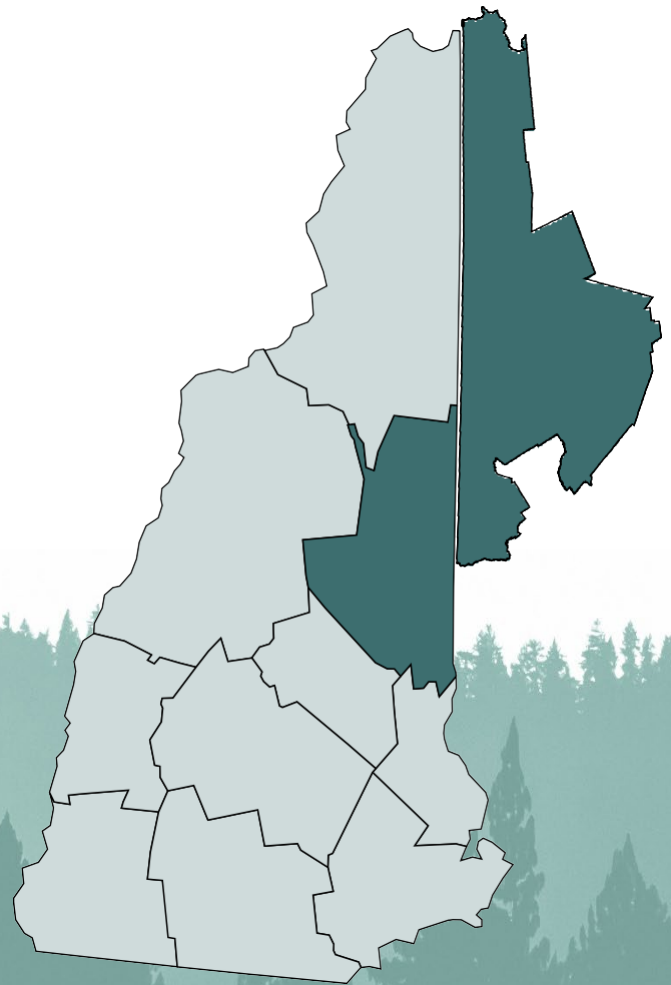


CARROLL COUNTY

Mt. Washington Valley Community Health Needs Assessment Report

2022



COVID-19 AND OUR HEALTH

While our quantitative data pre-dates the COVID-19 pandemic, the 2021 community health needs assessment outreach took place during the pandemic, and participants noted its impacts in deep and meaningful ways. It was impossible not to recognize the pandemic's impacts on healthcare, health outcomes, behavioral health, and social support systems, especially for those who experience systemic disadvantages.

Challenges in accessing care have impacted chronic disease management and caused delays in non-emergency procedures. Rates of those seeking medical care for even acute health events such as heart attack, stroke, and uncontrolled high blood sugar were low during the early phase of the pandemic due to COVID-19 concerns. This occurred even while the use of telemedicine increased (Kendziersa et al). Later in the pandemic, health care usage data from July 2020 through July 2021 show that increases in ICU bed occupancy were followed weeks later by a higher number of deaths not caused by COVID than typically seen before the pandemic. ICU bed occupancy had exceeded 75% of capacity nationwide for at least 12 weeks as of October 25, 2021. (French G, et al, MMWR).

Previous disasters have shown that the secondary impacts on population health are long-lasting. For instance, 10 years after Hurricane Katrina, Tulane University Health Sciences Center saw a significant increase in heart disease and related risk factors such as increases in A1C levels, blood pressure, and LDL cholesterol (Fonseca, et al, NCBI). The after-effects of disasters such as the Iraqi occupation of Kuwait in 1990, the London bombings in 2005, and the tidal waves and nuclear meltdown in Fukushima, Japan in 2011 have revealed the need for immediate as well as long-term mental health care (McFarlane).

Emerging concerns on the lasting impacts of this pandemic also include the long-term effects of COVID infection as our newest chronic disease. A recent systematic review estimates that more than half of COVID-19 survivors worldwide continue to have COVID-related health problems six months after recovery from acute COVID-19 infection (Groff et al). New evidence shows increases in adult diagnoses of diabetes, the risk for diabetes among children, and worsening diabetes among those who already had diabetes after COVID-19 infection (Barrett, MMWR).

There are some concerns that the pandemic has had negative impacts on health behaviors. However, the evidence is not yet clear. In New Hampshire, newly available 2020 Behavioral Risk Factors Surveillance System (BRFSS) data on a few key measures give us an early snapshot of the health of adults in the first year of the pandemic. These data do not show any evidence of adverse impacts on trends in smoking, alcohol use, overweight, and obesity, or physical activity.

The pandemic is affecting different segments of the population more than others. The August 2021/COVID Resilience Survey showed that younger people, people of color, and those with lower incomes all had elevated stress. (American Psychological Association). Thus, the findings in the 2022 CHNA Report which show the most often identified priorities such as mental health, substance use, access to care, and social determinants of health take on new meaning and an increased sense of urgency.

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INTRODUCTION

Memorial Hospital, a member of the MaineHealth family, is a not-for-profit 25-bed Critical Access Hospital located in North Conway, New Hampshire. Memorial's staff and providers are committed to meeting the health needs of the Mt. Washington Valley and Western Maine mountain communities through the delivery of accessible, comprehensive, compassionate, and quality health care.

The Memorial Hospital Community Health Needs Assessment (CHNA) is part of the commitment by MaineHealth to turn data into actions to improve the health of all Mt. Washington Valley residents. This is part of a larger effort within all 12 of the counties between Maine and New Hampshire that are served by members of the MaineHealth network within their service areas. This is the fourth CHNA Memorial Hospital has conducted in collaboration with the Mt. Washington Valley Community Health Collaboration.

The mission of the CHNA is to:

- Create the final CHNA Report,
- Engage and activate communities, and
- Support data-driven health improvements within Mt. Washington Valley and Western Maine

This report, as well as past CHNA reports and implementation plans, can be found on the MaineHealth Community Health Needs Assessment web page (www.mainehealth.org/chna).

