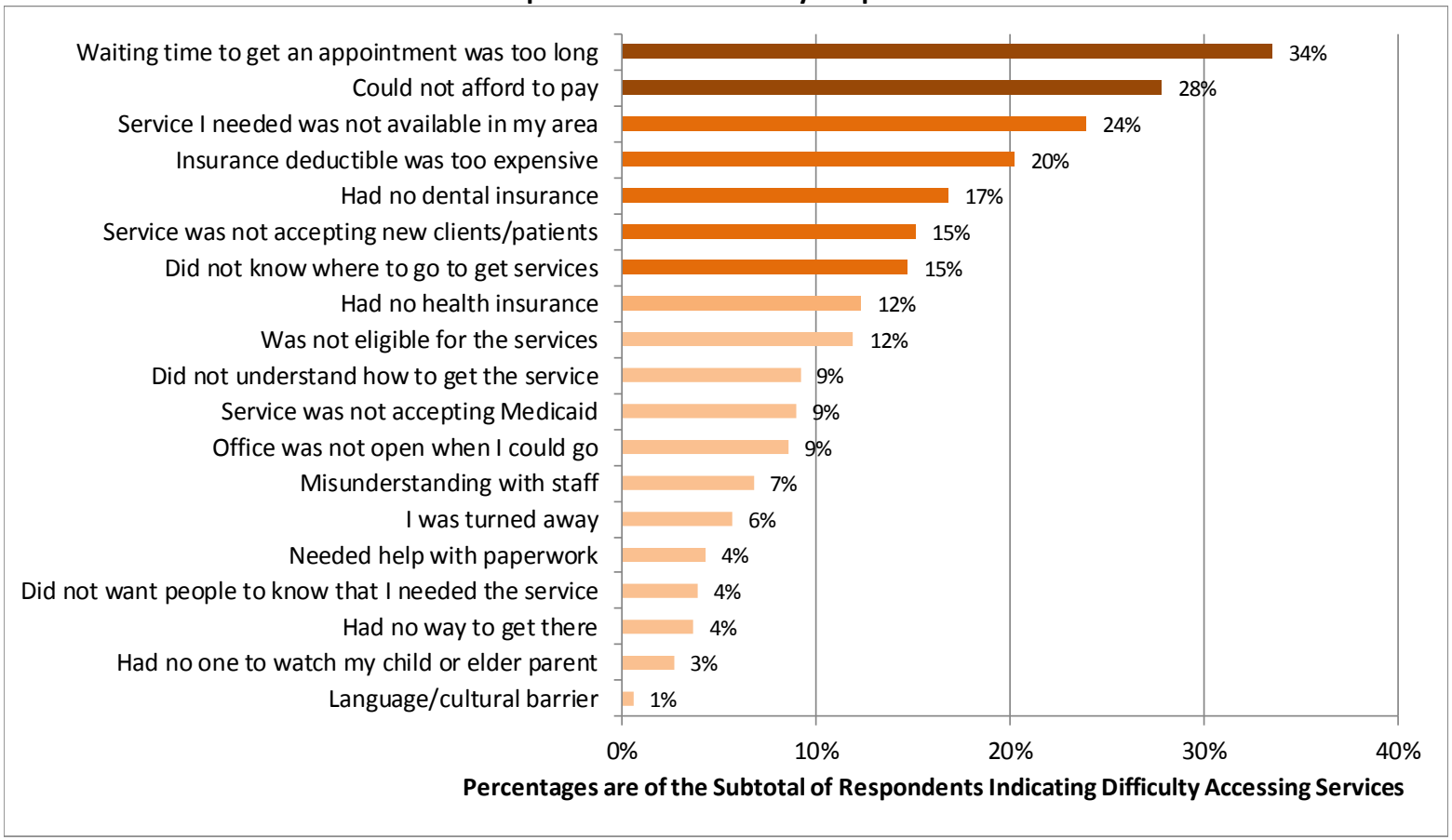
Chart 7



*Survey respondents selecting Specialty health care were asked to specify further. The most frequently cited specialty health care services were Neurology, Orthopedics, Gastroenterology Dermatology, and Mental Health Care/Psychiatry.

Respondents who reported difficulty accessing services in the past year for themselves or a family member were also asked to indicate the reasons why they had difficulty. As shown on Chart 8, the top reasons cited were 'waiting time to get an appointment was too long' (34%); 'could not afford to pay' for the service (28%); 'service I needed was not available in my area' (24%); and 'insurance deductible was too expensive' (20%). Percentages are again calculated from the subset of respondents who indicated difficulty accessing any services.

Chart 8: Access Barriers
Perspectives of Community Respondents



Further analysis of these two questions addressing access to specific types of services is shown by Table 9. Among respondents indicating difficulty accessing mental health care, primary health care or specialty health care, the top reason indicated for difficulty accessing (any) services was 'waiting time to get an appointment too long'. Among respondents indicating difficulty accessing adult dental care, the top reason cited for access difficulties was 'had no dental insurance'.

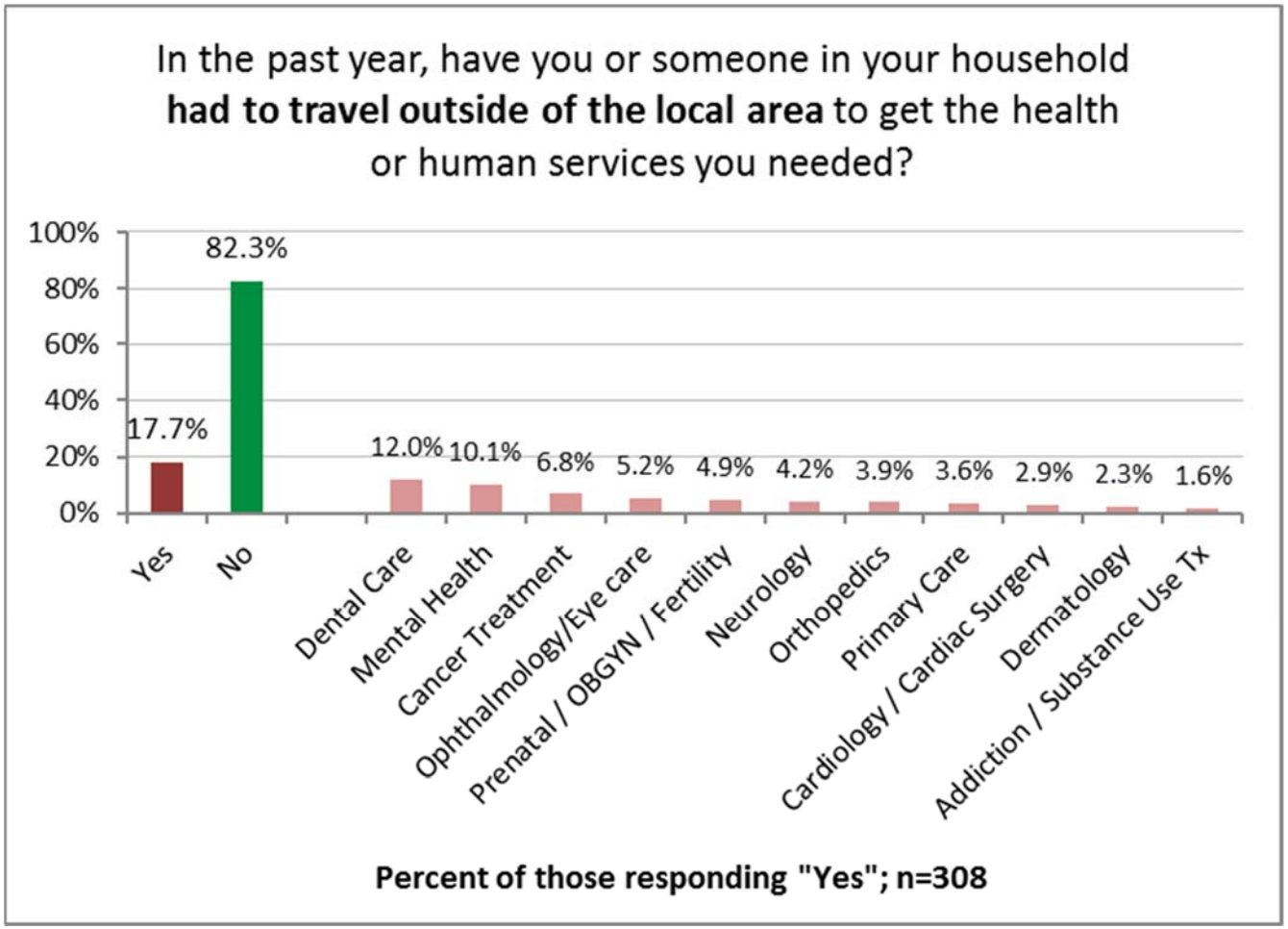
TABLE 9: TOP REASONS RESPONDENTS HAD DIFFICULTY ACCESSING SERVICES BY TYPE OF SERVICE

(Percentage of respondents who reported difficulty accessing a particular type of service)

Mental Health Care (n=198, 10.7% of all respondents)	Primary Health Care (n=167, 9.0% of all respondents)	Specialty Health Care (n=135, 7.3% of all respondents)	Routine Dental Care for Adults (n=126, 6.8% of all respondents)
48.5% of respondents who had difficulty accessing mental health care also reported ***Waiting time to get an appointment was too long***	**35.9%** of respondents who had difficulty accessing primary health care also reported ***Waiting time to get an appointment was too long***	**39.3%** of respondents who had difficulty accessing specialty health care also reported ***Waiting time to get an appointment was too long***	**55.6%** of respondents who had difficulty accessing routine adult dental care also reported ***Had no dental insurance***
32.8% ***Service I needed was not available in my area***	**31.7%** ***Could not afford to pay***	**28.9%** ***Service I needed was not available in my area***	**54.8%** ***Could not afford to pay***
31.8% ***Could not afford to pay***	**28.1%** ***Insurance deductible was too expensive***	**24.4%** ***Could not afford to pay***	**32.5%** ***Insurance deductible was too expensive***
27.8% ***Service was not accepting new clients / patients***	**25.1%** ***Had no health insurance***	**19.3%** ***Insurance deductible was too expensive***	**26.2%** ***Waiting time to get an appointment was too long***
24.7% ***Insurance deductible was too expensive***	**18.6%** ***Service I needed was not available in my area***	**14.8%** ***Did not know where to go to get services***	**25.4%** ***Was not eligible for the services***

In a separate question, survey respondents were asked, "In the past year, have you or someone in your household had to travel outside of the local area to get the health or human services you needed?" About 18% of all survey respondents indicated traveling outside of the 'local area' for health and human services in the past year. In an open-ended follow-up question, respondents were asked what type of services they had traveled outside of the area to get. Dental care, mental health care, cancer treatment, and ophthalmology were the most frequently mentioned types of services.

