



Local Determinants of Health in Addison County

SUMMER 2015

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Letter to the Community

November 23, 2015

To our Addison County community:

We wish to thank, first and foremost, the many community members who donated time and expertise to this project in their capacity as staff members of local health and social service organizations. We are fortunate to have in our area a wide array of high-quality health and social services. These service organizations are staffed by dedicated, committed professionals who have chosen to devote their skills to improving the quality of life and health for Addison County residents. Their work is not easy and the demands on their budgets are relentless; yet they are passionate about what their organizations do, and they are striving to meet local needs with even greater success. We deeply appreciate the time, enthusiasm, support, and honesty of the interviewees, as well as the respect that they expressed for each other. Thank you!

We are very grateful to Tiffany Nourse Sargent, Director of the Middlebury College Office of Community Engagement. The Office of Community Engagement fosters collaboration between the College and the local community, helps students make positive contributions to local groups while developing life-long skills, and helps faculty to promote community-connected teaching, learning, and research. Ms. Sargent oversees the Academic Outreach Endowment, which provided funding for this project through a grant. Thank you, Tiffany, for your encouragement and support.

Finally, I am deeply appreciative for the opportunity to collaborate with Alessandria Schumacher, Middlebury College Class of 2017, who worked during the summer as a research assistant on this project. She conducted all of the interviews for this study, analyzed and summarized all of the data, and wrote most of this report. Alessandria's organizational skills, efficiency, and work commitment are formidable. Her attention to detail, analytic abilities, and ethical standards deserve the highest praise. She repeatedly raised the bar for both of us, for which I am grateful.

We hope that this report, which represents contributions from so many people, can be used to encourage a greater understanding of local needs as well as a commitment to strengthening community ties.

With warm wishes for a healthy community,



Pamela A. Berenbaum
Coordinator of Global Health Programs
Professor of the Practice of Global Health

About This Report

This report, released on November 23, 2015, describes the tasks and results of a project conducted during summer and fall of 2015 by a Middlebury College staff member and student.

The goal of the project, *Local Determinants of Health in Addison County*, was to reveal local factors that promote or undermine the health of county residents. A person's health and well-being are dependent not only on access to medical services, but also on a complex web of social supports, opportunities for health-promoting behavior change, and financial security. Many statistics are available about, for instance, local rates of obesity or teen pregnancy in a community; however, standard data collection and statistics often provide these figures in isolation, without providing information about contributing social forces such as unemployment, lack of affordable child care, transportation challenges, or violence in the home. To our knowledge, the only other report in existence about Addison County health was devoid of opinions of local experts and focused on health *care* and health indicators from existing surveys rather than the perspectives of people working in health and social service fields in Addison County.

To that end, **we sought the opinions, through interviews, of our local experts** who serve as directors and staff members of health and social service organizations. Addison County is regarded as a community that, for its population size, is well-endowed with organizations that provide opportunities for civic engagement as well as supports to those who struggle. Naturally, no one organization can serve the full spectrum of families' and individuals' needs; we attempted to cast a wide net to represent many different types of services across all of the towns in Addison County. The methods used (appendix 4), and the organizations represented (appendix 1), are described in the appendices of this document.

This focus of this report is on our findings, which begin on page 11 and constitute the bulk of the document. The rationale for conducting the study, as well as background information which guided our questions, is summarized in the *Background Information* section which begins on page 5. Please see the Table of Contents on pages 1-2 to see the overall structure of the document and to learn where to find specific information.

Some of the information in this report is repeated in several places. The findings are presented in several formats:

- by the questions that we posed;
- by issue; and
- by subpopulation within the larger Addison County community.

Our hope is that, in this way, the information will be more accessible and easy to find by those who want to learn more about a specific topic.

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Introduction

According to America's Health Rankings, Vermont is the second healthiest state in the country [1]. In another report by America's Health Rankings, Vermont ranks number one in health of senior citizens [2]. Not only is Vermont ranked highly among the 50 states, but Addison County is ranked highly within Vermont. The County Health Rankings and Roadmaps program ranks Addison County as number two in the state for health outcomes and number three in the state for positive factors that contribute to health [3]. Another score, the Opportunity Index, considers social, economic, and community factors, all of which influence health, and on that index, Vermont's overall score ranks number one nationally. Vermont also ranks number one in education score and community score, along with fifth for the overall economy score [4]. However, at the county level, Addison County is seventh in Vermont[5].

So what's the problem here, if Addison County is one of the healthiest counties in one of the healthiest states? It's clearly not that health, as measured by these data, is so much worse than any place else. No matter how highly ranked a county or state may be, there are differences in health that vary by income, location, family structure, and other social factors. These differences that may exist at a town, household or individual level are lost when data are averaged and aggregated to a higher level, like county or state. In addition, nuances in particular health challenges or victories are masked by lumping all health measures together. In a similar way, a single indicator for "opportunity" fails to address the questions of opportunity for whom and what kinds of opportunities exist. In every place, there are unique factors that contribute to the level of health of everyone, no matter their place in the social or economic structure.

Through this project, we intend to uncover the challenges and opportunities for living a healthy life for residents of Addison County, noting the influence of income, occupation, location, family structure, and other factors.

To do this, we began by looking at existing data on health in Vermont and Addison County and dissecting the meaning of the health and social indicators noted above. Next, we interviewed providers of healthcare, social services, and other services that influence health status, such as education and transportation. Professionals in these positions already know the needs and challenges of their services users, but by interviewing providers from a variety of services, we hoped to bring together the different perspectives to create a comprehensive report on factors in Addison County that either favor or hinder living a healthy life here. This project also aims to identify unmet and under-met needs, who is or is not coming for services, and changes over time.

This report will begin with background information on the concepts of social and structural determinants of health. This section of background information will also go into greater depth about existing health, social, and economic data on Vermont and Addison County. However, these existing data are not meant to be a comparison to the data collected in this study, as different methods were used. Rather, the intent of the background data is to present existing research on health in Vermont and Addison County.

Background Information

CONCEPTUAL FRAMEWORK: SOCIAL AND STRUCTURAL DETERMINANTS OF HEALTH

To study "health" is a very broad mission. We can look at life expectancy, infant mortality, quality of life, insurance coverage, and dozens of other measures, each of which addresses one small aspect of health. However, we do not make choices about our lives and health in a vacuum. The concepts of the *social and structural determinants of health* highlight the complex environment in which we live and how that environment influences health.

- In an effort to understand and address health issues, we can look at several different levels:
- individuals and their behavior,
 - the immediate environment where a person lives,

- the intermediate level of policies and government regulations, and
- the underlying social, political, and economic system of a society. [6]

While the present study did not systematically address each of these levels, interviewees noted the influence of all of them.

The individual level includes aspects of health like a person's genetic predispositions, decision whether or not to smoke, diet, hygiene level, and so forth. While this healthy lifestyle approach is important, it does not tell the whole story or answer why people might not make the best choices; people do not have complete control over their environment and are not always perfect decision-makers [6]. We must look at the intersection with other levels that influence health to get a more complete picture of what is going on.

The next level is the immediate environment around people—their living conditions. This includes water and sanitation, nutrition, housing, income, neighborhood conditions, social stress, access to and quality of healthcare services, culture, religion, and transportation. As one might expect, nutritious foods, access to clean water, safe housing, higher levels of income, socially cohesive neighborhoods, and quality and affordable education and healthcare are all related to higher levels of health. Factors at this level are known as the *social determinants of health*.

Yet, to understand some of these aspects of our living conditions, it is helpful to look more broadly at the social policies and government regulations that influence the social environment. Policies and regulations often influence things such as the presence of extreme poverty, education, work conditions, violence, social inclusion and social capital, human rights, and political freedoms. [6] Policies related to this may take the form of subsidies, education mandates, minimum wages, insurance, and tax policies. These policies, in turn, are influenced by another level of factors.