Key Companion Documents can be found at the MaineHealth Community Health Needs Assessment web page www.mainehealth.org/chna

- Carroll County Health Profile is listed in the section labeled "Memorial Hospital and Carroll County (New Hampshire)."
- Oxford County Health Profile (listed in the section labeled "Stephens Memorial Hospital and Oxford County."

EXECUTIVE SUMMARY

LEADING CAUSES OF DEATH

One way to view the top health priorities is to consider their contributions to Carroll County's morbidity, mortality, and overall quality of life issues. It is important to note Carroll County's leading causes of death in order to put the community-identified health priorities into perspective. This includes underlying causes of death such as tobacco use, substance use, and obesity.

Table 1: Leading Causes of Death

RANK	NEW HAMPSHIRE	CARROLL COUNTY
1	Cancer	Heart Disease
2	Heart Disease	Cancer
3	Unintentional Injury	Unintentional Injury
4	Chronic Lower Respiratory Disease	Chronic Lower Respiratory Disease
5	Stroke	Stroke

TOP HEALTH PRIORITIES

Participants of the Carroll County forum have identified the following health priorities.

Table 2: Top Health Priorities for Carroll County

PRIORITIES	% OF VOTES
Mental Health	69%
Access to Care	62%
Social Determinants of Health	58%
Substance Use	38%

The county identified similar top four priorities in the 2021 engagement process as was in 2018.

Table 3: Top Health Priorities for County/State

PRIORITIES	2018	2021
Mental Health	✓ ●	✓ ●
Access to Care	✓ ●	✓ ●
Social Determinants of Health	✓ ●	✓ ●
Substance Use	✓ ●	✓ ●
Older Adult Health	✓ ●	
Physical Activity, Nutrition, and Weight	●	

✓ County Priority ● State Priority

Common themes identified by participants in 2021 include an emerging mental health crisis; challenges in access to healthcare, including mental health providers; issues related to poverty, transportation,

and other social determinants of health in a rural state; and increasing rates of substance use.

The following pages describe each of these priorities in more detail including the **major health concerns** identified by participants in the community engagement process. There is a description of community identified resources available to address those concerns as well as any related gaps or needs. Where available, there is also information for certain groups that are at higher risk due to systemic disadvantages. Finally, following the sections that discuss each of the health priorities is a listing of other health issues that were raised by community members but were not identified as priorities.

DEMOGRAPHICS

Carroll is a rural county, with lower income and educational attainment and higher rates of those living in poverty or with a disability. Much of the population is at or near retirement age.

Table 4. Selected Demographics

	COUNTY	STATE
Population numbers	49,167	1.36M
Median household income	\$63,153	\$76,768
Unemployment rate	7.7%	6.7%
Individuals living in poverty	9.0%	7.6%
Children living in poverty	15.5%	17.5%

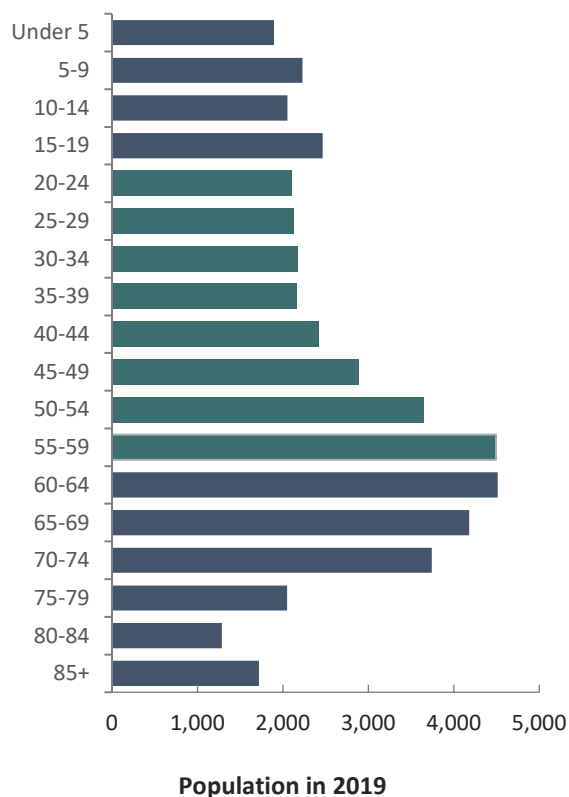
Table 4. Selected Demographics (continued)

	COUNTY	STATE
65+ living alone	21.8%	22.0%
Associate's degree or higher (age 25+)	33.6%	34.7%
Gay, lesbian and bisexual (adults)	-	-
Persons with a disability	16.4%	15.6%
Veterans	11.9%	10.0%

Table 5. Race/Ethnicity in Carroll County

	PERCENT	NUMBER
American Indian/Alaskan Native	0.1%	31
Asian	0.7%	327
Black/African American	0.5%	226
Native Hawaiian or other Pacific Islander	-	-
White	97.2%	46,773
Some other race	0.1%	56
Two or more races	725	1.5%
Hispanic	1.5%	713
Non-Hispanic	98.5%	48,454

Figure 1. Age distribution for Carroll County



HEALTH EQUITY

There is significant agreement between the priorities chosen during Maine's 16 county forums and those identified through community sponsored events and oral surveys. The underlying causes for those who may experience systemic disadvantages differ depending on local resources and the unique characteristics and cultural norms of each sub-population. These differences are best identified through further collaboration at the community level.

For a detailed look at what priority health topics were identified in the other 16 counties within the MaineHealth Service area, as well as any gaps or barriers and resources or assets, please see the MaineHealth Community Health Needs Assessment web page (www.mainehealth.org/chna).