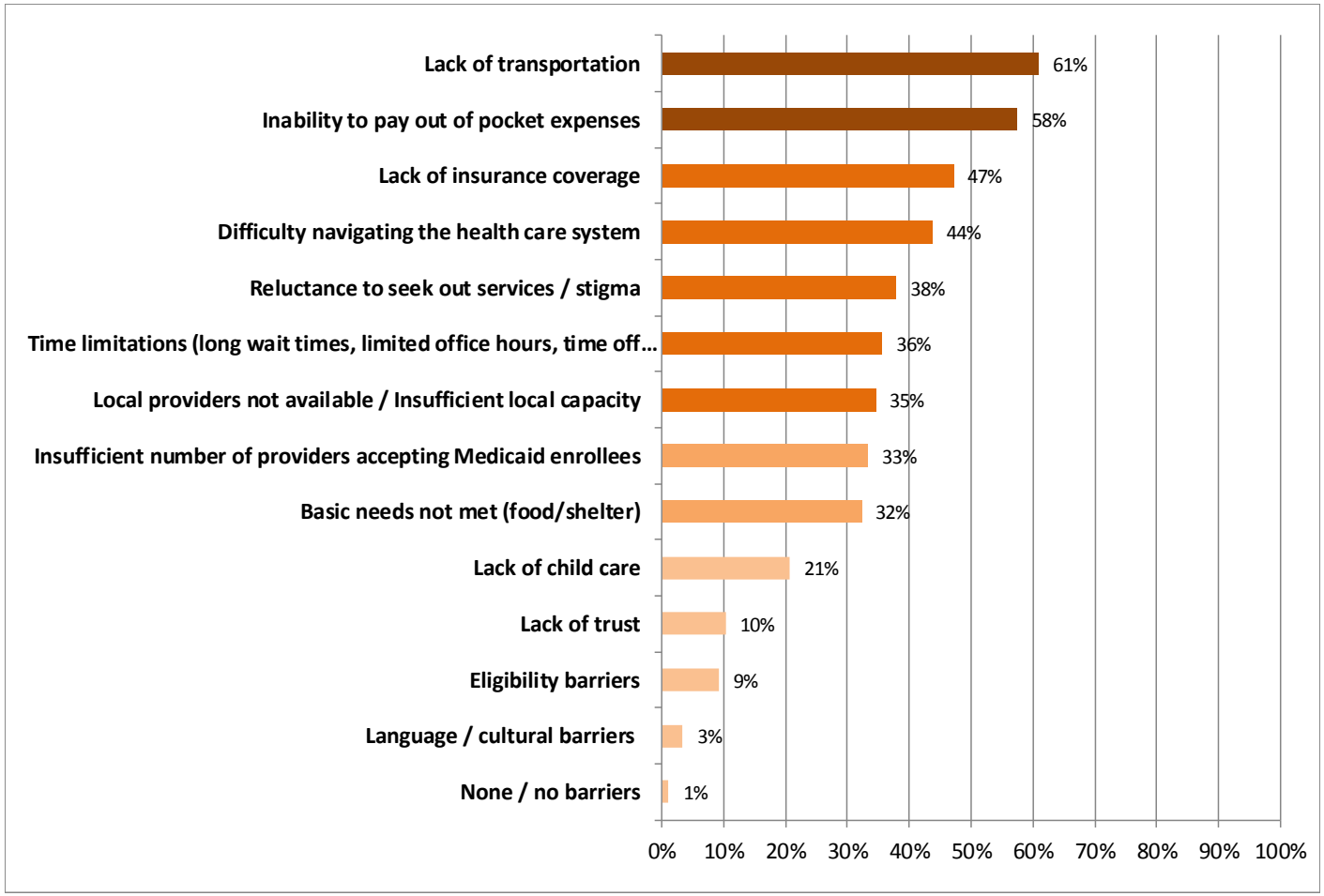
Chart 9



5. Barriers to Services Identified by Key Stakeholder Survey Respondents

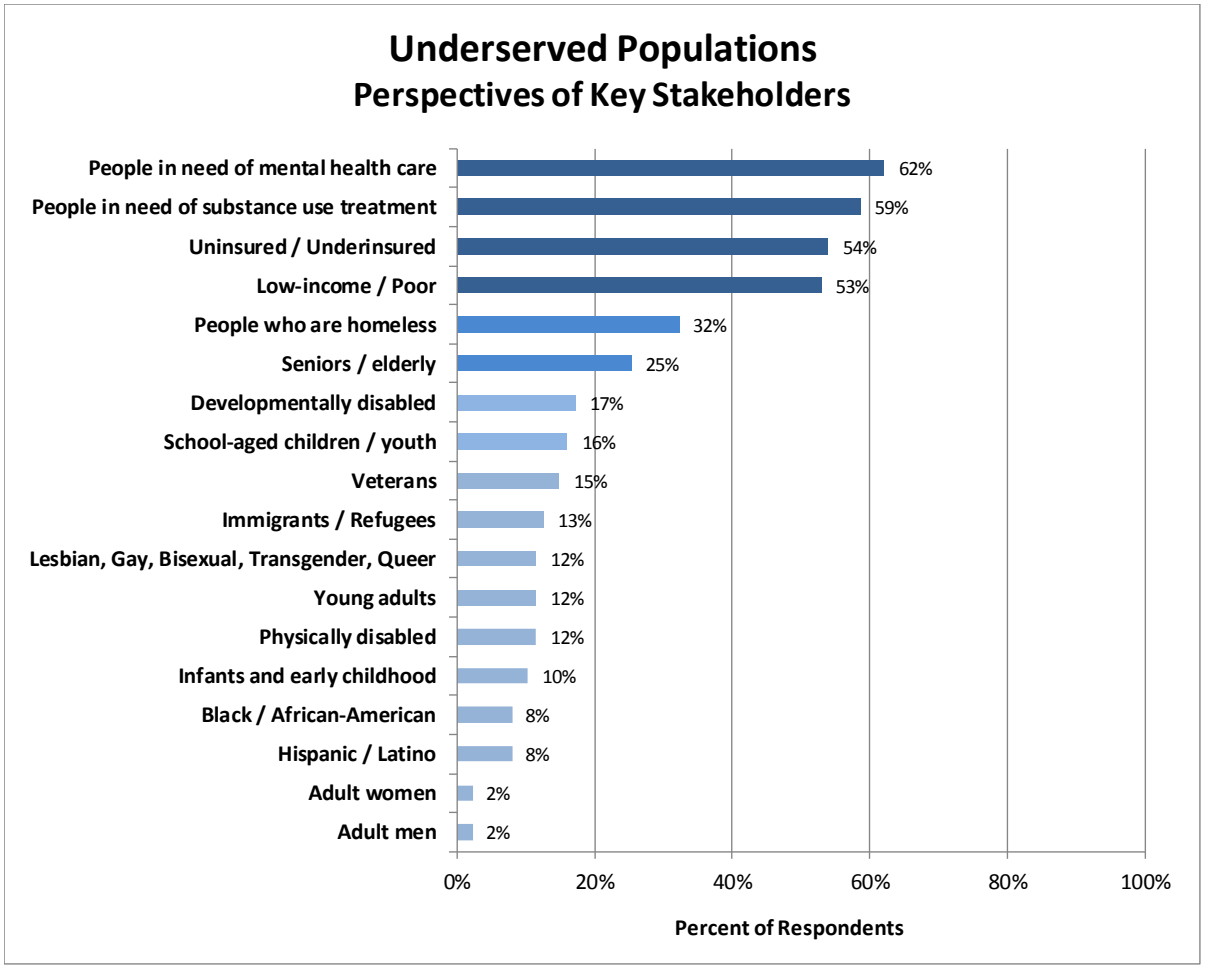
Respondents to the key stakeholder survey were also asked to identify the most significant barriers that prevent people in the community from accessing needed health care services. The top issue identified by this group was lack of transportation, followed by inability to pay out of pocket expenses, lack of insurance coverage and difficulty navigating the health care system.

Chart 10: Most Significant Barriers to Accessing Services
Perspectives of Key Stakeholders



Key stakeholders were also asked if there are specific populations in the community that are not being adequately served by local health services. Chart 11 displays results from key stakeholder responses on specific populations thought to be currently underserved. 'People in need of mental health care', 'People in need of substance abuse treatment', Uninsured / Underinsured and 'Low Income/Poor' were the most frequently indicated populations perceived to be currently underserved.

Chart 11

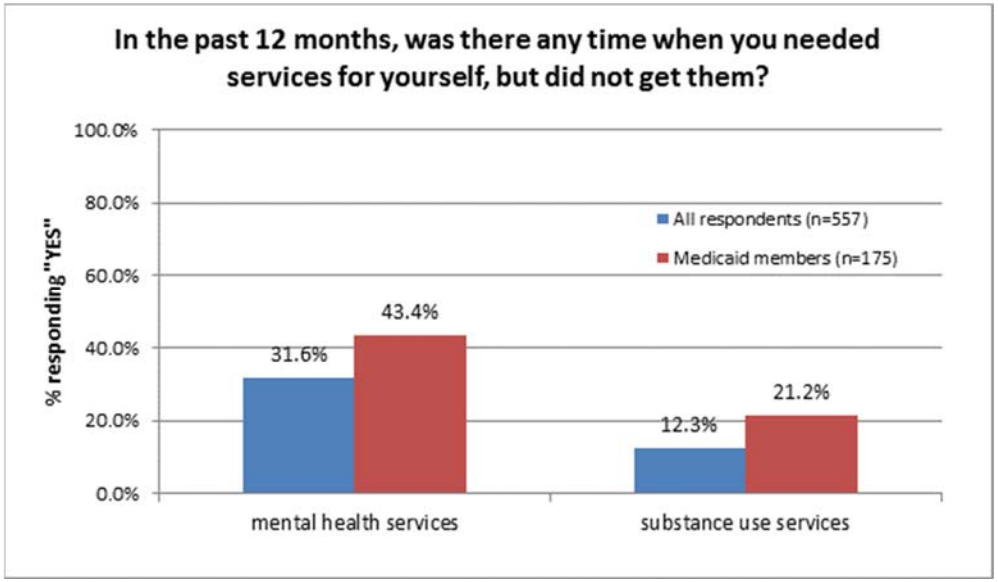


6. Behavioral Health Needs Survey Findings

Recognizing the continued importance of mental health and substance misuse as community identified priorities for improvement, the organizational partners involved in this Community Health Needs Assessment partnered with other health and human service providers in the fall of 2016 to conduct an assessment specifically focused on behavioral health needs. The results of that assessment were used to inform the development of an Integrated Delivery Network for behavioral health care services in the Southwestern and Upper Valley region of New Hampshire including the VRH service area. One aspect of this assessment was a consumer survey of area residents targeted to high need locations and populations with a particular emphasis on reaching populations covered by Medicaid. Some of key findings of this behavioral health needs assessment relevant to the 2018 VRH Community Health Needs Assessment are included here.

The behavioral health-focused assessment included a survey of consumers of behavioral health services. About 32% of consumer survey respondents indicated having difficulty getting the mental health services they needed in the past 12 months, including about 43% of Medicaid members; while 12% indicated they had difficulty getting substance use services they needed including about 21% of Medicaid eligible respondents.

Chart 12



Further analysis of these results showed that of those respondents who did receive some type of mental health services in the past 12 months, about 44% also indicated having difficulty getting the mental health services they needed. Among respondents who received no mental health services in the past 12 months, nearly 1 in 5 (about 19%) indicated a need for mental health services that they did not get. These findings may reflect different challenges to receiving services such as waiting lists (e.g. respondents may have had difficulty getting services initially, but eventually did so), gaps in the appropriateness or acceptability of services, financial obstacles to care and respondent readiness to seek services.

Similar findings were observed for respondents indicating difficulty accessing substance use services where nearly half of respondents (46%) who did receive substance use services in the prior 12 months also indicated difficulty in getting services they needed. Among those respondents who did not access substance use services in the prior 12 months, about 5% reported a need for services that they did not get.

Chart 13

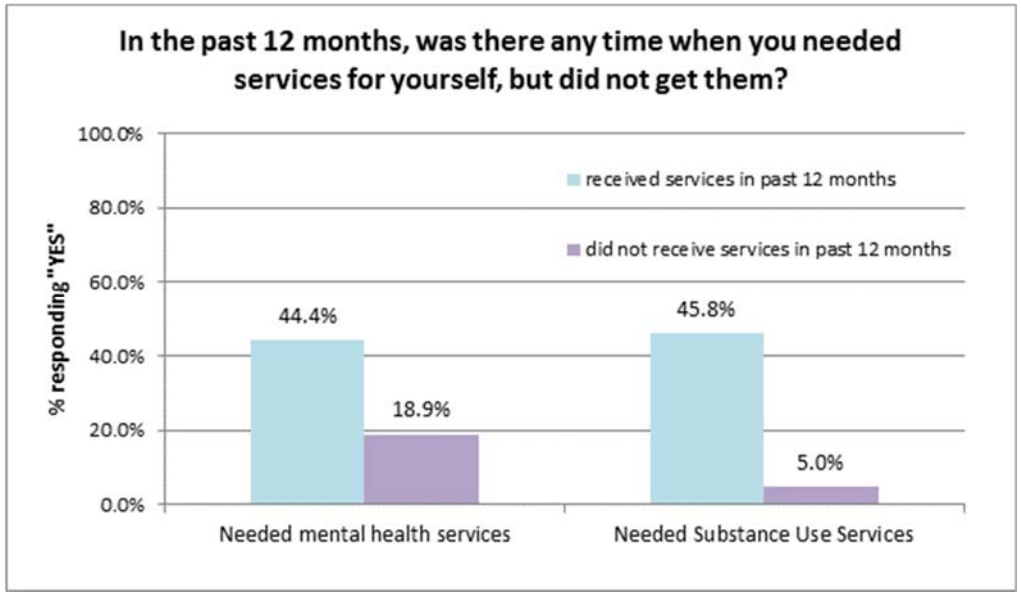


Chart 14 displays the finding that the top reasons reported for not getting needed mental health services are "I thought I could handle the problem without treatment" and "There were no openings or I could not get an appointment". The top mental health services that people reported having difficulty accessing (Chart 15) are individual therapy or counseling and assistance with medication management.

Chart 14

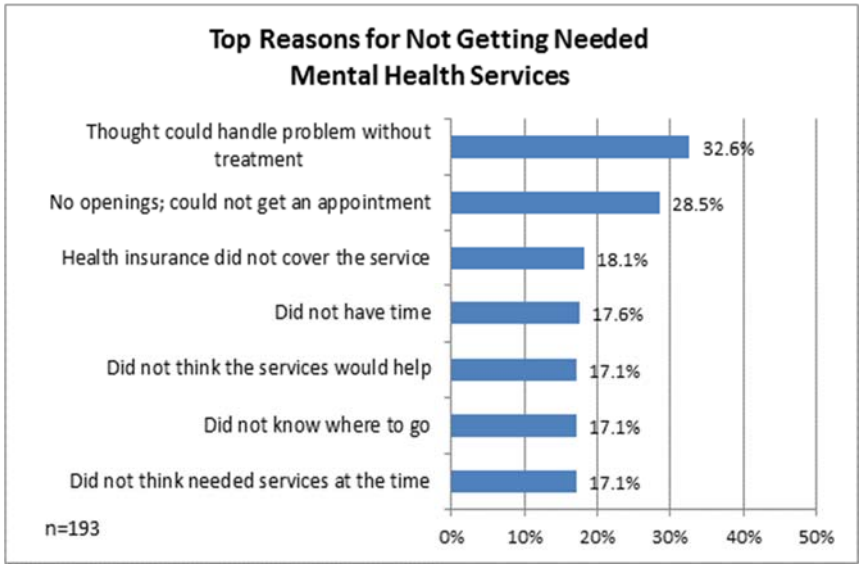
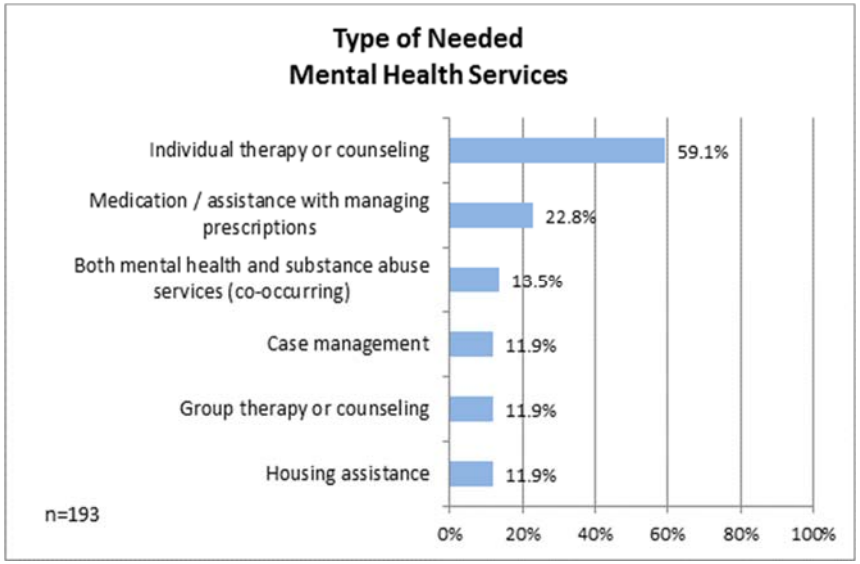


Chart 15



Reported reasons for substance use service access difficulties are similar with the top reasons being “I was not ready to stop using alcohol or drugs”, “I thought I could handle the problem without treatment”, and “There were no openings or I could not get an appointment”. However, some differences are observed for the type of services respondents had difficulty getting (Chart 17). While ‘individual therapy or counseling’ was again the top service mentioned, it was mentioned by a smaller proportion of respondents and a more diverse array of services were mentioned with higher frequency including co-occurring mental health and substance use services, peer and recovery support services, intensive outpatient treatment and opioid treatment.