To understand why certain policies and regulations exist or not, it may help to look at the foundational level of a society: the political system, the economic system, the social structure, and the historical context [6], including such factors as class structure, wealth distribution, trade agreements, militarism, colonialism, racism, and land ownership. As stated earlier, many of these factors [the *structural determinants of health*] are beyond the scope of the present study. However, one that is very relevant to this study is the idea that health varies with the social and economic gradient. Aside from the significant influence of socioeconomic status on individual health, it is interesting to note that contemporary global health research has revealed that societies with greater income disparities are less cohesive, resulting in worse health for everyone—even those at the top of the income scale—than in a more egalitarian society [6,7,8].

In this project, we have chosen to focus on the intermediate levels that determine health, the social determinants, yet structural determinants, especially income distribution and disparities, are relevant and important forces as well.

Considering the concept that health is influenced by social and societal factors, health and its determinants can change over time, or remain the same, so time is a relevant factor. Pneumonia was often a death sentence in 1915, but in 2015, many more people survive pneumonia due to antibiotics, improved supportive therapies, and an overall healthier population thanks to improved hygiene and sanitation. In a more recent example, in 2005, substance abuse was not as visible of an issue in Vermont, but in 2015, most participants mentioned it as a major issue and one that had become increasingly problematic.

Place matters when it comes to health determinants and outcomes, which is why it has become increasingly common to take a neighborhood approach to studying health determinant and outcomes [9]. The term “neighborhood,” however, can be as specific as a particular block or radius from one's home, or as general as a county or a region [9]. For the purposes of this time- and place-specific project, we have chosen to make Addison County the unit of study.

These time- and place-specific social and structural determinants of health are what we aim to uncover in this study. The social and structural determinants at large are well known, but we wanted to know what social and structural factors are most at play here in Addison County, both those that promote and those that inhibit health.

EXISTING HEALTH DATA

Different government agencies collect various health and demographic data: the decennial census, the Behavioral Risk Factor Surveillance System (BRFSS), the American Community Survey (ACS), the Safe Drinking Water Information System (SDWIS), and so forth; the list goes on. These data are extremely useful, but often hard to understand in a meaningful way. Several organizations have taken a combination of these different datasets and made indicators—a single value for a given place, so it can be compared with other places.

While these indicators are extremely helpful, data at the state or county level can only tell so much. Every time data are aggregated to a higher level, nuances and variation are lost [9]. For example, saying that there are 67.9 people per square mile in Vermont hides the fact that a rural place like Addison County has only 48 people per square mile, yet, within that rural county, the town of Middlebury has 473 people per square mile [10]. In a similar way, the availability of health services in Middlebury cannot be used to generalize the availability of health services in Addison County.

There is a large body of literature addressing the shortcomings, errors, and biases inherent in all quantitative population measures, yet such measures remain useful for comparative purposes. The following sections will compare Vermont relative to the rest of the US, and Addison County relative to Vermont, using indicators and rankings created by non-governmental groups using different types of data. These indicators provide background for our study, but like all aggregate data, they do not provide nuanced insight into our daily struggles. Uncovering those nuances was the motivation for our study.

Vermont in the Context of the United States

America's Health Rankings is an annual report on health of the United States on a state-by-state basis, produced for the past 25 years. *America's Health Rankings* is a collaborative effort by the United Health Foundation, the American Public Health Association, and the Partnership for Prevention. The ranking is made of measures of both determinants and outcomes [11]. The determinants fall into four categories:

1. behaviors (smoking, binge drinking, drug deaths, obesity, physical inactivity, high school graduation),
2. community and environment (violent crime, occupational fatalities, infectious disease, children in poverty, air pollution),
3. policy (lack of health insurance, public health funding, immunization), and
4. clinical care (low birthweight, primary care physicians, dentists, preventable hospitalizations).

The outcomes used in the index are diabetes, poor mental health days, poor physical health days, disparity in health status, infant mortality, cardiovascular deaths, cancer deaths, and premature deaths [11].

In *America's Health Rankings*, Vermont is number two overall. In fact, Vermont is number one for the four determinants in the index. Yet, for outcome, Vermont ranks 10th. Vermont performs very well in some categories—the highest high school graduation rate in the country, the second lowest violent crime rate, the second highest insurance rate, and second lowest number of children in poverty. Vermont ranks fourth lowest in low birthweight and infant mortality. Also, since 1990, infant mortality has decreased by 50 percent. From these excellent rankings, it appears that as a whole, the state of Vermont has some great trends in education, community safety, and maternal and infant health.

However, Vermont ranks 44th in the category of disparity in health status. This means that not only does Vermont have the expected variation one would find when data are aggregated to the state level, but that Vermont has an especially vast amount of variation in health status. The measure of disparity in health status is determined by the difference in self-reported health status stratified by education level in adults. For immunization of children aged 19 to 35 months,

Vermont ranks 37th. For overall infectious disease activity, Vermont ranks 28th, but for pertussis, Vermont ranks 49th, meaning it has the second highest rate of pertussis per 100,000 people in the country. This ranking is explained by incomplete immunization coverage, the pertussis vaccine's waning immunity (requiring boosters), and high prevalence of pertussis in the state as compared to other states. There are several areas of *America's Health Rankings* where Vermont ranks solidly in the middle of the pack: 29th for binge drinking, 21st for dentists per 100,000 people, 32nd for cancer deaths [11].

The **County Health Rankings** (a collaborative project between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute) gives rankings of each county within its respective state [3]. *County Health Rankings* has tried to align their measures as closely as possible with *America's Health Rankings*, but they are still different, so the indicator values cannot be directly compared. *County Health Rankings* makes two different rankings: health outcomes and health factors. The health outcomes rank is a combination of length of life and quality of life measures. The other indicator is health factors, which includes 30 different measures that fall into the following 4 categories:

- health behaviors (30%),
- clinical care (20%),
- social and economic factors (40%), and
- physical environment (10%).

The purpose of the health factors ranking is to quantify social determinants that will influence health outcomes in the future, thus predicting where the county's health trajectory.

While the *County Health Rankings* does not rank the states, it does provide data at the state level in comparison to the national level. Vermont does better than the national average in most areas, most notably exercise, obesity, teen pregnancies, percent uninsured, and violent crime. The only areas where Vermont scored worse than the national average are binge drinking, alcohol-impaired driving deaths, drinking water violations, and severe housing problems (overcrowding, high costs, or lack of kitchen/plumbing). Excessive alcohol use and the shortage of affordable housing are consistent with *America's Health Rankings* and the *Opportunity Index*.

The **Opportunity Index** is another national ranking, similar to *America's Health Rankings*, which measures opportunity and economic mobility rather than health outcomes. As revealed by the social and structural determinants of health framework, opportunity and economic mobility do strongly influence health. The *Opportunity Index* is created by Opportunity Nation, which describes itself as "a bipartisan, national campaign comprised of more than 300 businesses, educational institutions, nonprofits and civic organizations working together to expand economic mobility and close the opportunity gap in America [12]."

In the *Opportunity Index*, Vermont ranks number one. This finding seems counterintuitive just based on the lack of affordable housing identified in other studies. The sub-rankings in the *Opportunity Index* include three scores that go into making the overall index:

- economic indicators (unemployment rate, median household income, percent of the population living below the poverty line, the ratio between the 80th percentile and 20th percentile of household income, the presence of banking institutions, number of households spending less than 30 percent of household income on housing costs, availability of high speed internet),
- education (preschool enrollment, on-time high school graduation, attainment of an associate degree or higher), and
- community health and civic life (violent crime rate, youth aged 16-24 not in school and not working, number of medical doctors per 100,000 people, number of grocery stores and produce vendors per 10,000 people).