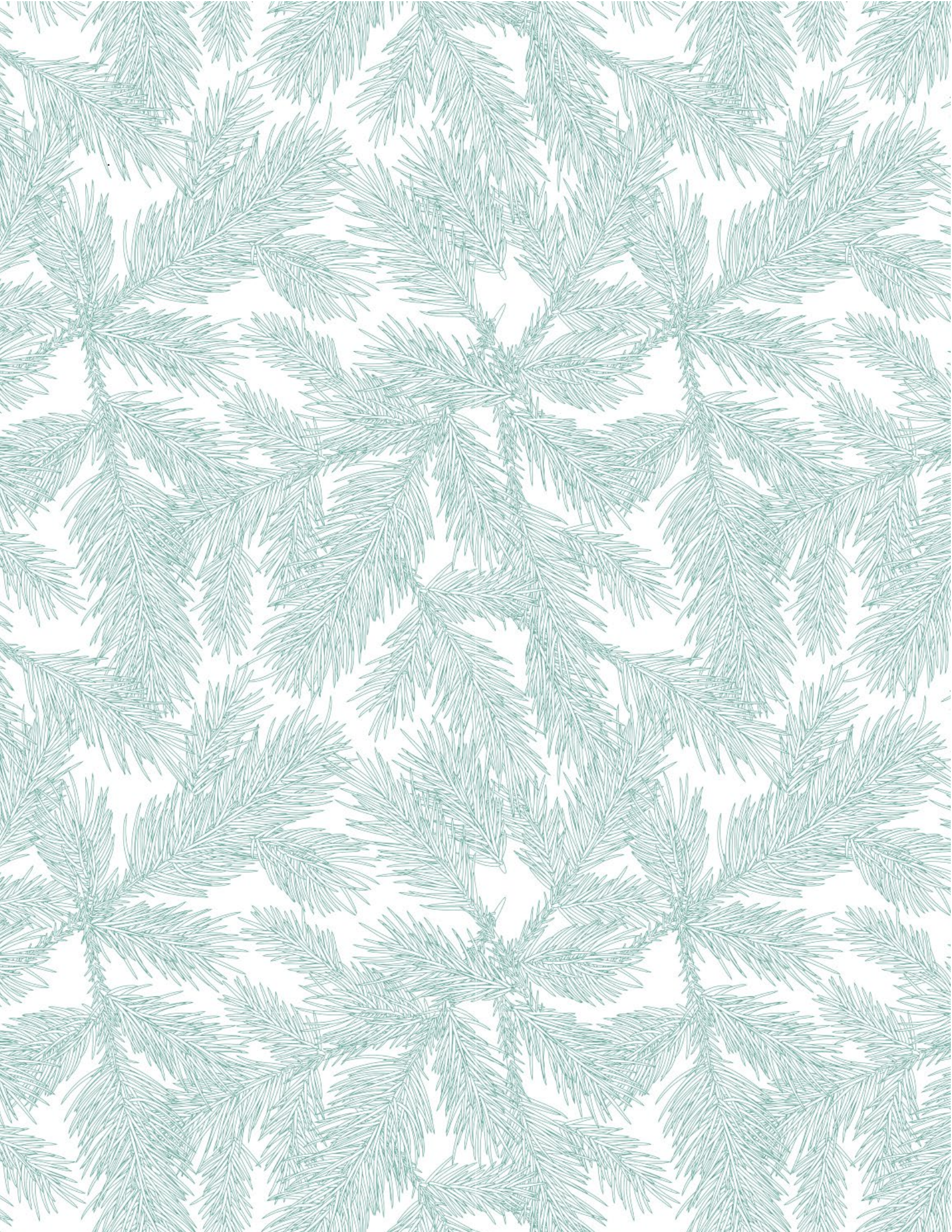
For a quantitative look at how these differences affect health outcomes, see the Health Equity Data Sheets, produced by the Maine Shared CHNA collaborative (www.mainehealth.org/chna).

NEXT STEPS

This assessment report will be used to fulfill the Internal Revenue Service (IRS) requirements for non-profit hospitals as well as the Public Health Accreditation Board (PHAB) requirements for state and local public health departments. Next steps include:

- For hospitals, create an informed implementation strategy designed to address the identified needs.
- For the New Hampshire CDC, create an informed State Health Improvement Plan.

This report will also be used by policymakers, non-profits, businesses, academics, and community partners to support strategic planning, coalition building, and grant writing. Taken together, these steps can lead to New Hampshire becoming the healthiest state in the nation.



PRIORITY: MENTAL HEALTH

KEY TAKEAWAYS FOR CARROLL COUNTY

Mental Health was the top priority identified in Carroll County. It was also identified as a top health priority among underserved communities and in all other counties participating in the shared needs assessment process. Mental health includes emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices.¹

“The mental health system is a big concern, highlighted by the Emergency Department utilization rates for mental health patients.”

Availability of mental health providers in Carroll County was the most frequently mentioned concern related to mental health. Community forum participants noted the long waitlists for mental health services, the low availability of mental health providers in the area for outpatient care, and the lack of inpatient psychiatric beds for ongoing treatment.

Nearly half of the community forum participants identified the use of the **Emergency Department** to address mental health needs in Carroll County as a concern. The mental health emergency department rate per 10,000 population in Carroll County in 2019 was 482.2. This rate was significantly higher than the state (362.0) over that same period and has significantly increased since 2017 (268.5). Community members noted that mental health issues could likely be better addressed and managed through regular preventative and primary care.

Community forum participants expressed concerns about an increase in mental and behavioral health issues in Carroll County, especially since the pandemic. Depression, anxiety, and sadness/hopelessness in youth were frequently mentioned concerns related to mental health. Recent estimates show that 18.6% of adults in Carroll County have experienced **depression in their lifetime**. The rate of Carroll County youth reporting feeling **sad and hopeless** is 36.4%. This rate is not significantly different than the state overall.

Those with a mental health diagnosis noted extremely long waitlists for services, highlighting a need for more high-quality mental health services. Participants also suggested the need for more case management, supportive, and wrap-around services, as those with a mental health diagnosis required varied and nuanced care and treatment.