Chart 16

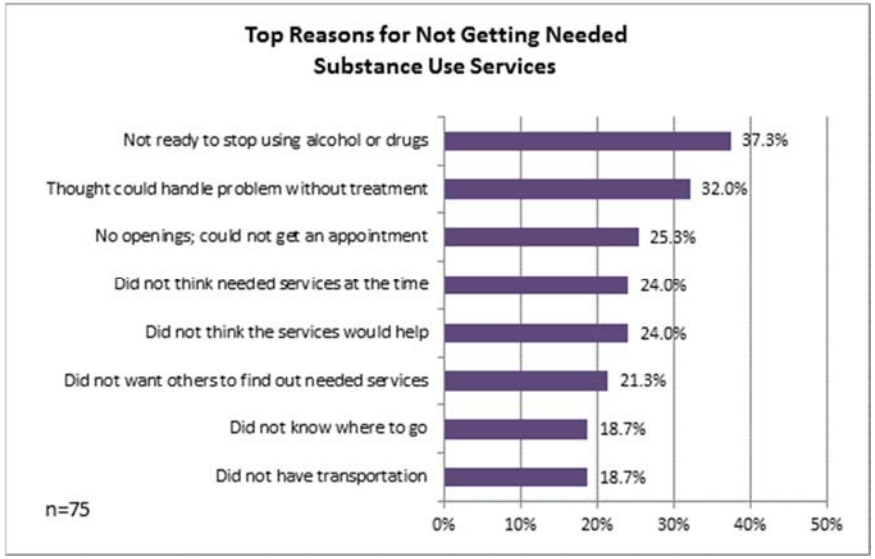
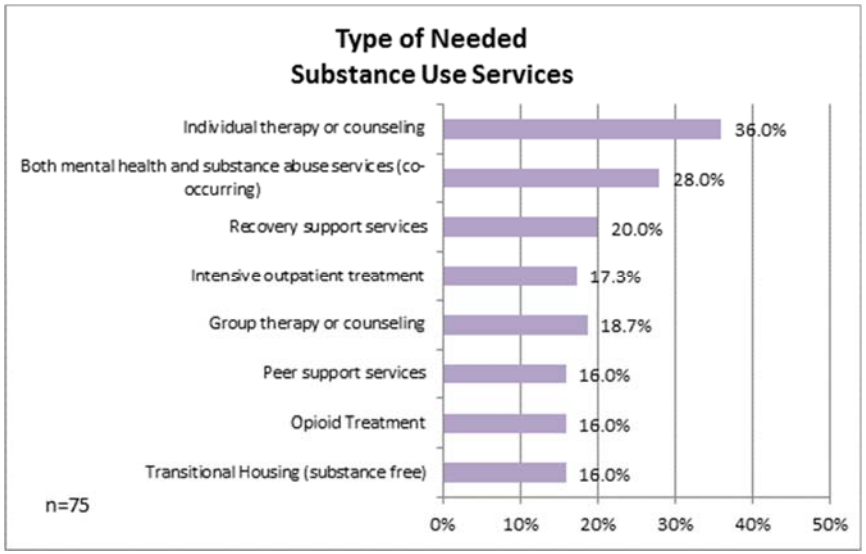
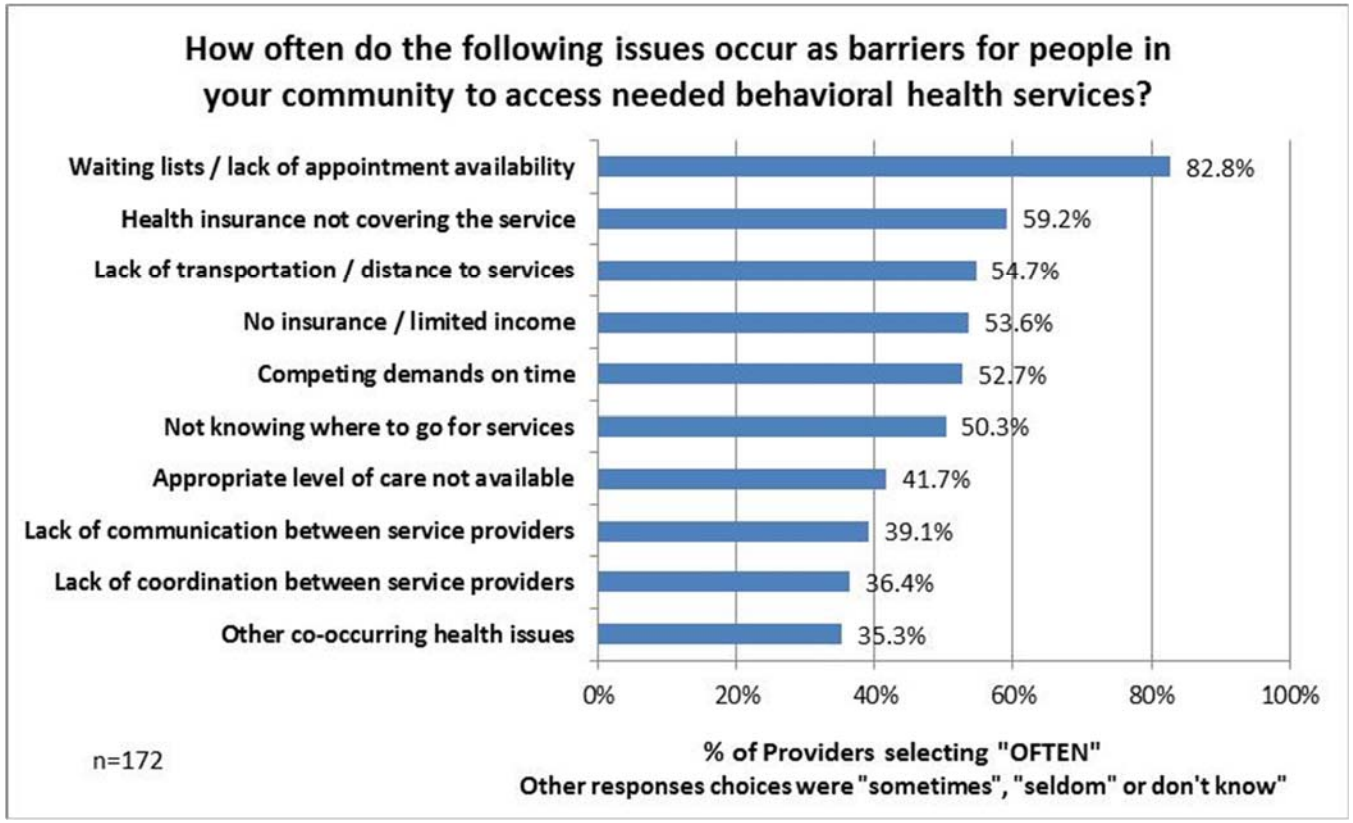


Chart 17



The focused assessment of behavioral health needs also included a survey of area health and human service providers (n=172). As displayed by Chart 18, respondents to the provider survey also reflect the observation that workforce capacity is an important concern with 'waiting lists / lack of appointment availability' cited as a top barrier to accessing behavioral health services in the region. Health insurance coverage limitations and lack of transportation / distance to services also noted as substantial barriers to accessing needed behavioral health services.

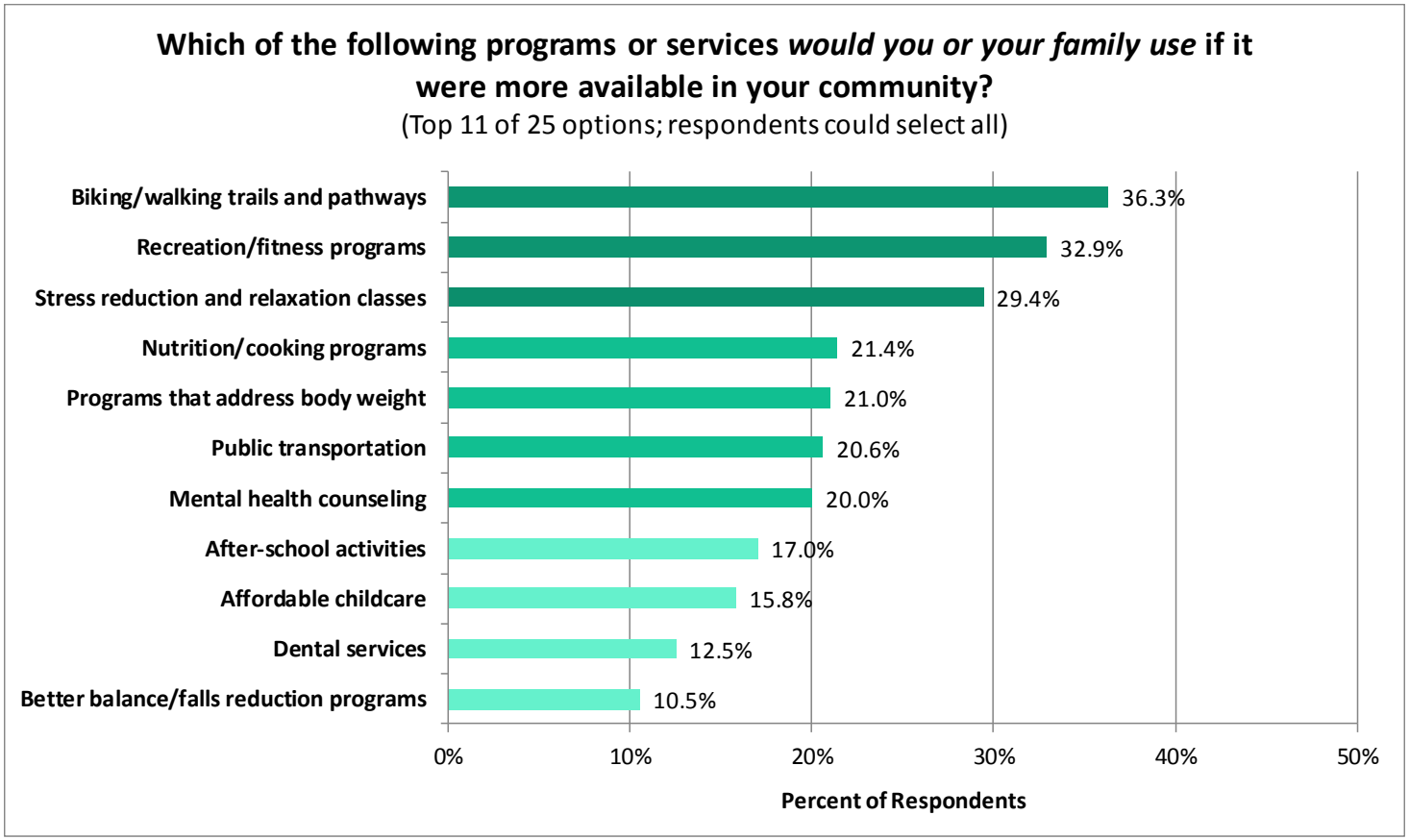
Chart 18



7. Community Health Resources and Suggestions for Improvement

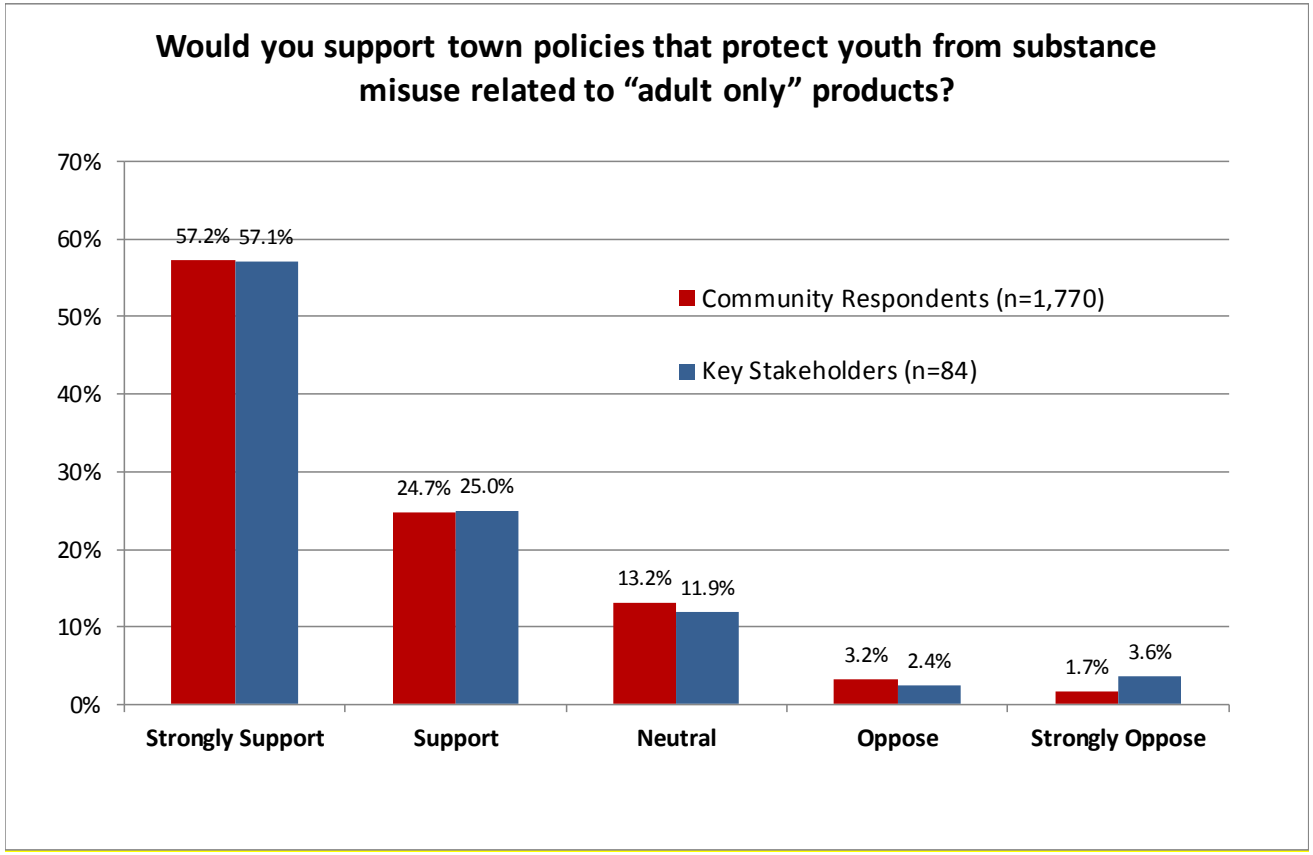
The 2019 Community Health Needs Assessment Survey asked people to indicate community health-related programs or services they would use if more available in the community. Biking/walking trails (36%), recreation/fitness programs (33%) and stress reduction and relaxation classes (29%) were the programs or services most frequently selected.