In most of the economy categories, Vermont is doing better than the national average. However, slightly fewer Vermonters are able to spend less than 30 percent of their household income on housing costs than the national average. Vermont also scores better than the national average for

all measures of education and community health and civic life. However, as discussed earlier, aggregating data hides variations at different scales. For example, given Vermont's rural character, the above-average number of doctors per 100,000 people does not mean that doctors are necessarily accessible. And although the median income is higher than the national average, Vermont has one of the highest costs of living in the country, according to a ranking by CNBC [16]. Given that *America's Health Rankings* puts Vermont 44th for disparities in health status, we can imagine that perhaps this disparity is not well captured in the state-level data [12].

The summary of the various indices is as follows. Vermont seems very healthy in comparison to other states using *America's Health Rankings*. The *Opportunity Index* suggests that Vermont has good social and economic mobility, an important factor influencing healthy lifestyle. Areas where Vermont seems to be doing particularly well are education, community safety, and unemployment. Areas in which Vermont performs less favorably are alcohol abuse, infectious disease, and affordable housing.

Addison County in the Context of Vermont

Now that we have an idea of where Vermont stands in relation to other states, let's look at how Addison County appears in these rankings in comparison to the other 13 counties. In the *County Health Rankings* discussed in the previous section, Addison County ranks 2nd in Vermont for health outcomes (length and quality of life) and 3rd for health factors (health behaviors, clinical care, social and economic environment, and physical environment).

In comparison to the other Vermont counties, Addison County ranks #1 in the quality of life component of health outcomes and #3 in length of life. Addison County was notably better than the state average for alcohol-impaired driving deaths, sexually transmitted infections, teen births, high school graduation, and violent crime. In other areas, Addison County was worse than the state average: access to exercise opportunities, dentists per capita, mental health providers per capita, drinking water violations, and long solo commutes to work.

As noted earlier, statewide Vermont scored better than the national average on most indicators that make up the *Opportunity Index*, and Addison County's scores were better than the state average on many of the factors, such as unemployment, median household income, and violent crime rates. However, there are several areas where Addison County is not doing so well. While the percent of households spending less than 30% of their income on housing was lower in Vermont than nationally, Addison County fares worse than Vermont as a whole. While the on-time high school graduation rate is higher in Addison County than in the US, it is much lower than the average in Vermont. The same applies to people with an associate degree or higher: Addison County fares better than in the US, but worse than in Vermont as a whole. Regarding medical doctors per 100,000 people, Vermont has 100 more on average than the national average, yet Addison County has over 50 less than the national average, meaning there is a huge disparity between the aggregate state data and the county level. These strengths and weaknesses of Addison County in the statewide context give Addison County a ranking of 7th out of the 14 counties on the *Opportunity Index*. However, it ranks 9th on economy, 6th on education, and 7th on community as measured by that index.

The *Opportunity Index* also marks change over time at the county level from 2011 to 2014. Over those four years, certain things have improved in Addison County: unemployment has fallen, preschool enrollment has risen, the number of disengaged youth had fallen slightly, and the number of doctors has risen slightly. Conversely, median household income has fallen, the ratio between the 80th percentile and 20th percentile of income has risen, the number of households spending less than 30% of their income on housing has dropped, and violent crime has doubled. Despite some improvements in community indicators, poverty has increased.

Other Existing Reports on Addison County

While this particular study is the first of its sort, other similar projects have been done including county health profiles by the University of Vermont [13], the Porter Hospital Community Needs Assessment from 2012 [14], and the 2015 Needs Assessment update [15]. Other reports exist on the statewide scale, such as *Healthy Vermonters 2020*, *Vermont Blueprint for Health*, and *Health Disparities of Vermonters*.

Vermont County Profiles for Medical and Health Sciences Students/Residents was created by the University of Vermont College of Medicine Office of Primary Care and Area Health Centers in 2013. The purpose of this document was to provide information about the communities by county so that medical students and residents would have more context about the communities in which they were working. This document reports on facts and figures about the health and community. Some of the most notable statistics from the document are the following:

- Addison County has the fastest growing population age 85 and older in the state;
- Addison County's economy is largely agriculturally based, and much of the work on dairy farms is done by migrant workers from Latin America;
- The gap between median income and house price is the fourth highest in the state, meaning that buying a house is difficult for many families;
- The population density for Addison County is lower than the state average;
- Binge drinking affects Addison County to a greater extent than the rest of Vermont;
- Teen pregnancy and low birthweights are lower than the state averages;
- Heart disease, obesity, stroke deaths, and diabetes-related death rates are higher in Addison County than in Vermont on average [13].

In 2012 Porter Medical Center produced a Community Health Needs Assessment (CHNA) and updated that report in June 2015. The needs assessment focused on the medical needs and services use of people within Porter Medical Center's service area. Some highlights from the update are included here, but more information can be found by accessing the reports online [14,15].

CHNA said that the population of Vermont has good rates of insurance coverage, and that coverage has improved since the passage of the Affordable Care Act. However, "a shortage of providers or hospitals, lack of reliable transportation or long drives to care, cultural or personal beliefs, language and education" were identified as barriers to healthcare. The report also describes Porter Medical Center and the network of primary care and specialist practices associated with it.

The 2015 report states, "Access to dental care...remains a serious issue." For many people who do not have dental insurance, dental care is the first kind of care they choose to defer. Also, many dentists will not take adult Medicaid patients because of poor reimbursement rates.

On the topic of mental health, this report acknowledges the problem with mental health services statewide. It cites the closing of the Vermont State Hospital in Waterbury, and the governor's proposed "remedies to the current care crisis, including renovations, services, and expansions across the state in order to help the mental health needs of the state."

The CHNA says that three doctors are currently providing buprenorphine (Suboxone) treatment for opiate addiction for about 75 patients in Addison County. There have been significant improvements in opiate addiction treatment since 2012, but preventative efforts are needed.

In terms of care for the aging population, the CHNA states that more people have been choosing to stay in their homes with care. As a result, it says there has been "significant downward pressure on nursing home occupancy throughout the State and especially in Addison County." The report also notes specific changes in the focus of Helen Porter Healthcare and Rehabilitation Center to include short-term rehabilitation beds, more dementia care, and more home-like touches.

The remainder of the CHNA 2015 Update focuses more on specific medical services offered and how often they are used. Since such issues are not a focus of this report, the CHNA findings on medical services are not summarized here. We recommend the CHNA report to interested readers [see bibliography].