Youth with disabilities who experience mental health issues are a particularly vulnerable population. They require access to providers who can connect and communicate in ways to meet their unique needs.

A lack of mental health treatment options (especially inpatient psychiatric care) and lack of providers in the area were two of the most frequently mentioned gaps/barriers related to mental health in Carroll County. Community resources in Carroll to address mental health issues include Self-Management and Recovery Training (SMART) Recovery, mobile crisis services, 9-8-8 behavioral line, peer support services, and the Dementia Care Grant.

¹ Centers for Disease Control and Prevention. Available from: <https://www.cdc.gov/mentalhealth/index.htm>

MAJOR HEALTH CONCERNS FOR CARROLL COUNTY

INDICATOR	CARROLL COUNTY			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	New Hampshire	+/-	U.S.	+/-
MENTAL HEALTH							
Ratio of population to psychiatrists	—	²⁰¹⁸ 24,455.0	N/A	²⁰¹⁸ 6,383.6	N/A	—	N/A
Mental health emergency department rate per 10,000 population	²⁰¹⁷ 268.5	²⁰¹⁹ 482.2	!	²⁰¹⁹ 362.0	!	—	N/A
Depression, lifetime	²⁰¹⁶ 26.7%	²⁰¹⁸ 18.6%	○	²⁰¹⁸ 20.7%	○	²⁰¹⁷ 19.1%	N/A
Sad/hopeless for two weeks in a row (high school students)	—	²⁰¹⁹ 36.4%	N/A	²⁰¹⁹ 33.6%	○	—	N/A
Seriously considered suicide (high school students)	—	²⁰¹⁹ 20.5%	N/A	²⁰¹⁹ 18.4%	○	—	N/A

COMMUNITY RESOURCES TO ADDRESS MENTAL HEALTH

Community members identified community collaboration, multiple available treatment options and an increased number of trauma-informed organizations as assets available for the Carroll County community. The community also identified barriers to care, including a lack of mental health providers, a need for additional youth mental health services, a lack of focus on prevention, and the potential serious consequences of untreated mental health issues as ongoing challenges Carroll County will need to overcome.

The following information was gathered from participants during a group activity, where participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities with regard to the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 6. Gaps/Needs and Available Resources (Mental Health)

AVAILABLE RESOURCES	GAPS/NEEDS
<p>Community Cohesion Strong relationships between Memorial Hospital and Mental health organizations (2) Community collaboration (2) Community Organizations, self-help groups (AA, NA, Self-Management and Recovery Training (SMART) Recovery)</p> <p>Providers Mobile crisis service development (4) Psychiatric nurse practitioner added to support the Emergency Department Improving access to peer counseling and support workers Upcoming 9-8-8 behavioral line (2) Formation of behavioral health crisis response team (3) Peer Support via Recovery</p> <p>Additional Funding Working with the Dementia Care Grant and increasing visibility and awareness Increased number of organizations that are trauma-informed (4)</p>	<p>Providers Lack of providers (7) Lack of inpatient psychiatric beds for ongoing treatment (10) Lack of coverage for MH services Lack of case management services (2) Workforce shortages (3)</p> <p>Barriers to care Lack of therapists Long waitlist for MH services (4) Increased social isolation (2) Lack of continuity of care (2) Stigma surrounding mental illness (2)</p> <p>Youth Teen education Services for pediatric population</p> <p>Funding/resources Lack of resources for aging population (2) Need to improve insurance covered providers</p> <p>Awareness/Advocacy Lack of knowledge around developmental delay and intellectual disability diagnoses People returning to unsupportive environments after receiving help (2)</p>

PRIORITY: ACCESS TO CARE

KEY TAKEAWAYS FOR CARROLL COUNTY

Access to care was identified as the second top priority in Carroll County. It was also identified as a top health priority among underserved communities and in all other counties participating in the shared needs assessment process. Access to care means having the timely use of health services to achieve the best possible health outcomes. It consists of four main components: availability of coverage, services, timeliness, and workforce.²

In Carroll County, community members noted that workforce issues lead to a lack of providers, long wait times, and delayed care. A number of barriers to access were identified, including transportation, cost of care, insurance issues, and a lack of health literacy. Additional telehealth services have helped to improve access, but it also creates a new barrier to overcome for those who have limited broadband or access to the internet or who are not tech-savvy.

A lack of **health insurance** was the top health concern mentioned by community members when it comes to access to care. The rate of **uninsured** individuals in Carroll County declined from 10.6% in 2017 to 8.8% in 2019. However, the uninsured rate in the county was higher than the state (5.8%) in 2019.

“Telehealth has been identified as a way to improve access, but a new barrier to overcome for those who have limited broadband or aren’t tech-savvy.”

Cost barriers to care was the second most frequently identified health concern related to access to care. In 2018, 11.1% of adults in the county

reported that there was a time during the last 12 months when they needed to see a doctor but could not because of the cost. This is slightly higher than the state overall (10.6%).

The **lack of providers** in the area and the rural nature of the county creates long travel distances to receive care as well as lengthy delays to establish care. The ratio of population to primary care physicians in Carroll County was 1,358.6 during the 2019-2020 time period. This is slightly higher than the state overall (1,073.2). In addition, one-in-six community forum participants noted **primary care visits more than 30 miles from the patient's home** was a concern. Given these long travel distances, **transportation** was identified as a top need in Carroll County to help improve access (mentioned by 20 forum participants).

The percentage of adults with a **visit to any primary care provider in the past year** was 77.9% in 2018. This rate is similar to the state overall. Adults in the county who had a **usual primary care provider** decreased from 88.7% in 2016 to 80.1% in 2018. This rate is also lower than the state overall (86.0%).

Despite the challenges that Carroll County faces with access to care, community forum participants noted the area has resources specifically for seniors such as the Dementia Capable Community Grant, Mount Washington Valley (MWV) Adult Day Center, and Matter of Balance, as well as others including Northern Carroll County Provider Network, White Mountain Community Health Center and telehealth.