Chart 19



Respondents to the community survey and the key stakeholder survey were asked the question, "Would you support town policies that protect youth from substance misuse related to "adult only" products?" Examples of such policies could include policies that limit advertising, limit retail locations, or restrict use at community events of alcohol, tobacco, 'vaping', marijuana and related paraphernalia. Support for these types of town policies was similar on the two surveys with over 80% of community and key stakeholder respondents indicating support or strong support.

Chart 20



The 2019 Community Health Needs Assessment Survey asked people to respond to the question, ***"If you could change one thing that you believe would contribute to better health in your community, what would you change?"*** A total of 1,159 survey respondents (55%) provided written responses to this question. Table 10 provides a summary of the most common responses by topic theme.

TABLE 10

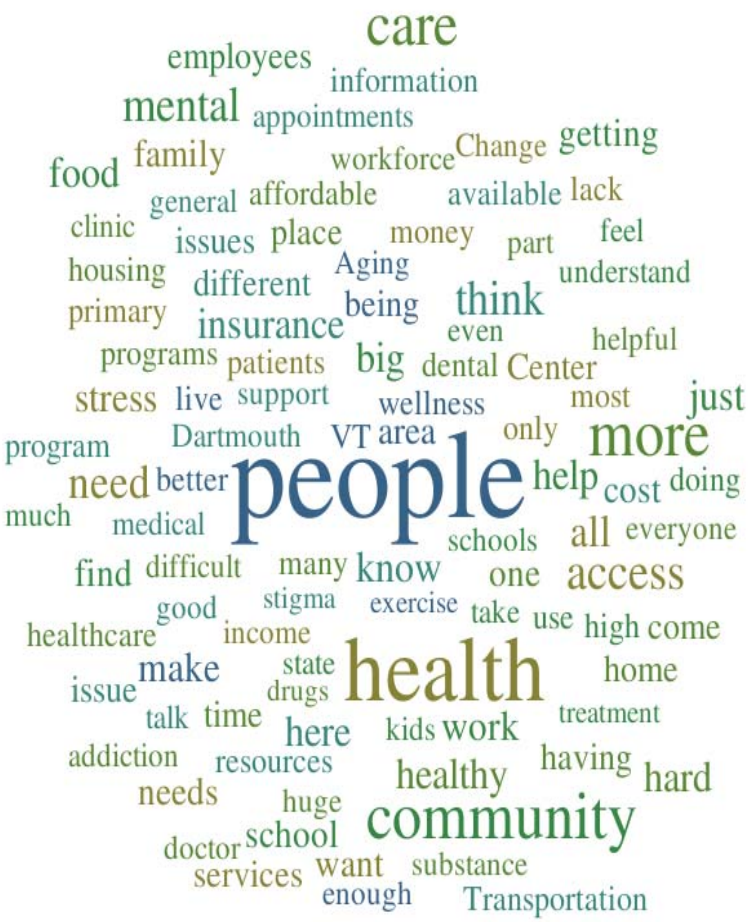
"If you could change one thing that you believe would contribute to better health in your community, what would you change?"	
Affordability of health insurance / cost of health care; low cost or subsidized services; health care payment reform	***16.8% of all comments***
Health care provider availability including certain specialties; hours and wait time; delivery system improvements, quality, options	***12.7%***
Improved resources, programs or environment for healthy eating / nutrition / food affordability; weight loss programs, obesity	**9.3%**
Accessibility / availability of substance use treatment services; substance misuse prevention including tobacco	**9.2%**
Improved resources, programs or environment for physical activity, active living; affordable recreation and fitness	**7.8%**
Accessibility/availability of mental health services; awareness, outreach and stigma	**7.5%**
Cost of living, poverty, employment; Basic needs including affordable housing	**6.7%**
Activities, resources to support a healthy lifestyle; health and wellness education; program information and awareness	**5.6%**
Caring community / culture; community connections and supports	**4.4%**
Parenting support including child care; family strengthening	**3.6%**
Improved transportation services / public transportation; medical transportation	**3.3%**

"If you could change one thing that you believe would contribute to better health in your community, what would you change?" (continued)	
Recreation programs, activities, resources for youth and families	2.3%
Senior services, concerns of aging, home care assisted living and hospice	2.2%
Affordability / availability of dental services	1.9%
General Education; Improve educational system	1.1%
Public safety, violence, crime; gun control	1.1%

B. COMMUNITY HEALTH DISCUSSION GROUPS

A set of seven discussion groups were convened in the spring of 2018 as part of the effort by Dartmouth-Hitchcock, Alice Peck Day Memorial Hospital, and Visiting Nurse and Hospice for VT and NH to understand the health-related needs of the community and to plan programs and services that address those needs. The purpose of the discussion groups was to get input on health issues that matter to the community and thoughts and perceptions about the health of the community. Discussion groups were convened representing important community sectors and perspectives, specifically the following:

- Mothers in Recovery group (2 participants)
- Teen mothers group (7 participants)
- Mascoma Community Health Center leadership (8 participants)
- Adults with special needs and caregivers (8 participants)
- Upper Valley Elder Forum members (12 participants)
- Persons of color (10 participants)
- Local employer representatives (12 participants)



1. Community Discussion Group Themes

The following paragraphs and table summarize findings from the community discussion groups.

- Discussion group participants described a relationship between individual health and community health. “The health of the community in general impacts the health of our employees.” Discussion group participants also had mixed perspectives about the current health status of the overall community. There was consensus that the Upper Valley community is a healthy community in general. However, it was also observed that there are significant disparities within the community that contribute to poor health. Other factors

noted by discussion group participants that contribute to increased health risks include the opioid epidemic, an aging population, and issues of affordability and limited infrastructure to support healthy choices such as exercise and good nutrition. Discussion also described increased family stress and related issues of adverse childhood experiences affecting the future health and welfare of the community.

> *"When I look out the window and I see people are exercising that is new for me-where I am from that did not happen. It is hard to eat right when you are in your car and going from place to place. It's hard to eat right when you are working. I think this area is really healthy."* Persons of Color discussion group participant

- Participants identified a wide variety of community strengths and resources that promote health including the Mascoma Community Health Center, Good Neighbor Health Clinic and Red Logan Dental Clinic, Clara Martin Center, Dartmouth-Hitchcock Addiction Treatment Programs (Rivermill), West Central Behavioral Health / NH REAP, Brattleboro Retreat, AA and NA, LISTEN Community Services, Grafton County Senior Citizens Council / Service Link, Willing Hands, Relay for Life, workplace wellness policies and programs, wellness, Area Agencies on Aging, SASH, D-H Aging Resource Center working with Meals on Wheels drivers for assessments of home based patients. APD Senior Care Team "Elder Friends" program, matching isolated seniors with volunteers from the community, Advance Transit ACCESS program; Stagecoach (transportation), United Valley Interfaith Project, Upper Valley HAVEN, Twin Pines Housing Trust building more affordable housing including senior housing in Hanover, SNAP debits that can be used at Farmers markets, and Working Bridges (now called Work United), a United Way initiative that focuses on helping businesses and employees strengthen job retention and decrease absenteeism. ("Demand for their services is skyrocketing- people don't know how to find resources."

> *"There is a huge social gradient . . . (leading to significant health disparities). Wealthy versus people barely scraping by; some have no access. We see people who are completely outside of the system, adults with tremendous unmet need. "* Mascoma Community Health Center leadership group participant

> *"I think right now we are seeing a lot more unhealthy than healthy, with the influx of opiates and addiction in New England. People who used to be alcoholics are now addicted to opiates. I have lost a lot of classmates, they just did not come back from it."* Moms in Recovery group participant

- Participants identified a range of barriers to promoting good health in the community, especially factors influenced by individual and family finances including affordability of medical care services and health insurance coverage, meeting eligibility criteria for assistance programs, access to care including mental health care, dental care, transportation challenges in general and medical transporation in particular, availability of child care, and the expense of eating healthy foods. Other aspects of the discussions focused on the effects of substance misuse, stigma associated with addiction including among health professionals, accessibility issues for individuals with physical limitations including accessibility to fitness and recreational resources, physical, social and cultural isolation, and insufficient communication and awareness of available services and programs. "(Even) when there are resources, it's tough to know where to send the employee, at times. It can be confusing to us, as well." "Some services are easy to access in VT, but not NH and vice versa. Having to deal with 2 states makes it even more confusing" for providers and employers.

> *"We have all these resources but we're missing a big part of the population. We can't get people to come! . . . . Are we just trying to impose our own model on people? But the model of one-on-one is not sustainable!* Upper Valley Elder Forum group participant

> *"We need more multi-organizational collaborations recognizing the economic imperative to improve community health, using anchor institutions investing in community health."* Local Employer discussion group participant

- With respect to what organizations could be doing better to support or improve community health, there was significant discussion around the need for improved partnerships, coordination and communication among provider organizations, as well as more outreach to let people know what services are available. Other suggestions included "more community centers where people could go and have mentors"; more effective substance misuse education and prevention strategies, reduced stigma and judgement; cultural competence training in schools, hospitals, community and recognition that diversity is increasing in the area; more home check ins, wellness checks and service coordination for elderly and special needs population; better pay and expanded work force for home health aides, personal care attendants, and homemaker assistance; expanded use of community health workers to help connect people with services; more providers who accept Medicaid and Medicare; more transparency in prices and billing more easily understood health insurance information and better clarity on what is covered; ("Make forms less complicated! Offer individualized assistance in filling out paperwork. Caseworkers are overworked so HR is having to step in; takes hours!").

> *"Insurance options are ridiculously complicated. Employees have to figure it out online and they are overwhelmed on the computer."* Local Employer group participant

2. High Priority Issues from Community Discussion Groups

In each of the community discussion groups convened in 2018, the discussion group facilitator presented a list of top priority areas identified in previous Community Health Needs Assessments in the region. The list of priorities presented to discussion group participants for their reflection were:

- Access to mental health care
- Affordable health insurance including prescription drugs
- Substance misuse
- Access to dental health care
- Lack of physical activity
- Poor nutrition / access to affordable healthy foods
- Income; poverty; family stress
- Affordable housing
- Access to primary health care
- Health care for seniors

"The wait list at any mental health facility is ridiculously long. Any psychologist or counselors or inpatient. Everyone has a 2 year wait list. It is very difficult to find a female therapist. I have been told several times when I go to my appointment that there is no female therapists and it makes it harder for me to go to my appointments." Teen Mom Group Participant

"We see a lot of healthy vibrant seniors at the Aging Resource Center, but there are pockets of isolated people not getting the help they need, not getting followed as closely as they should be." Upper Valley Elder Forum group participant

Participants were then asked if they were: a) aware of any programs or activities that have focused on any of these areas; b) if they had noticed any improvements in these areas; and c) if they thought these are still the most important issues for the community to address for improving health or if there are new, different priorities. With some additions (see table on the next page), most participants in each group expressed the overall opinion that the priorities identified previously were still the most important issues to focus attention on for community health improvement.

"I hear a lot of stories about D-H employee experiences, mental health is a big concern. Stress from the workplace or in their family. They may be caregivers at work and caregivers at home. It seems like not enough attention is being given to this, exhaustion, burnout emotional exhaustion. The mental health issue is a big thing and people having enough time and resources to commit to positive health behaviors." Persons of Color discussion group participant

The table below displays overall priorities, concerns and areas of improvement identified by each set of discussion groups. As noted on the previous page, the community discussion groups convened in 2018 generally endorsed the same set of priorities as identified in 2015. Some additional themes emerged in these discussions and are noted in this table as well.