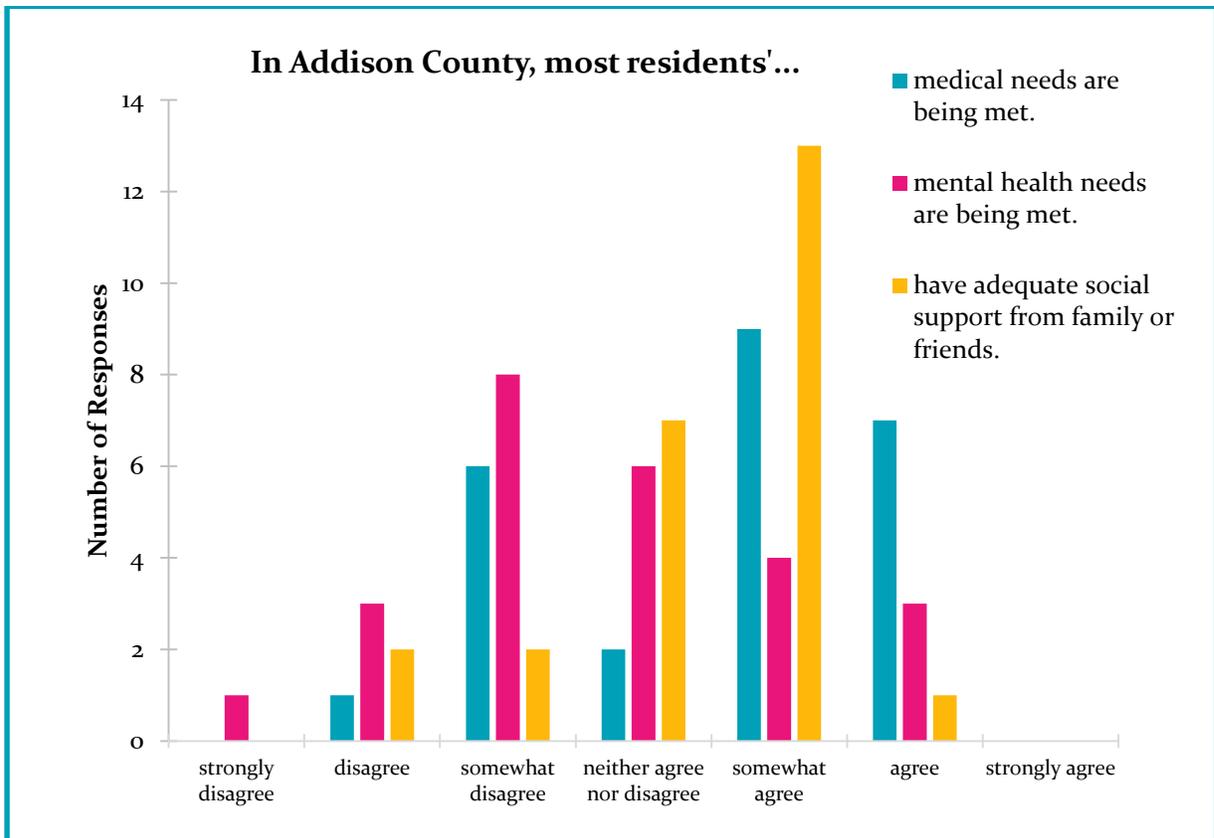
Findings

Here we present the findings of our interviews and the surveys filled out by the interview subjects, organized into four sections to assist readers in locating the information of most interest to them. Some readers may be most interested in a particular issue; others may be most interested in a particular population group. The four sections are:

- I. Unmet needs
- II. Findings by interview question
- III. Findings by issue
- IV. Findings by specific population within the county

Much of the findings are repeated throughout this section, appearing in several places -- this was a necessary byproduct of presenting the information in multiple formats, and we hope the repetition is not too cumbersome. We invite readers to skim through the headings in order to quickly find the information they seek.

It is important to note that the findings presented in this section represent the stated beliefs of individual professionals who work in health or social services in Addison County. We made no effort to verify or quantify these claims; rather, we trust that the stated opinions are valid and grounded by the interviewees' day-to-day work and commitment to addressing the community's needs. Many of our interview subjects reiterated similar themes and observations, and this fact gives further validation of the findings and confidence in our subjects' observations.



I. UNMET NEEDS

This section describes issues that interviewees identified as unmet needs in Addison County.

Child Care

The unmet need for child care was identified by both child care providers and other service providers. Most who spoke about this discussed a general lack of available spots in child care services. The long waitlists appear to be a problem across all income levels. Affordability of child care is another issue and one that specifically affects the low to moderate income earners—those who make too much money to be receiving government subsidies, but too little to comfortably afford quality child care. There is also an unmet need for child care in the summers, after school care, and programs for teens and school-aged kids. There is a concern about school-aged kids being left home alone after school and in the summers, especially in isolated places. One interviewee expressed an unmet need for child care in the early mornings and after 5 pm, especially for children of parents who are trying to work and get out of poverty and may not have negotiable hours.



Substance Abuse Treatment

There is an unmet need for drug and alcohol treatment. Many interviewees expressed the need for more doctors willing to medically treat opiate addiction using suboxone, so as to reduce the wait time for those seeking that treatment. One interviewee noted a lack of obstetricians who will see pregnant women who are addicted to opiates, given the extremely complicated nature of those pregnancies. Another stated a need for longer time allowed in treatment. Yet another interviewee expressed a need for a sober-housing option in Middlebury so that those in recovery can have a safe place to stay if they need.

Mental Health

Many mental health needs seem to remain unmet, specifically those of people who are severely mentally ill, yet still functioning in day-to-day life. One interviewee identified an unmet need for psychosocial support of children, especially those living in isolated areas. Another noted the unmet need for psychiatry and counseling of children with emotional and behavioral problems.

Housing

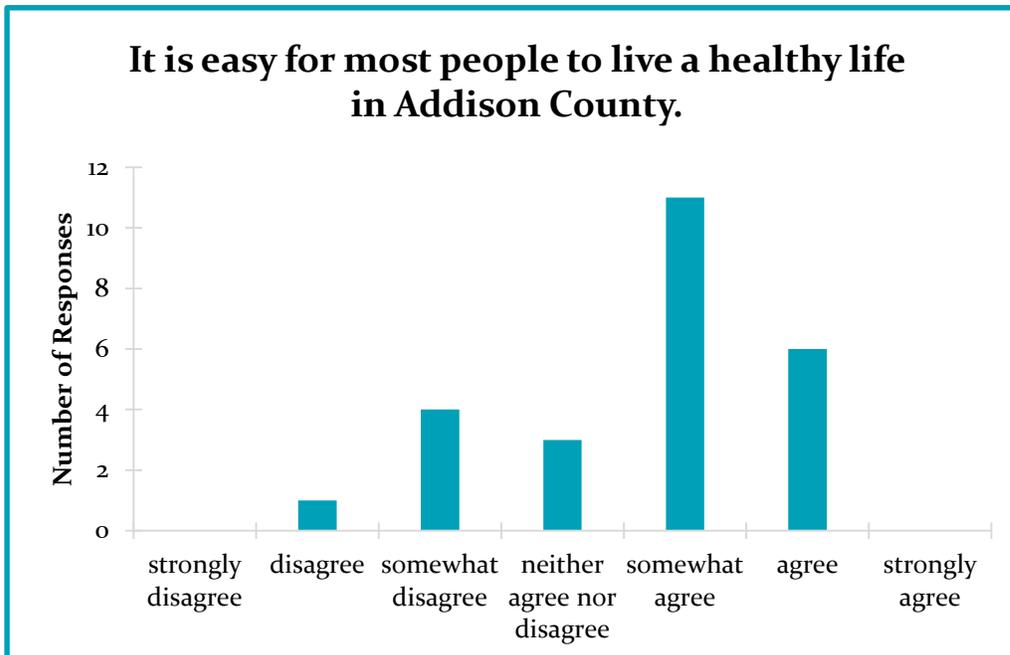
Another major unmet need seems to be housing regardless of price, but especially affordable housing. Providers of services to the elderly noted that there is an unmet need for affordable houses for the elderly when they can no longer live on their own, but cannot afford assisted living. A related issue is transportation for those whose homes are located far from town centers, though many noted that transportation is much improved over the past decade.

Other unmet needs

Other unmet needs mentioned include financial need, hunger, employment, and services for people living rurally. Broadly speaking, there was concern for the needs of those with limited financial resources, including the working poor.

II. FINDINGS BY INTERVIEW QUESTION

How easy is it to meet basic health needs, including medical, mental health, and social support?