² Chartbook on Access to Health Care, Agency for Healthcare Research and Quality. Available from: <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/access/elements.html>

MAJOR HEALTH CONCERNS FOR CARROLL COUNTY

INDICATOR	CARROLL COUNTY			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	New Hampshire	+/-	U.S.	+/-
ACCESS							
Uninsured	2017 10.6%	2019 8.8%	N/A	2019 5.8%	N/A	2019 9.2%	N/A
Cost barriers to health care	2016 12.3%	2018 11.1%	○	2018 10.6%	○	2016 12.0%	N/A
Ratio of population to primary care physicians	—	2019-2020 1,358.6	N/A	2019-2020 1,073.2	N/A	—	N/A
Primary care visit to any primary care provider in the past year	2016 77.7%	2018 77.9%	○	2018 77.9%	○	2017 70.4%	N/A
Medicaid enrollment (all ages)	—	2020 18.4%	N/A	2020 15.5%	N/A	2020 24.1%	N/A
Medicaid enrollment (ages 0-19)	—	2020 —	N/A	2020 5.6%	N/A	—	N/A
Usual primary care provider (adults)	2016 88.7%	2018 80.1%	○	2018 86.0%	○	2017 76.8%	N/A

COMMUNITY RESOURCES TO ADDRESS ACCESS TO CARE

Available resources in Carroll County to address issues related to access to care include community cohesion and collaboration, the presence of community organizations which increase access to care, emerging technologies, alternatives to in-office care, health care education, and a development plan for the health care workforce. Community members were also able to identify potential barriers to care. These included limited numbers of healthcare providers, a lack of specialist services, the need for transportation resources in an extremely rural area, and a lack of resources for youth healthcare.

The following information was gathered from participants during a group activity, where participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities with regard to the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 7. Gaps/Needs and Available Resources (Access to Care)

AVAILABLE RESOURCES	GAPS/NEEDS
Community Cohesion Advanced accessibility to care (2) White Mountain Community Health Center (3) Palliative Care program at Visiting Nurse Home Care and Hospice (VNHCH) Visiting nurses delivering vaccines to home Northern Carroll County Provider Network exchanges information (2) Population Health programs suspended during covid that could be reinstituted (i.e., Matter of Balance, Let's Go)	Transportation Transportation (23) Far distance of provider offices from home (2)
Community Organizations & Programs Expanded primary care hours Valley Independent Pharmacy, pre-filling bubble packs and will accommodate patients' needs Strong community Collaboration is strong asset of this community Ongoing access to testing and vaccines for COVID 19 at Memorial Mount Washington Valley (MWV) Adult Day Center (2)	Providers Lack of providers in general (3) Lack of primary care providers (4) Lack of appointment availability for primary care and MH (2)
Technology Advances in telehealth services (3) More use of telehealth services (3)	Specialty Care Lack of specialty providers
Funding & Insurance Insurance is back billable (2) Dementia Capable Community Grant	Education Not enough benefit access trainings specific to individual programs Lack of literacy (2) Workforce training and financial support for health aides and LNA's Need caregiver training and support
Workforce Development Memorial Hospital hired several primary care providers (3) Hiring more providers in general (4)	Barriers to Care Lack of insurance (3) High premiums and deductibles (4) Lack of preventative care and screening access Cost of care (4) Cost of prescriptions Confusing and different insurance rules (2) Technology barriers to accessing telehealth in general (3) Lack of broadband internet access (3) Need more telehealth appointments Accessibility of services and limited services (3) People must be extremely low income to be covered by Medicaid (2) Lack of trust
Youth 110 beds are to be opened at Hampstead Hospital for both adults and children	

PRIORITY: SOCIAL DETERMINANTS OF HEALTH

KEY TAKEAWAYS FOR CARROLL COUNTY

Social determinants of health was selected as a top priority in Carroll County. It was also identified as a top health priority among underserved communities and in 14 other counties participating in the shared needs assessment process.

Social determinants of health are the conditions in which people live, learn, work, play, worship, and age. Domains include education, economic stability, health care access and quality, the environment, and social connectedness. Examples include access to healthy food, housing, water, air, and relationships.³ Differences in social determinants can create disparities that impact vulnerable populations and rural areas like Carroll County.

Community forum participants noted poverty and a lack of affordable housing as the most significant barriers in the community. They also expressed concerns about transportation, food insecurity, as well as childcare issues.

“There’s a recognition that these issues underlie and may often be the root cause of poor health outcomes.”

Poverty was the most frequently mentioned health concern related to social determinants of health in Carroll County. According to recent estimates, 9.0% of individuals and 15.5% of children in Carroll County live in poverty. This is higher than the state overall for both individuals (7.3%) and children (9.2%). Forum participants noted several local programs available that provide food and meals to those experiencing food insecurity.

The cost of housing and housing insecurity were the second and third most frequently mentioned health concerns. About two-in-five forum

participants noted that residents spending more than **half of their income on housing** was a concern. From 2015-2019, 13.6% of Carroll County households spent more than 50% of their income on housing. This is significantly higher than the state (12.1%) over that same time period.

Older adults living alone was the fourth most frequently mentioned health concern in Carroll County. According to recent estimates, 22.0% of adults 65 years and older in the county were living alone. This is similar to the percentage of older adults in the state who live alone (24.7%).

Rurality and lack of vehicles for households were also identified as a concern related to social determinants of health. All of Carroll County is classified as rural. A lack of transportation was identified as a barrier by community members, suggesting the need for improved transportation services, especially for those who lack a vehicle.

Community members facing systemic disadvantages can be especially impacted by social determinants of health. Individuals with disabilities are impacted by a lack of transportation and face issues of discrimination. Black or African Americans noted issues related to poverty, unemployment, and food insecurity. Older adults often live on limited incomes and must rely on the support of others as well as face barriers related to transportation and food insecurity.