TABLE 11 – COMMUNITY DISCUSSION GROUPS; MAJOR THEMES & PRIORITIES

	High priority health issues	What people are concerned about	Areas where there has been improvement
Mothers in Recovery group	Increased substance misuse education and prevention Educate health professionals on addiction; reduce stigma "More information, not just going into school and talking with kids. Talking with parents, these are the things that lead to addiction, giving parents information, this is the reality of the day and age we are in, this is the reality of protecting our kids. That is where prevention starts, alternatives and information." More comprehensive, 'one stop' centers; "I think this all inclusive idea is good. Getting to all your appointments is really overwhelming. Having them all in one place is really helpful."	Access to care, health insurance, affordability of services; access to dental services "My brother is an addict and he does not have health insurance, because he works and he is just over the cut off for state. I don't work, I have full coverage of everything, I get full coverage and get to work on my sobriety for free and he is working and he cannot go to a clinic like this. It is not fair. " "I was talking with my neighbor yesterday. They make too much money for help with childcare, and too much money for state insurance so they just cannot get ahead."	Access to affordable dental care, sliding fee scale dental services has improved Availability of dental services at Mascoma Community Health Center mentioned as an improvement Increased access / capacity for treatment services; there is more supply for treatment too ("it seems like there is more access to treatment") and "Stigma is less, it is more talked about." Dartmouth Moms in Recovery program described as a model program. "This place IS access to mental health, alcohol drug use prevention, treatment and recovery . . . . They can help find activities and recreational activities. They have a resource specialist that can help with housing and childcare. "
Teen mothers group	Income, poverty, family stress Expense of healthy food; poor nutrition Access to dental care; "A lot of places accept Dr. Dynasaur, but nowhere accepts for adults. Red Logan is for people with no insurance, but *only* if you have no insurance." Access to / utilization of primary care – most of the discussion group participants use the ED as their source of primary care More mental health facilities / specialists Knowledge about healthy relationships	"Worry about money a lot. Because we technically make too much money to get enough assistance." "It is especially hard if you don't have food stamps." Getting exercise; "not a lot of parks or gyms that don't cost a lot." Transportation, most of the discussion group participants don't have their own cars.	"WIC uses a card now that is more convenient and they give you more options so that is easier."

	High priority health issues	What people are concerned about	Areas where there has been improvement
Mascoma Community Health Center leadership	Affordability of Insurance; high deductibles cost of health care; "We see sicker people with more complex needs because people are delaying care." "Cost is the primary access issue, compounded by geography." Need for improved coordination / communication / partnerships between health care provider organizations; between hospitals and health centers. Dental and mental health workforce challenges; insufficient capacity to meet needs. "We have a food desert on route 4. Also, this community isn't as (physically) active as Norwich"	Cost of services; "People can't see what things will cost, especially at large organizations like APD and DH . . . . there's a real problem with 'transparency' "We need an affordable generic formulary" "Diabetes, cardiac, opioids, mental health; the dental disease is incredible, plays into chronic conditions. " "Behavioral health is just as big as opioids" "The integrated delivery network isn't working. Also, there's no adequate support for child abuse/domestic violence…no coordination.	Significant increase in trained recovery coaches Opening of Mascoma Community Health Center in June 2017 a significant improvement for access to comprehensive primary care services including dental and mental health; working to get 340B pharmacy program in place "The local schools are putting more resources into mental health" "There are lots of opportunities for physical activity (yoga studio in Enfield, Mascoma Recreation, Bone Builders at Senior Center in Canaan), but these programs aren't coordinated yet . . . . Also, the activities aren't publicized; and, low income families don't have time for them."
Adults with special needs and caregivers	Cost of care; "Costs have increased"; affordability is a barrier to maintaining good health; sometimes avoid seeking healthcare due to cost Mental health; "Mental health problems have increased due to drug use"; drug addiction Waiting lists to see mental health professionals, lots of turnover on mental health professionals Cost of healthy food Affordable housing; Not enough beds for people/homelessness Access to dental care	Finances; Prioritizing when to seek medical care based on cost Change in insurance co-pays; Change in insurance coverage and out of pocket costs Sometimes hard to find places to exercise that meet people's mobility needs; Make it easier to be active Hard to find places with wheelchair access D-H "takeover of all the hospitals in area" Transportation to hospitals and Dr. Appointments; Transportation in general	Health care seems to be better for children than for adults "Seems to be a better effort in preventing overdose deaths", including Narcan availability, but "after care is lacking. Lack of treatment facilities/options"

	High priority health issues	What people are concerned about	Areas where there has been improvement
Upper Valley Elder Forum members	Frail elders: "I work with highest risk frail elders in APD senior care, they lack resources. We don't have staffing in the community to support them (indigent, high medical needs). They lose their option to stay at home." "Wait list for long term care is enormous. Many could be in their own home but nursing home is the only place they can access" Insufficient workforce; "This area is saturated with care needs but we don't have enough caregivers" Transportation: "Rural nature of area makes transportation a huge issue"; lack of weekend transportation "a big miss", e.g. to church or weekend events Income; poverty; family stress; "Real disparity between overall general health; divides along class lines." Access to mental health Access to affordable health insurance including prescriptions	Losing control, ending up in a facility and "there's no one to take care of me" No one wants to go to a nursing home; they think if they get there they'll never leave. Huge drain on finances. Money! Want to leave assets to their children The crumbles (body falling apart) and the dwindles (the mind starts to go)- and your house crumbling too "People say the medical system is not responsive to them; they're not heard. They're at the mercy of a system that can feel capricious, arrogant" Change the culture- make people feel they don't have to be alone and isolated; Remove the stigma on growing old	LISTEN community dinners participation going up, but is that an improvement? (more people hungry?). Ditto with food bank at the HAVEN: more food but also more participants? Housing: Twin Pines Housing Trust building more affordable housing including senior housing in Hanover Debit card for food stamps to be used at Farmers markets = big improvement Aging Resource Center; Senior Center has lots of balance classes, wellness; SASH has great newsletter; but not a lot of these programs coming into the home or very time limited. APD Senior Care Team "Elder Friends" program, matching highest-risk (isolation/depression) with volunteer from the community- very successful. Volunteers become integral part of the care team Churches in our community are reaching out the way neighbors did in the old days; United Valley Interfaith Project does a lot of volunteer work
Persons of color	Cost of healthcare to the individual (deductibles and co-pays can make getting healthcare really difficult); "That is a big issue here. I have heard people say they need $1,000 or $2,000 and if they are already on a tight budget, they don't get the healthcare." "It can be really hard for people to address their healthcare needs because people don't come back because of the high deductible. I see people make really bizarre decisions. Now	Making community connections; finding supportive social relationships; "When people are new to the area it is really hard to find those connections and attachments, you may want to go out and exercise but you are looking for people to connect with. It is harder to find these organized activities as adults in this community." "What I can often hear from other people transitioning into the area, in particular if	(Discussion group time ran out before this question could be addressed.)

	High priority health issues	What people are concerned about	Areas where there has been improvement
Persons of color (continued)	if you go to the ER once you met your high deductible and then you can go to the doctors all the time, get the MRI just because . . .” “I don’t think most physicians here understand that people make decisions about whether they go to a doctor based on expense. Where I came from, the first thing they did in the clinic was to offer different payment options.” Access to transportation Affordable housing Poor nutrition; “it is easier and more affordable to eat unhealthy”	they are coming from an area that had a larger black community, is it would be helpful to have people understand what it is like to be in a minority group. Being in a group where people take your word for that instead of challenge that. It might be easier to trust and share openly. There are a lot of supportive people out there, but it is hard to know who those people are.” Racism and related stress: “I would like to go to schools to talk about racism. We have had to address some things at school that the school should be dealing with. I worry about their mental health. I try to help them understand what has happened. I cannot promise them it is not going to happen again.” “I worry about stress on all different levels. Had a similar experience, with our son on the school bus, and having to explain things I really did not want to deal with at this age with him. That causes stress not knowing what people are going to say to them. Sometimes it creates a dynamic where they are in school to learn and they have to deal with some things others don’t have to deal with. I also worry about the opioid crisis and drugs, and being on the playground you have to worry about what is out there.” The weather is very different here, the lack of sunlight. I am from the south and the lack of sunlight, especially in the winter it can really effect my health.	

	High priority health issues	What people are concerned about	Areas where there has been improvement
Local employer representatives	Access to affordable health insurance including prescription drugs Substance misuse prevention or treatment Access to mental health care Affordable housing Income, poverty, family stress Daycare is a major issue; "daycare in Hartford has 18 month wait list"; "People quit their jobs because they can't find daycare, or affordable daycare." "Early childhood education is hugely predictive of health - how adequate is it in the Upper Valley?"; Large numbers of young children are being impacted by substance misuse, behavioral health issues Transportation; "Big issue for a lot of people; especially when you're trying to recruit people from the city" Ticks! The issue is exploding! People are uneducated about this	COST! COST! COST! "Access- not easy to get a primary care doctor and, if you have one, not easy to get in to see them. Mental health presents a huge access challenge, whether minor or serious. Also substance abuse issues, family members - hard to get into consistent care" "Mental health is the big one" "Specialty care access also difficult; 3 months to see someone" "Specialty care even with workers comp: injured employee waited 4 months for surgery so he couldn't work in the kitchen and couldn't provide for his family" "We're having to spend way more time in HR helping people get medical appointments" "Also a lot of elder care issues/sandwich generation. Big stressor!"; We have changed schedules for people so they can be home with their aging parent; they don't qualify for in home assistance otherwise. Daycare issues: can't find it, especially for 3rd shift.	In the past year, fewer people are saying they can't find a PCP A lot of people are using walk in clinics because they can get in and out quickly, and it's affordable! Our managers are more educated on resources available for their employees (EAP, etc.) More education on elder care options; people looking sooner. "Even PCPs know what the options are." Some additional programs for mental health and substance misuse, not sure if they have made a difference yet Advance Directives: some progress here, and this impacts cost of health care. West Central has shortened their wait times for mental health appointments Community/parish nurse programs are catching on; focused on elderly

C. COMMUNITY HEALTH STATUS INDICATORS

This section of the 2018 Community Health Needs Assessment report provides information on key indicators and measures of community health status. Some measures associated with health status have been included earlier in this report, such as measures of income and poverty. Where possible, statistics are presented specific to the 19 town primary hospital service area (identified in the following tables as DH-APD Service Area). In some instances, population health data are only available at the county or health district / regional level. For example, some indicators included here report statistics for the White River Junction Health District in Vermont. All 7 Vermont municipalities in the DH-APD service area are part of the White River Junction Health District along with 15 other Vermont municipalities. For the 12 New Hampshire municipalities in the DH-APD service area, most population health information is reported for the Upper Valley Public Health Region, which is completely congruent with those 12 municipalities and comprises 65% of the total service area population. The following tables identify the different geographic regions and data sources from which the different statistics are derived.

1. Demographics and Social Determinants of Health

A population's demographic and social characteristics, including such factors as prosperity, education, and housing influence its health status. Similarly, factors such as age, disability, language and transportation can influence the types of health and social services needed by communities.

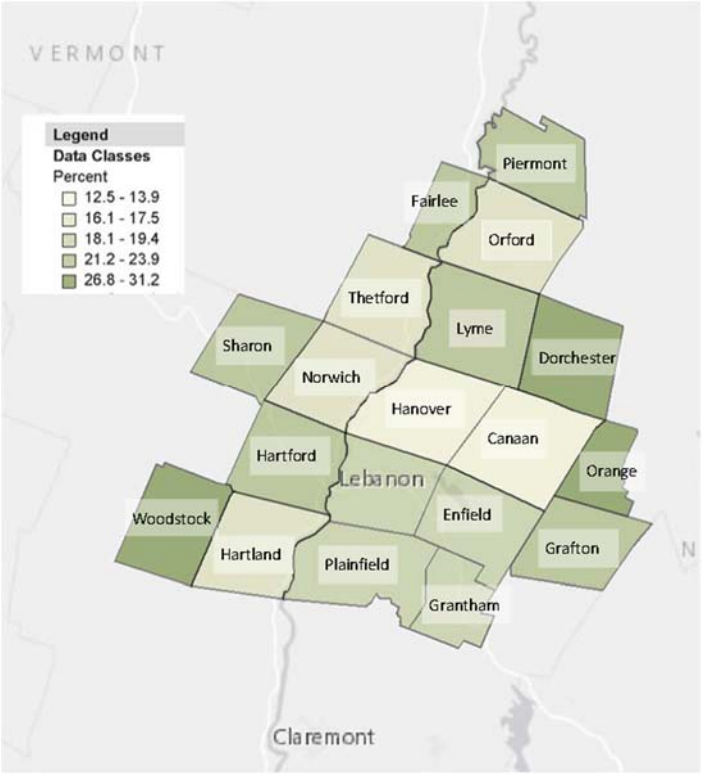
a. General Population Characteristics

According to the 2016 American Community Survey (US Census Bureau), the population of the DH-APD Service Area is older on average than in New Hampshire overall and similar to Vermont. The service area map on the next page displays the percent of the population 65 years of age and older by town. Between 2010 and 2016, the population of the DH-APD Service Area increased by 4.7%, proportionally higher than population growth experience in Vermont or New Hampshire overall.

Population Overview	DH-APD Service Area	Vermont	New Hampshire
Total Population	**69,467**	626,249	1,327,503
Age 65 and older	**17.5%**	17.0%	15.8%
Under age 18	**18.0%**	19.4%	20.1%
Change in population compared to 2010 census	**4.7%**	+0.05%	+0.8%

Data Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates and 2010 US Census.

Figure 2 - Percent of Population 65 years of age and older
DH-APD Service Area Towns



The proportion of the population age 65 years or more ranges from 12.5% in Hanover to 31.2% in Orange, New Hampshire.

b. Poverty

The correlation between economic prosperity and good health status is well established. Inversely, the lack of economic prosperity, or poverty, can be associated with barriers to accessing health services, healthy food, and healthy physical environments that contribute to good health. Information describing household income and poverty status was included in the first section of this report. The table below presents the proportion of children under age 18 living below 100% and 200% of the Federal Poverty Level in the DH-APD Service Area compared with percentages for Vermont and New Hampshire. Child poverty rates in the service area are similar to New Hampshire statewide proportions of children living in or near poverty and lower compared to Vermont overall.

Area	Percent of Children in Poverty Income < 100% FPL	Percent of Children in or near Poverty Income < 200% FPL
DH-APD Service Area	**11.5%**	**25.7%**
Vermont	15.1%	35.3
New Hampshire	11.0%	26.8%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates.

c. Education

Educational attainment is also considered a key driver of health status with lower levels of education linked to both poverty and poor health. The proportion of the population of the DH-APD Service Area having earned at least a high school diploma or equivalent is slightly higher compared to the overall statewide proportions on this measure. The table below presents data on the percentage of the population aged 25 and older without a high school diploma (or equivalent).