According to the survey results, over half of the interviewees either *agree* or *somewhat agree* with the statement that “It is easy for most residents to live a healthy life in Addison County.” No one *strongly agreed* or *strongly disagreed*. While filling out the survey, many participants stopped at this first question and wanted to qualify their answer by saying something along the lines of “I’m answering for the *majority* of the population, but definitely not everyone.” Others commented on how they see worse health than the general population, given that their organization serves people in need of some kind of support. However, this question was asked again in the interview, so the interviewees had a chance to elaborate.

An overwhelming number of interviewees mentioned the high-quality **health services** available in Addison County. The available health services are what many interviewees cited when asked to answer this question. However, the one downside noted about the health services is the long wait-times often necessary to see a provider. Many noted that mental health services, in particular, are more difficult to obtain. Interviewees said that living in a state with such good insurance coverage, especially for kids, takes away much of the financial burden of accessing medical care.

Interviewees also talked about the environment, not just the health services. Several interviewees said there are excellent **opportunities for physical activity and recreation**, which make it easy for most residents to live an active life. However, a couple of interviewees noted that the lack of sidewalks and bike lanes, as well as many high-speed roads, force people to drive, even short distances.

Several interviewees noted the abundance of **healthy and fresh food** that comes with living in an agricultural county, though long winters present the challenge of getting fresh produce at a low cost all year round.

In terms of **social support**, most people noted that the family is key to this aspect of health, but as a community, this is a relatively caring, supportive, and healthy place to live.

While most interviewees thought it was easy for the majority to live a healthy life in Addison County, some specified for whom. For **those who lack money, education, or**

knowledge about health, it is not easy to live a healthy life. Those living in rural isolation, especially who are low-income, also cannot easily live a healthy life. The idea of two distinctly parallel courses—the haves and the have-nots—came up in several interviews. Those who brought up this idea talked about how poverty and family environment are the “make it or break it” factor in living a healthy life. These interviewees saw this as a stark divide, especially in Middlebury, but not as much in more rural towns.

Interviewees brought up **other ideas** about the ease of living a healthy life in Addison County. One differentiated that it is easier in Middlebury, Bristol, or Vergennes because of the services there. Another noted that it is a difficult place to maintain good dental health, especially for those not yet a regularly attending a practice or lacking dental insurance. One person noted the decline in medical care here, and nationally, which has come with the fee-for-service insurance model. Yet, this person also noted the abundance of alternative health services, such as chiropractors and acupuncture. Lastly, an interviewee noted that the place where good health breaks down is when it comes to mental health.

Overall, it seems to be fairly easy for most residents to live healthy lives in Addison County, especially if they have money, education, and knowledge of how to do so. The providers, physical environment, and community atmosphere seem to help. However, rural isolation, low income, and unsupportive family environment seem to thwart the ability to be healthy.

How has this (who comes and their needs) changed (or not) over the past 5 and 10 years?

When asked about changes in service users and in the needs of the population over the past 5 or 10 (or more) years, some interviewees provided more general answers about the population of Addison County at large, while others spoke more specifically about the people who come for their services. However, many of the specific changes fit into larger changes other people have seen, so specific examples are used in this section to illustrate more general changes. Some of those general changes have to do with substance abuse, mental, health, the aging population, and poverty.

Substance Abuse

About a third of the interviewees have seen a major increase in substance abuse, particularly **opiates**, over the past five to 10 years, which has changed many people’s lives. Half of those who said they have seen an increase have also seen some improvements on the issue of substance abuse over the past year. Several of them said that the improvements have been due to more doctors administering suboxone. However, one noted that there is still no methadone clinic in Middlebury and not enough treatment in general. Given the recent increase in treatment options, one interviewee said that the fight against opiates has moved to a point where the focus can turn more to prevention.

Mental Health Needs

Mental Health is another area where interviewees have noted change. One interviewee noted that over the past 35 years, there has been a shift away from inpatient mental health care to **community-based care**, which reflects national trends. This means that people working in mental health have been seeing people with increasingly serious illnesses, including comorbid physical conditions, and fewer well-functioning people. Most interviewees who work with kids noted that there are more kids every year who are on **medications** for emotional or behavioral problems. As one interviewee noted, this means there has been an increase in demand for **counseling** of these kids. The rise in number of kids on medications, one interviewee said, is because there has been a rise in emotional and behavioral disturbances in the classroom, perhaps because of problems in children’s home lives, more time spent looking at screens, or mental health problems of a family member. One provider of services to children and families said that over the past 35 years, she has seen a decline in the **supportiveness of families for their children**.

Aging Population

Several interviewees, most of whom provide a service to the elderly, noted that a significant change is the rapidly **aging population**. One said they are seeing more elderly, and not as old, people with **cognitive impairments**. Another said they are caring for people who are sicker because they are getting discharged from the hospital sooner. This individual also noted that people seem to be living longer with illnesses that 30 years ago would have killed them sooner, reflecting national trends. **Transportation** is a major issue for elderly people, one interviewee noted, which means that there is an increasing need for public transit and transportation to medical appointments.

Increase in Service Users

Some interviewees reported an increase in service users. Users of **public transit** have increased tremendously over the past 10 years, said one interviewee, though the public transit services offered have increased as well. Another specific increase has been in the number of people needing **food and housing**, especially just after the 2008 recession. Interviewees offering services to both perpetrators and victims of **domestic violence** have seen an increase in people using their services. One said that there seems to be more awareness and care about domestic violence in Addison County, which may reduce the stigma around people seeking services for that issue.

Decrease in Service Users

Not all interviewees noted an increase in users of their services. One interviewee said there was a spike in people seeking **education and job-training** after the 2008 recession, but now the number of people coming for further education or job-training has declined. He speculated that this might be because high schools are offering more **alternative pathways to graduation**, so fewer kids are dropping out. One interviewee said there has been a huge decrease in the number of **uninsured** Vermonters coming for free health services, whereas prior to Vermont Health Connect, there were more and more people seeking free medical services every year. A few interviewees noted this increase in people with insurance over the past few years.

Poverty

Many interviewees noted changes related to poverty or income. One interviewee said that the rate of poverty in Addison County seem to be increasing. Other interviewees spoke to this issue indirectly by pointing out several trends:

- more people are receiving **government subsidies** for child care;
- families receiving **food assistance** seem more impoverished than in the past;
- there are more recipients of **government aid** in general; and
- more people need **emergency housing**.

One interviewee said that over the past 10 years, there seems to be more people working, but the people working seem to be **working harder**, and they seem to be **making less money**. Several people noted the high cost of living in Vermont and Addison County, which makes it hard to live here and live healthily for people with low income. A couple of interviewees said that despite the high and rising cost of living here, there has been no rise in income associated with that for most people.

Before and After 2008

A few interviewees noted changes that occurred following the **2008 recession**. From then, up until this year, most towns saw an average of only five new homes being built per year, one interviewee said, contributing to the lack of housing. Another noted that there was more need for



emergency housing and food immediately post-2008. One person noticed that the number of people seeking further education increased right after the recession began. However, some of these trends, such as homebuilding and education, are returning to pre-2008 levels.