Resources identified by forum participants to address issues related to social determinants of health in Carroll County include New Hampshire Bank Mobile Food Pantry, Gibson Center, Family Resource Center at Children Unlimited, Inc, and peer support services.

³ Healthy People 2030, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. Available from: <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

MAJOR HEALTH CONCERNS FOR CARROLL COUNTY

INDICATOR	CARROLL COUNTY			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	New Hampshire	+/-	U.S.	+/-
SOCIAL DETERMINANTS OF HEALTH							
Individuals living in poverty	2013-2017 9.1%	2015-2019 9.0%	N/A	2015-2019 7.3%	N/A	2019 12.3%	N/A
Children living in poverty	2017 11.5%	2019 15.5%	N/A	2019 9.2%	N/A	2019 16.8%	N/A
Households that spend more than 50% of income toward housing	—	2015-2019 13.6%	N/A	2015-2019 12.1%	!	—	N/A
Persons 65 years and older living alone	2013-2017 21.8%	2015-2019 22.0%	N/A	2015-2019 24.7%	N/A	2019 26.6%	N/A
No vehicle for the household	2017 4.8%	2019 4.7%	N/A	2019 5.1%	N/A	2019 4.3%	N/A
Median household income	2017 \$58,139.0	2019 \$63,153.0	N/A	2019 \$76,768.0	N/A	2019 \$65,712	N/A
Children eligible for free or reduced lunch	2017 39.0%	2020 34.0%	N/A	2020 26.0%	N/A	2017 15.6%	N/A
Unemployment	2019 2.6%	2020 7.7%	N/A	2020 6.7%	N/A	2020 8.1%	N/A
Access to broadband	—	2015-2019 87.0%	N/A	2015-2019 88.0%	N/A	2017 90.4%	N/A
People living in rural areas	—	—	N/A	2010 20.6%	N/A	—	N/A
High school student graduation	2017 95.0%	2021 94.0%	N/A	2021 89.0%	N/A	2019 87.1%	N/A
Associate's degree or higher among those age 25 and older	2017 33.6%	2019 34.7%	N/A	2019 33.3%	N/A	2019 41.7%	N/A
Commute of greater than 30 minutes driving alone	2017 34.0%	2019 34.8%	N/A	2019 38.6%	N/A	2019 37.9%	N/A

COMMUNITY RESOURCES TO ADDRESS SOCIAL DETERMINANTS OF HEALTH

Carroll County community members point to several resources available that improve social determinants of health. These include many resources available to assist residents with accessing healthy foods, community cohesion, and youth services. However, community members also identified several challenges related to social determinants of health, including high levels of poverty, lack of resources for housing and transportation, and a lack of childcare resources.

The following information was gathered from participants during a group activity, where participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities with regard to the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 8. Gaps/Needs and Available Resources (Social Determinants of Health)

AVAILABLE RESOURCES	GAPS/NEEDS
Community Cohesion Support to families through family liaisons (2) Family Resource Center at Children Unlimited (2) Community partnerships across sectors Acknowledgement of SDOH challenges within business & non-profit community Gibson Center programming (2) Senior resource coordinator position at Freedom	Poverty Low income Cost of insurance (4) Housing Lack of affordable housing (25) Housing instability Homelessness
Substance Use Recovery Peer Support via Recovery Community Organizations, self-help groups (AA, NA, SMART Recovery)	Youth/families Lack of childcare options (5) Social media influence on youth Lack of school education for many people Difficult for parents and caregivers to balance work, school, and childcare costs
ACEs/Trauma/Resiliency Determinants increased attention to intergenerational programs such as music and memory	Barriers to care Low wage jobs w/out benefits (2) Access to parks, rec areas, outdoor spaces Language barriers
Food Food insecurity screening Food pantries (4) NH Food Bank Mobile Food Pantry (3) End 68 Hours of Hunger (3) Food Insecurity Program at MWVRHC (2)	Services Recreational opportunities for seniors Re-entry programs for parolees (2) Lack of pandemic readiness Access to parks, rec areas, outdoor spaces More prevention services are needed to address root causes (2)
Youth Age friendly initiative to address SDOH (2) Addition of social workers in local school (2)	Transportation Lack of programs to help with car repair, insurance, payments, registration Lack of or barriers to transportation (6)

Table 8. Gaps/Needs and Available Resources (Social Determinants of Health - Continued)

AVAILABLE RESOURCES	GAPS/NEEDS
	<p>Isolation Social isolation (2) People from different age groups are disconnected from each other</p> <p>Education Lack of healthcare knowledge Services for developmentally disabled individuals Increase training in SMART technology for homes and cars</p> <p>Technology Unreliable broadband</p> <p>ACEs Increase ACEs awareness</p>

PRIORITY: SUBSTANCE & ALCOHOL USE

KEY TAKEAWAYS FOR CARROLL COUNTY

Substance and Alcohol Use was selected as a top priority in Carroll County. It was also identified as a top health priority among underserved communities and in all other counties participating in the shared needs assessment process. Recurring use of alcohol and/or drugs can cause clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. Substance and Alcohol Use has also been linked to co-occurring mental health issues such as anxiety, depression, and attention deficit/hyperactivity disorder (ADHD), among others.⁴

Hospital utilization was the most frequently mentioned health indicator for substance and alcohol use. In 2019, the rate of opiate poisoning hospitalizations per 10,000 population in Carroll County was 10.7. This is significantly lower than the rate in 2017 (19.7).

“There has been major work done in the area of opioids and overdose prevention, which was reflected in changing numbers.”

Overdose deaths were the second most frequently mentioned health concern for substance and alcohol use in Carroll County. In 2020, the rate of overdose deaths per 100,000 population in Carroll County was 26.4. The rate in New Hampshire overall was 30.5 in 2020.

Community forum participants expressed concerns about alcohol use health indicators, including **chronic heavy drinking, alcohol-induced**

deaths, and alcohol-impaired driving deaths.