Area	Percent of Population Aged 25+ with No High School Diploma
DH-APD Service Area	**5.6%**
Vermont	8.1%
New Hampshire	7.4%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates.

d. Language

Inability to speak English well can create barriers to accessing services, communication with service providers, and ability to understand and apply health information (health literacy). The table below reports the percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well".

Area	Percent of Population Aged 5+ Who Speak English Less Than "Very Well"
DH-APD Service Area	**0.8%**
Vermont	0.7%
New Hampshire	1.5%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates.

e. Housing

Housing characteristics, including housing quality and cost burden as a proportion of income, can influence the health of families and communities. The table below presents data on the percentage of housing units that are considered substandard housing and housing cost burden.

"Substandard" housing units are housing units that have at least one of the following characteristics 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) an average of more than one occupant per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent.

A component of the substandard housing index is the proportion of income that is spent on housing costs. According to research by the U.S. Department of Housing and Urban development, households that spend more than 30 percent of income on housing costs are less likely to have adequate resources for food, clothing, medical care, or other needs. The table below shows the finding that

nearly a third of households in the region liv in housing categorized as substandard and have mortgage or rental costs exceeding 30% of household income.

Area	Percent of Housing Units Categorized As "Substandard"	Percent of Households with Housing Costs >30% of Household Income
DH-APD Service Area	**31.4%**	**31.6%**
Vermont	35.3%	35.4%
New Hampshire	32.8%	33.3%

Data Source: 2012 – 2016 American Community Survey 5-Year Estimates; Sub-standard Housing and Housing Cost Burden data accessed from Community Commons.

f. Transportation

Individuals with limited transportation options also have limited employment options, greater difficulty accessing services, and more challenges to leading independent, healthy lives. The next table presents data on the percent of households that have no vehicle available. About 6% of households in the DH-APD service area report not having access to a vehicle.

Area	Percent of Households with No Vehicle Available
DH-APD Service Area	**6.2%**
Vermont	6.7%
New Hampshire	5.3%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates.

g. Disability Status

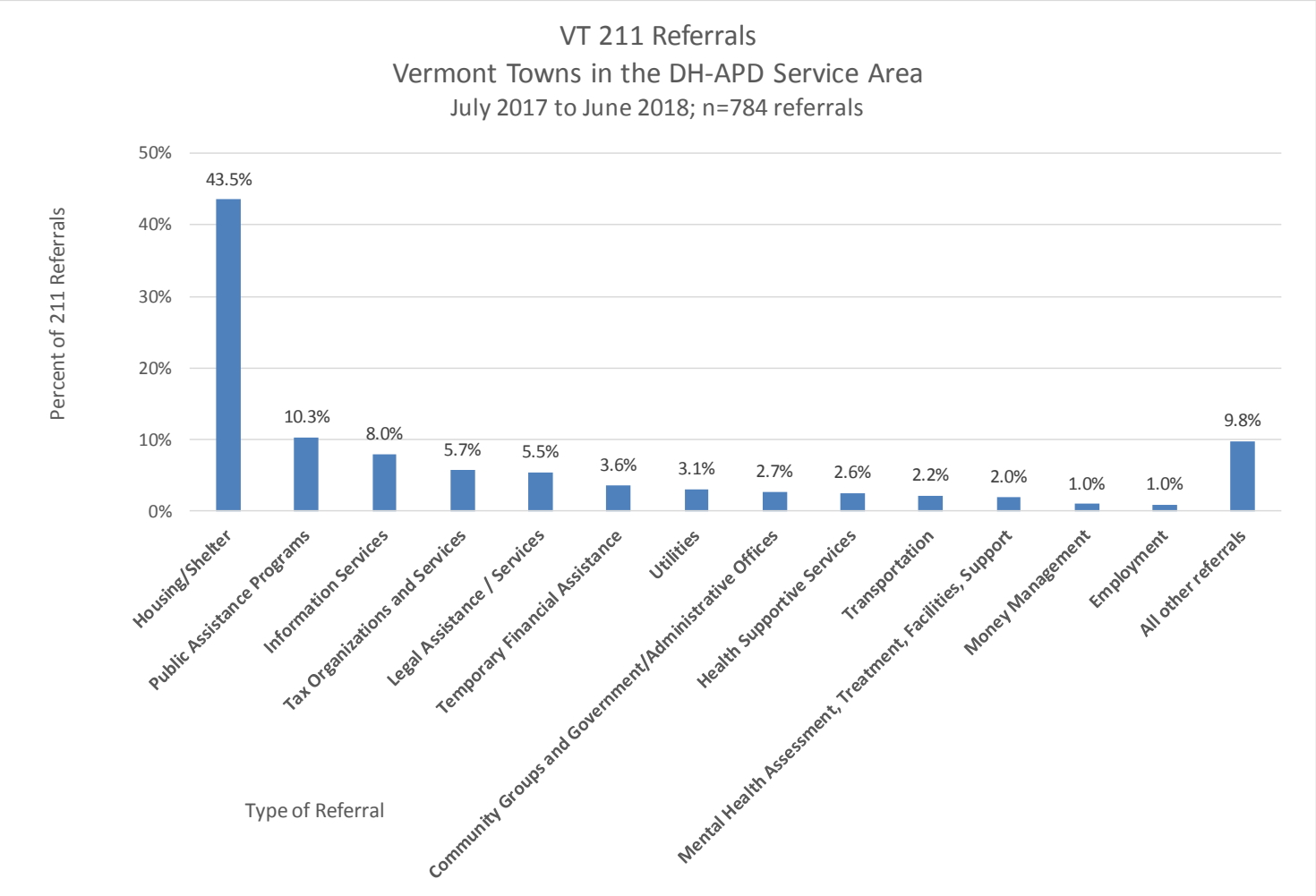
Disability is defined as the product of interactions among individuals' bodies; their physical, emotional, and mental health; and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community. The US Census Bureau (American Community Survey) identifies people reporting serious difficulty with four basic areas of functioning – hearing, vision, cognition, and ambulation. According to the 2016 American Community Survey, 12.5% of DH-APD Service Area residents report having at least one disability, a percentage that is similar to the overall proportion in New Hampshire and slightly lower than proportion indicated for Vermont.

Area	Percent of Population Reporting Serious Difficulty With Hearing, Vision, Cognition and/or Ambulation
DH-APD Service Area	**12.5%**
Vermont	14.0%
New Hampshire	12.3%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates.

h. Community Referral Needs

An additional barometer of community needs is referral activity through Vermont 2-1-1. During the period July 2017 through June 2018, Vermont 2-1-1 made 784 service referrals for residents of Vermont towns in the DH-APD service area. The chart below displays the distribution of these referrals by referral type. By far, the most common type of referral was for Housing/Shelter (44% of referrals); followed by referrals to public assistance programs (10%).



2. Access to Care

Access to care refers to the ease with which an individual can obtain needed services. Access is influenced by a variety of factors including affordability of services and insurance coverage, provider capacity in relationship to population need and demand for services, and related concepts of availability, proximity and appropriateness of services.

a. Insurance Coverage

Table 12 displays estimates of the proportion of residents who do not have any form of health insurance coverage by municipality, as well as the proportion of residents covered by Medicare or Medicaid. It is important to note that the data source for these municipal level estimates is a 5 year span of the American Community Survey. A combination of five years of data is required to produce reasonably stable estimates on these and other measures from the survey samples. This particular time period spans a period of significant change in the health insurance market with the implementation of the federal Affordable Care Act and Medicaid expansion. The overall proportion of the population without health insurance is estimated to be 7.1%. In the 2016 Community Health Needs Assessment, the estimated percentage of the service area population without health insurance was 8.2%.

TABLE 12

Area	Percent of the Total Population with No Health Insurance Coverage	Percent with Medicare Coverage Alone or in Combination	Percent with Medicaid Coverage Alone or in Combination
Thetford VT	2.4%	17.8%	14.1%
Hanover NH	2.8%	10.3%	3.3%
Fairlee VT	3.0%	21.6%	22.1%
Plainfield NH	3.0%	18.0%	8.9%
Sharon VT	3.5%	21.5%	23.3%
Norwich VT	4.2%	15.1%	8.1%
Grantham NH	5.2%	19.8%	4.6%
Vermont	**5.3%**	**19.3%**	**24.9%**
Lyme NH	6.2%	22.1%	5.9%
Woodstock VT	6.6%	29.7%	13.9%
DH-APD Service Area	**7.1%**	**18.6%**	**12.5%**
Hartland VT	7.7%	20.3%	23.3%
Hartford VT	7.8%	21.7%	21.8%
Piermont NH	8.4%	26.0%	8.5%
New Hampshire	**8.4%**	**17.5%**	**11.8%**
Orange NH	8.7%	36.1%	7.4%
Lebanon NH	8.9%	19.6%	13.9%
Enfield NH	9.5%	19.9%	9.9%
Grafton NH	14.1%	19.6%	14.3%
Canaan NH	16.3%	16.4%	12.7%
Dorchester NH	17.4%	27.0%	18.0%
Orford NH	19.8%	15.2%	10.4%

Data Source: U.S. Census Bureau, 2012 – 2016 American Community Survey 5-Year Estimates

b. Adults with a Personal Health Care Provider

This indicator reports the percentage of adults aged 18 and older who self-report that they have at least one person who they think of as a personal doctor or health care provider. A lower percentage on this indicator may highlight insufficient access or availability of medical providers, a lack of awareness or health knowledge or other barriers preventing formation of a relationship with a particular medical care provider.

Area	Percent of adults who report having a personal doctor or health care provider
DH-APD Service Area	**86.3%**
Vermont	88%
New Hampshire	86.8%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015, composite statistic. Regional statistics are not significantly different from the overall state statistics.

c. Preventable Hospital Stays

Preventable Hospital Stays is the hospital discharge rate for diagnoses potentially treatable in outpatient setting, also known as ambulatory care sensitive conditions, such as diabetes, hypertension, asthma and chronic obstructive pulmonary disease. A high rate of inpatient stays for ambulatory care sensitive conditions may indicate limited access, availability or quality of primary and outpatient specialty care in a community. The chart below displays the rate of preventable hospitals stays for Medicare enrollees in the four counties that include municipalities in the DH-APD service area.

Area	Number of hospital stays for ambulatory care sensitive conditions per 1,000 Medicare enrollees
Grafton County, NH	**39.2**
Sullivan County, NH	**52.6**
Orange County, VT	**55.6**
Windsor County, VT	**48.9**
Vermont	39.4
New Hampshire	47.1

Data Source: Dartmouth Atlas of Health Care, 2015; accessed through County Health Rankings.

d. Behavioral Health

Overall health depends on both physical and mental well-being. The table below shows proportion of adults who self-report that their mental health was not good for 14 or more days in the past 30 days, a measure that is correlated with depression and other chronic mental health concerns as well as overall health-related quality of life. The proportion of adults in the service area reporting 14 or more days in the past 30 days when their mental health was not good ranges from about 10% in the Upper Valley Public Health Region (all NH towns in the DH-APD service area) to 12% in the White River Junction Health District (includes all of the Vermont towns in the DH-APD service area and 15 other VT towns).

Area	Percent of adults reporting 14 or more days in the past 30 days during which their mental health was not good
White River Junction Health District	**12%**
Upper Valley Public Health Region	**9.8%**
Vermont	12%
New Hampshire	11.0%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

e. Dental Care Utilization (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report that they have not visited a dentist, dental hygienist or dental clinic within the past five years. The proportion of adults in Orange County, VT who report not having seen a dentist in the past year (40%) is higher compared to the overall state percentage.

Area	Percent of adults who have not visited a dentist or dental clinic in the past year
Windsor County	**31%**
Orange County	**40%***
Upper Valley Public Health Region	**22.7%**
Vermont	29%
New Hampshire	30.3%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2014, 2016, NHDHHS, 2014-2015.

***Regional statistic is significantly different and higher than the overall state statistics.** Other proportions are not significantly different.*

f. Poor Dental Health

This indicator reports the percentage of adults (ages 45-64 for Vermont; ages 18-64 for New Hampshire) who self-report having any of their permanent teeth removed due to tooth decay, gum disease, or infection. In addition to highlighting needed improvements in preventive oral health care, this indicator can also highlight a lack of access to care, a lack of health knowledge, or social and economic barriers preventing utilization of services.

Area	Percent of adults who report having any of their permanent teeth removed
Windsor County	**46%** (ages 45-64)
Orange County	**54% (ages 45-64)**
Upper Valley Public Health Region	**28.0%** (ages 18-64)
Vermont	49% (ages 45-64)
New Hampshire	34.7% (ages 18-64)

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2014, 2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

3. Health Promotion and Disease Prevention Practices

Adopting healthy lifestyle practices and behaviors, such as not smoking and limiting alcohol intake, can prevent or control the effects of disease and injury. For example, regular physical activity not only builds fitness, but helps to maintain balance, promotes relaxation, and reduces the risk of disease. Similarly, eating a healthy diet rich in fruits, vegetables and whole grains can reduce risk for diseases like heart disease, certain cancers, diabetes, and osteoporosis. This section includes indicators of individual behaviors influencing personal health and wellness. Some indicators of clinical prevention practices, such as screening for cancer and heart disease, are included in a later section that also describes population health outcomes in those areas.

a. Fruit and Vegetable Consumption (Adults)

This indicator reports the percentage of adults aged 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day. Unhealthy eating habits contribute to significant health issues such as obesity and diabetes.

Area	Percent of Adults Consuming Less than 5 Fruit or Vegetable Servings per Day
White River Junction Health District	**77%**
Upper Valley Public Health Region	**NA**
Vermont	80%
New Hampshire	NA

Data Source: Behavioral Risk Factor Surveillance System, VtDH, 2015-2016
Most recent data available on this measure for NH communities is from 2009.

b. Physical Inactivity (Adults)

This indicator reports the percentage of adults aged 18 and older who self-report leisure time physical activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?". Lack of physical activity can lead to significant health issues such as obesity and poor cardiovascular health. About 60% of adults in Vermont and in the region self-reported meeting guidelines for regular physical activity.