Youth Population

A few interviewees noticed changes in the youth population. First of all, one interviewee said that the number of kids is shrinking; in the past 10 years, the number of students at one



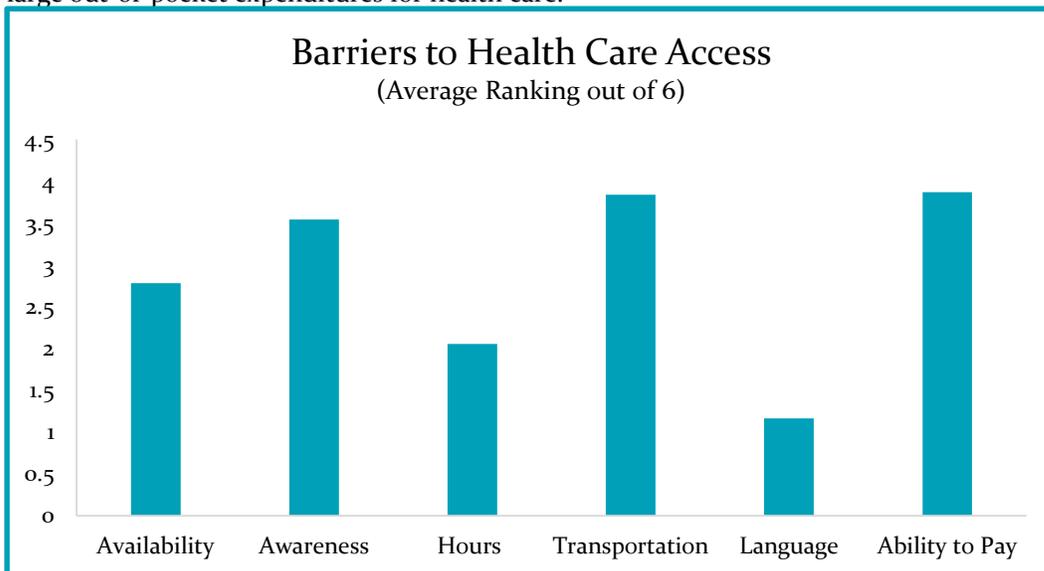
elementary school has halved, mostly because families are having **fewer kids**. Two interviewees feel like there are more **disengaged youth** over the past 10 years, meaning people from ages 16 to 24 who are neither working nor in school. However, this group is hard to reach because they are not connected to the rest of the community through a job, a school, or a teen center, said one interviewee. On the other hand, one interviewee has seen more high-achieving youth who are taking advantage of other education options available to them while still in high school.

At a policy and government level, one interviewee said there has been more attention given to emergency management since Tropical Storm Irene hit Vermont several years ago.

Are there people or groups in the community who could use your services but you have not been able to reach? Why?

When asked this question, most interviewees did not respond with a certain demographic group. Instead, most responses fell into one of two categories: either the people who could use the services are **not reaching out**, or people have **highly specialized needs**.

One underserved demographic group identified was those who are middle or lower-middle income, meaning they make too much to qualify for government assistance, but cannot pay for everything they need and maintain financial stability. Another group identified was underinsured people—those who have insurance but have very high deductibles or limited coverage, resulting in large out-of-pocket expenditures for health care.



The height of bars on this graph corresponds to their relative importance, as ranked by interviewees.

The group of people who do not seek services has taken many different forms, depending on the service offered, so many interviewees described this group differently. Here are some examples:

- People may not seek **mental health services** until they have a crisis, especially if they are functional in their daily lives up until that point.
- People experiencing **domestic or partner violence** often do not get help or call the police, either out of fear of what the abusive partner might do in retaliation, or out of fear of police involvement for any reason.
- Farmers were characterized as prioritizing **farm work** over keeping appointments and attending to their own health.
- **Disengaged youth** are by definition not getting the services they could use, specifically education or job-training.
- Many people who could take advantage of filing for **earned income tax credit** do not do so.
- Some people do not seek services because of **logistical challenges** such as changing work hours, transportation, or child care.
- Others may **lack information** about the available services, despite communication and advertising efforts by the providers to make their services known.

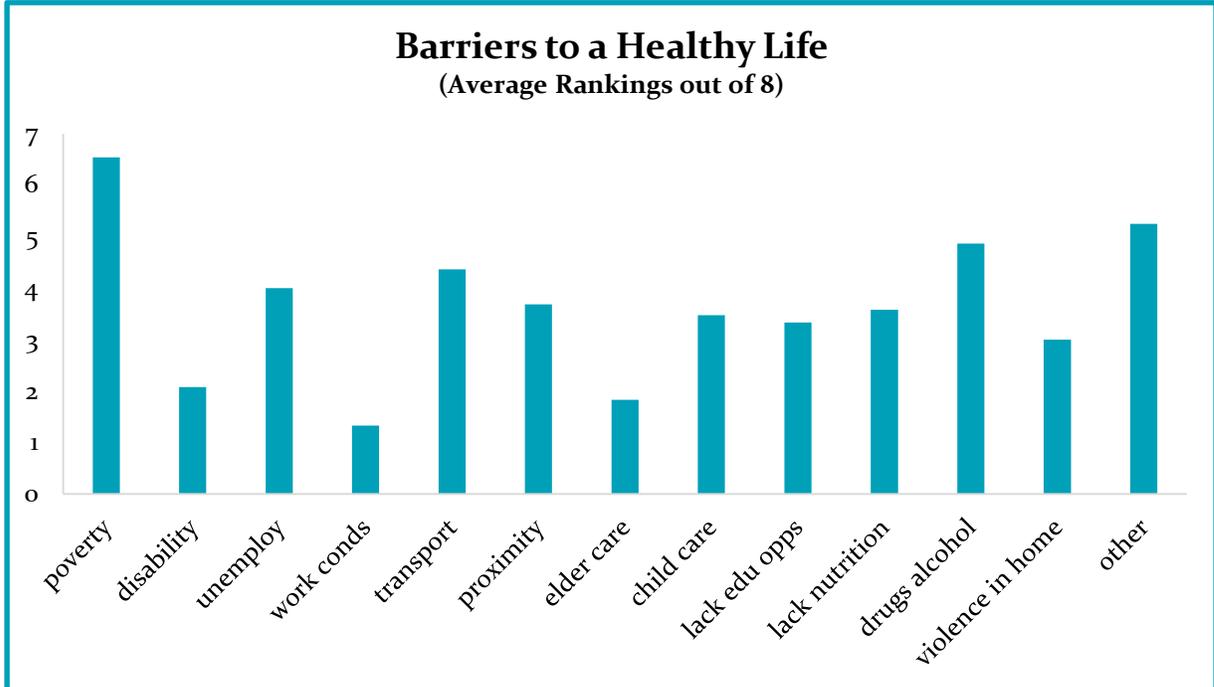
All of these examples describe people not seeking services for a number of reasons. Nearly half the interviewees talked about **fear or stigma** as a reason people do not ask for the help they need. Others talked about **lack of education or knowledge** in general as a barrier that keeps people from taking action.

Interviewees also identified very specific niche services that are unavailable or would require collaboration between different providers. Specific **niche service** needs mentioned were:

- more **parenting classes** available to those who want them, with a particular need for parenting classes for fathers;
- services for **people with a developmental disability who are also victims of domestic or sexual violence**;
- reaching **men who are committing domestic or partner violence** and lack both motivation and legal pressure to cease their violent behavior;
- more **teen pregnancy prevention** services delivered earlier than high school;
- adequate and appropriate care for **pregnant women with a history of substance abuse**;
- **immediate post-partum mental health support** for women, whose need for counseling is time-sensitive but does not qualify as an emergency.

Interviewees identified these unserved groups but noted that a couple of the categories represented a very small number of people affected. In that case, interviewees noted that it is simply impractical to allot limited resources to such small niches.

III. FINDINGS BY ISSUE



The height of the bars on this graph correspond to their relative importance, as ranked by interviewees.

Quality and Coordination of Services

Nearly all of the interviewees talked about the healthcare services that exist in Addison County. An overwhelming number—over four fifths—of those interviewed spoke highly of the health services and social services available. Most also emphasized the good coordination of services. These positive assessments about quality of services or care coordination were not unanimous among interviewees.