Participants noted changing societal norms around drug use and increased access, coupled with a lack of early intervention and education. The rate of alcohol-induced deaths in Carroll County was 14.2 per 100,000 residents between 2020. This is not significantly different than the state overall (14.6). Chronic heavy drinking among Carroll County adults was 8.6% in 2018 while the rate for **youth binge drinking** was 19.4%. The latter is significantly higher than the state overall (14.4%) over the same time period.

Community members facing systemic disadvantages, including the formerly homeless or homeless, low-income adults, and the LGBTQ+ community mentioned a lack of treatment and recovery resources in the state. They noted a lack of harm-reduction programming, a need for supportive living environments, and skill-building programs for independent living.

Common barriers to addressing substance and alcohol use in Carroll County are the need for more prevention services and challenges with accessing treatment providers and programs, such as Medication Assisted Treatment (MAT). Resources to address the issue in the area include peer recovery support groups, White Horse Recovery, Memorial Hospital's New Life Program, and Memorial Hospital's Integrated Medication-Assisted Treatment Program, among others.

⁴ Mental Health and Substance Use Disorders. Substance Abuse and Mental Health Services Administration (SAMHSA). Available from: <https://www.samhsa.gov/find-help/disorders>

MAJOR HEALTH CONCERNS FOR CARROLL COUNTY

INDICATOR	CARROLL COUNTY			BENCHMARKS			
	POINT 1	POINT 2	CHANGE	New Hampshire	+/-	U.S.	+/-
SUBSTANCE USE							
Overdose deaths per 100,000 population	2015 46.4	2020 26.4	○	2020 30.5	○	2019 21.5	N/A
Alcohol-induced deaths per 100,000 population	2017 —	2020 14.2	N/A	2020 14.6	○	2019 10.4	N/A
Alcohol-impaired driving deaths per 100,000 population	2015 2.1	2019 4.1	N/A	—	N/A	2019 3.1	N/A
Chronic heavy drinking (adults)	2016 6.8%	2018 8.6%	○	2018 7.3%	○	2017 6.2%	N/A
Binge drinking (adults)	2015 17.7%	2018 15.6%	○	2018 16.2%	○	2017 17.4%	N/A
Past-30-day marijuana use (adults)	2017 11.3%	2018 14.2%	○	2018 9.4%	○	—	N/A
Past-30-day alcohol use (high school students)	—	2019 32.1%	N/A	2019 26.8%	○	—	N/A
Binge drinking (high school students)	—	2019 19.4%	N/A	2019 14.4%	!	—	N/A
Past-30-day marijuana use (high school students)	—	2019 33.0%	N/A	2019 26.1%	!	—	N/A
Past-30-day misuse of prescription drugs (high school students)	—	2019 4.1%	N/A	2019 4.3%	○	—	N/A
Overdose emergency medical service responses per 10,000 population	2016 45.7	2020 28.1	N/A	2020 49.8	N/A	—	N/A
Opiate poisoning emergency department rate per 10,000 population	2017 19.7	2019 10.7	★	2019 13.8	○	—	N/A
Opiate poisoning hospitalizations per 10,000 population	2017 6.3	2019 4.1	○	2019 6.2	○	—	N/A
Opiate poisoning emergency department rate per 10,000 population	2017 19.7	2019 10.7	★	2019 13.8	○	—	N/A

COMMUNITY RESOURCES TO ADDRESS SUBSTANCE & ALCOHOL USE

Community members in Carroll County identified recovery and treatment resources available as potential strengths to address substance and alcohol use in their county, along with prevention strategies and early intervention sources. Additionally, barriers to substance and alcohol use issues were identified by community members, including a lack of available treatment programs, a need for additional recovery coaches, widely available addictive substances, and a lack of youth resources.

The following information was gathered from participants during a group activity, where participants were asked to share their knowledge of the gaps and needs or resources and assets in their communities with regard to the identified health priorities. The numbers in parentheses indicate the number of times community members mentioned or concurred with what was listed.

Table 9. Gaps/Needs and Available Resources (Substance and Alcohol Use)

AVAILABLE RESOURCES	GAPS/NEEDS
Collaboration Community committee on substance use prevention Continued efforts to reduce stigma	Stigma Social stigma
Prevention School community education and activity partnerships available	Treatment Lack of education and resources outside of opiate use Need more SAU education and programs in schools (5) Lack of counselor access (7)
Recovery Peer recovery supports (3) Recovery support coaches that are dispatched to the emergency department Recover community organizations	Recovery Lack of sober living housing
Treatment New Life program (4) Local treatment Outpatient Substance Use Disorder treatment Co-occurring treatment at White Horse Recovery in Person/Telehealth (3) Integrated Medication Assistance Treatment (IMAT) Program at Mount Washington Valley Region Health Center (MWVRHC)	Ease of Access Increased social isolation (2) Long wait lists Access to Sober Living funds
	Prevention Tobacco and other drug experimentation by youth

OTHER IDENTIFIED NEEDS

The following is a list of all health priorities identified in the Carroll County forum. Each participant was allowed to vote for up to 4 priorities from a list of twenty-four priorities. The first column is the name of the priority, the second column is the total number of votes that priority received, and the final column is the percentage participants who voted for that priority.

Table 10. All Priority Health Topic Areas for Carroll County

PRIORITIES	# OF VOTES	% OF PARTICIPANTS
Mental Health	36	69%
Access to Care	32	62%
Social Determinants of Health	30	58%
Substance and Alcohol Use	20	38%
Older Adult Health	14	27%
Health Care Quality	14	27%
Physical Activity, Nutrition, and Weight	9	17%
Diabetes	8	15%
Children with Special Needs	6	12%
Tobacco	5	10%
Intentional Injury	4	8%
Other-better care for people with developmental disabilities	4	8%
Immunizations	3	6%
Cancer	3	6%
Environmental Health	3	6%
Infectious Disease	1	2%
Oral Health	1	2%
Respiratory Disease	1	2%
Unintentional Injury	1	2%

APPENDIX: METHODOLOGY

The Mt. Washington Valley CHNA was developed and conducted based on the methodology of the Maine Shared CHNA.