Area	No physical activity or exercise in past 30 days, % of adults
Windsor County	**23%**
Orange County	**19.0%**
Upper Valley Public Health Region	**16.0%**
Vermont	18%
New Hampshire	20.8%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

c. Pneumonia and Influenza Vaccinations (Adults)

This indicator reports the percentage of adults who self-report that they have ever received a pneumonia vaccine or received influenza vaccine in the past year. In addition to measuring the population proportion receiving preventive vaccines, this indicator can also highlight a lack of access to preventive care, opportunities for health education, or other barriers preventing utilization of services.

Area	Adults who have received a flu shot in past 12 months and those who have ever received a pneumococcal vaccination		
	Influenza Vaccination 18 years of age or older	Influenza Vaccination 65 years of age or older	Pneumococcal Vaccination 65 year of age or older
White River Junction Health District		**61%**	**72%**
Upper Valley Public Health Region	**55.9%+**	**66.5%**	**81.2%**
Vermont		59%	77%
New Hampshire	43.7%	61.9%	77.2%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-1016, NHDHHS, 2014-2015.

***+Regional statistic is significantly different and higher than the overall state statistic**. Other statistics are not significantly different.*

d. Substance Misuse

Substance misuse, involving alcohol, illicit drugs, misuse of prescription drugs, or combinations of all of these behaviors, is associated with a complex range of negative consequences for health and wellbeing of individuals, families and communities. In addition to contributing to both acute and chronic disease and injury, substance misuse is associated with destructive social conditions, including family dysfunction, lower prosperity, domestic violence and crime.

Excessive drinking: Excessive alcohol use, either in the form of heavy drinking (drinking more than two drinks per day on average for men or more than one drink per day on average for women), or binge drinking (drinking 5 or more drinks on an occasion for

men or 4 or more drinks on an occasion for women), can lead to increased risk of health problems such as liver disease or unintentional injuries.

Area	Engaged in Binge Drinking in Past 30 days, Percent of Adults		
	Male	Female	Total
White River Junction Health District			**18%**
Upper Valley Public Health Region	**14.7%**	**11.7%**	**13.2%**
Vermont			18%
New Hampshire	21.6%	12.2%	16.8%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

Area	Heavy Alcohol Use, Percent of Adults		
	Male	Female	Total
White River Junction Health District			**11%**
Upper Valley Public Health Region	**NA**	**9.5%**	**7.5%**
Vermont			9%
New Hampshire	6.4%	6.8%	6.6%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

Although underage drinking is illegal, alcohol is the most commonly used and misused drug among youth. On average, underage drinkers also consume more drinks per drinking occasion than adult drinkers. In the Upper Valley Public Health Region, the proportion of high school aged youth reporting binge drinking behavior is slightly lower than the overall state percentage, although the difference is not statistically significant.

Area	Engaged in Binge Drinking in Past 30 days, Percent of High School Youth
Windsor County	**15%**
Orange County	**15%**
Upper Valley Public Health Region	**12.4%**
Vermont	17%
New Hampshire	15.9%

Data Source: Youth Risk Behavior Survey, VDH, 2017, NHDHHS, 2017
Regional statistics are not significantly different from the overall state statistics.

The misuse of prescription drugs, particularly prescription pain relievers, poses significant risk to individual health and can be a contributing factor leading to misuse of other drugs and a cause of unintentional overdose and mortality. Reported lifetime experience of prescription drug misuse among high school youth in the service area are similar to proportions reported across Vermont and New Hampshire with about 1 in 10 youth reporting ever having misused prescription drugs.

Area	Ever used prescription drugs without a doctor's prescription, % of High School Youth	Ever misused prescription pain medicine, % of High School Youth	Ever misused prescription stimulants, % of High School Youth
Upper Valley Public Health Region	**11.1%**		
New Hampshire	11.5%		
Windsor County		7%	6%
Orange County		8%	6%
Vermont		8%	6%

Data Source: NH Youth Risk Behavior Survey, 2017; VT Youth Risk Behavior Survey 2017
Regional statistics are not significantly different from the overall state statistics.

Note: The NH YRBS asked one question, “During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?” The VT YRBS separated this into two questions, one instructing respondents to “count drugs such as such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet” and one instructing respondents to “count drugs such as Adderall or Ritalin”.

e. Cigarette Smoking

Tobacco use is a primary contributor to leading causes of death such as lung cancer, respiratory disease and cardiovascular disease. This indicator reports the percentage of adults aged 18 and older who self-report currently smoking cigarettes some days or every day. The estimate for the proportion of adults in the Upper Valley Public Health Region who are current cigarette smokers is about 10%, a proportion significantly lower than the overall percentage of adults in NH who are current cigarette smokers (about 16%).

Area	Percent of Adults who are Current Smokers
White River Junction Health District	**14%**
Upper Valley Public Health Region	**9.7%+**
Vermont	18%
New Hampshire	16.3%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2015.
+Regional statistic is significantly different and lower than the overall state statistic.
VT regional statistic is not significantly different from the VT state percentage.

f. Teen Birth Rate

Teen pregnancy is closely linked to economic prosperity, educational attainment, and overall infant and child well-being. The teen birth rate Upper Valley Public Health Region is significantly lower than the overall NH rate in 2016. The teen birth rate in Orange County, VT is lower than the overall Vermont rate, while the Windsor County rate is higher.

Area	Teen Birth Rate per 1,000 Women Age 15-19
Windsor County	**22.6**
Orange County	**10.8**
Upper Valley Public Health Region	**4.6+**
Vermont	16.8
New Hampshire	11.0

Data source: NH Division of Vital Records Administration birth certificate data; 2012-2016. VT Dept of Health, 2016
+Regional statistic is significantly different and lower than the overall state statistic.
Other statistics are not significantly different.

g. Children in Out of Home Placement

One measure of child safety, abuse and neglect in a community is the number of children placed in temporary out-of-home care. As displayed by the next table, the rate of such placements in Northern Windsor and Orange Counties during 2015 was 13.9 children per 1,000 (57 children), a rate similar to the overall rate in Vermont. The rate of out of home placement in Sullivan County appears to be somewhat higher than the New Hampshire rate overall (2014 data).

Area	Children under age 9 in DCF Custody; Rate per 1,000 Children	Children under age 18 in out of home placement Rate per 1,000 Children
Northern Windsor & Orange Region	**13.9**	
Grafton County		2.5
Sullivan County		6.4
Vermont	12.4	
New Hampshire		3.7

Data sources: How are Vermont's Young Children and Families? 2017 Report. Building Bright Futures, citing Vermont Agency of Human Services, Adoption and Foster Care Analysis and Reporting System, 2015 data. NHDHHS, Division for Children, Youth and Families/Division for Juvenile Justice Services via Annie E. Casey Foundation, 2014 data

h. Domestic Violence

Domestic violence or intimate partner violence can be defined as a pattern of coercive behaviors used by one partner against another in order to gain power and control over the other person. The coercive behaviors may include physical assault, sexual assault, stalking, emotional abuse or economic abuse. There were 359 civil domestic violence petitions filed in Sullivan County courts and 557 in Grafton County courts in 2014 and 2015 (most current data available). In New Hampshire overall, 76% of civil domestic violence petitioners in 2014 and 2015 were granted a temporary order of protection (statistics by County not known).

Area	Civil Domestic Violence Petitions 2014 - 2015	
	Number	Rate per 1,000 population
Grafton county	**557**	**3.1**
Sullivan County	**359**	**4.2**
New Hampshire	8,025	3.0

Data Source: New Hampshire Domestic Fatality Review Committee, 2014-2015 Biennial Report

4. Selected Health Outcomes

Traditional measures of population health status focus on rates of illness or disease (morbidity) and death (mortality) from specific causes. Advances in public health and medicine through the 20th Century have reduced infectious disease and complications of child birth as major contributors to or causes of death and disease. Chronic diseases, such as heart disease, cancer, respiratory disease and diabetes, along with injury and violence, are now the primary burdens on the health and wellbeing of individuals, families and communities. In addition to considering the absolute magnitude of specific disease burdens in a population, examination of disparities in disease rates can help to identify areas of need and opportunities for intervention.

a. Overweight and Obesity

Being overweight or obese can indicate an unhealthy lifestyle that puts individuals at risk for a variety of significant health issues including hypertension, heart disease and diabetes. The indicators below report the percentage of adults aged 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) or greater than 25.0 (overweight or obese). The chart on the next page displays the trend in Windsor County since 2001 toward increasing prevalence of obesity in the adult population.

Area	Percent of Adults Who Are Obese	Percent of Adults Who Are Overweight or Obese
White River Junction Health District	**30%**	**62%**
Upper Valley Public Health Region	**17.1%+**	**53.0%**
Vermont	28%	62%
New Hampshire	27.0%	63.6%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.

+Regional statistic is significantly different and lower than the overall state statistic.

Other statistics are not significantly different.

b. Heart Disease

Heart disease is the leading cause of death in Vermont and second leading cause of death in New Hampshire after all forms of Cancer. Heart disease is closely related to unhealthy weight, high blood pressure, high cholesterol, and substance abuse including tobacco use.

Cardiovascular and Heart Disease Prevalence: This indicator reports the percentage of adults aged 18 and older who have ever been told by a doctor that they have coronary heart disease or angina (NH) or the percentage of adults who have been told they have coronary heart disease, or have had a heart attack or stroke (VT).

Area	Percent of Adults with Heart Disease (self-reported)	Percent of Adults with Cardiovascular Disease (self-reported)
White River Junction Health District		**8%**
Upper Valley Public Health Region	**2.2%+**	
Vermont		8%
New Hampshire	4.0%	

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.

+Regional statistic is significantly different and lower than the overall state statistic.

Other statistics are not significantly different.

Cholesterol Screening: High levels of total cholesterol and low density lipoprotein-cholesterol (LDL-C) and low levels of high density lipoprotein-cholesterol (HDL-C) are important risk factors for coronary heart disease. Periodic cholesterol screening for adults, particularly those with other risk factors, is a beneficial procedure for early identification of heart disease that can be treated with preventive therapy. The next table displays the proportion of adults who report that they have had their cholesterol levels checked at some point within the past 5 years.

Area	Percent of adults who have had their cholesterol levels checked within the past 5 years
White River Junction Health District	**74%**
Upper Valley Public Health Region	**74.8%**
Vermont	76%
New Hampshire	83.0%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

Heart Disease and Stroke Mortality: Coronary Heart Disease, a narrowing of the small blood vessels that supply blood and oxygen to the heart, is the largest component of heart disease mortality. The rate of death due to coronary heart disease among Upper Valley Public Health Region residents was significantly lower than the overall rate for New Hampshire over the period 2011 to 2016. Cerebrovascular disease (stroke), which happens when blood flow to a part of the brain stops, is the fifth leading cause of death in New Hampshire and in the DH-APD service area.

Area	Coronary Heart Disease Mortality (per 100,000 people, age-adjusted)	Cerebrovascular Disease Mortality (per 100,000 people, age-adjusted)
White River Junction Health District	**100.1**	**38.3**
Upper Valley Public Health Region	**62.3+**	**21.7**
Vermont	114.8	36.4
New Hampshire	94.6	27.9

Data Source: NH Division of Vital Records death certificate data, 2012-2016; VDH, 2013-2015
+Regional statistic is significantly different and lower than the overall state statistic.
Other statistics are not significantly different.

c. Diabetes

Diabetes is an increasingly prevalent chronic health condition that puts individuals at risk for further health complications, but is also amenable to control through diet and adequate clinical care.

Diabetes Prevalence: This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. The proportion of adults who report having been told they have diabetes ranges from about 6% in the Upper Valley Public Health Region of NH to 11% of adults in White River Junction Health District of VT.

Area	Percent of Adults with Diabetes
White River Junction Health District	**11%**
Upper Valley Public Health Region	**5.9%**
Vermont	8%
New Hampshire	8.6%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

Diabetes Management: This indicator reports the percentage of Medicare beneficiaries with diabetes a who have had a hemoglobin A1c (HbA1c) test, a blood test which measures blood glucose levels, administered by a health care professional in the past year. Regular HbA1C testing is important for diabetes management and prevention of diabetes-related health complications.

Area	Percent of Medicare Beneficiaries with Diabetes with Annual Hemoglobin A1c Test
DH-APD Service Area	**90.2%**
Vermont	89.9%
New Hampshire	90.3%

Data Source: Dartmouth Atlas of Health Care, 2014; accessed through Community Commons

Diabetes-related Mortality: Diabetes is the seventh leading cause of death in both Vermont and New Hampshire. The rate of death due to Diabetes Mellitus among residents in the Upper Valley Public Health Region is significantly lower than the overall rates for New Hampshire and Vermont.

Area	Deaths due to Diabetes Mellitus (per 100,000 people, age adjusted)
Windsor County	**16.1**
Orange County	**15.9**
Upper Valley Public Health Region	**9.4+**
Vermont	19.1
New Hampshire	18.2

Data Source: NH Division of Vital Records death certificate data, 2012-2016
Vermont statistics from CDC Wonder, 2013-2017
+Regional statistic is significantly different and lower than the overall state statistic.
Other statistics are not significantly different.

d. Cancer

Cancer is the leading cause of death in New Hampshire and the second leading cause of death in Vermont. Although not all cancers can be prevented, risk factors for some of the most common cancers can be reduced. It is estimated that nearly two-thirds of cancer diagnoses and deaths in the US can be linked to health-related behaviors, including tobacco use, poor nutrition, obesity, and lack of exercise.

Cancer Screening: The table below displays screening rates for colorectal cancer, breast cancer and cervical cancer. The United States Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy, in adults, beginning at age 50 years and continuing until age 75 years. The proportion of adults age 50 to 75 who are in compliance with the USPSTF recommendations (self-report) in the region is similar to the overall state rates. The proportion of women who report being in compliance with breast and cervical cancer screening recommendations are also similar to the overall state rates.