Most people talked about the abundant and high-quality health and social services here in Addison County. Half the people who talked about excellent health services talked positively about the **local hospital** and its associated services, including the emergency department. A few people also mentioned the good **emergency response teams**, particularly those in the more rural areas. Several people think there are good physical health services available, but not as good mental

“It’s more the quantity of services that are available, not the quality.”

health services. Several other interviewees said there are good services, but often long waits. Another said there are good services if you have money and good insurance. One interviewee stated that everyone can get into a doctor if they want. Some interviewees specifically mentioned the excellent

maternal and early childhood health care and services here. Most interviewees agree that there is good **access** for most people to good providers. One noted that people are attracted to the area specifically to receive services. However, the downside to having so many health and social services, as one interviewee noted, is that people get **“agency fatigue.”** One interviewee said he has often seen the same person represented by several organizations, which gets confusing.

Most interviewees talked about good **collaboration, coordination, and cooperation among agencies and offices**. Several interviewees said they do this through frequent referrals elsewhere for other care or help. Collaboration is a good way to make limited funding go farther, noted one interviewee. Another said there is no duplication of services because there is simply not enough money for that to happen.

The problems with providers in the county seem to be with quantity, not quality. Several interviewees noted lack of capacity for **mental health services, drug treatment, and dental care**, though most are limited because of limited funding. One person noted that coordination between agencies could be improved by better information about the organizations that exist, what they do, and their funding sources. Some interviewees noted the nationwide (and local) trend towards a healthcare system driven by insurance, not health.

Overall, there seems to be agreement that there are high quality health and social services in Addison County, as well as good coordination among agencies. The problems noted lie in capacity for some specific areas of service.

Transportation

More interviewees mentioned transportation than any other topic. However, on the survey, transportation as a barrier to healthy living ranked 3.64 on average, making it the fourth most important barrier. While transportation is not a health service, transportation is essential to accessing everything—doctors, jobs, education—that would influence health. Lack of private transportation provides a greater barrier in a rural area because people and places are spread out and public transportation is not everywhere.

“We’re all transit users eventually.”

Among those who discussed transportation, most noted that for such a rural county, there is excellent public transportation. The lack of transportation provides the biggest barrier to those living in more peripheral towns (everywhere except Middlebury, Vergennes, and Bristol). Interviewees expressed that transportation barriers are most significant for these categories of people:

- those who cannot afford a car,
- the elderly,
- those who have lost their license,
- high school kids who are too young to drive,
- children in need of child care but cannot get there,
- the migrant farmworker population, and
- those who cannot drive because they have an alcohol or drug addiction.

One interviewee elaborated on the issue of transportation for those with substance abuse problems, who may become caught in a downward spiral of being arrested for driving under the influence, losing their license, being unable to get to work, feeling hopeless, using more drugs, being unable to access treatment when they want it, and getting worse.

In summary, good public transportation exists for such as rural area, but given that it is rural and sparsely populated, more extensive public transit is a challenge. And, certain demographic and geographic groups are more affected by the transportation barriers than others.



Education/Knowledge/Awareness

The next biggest theme mentioned was education, knowledge, and awareness. However, many who spoke about education clarified that there is no lack of educational opportunities, rather there is a lack of education—both low attainment in school and lack of education about health.

Along similar lines, many interviewees talked about lack of awareness or knowledge, either about their services or about how to be healthy in general.

On the survey instrument, *lack of education opportunities* received an average ranking of 4.67 (where 1 was most important), but only 12 out of the 25 interviewees included it under impediments to healthy living. This made it, on average, the 9th most important impediment. Some survey respondents wrote in comments under “other” such as *lack of education (not opportunities)* or *lack of awareness/making health a priority*.

Lack of Awareness of Services Available

Half of the interviewees said that there is a lack of knowledge or awareness of their particular service or other services people might need. However, one interviewee noted that if they were to advertise their services more, then those currently being served would receive less; it is sometimes a tradeoff between serving more people a little bit, or fewer people in greater depth, especially since resources are scarce. An interviewee who offers educational services noted that their particular target group—those who lack education—are often the hardest to reach either because they have limited literacy, do not read news and advertisements, may not have a job or educational group that keeps them in the loop, or may stay in isolated areas.

“The services are there and often the difficulty is in getting people to realize they need those services.”

Lack of Educational Attainment

This paragraph will address education in the typical sense, meaning level of educational attainment. Many interviewees stated that education is a clear health-promoting factor. A couple of interviewees thought that there is a lack of educational attainment and job-training in the county. One noted delineated that this need for education and/or job training is greatest among the following groups:

- people who did not finish high school,
- people who need additional education for a job, or to support a career switch or layoff;
- young people aged 16-24 who are not in school or do not work.

This interviewee noted that there was a spike in people returning to education or job-training after the 2008 recession, but now the number of people doing so is down.

One interviewee emphasized the strong public schools and another talked about the increase in alternative pathways to graduation offered in the public high schools. One interviewee said that education is necessary for people to get out of poverty or improve their health because it allows them to imagine something better.

Lack of Knowledge About Health

Another way in which people spoke of education was not strictly in the amount of school completed or level of specialization of a job, but as knowledge, awareness, and familiarity. A lack of

“I think if one has resources, there are a lot of choices and options to access in Addison County... I feel like there are a lot of social services and resources available, but one has to know about them.”

basic knowledge by the individual was identified by one provider as the biggest barrier to health. In particular, many interviewees specified that there is a lack of knowledge about effective health-promoting behaviors such as good parenting, healthy cooking, being physically active, seeking dental care, and other aspects of living a healthy lifestyle. Most of the interviewees who expressed concerns about the lack of knowledge of these sorts of things work with children.

While there are excellent educational, job training, and alternative education options here in Addison County, there is still a lack of educational attainment and preparedness for skilled jobs. Moreover, many interviewees have seen problems with a lack of knowledge of healthy choices and available health services.

Poverty

About three quarters of the people interviewed brought up poverty as a barrier to health. On the survey, its average ranking was 1.46 (where 1 was most important) and it ranked first on average of barriers to living a healthy life. *Ability to pay* was ranked on average the most significant barrier to accessing health and social services. However, one person noted that this may also be *perceived* inability to pay. Unlike some other barriers, poverty is extremely complex. It may cause another problem, like substance abuse, or may be the result of something like substance abuse. Many of the issues discussed here intersect, especially with poverty, making it impossible to pinpoint that “poverty” is the problem in a given situation, because lack of reliable transportation, underinsurance, rural isolation, and expensive housing could be some of the other factors at play. Although it seems artificial to discuss poverty in isolation, this section will discuss how each interviewee talked about poverty and what they had to say about poverty and health.

A few interviewees were adamant that the biggest issue facing their service users was poverty. Many stated that poverty is the biggest determinant of health here; everything else follows suit—transportation, healthy food, seeing a primary care physician, etc. One interviewee noted that for those in poverty, health is not something on their mind.

Income Divide

One common topic related to poverty was the divide between those who are well-off and those who are poor, with very few people in the middle. Of those who discussed poverty, several brought up the idea that there are “two Middleburys” or “two Addison Counties”: one made up of people who are well-off, employed in well-paying jobs, and living in comfortable houses, and the other made up of people working low-paying, unskilled, unstable jobs. Some of these interviewees cited the fact that nearly 50 percent of the students at Mary Hogan Elementary school are on free or reduced lunch to illustrate the stark divide between the two halves of the town. Many interviewees, even some who did not specifically talk about this divide, said that the people in the middle of the two extremes (of high and low income) lose out because they earn too much income for government subsidies, but not quite enough to be financially stable. One interviewee noted that our system is one that forces people into poverty to get services, rather than assists those in the lower-middle income bracket to get them solidly out of poverty. As a result, there is intergenerational poverty that perpetuates this divide, one interviewee noted. However, one interviewee from outside the Middlebury area thinks that this divide is less marked in the smaller, more rural towns.