The Maine Shared CHNA is a public-private collaboration governed by a Steering Committee, which is made up of representatives of each member organization (CMHC, MGH, MH, NLH, and Maine CDC). The Steering Committee sets fiscal and operational goals that are then implemented by the Maine Shared CHNA Program Manager. Input is provided by key stakeholder groups including the Metrics Committee and the Health Equity/Community Engagement Committee.

The Metrics Committee is charged with creating and reviewing a common set of population/community health indicators and measures every three years. Prior to the 2018-2019 Maine Shared CHNA, the Metrics Committee conducted an extensive review of the data using the following criteria as a guide: 1.] describes an emerging health issue; 2.] describes one or more social determinants of health; 3.] measures an issue that is actionable; 4.] the issue is known to have high health and social costs; 5.] rounds out our description of population health; 6.] aligns with national health assessments (i.e.: County Health Rankings, American Health Rankings, Healthy People); 7.] data is less than 2 years old; 8.] data was included in the previous data set; or 9.] the Maine CDC analyzes the indicator in a current program. This review process was carried into the 2021-2022 Maine Shared CHNA, where the Metrics Committee also reviewed the previous data set to check for changes in data sources, potential new sources of data to round out certain topics, and to deepen Social Determinants of Health data which many of our partners have included in their work.

The Health Equity/Community Engagement Committee is charged with updating outreach methodology to ensure a collection of broad, diverse, and representative qualitative data from groups who are more likely to experience health disparities. To ensure these methods reflect the needs and cultural expectations this committee

included representatives from a variety of Maine's ethnic-based and community-based organizations, along with representatives from public health and healthcare, and a variety of additional partners.

The 2021-2022 Maine Shared CHNA process involved three phases.

Data Analysis

The first phase of the project involved the analysis of more than 220 health indicators for Carroll County and New Hampshire.

Market Decisions Research provided quantitative and qualitative analysis, as well as design and production support.

Community Outreach and Engagement

Community outreach and engagement for the Maine Shared CHNA included the following efforts:

- County Forums
- Community Sponsored Events
- Oral Surveys

A community forum with residents and service providers from Mt Washington Valley was held in North Conway. Local planning teams led by local healthcare and public health district liaisons organized and promoted these events. Participants were shown a PowerPoint presentation with relevant county data and were led through guided discussions to identify indicators of concern. Participants then voted to identify their top four health priorities. They were then asked to share their knowledge on gaps and assets available in their communities to address each of the top priorities identified.

Groups that piloted these new outreach methods were offered stipends for their time.

Due to concerns related to COVID-19, community engagements efforts were conducted virtually. Oral surveys were conducted telephonically

or by following current U.S. CDC COVID-19 protocols.

Community engagement was supported by John Snow, Inc. (JSI), who also conducted the initial qualitative analysis. All support materials including Data Profiles and PowerPoints were produced by Market Decisions Research.

Reporting

Initial analysis for the community outreach and engagement was reviewed by local hosts for

accuracy and to ensure information the community may find sensitive was flagged. The final CHNA report was written and produced by Market Decisions Research in Spring 2022.

This report, as well as past CHNA reports and implementation plans, can be found on the MaineHealth Community Health Needs Assessment web page (www.mainehealth.org/chna).

There was one virtual community forum held in Carroll County on September 7, 2021, with 52 attendees. Persons from the following organizations representing broad interests of the community who were consulted during the engagement process:

Maine Behavioral Healthcare
Pope Memorial Library
Children Unlimited, Inc.
Town of Conway
Access To Care
Carroll County Coalition for Public Health
Patient and Family Advisory Council (PFAC) at
Memorial Hospital
Senator Jeanne Shaheen
Conway Police Department
Town of Freedom, NH
MaineHealth
White Horse Recovery
Gibson Center For Senior Services
Visiting Nurse Home Care & Hospice of Carroll County
Memorial Hospital
Mount Washington Valley Adult Day Center
ServiceLink
Primary Care at Memorial Hospital
SAU 9
First Church, Congregational UCC
Memorial Hospital
Northern Human Services

For a complete listing of organizations consulted for each of the 10 health equity outreach efforts, please see the Acknowledgements, page 22. This report, as well as past CHNA reports and implementation plans, can be found on the MaineHealth Community Health Needs Assessment web page (www.mainehealth.org/chna).

ACKNOWLEDGMENTS

Funding and support for the Mt. Washington Valley Community Health Needs Assessment (CHNA) Report was provided by MaineHealth on behalf of Memorial Hospital. The metrics included in the Carroll County Health Profile, tools and guidelines used for community engagement activities, and the format and structure of both the Health Profile and this CHNA report were adapted from those used by the Maine Shared Community Health Needs Assessment (Maine Shared CHNA). The Maine Shared CHNA is a collaboration between Central Maine Healthcare, the Maine Center for Disease Control and Prevention, a division of the Department of Health and Human Services (Maine CDC), MaineGeneral Health, MaineHealth, and Northern Light Health. Funding for the Maine Shared CHNA is provided by the partnering healthcare systems with generous in-kind support provided by Maine CDC and countless community partners and stakeholder groups.

In the Carroll County Health Profile, the New Hampshire Division of Public Health Services provided data and analysis for New Hampshire data. Market Decisions Research provided quantitative and qualitative analysis, as well as design and production support. John Snow, Inc. (JSI) provided methodology, community engagement, and qualitative analysis expertise and support.

Memorial Hospital and the Mt. Washington Valley Community Health Collaboration provided strong leadership throughout the CHNA process, particularly with community engagement.

Finally, Memorial Hospital and the Mt. Washington Valley Community Health Collaboration gratefully acknowledge the countless community volunteers who gave their time and passionately committed to hosting, facilitating, attending, and engaging in this effort. Thank you.