Cancer Screening Type	White River Junction Health District	Upper Valley Public Health Region	Vermont	New Hampshire
Percent of adults who are aged 50+ that met USPSTF colorectal cancer screening recommendations*	69%	78.0%	72%	74.9%
Percent of females aged 50+ who have had a mammogram in the past two years**	73%	78.0%^	79%	80.8%
Percent of females aged 18-64 who have had a pap test in the past 3 years**	91%	81.7%	86%	80.0%

*Data Source: Behavioral Risk Factor Surveillance System; NHDHHS 2015; VDH 2014 and 2016 (County), 2016 (State), ages 50-75
**Data Source: Behavioral Risk Factor Surveillance System; NHDHHS 2014; VDH 2014 and 2016 (County), 2016 (State), ages 50-74
***Data Source: Behavioral Risk Factor Surveillance System; NHDHHS 2014; VDH 2012 and 2014, ages 21-65
^Data Source: Behavioral Risk Factor Surveillance System accessed via Community Commons, composite statistic, 2006-2012
Regional rates are not statistically different from the overall state rates.

Cancer Incidence and Cancer Mortality: The table below shows cancer incidence rates by site group for the cancer types that account for the majority of new cancer cases (incidence). The incidence rates for the most common cancers are similar to the state rates, although incidence of Melanoma of the Skin is elevated in Windsor County and in the Upper Valley Public Health Region. Incidence of lung cancer and prostate cancer are lower in the Upper Valley Public Health Region, as is overall cancer incidence in comparison to NH cancer incidence statistics (2011-2015 data).

Cancer Incidence per 100,000 people, age adjusted					
	Windsor County	Orange County	Upper Valley Public Health Region	Vermont	New Hampshire
Overall cancer incidence (All Invasive Cancers)	**456.4**	**442.6**	**440.7+**	454.9	497.4
Cancer Incidence by Type					
Breast (female)	**141.2**	**115.8**	**146.0**	130.4	145.3
Prostate (male)	**90.8**	**80.8**	**82.4+**	92.0	120.9
Lung and bronchus	**61.9**	**63.5**	**46.8+**	63.3	67.3
Colorectal	**34.8**	**38.1**	**35.2**	36.1	38.8
Melanoma of Skin	**41.5***	**30.3**	**42.4***	33.1	29.7
Bladder	**22.5**	**24.6**	**22.2**	22.8	28.3

Data Source: VT Cancer Registry, 2011-2015; NH State Cancer Registry, 2011 - 2015
Data Source for Windsor and Orange County: National Cancer Institute, State Cancer Profiles, 2011 - 2015
+Regional statistic is significantly different and lower than the overall state statistic.
****Regional statistic is significantly different and higher than the overall state statistic.***
Other statistics are not significantly different.

Cancer Mortality: The table below shows the overall cancer mortality rate and for the cancer types that account for the majority of cancer deaths. As with cancer incidence, the overall cancer mortality rate and lung cancer mortality rates are lower in the Upper Valley Public Health Region in comparison to NH cancer incidence statistics (2011-2015 data).

Cancer Mortality per 100,000 people, age adjusted					
	Windsor County	Orange County	Upper Valley Public Health Region	Vermont	New Hampshire
Overall cancer mortality (All Invasive Cancers)	**160.7**	**176.4**	**128.6+**	168.6	162.3
Cancer Mortality by Type					
Lung and bronchus	**45.5**	**51.5**	**28.4+**	45.2	44.4
Pancreas	**11.9**	suppressed	**11.3**	11.1	10.7
Prostate (male)	**26.4**	**22.2**	**19.2**	20.2	20.1
Breast (female)	**18.1**	**16.5**	**18.1**	19.2	19.4
Colorectal	**9.5**	**16.4**	**11.2**	14.1	12.8

Data Source: NH State Cancer Registry, 2012 – 2016; VT Vital Statistics, 2011-2015.

Data Source for Windsor and Orange County: National Cancer Institute, State Cancer Profiles, 2011 – 2015

+Regional statistic is significantly different and lower than the overall state statistic.

Other statistics are not significantly different.

e. Asthma

Asthma is a chronic lung disease that inflames and narrows the airways. Asthma causes recurring periods of wheezing, chest tightness, shortness of breath, and coughing. Asthma is an increasingly prevalent condition that can be exacerbated by poor environmental conditions.

Asthma Prevalence: This indicator reports the percentage of adults aged 18 and older who self-report that they currently have asthma. Also displayed is the percentage of children with current asthma as reported by a parent or guardian. The reported prevalence of asthma in the region is similar to the overall proportions across each state.

Area	Percent of Children (ages 0 to 17) with Current Asthma	Percent of Adults (18+) with Current Asthma
Windsor County	**6.8%**	**10.5%**
Orange County	**12.1%**	**8.4%**
Upper Valley Public Health Region	**7.1%**	**7.6%**
Vermont	8.3%	10.6%
New Hampshire	7.2%	10.1%

Data Source: Behavioral Risk Factor Surveillance System, VDH, 2015-2016, NHDHHS, 2014-2015.
Regional statistics are not significantly different from the overall state statistics.

f. Intentional and Unintentional Injury:

Accidents and injury are the third leading cause of death in Vermont and New Hampshire. A substantial component of this circumstance is mortality related to falls in older adults, which has been increasing as the population of VT and NH ages.

Area	Fall related deaths per 100,000 people age 65 and over Age-adjusted rate
White River Junction Health District	**102.7**
Upper Valley Public Health Region	**103.8**
Vermont	118.7
New Hampshire	97.1

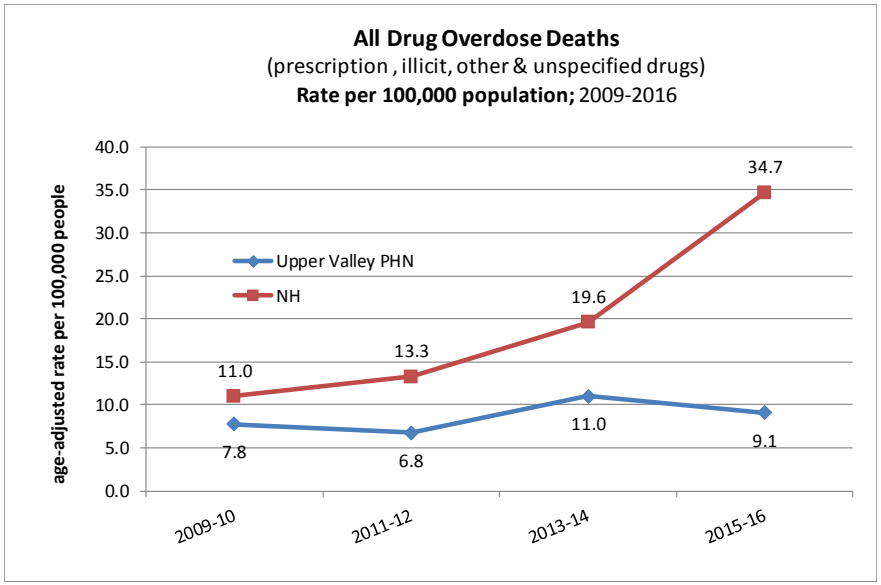
Data Source: NH Division of Vital Records death certificate data, 2012-2016; VDH, 2012-2014
Regional statistics are not significantly different from the overall state statistics.

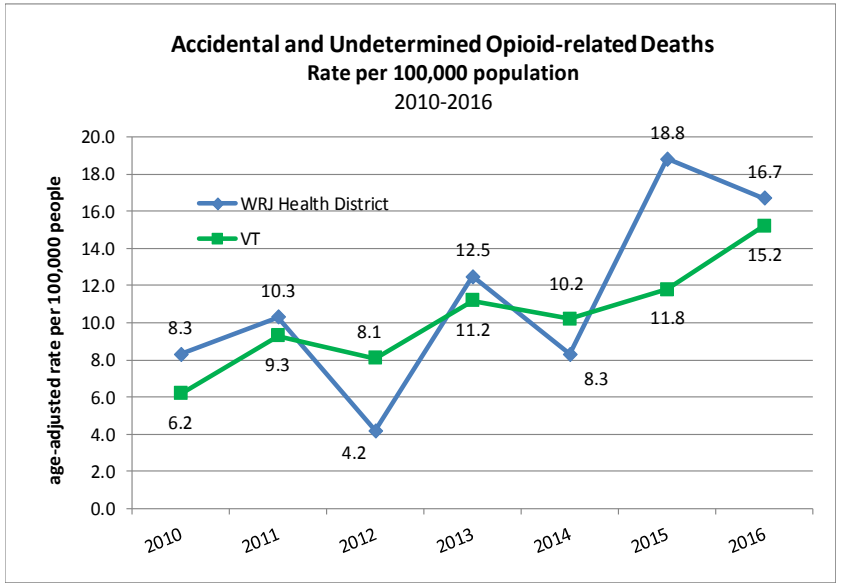
Drug Overdose Mortality: New Hampshire and Vermont have been among the hardest hit states by the epidemic of opioid-related misuse with NH ranking 3rd and Vermont ranking 20th among all states in 2016 for the number of opioid-related deaths per capita. While the rate of drug overdose deaths in the NH portion of the DH-APD service area appears to have remained below the overall rate for NH over the last several years, the rate of opioid-related fatalities in the White River Junction Health District has been increasing following a trend similar to that observed in VT overall.

Area	All drug overdose deaths (prescription , illicit, other & unspecified drugs) Age-adjusted rate per 100,000 population	Accidental and undetermined opioid-related deaths per 100,000 population
White River Junction Health District		**16.7**
Upper Valley Public Health Region	**9.1+**	
Vermont		15.2
New Hampshire	34.7	

Data Source: NH Division of Vital Records death certificate data, 2015-2016; Vermont Agency of Human Services, 2016

***Rate is statistically different and lower** than the overall NH rate; WRJ Health District rate is not significantly different than the VT state rate.





NH Division of Vital Records death certificate data

Vermont Agency of Human Services, Vital Records data

Suicide: This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 people. Suicide rates can be an indicator of access to mental health care. During the period 2012 to 2016, the suicide rate in the region was similar to the overall rate of suicide deaths in Vermont and New Hampshire.

Area	Suicide Deaths per 100,000 people; any cause or mechanism
White River Junction Health District	**15.3**
Upper Valley Public Health Region	**15.7**
Vermont	14.0
New Hampshire	15.3

Data Source: NH Division of Vital Records death certificate data, 2012-2016; VDH, 2013-2015
Regional statistics are not significantly different from the overall state statistics.

g. Premature Mortality

An overall measure of the burden of preventable injury and disease is premature mortality. The indicator below expresses premature mortality as the total years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. During the period 2014 to 2016, 662 deaths in Windsor County and 568 deaths in Sullivan County occurred before the age of 75.

Area	Years of potential life lost before age 75 per 100,000 population (age-adjusted)
Grafton County, NH	**5,138+**
Sullivan County, NH	**6,557**
Orange County, VT	**5,424**
Windsor County, VT	**5,993**
Vermont	5,732
New Hampshire	5,867

Data source: National Center for Health Statistics, National Vital Statistics System accessed via County Health Rankings, 2014-2016.
+Regional statistic is significantly different and lower than the overall state statistic.
Other statistics are not significantly different.

5. Comparison of Selected Community Health Indicators between 2016 and 2019

The table below displays comparisons of key community health status indicator estimates between the current community health assessment and the previous assessment completed in 2016, as well as the most recent statewide statistic for each indicator. Statistics that suggest improvement from the prior assessment are highlighted in green and those that suggest declines from the previous assessment are highlighted in red. These comparisons are provided for general informational purposes and in some cases are based on calculation of composite estimates that apportion sub-regional percentages / rates by overall service area population. It is important to note that many of the observed differences between years and between regional and state statistics are not significantly different unless noted.

Table 13: Comparison of Selected Community Health Indicators between 2016 and 2019

Community Health Indicator	Geographic Area	2016 Community Health Assessment	2019 Community Health Assessment	State Comparisons (most recent statistics available)	
Access to care				VT	NH
Percentage of population without health insurance coverage	DH-APD Service Area	8.2%	**7.1%**	5.3%	8.4%
Do not having a personal doctor or health care provider, percent of adults	DH-APD Service Area	13%	14%	12%	13%
Have not visited a dentist or dental clinic in the past year, percent of adults	DH-APD Service Area	27%	26%	29%	30%
Health Promotion and Disease Prevention					
Current smoking, percent of adults	DH-APD Service Area	18%	**11%***	18%	16%
Physically inactive in the past 30 days, % of adults	DH-APD Service Area	19%	18%	18%	21%
Binge drinking, percent of adults	DH-APD Service Area	18%	**15%**	18%	17%
Teen Birth Rate, per 1,000 Women Age 15-19	DH-APD Service Area	9.4	10.4*	16.8	11.0

Community Health Indicator	Geographic Area	2016 Community Health Assessment	2019 Community Health Assessment	State Comparisons (most recent statistics available)	
Health Outcomes				VT	NH
Obesity, percent of adults	DH-APD Service Area	26%	**22%***	28%	27%
Ever told had diabetes, percent of adults	DH-APD Service Area	7%	8%	8%	9%
Current asthma, percent of adults	DH-APD Service Area	11%	**9%**	11%	10%
Coronary Heart Disease Mortality, per 100,000 people, age-adjusted	UV PHN	71.6	**62.3***	114.8	94.6
	WRJ Health District	99.7	100.1		
Cancer Incidence, All sites, per 100,000 people, age-adjusted	UV PHN	469.0	**440.7***	454.9	497.4
	Orange County	NA	442.6		
Cancer Deaths, All Sites, per 100,000 people, age-adjusted	UV PHN	127.2	128.6*	168.6	162.3
	Orange County	192.1	**176.4**		

* The NH sub-population component of this estimate is significantly lower than the overall NH state statistic.