Several interviewees have seen increased rates of poverty, which take many different forms. One interviewee has noticed more service users receiving government assistance. Another noted that people who are receiving government assistance seem more impoverished than before.

The Economy and Employment at Large

Larger scale economic issues also came up in the interviews. A few interviewees brought up the high cost of living in Vermont and Addison County, especially in conjunction with the lack of rising income. One interviewee noted that despite low unemployment, there are high rates of poverty. Some interviewees attributed this to underemployment. Several others said this is due to people not being able to work enough hours, or not making enough in the hours worked to support themselves. One interviewee said that there seems to be more poverty following the 2008 recession. Two others mentioned that the slow economy in general has contributed to poverty.

In summary, poverty and its ramifications are clearly major factors in health. Poverty is not just determined by family circumstances, but by the general state of the economy. One aspect of poverty specific to Addison County seems to be this stark divide between those who are well-off and those who are impoverished, with very few in the middle.

Substance Abuse

Over half the interviewees mentioned substance abuse, either alcohol, opiates, or other drugs, especially when addressing trends that have increased over the past five or 10 years. Most discussed substance abuse as a barrier to health. About two thirds of those who discussed substance abuse discussed the lack of treatment availability or recovery support as a need in the county.

The effects of substance abuse

Two childcare providers mentioned substance abuse by parents affecting children's health and development, especially when both parents are using. One interviewee thought that substance abuse has been making acts of violence, including domestic violence, increasingly violent; yet the substance abuse tends to keep couples in abusive relationships because one often depends on the other for access to drugs. One interviewee expressed a belief that, not only does Addison County share Vermont's well-known opiate problem, it also has high levels of binge-drinking and marijuana use and a culture that often supports those habits.

Treatment and services

In terms of services for substance abuse, opinions differed. One thought there has been significant progress made in tackling opiate addiction in the past year and that the next step was to work on prevention. Another believes that those in treatment are not allowed adequate time in a treatment facility. One interviewee noted the lack of sober housing options available in Addison County. Another has found that people seem more reluctant to seek help and treatment for opiate addiction than for alcohol because of the greater stigma attached to opiate use. A couple of interviewees noted the effect that drug use has had on their services, even when the services are not directly related to substance abuse: it has made it more challenging to provide certain services and do so in a safe way. There has been an increase in the number of doctors offering suboxone treatment programs, yet the demand for treatment of opiate addiction is greater than the treatment resources currently available.

Substance abuse is a major health issue facing Addison County, and though steps have been made to address the issue, it seems that the treatment options are still stretched too thin. Moreover, substance abuse is not an isolated issue. It affects and is affected by so many other aspects of a person's life, so as long as the person is using substances, one interviewee said, there is no way to get them to think about any other aspect of health.



Mental Health

About half of the interviewees brought up the topic of mental health, whether they discussed it in depth or mentioned that their organization frequently refers service users to counseling. On the survey, the statement with which the most people disagreed was *In Addison County...most residents' mental health needs are met*. In noting the high prevalence of mental health issues in this county (as is true nationally), many interviewees prefaced their statements with the observation that the existing services are excellent, there are just not nearly enough services to meet the demand. Much of what people addressed fell into three categories: severe mental illness, emotional and behavior problems in children, and barriers to mental health services.

Severe mental illness

Two interviewees cited the closing of Vermont inpatient mental health institutions in the past 10 years as a reason that people with severe mental health issues are not receiving adequate treatment. Several mentioned the shortage of beds for inpatient mental health, including in the hospital emergency room. One interviewee talked about how their service users are often taken to the emergency room if they are having a mental health crisis, but if the beds

"The need is always going to outstrip what's available."

there are full, they are returned to wherever they came from. Two interviewees noted that there seems to be more people suffering from severe mental illness in the county in the past decade. Often other problems a person might be experiencing may be compounded by a mental health problem. One interviewee noted that it is difficult to deliver other services when a person has a severe mental illness because they may be disruptive to the service environment or make other service users feel uncomfortable.

Children and emotional/behavioral issues

Several interviewees who serve children noted that there have been increasing amounts of behavioral, social, emotional, and psychological problems among children. They are seeing more anxiety, depression, ADHD, and defiant behavior. As a result, interviewees are seeing more children on medications, something that one noted has really taken off over the past 10 years.

However, two interviewees noted how children's mental health is so interconnected to the family environment and the mental health of family members, making it difficult to truly help a child through treating the child in isolation; instead, the whole family needs treatment. One interviewee said that, due to an extreme shortage of child psychiatry services in the county (and state), doctors and pediatricians are required to know increasingly more about psychiatric medications so that children can be treated with prescription drugs.

"I think the biggest thing is mental health. We just have a huge lack of enough counselors and enough, certainly, psychiatrists. We just do not have enough psychiatrists."

Support for the elderly

One interviewee mentioned that there is an unmet need for psychosocial support for the elderly who might be isolated or afraid to seek services, more so than the general population. Another underserved group, one interviewee said, is women immediately post-partum who may have time-sensitive needs for emotional help, but not severe enough needs to receive emergency help; instead, they end up waiting and their needs get worse.

Other barriers to mental health care-seeking

Several people who talked about mental health identified the stigma in seeking services as a barrier for some people. Others noted that mental health care can be cost-prohibitive, even for those on insurance because it is often not covered. Another barrier an interviewee identified was the long wait list for actually getting in for services, which discourages people from reaching out for help in the first place.

Overall, there seem to be good quality mental health services, just not enough of them. The particular areas that seem to be lacking are inpatient treatment for those with severe mental illness and counseling and psychiatry for children. The major barriers to people obtaining mental health services are the wait time, cost, and stigma associated with admitting they need help.

Rural Isolation

Nearly half the interviewees brought up the idea of rural isolation or the problems associated with living rurally. *Proximity to services* as an impediment to healthy living received an average score of 4.31 (with 1 indicating 'most important'), making it 6th in the rankings of average scores. Transportation (previously discussed) plays a big role in making the difference between unhealthy rural isolation and healthy rural living. While rural isolation appears to be an issue, the main people affected by it are typically those living outside the Middlebury, Bristol, and Vergennes town centers.

Transportation in rural areas

Most interviewees who mentioned rural isolation mentioned it in conjunction with transportation. Living in a rural area, transportation is imperative, but because of their sparse populations, it is impractical for most public transit to go to such areas. Rural living is not inherently unhealthy. As one interviewee noted, rural living can be healthy for those who have a car, can easily access services and stores, and can take advantage of the outdoors for physical

activity. When rural isolation impedes the health of adults, it can negatively impact the health of children in the household as well.

Children in rural areas

Rural isolation is a concern for those serving kids. One interviewee said that a major concern among child care providers in Addison County is “latch-key kids” or “adultified kids”—those who are regularly left home alone for extended periods of time, especially in the summer, and take on the role of parenting themselves. Rural isolation exacerbates this problem since these kids have no place to go or people to see while they are home alone.

“It’s not as easy for some people because of transportation, because we’re spread out, you know, being such as rural area, all the services are concentrated in Middlebury or Burlington.”

The rural elderly

Regarding the other end of the age spectrum, two interviewees who provide services to the elderly noted that rural isolation can be especially difficult for the elderly because they have often lost the ability to drive and have very few people around. This can make people lonely and depressed. Addison County has an aging population, but one interviewee noted that the rural nature of the county makes it a difficult place to age.

Barriers to knowledge

One interviewee said that not only does rural isolation make it harder to *get* services, but it makes it harder to *know about* services. This interviewee has found that rural populations are harder to reach with advertisements because they are often disconnected from news and media sources containing advertisements. Another interviewee noted that sometimes these isolated communities are farming communities where there are other people around on the farm, so people do not feel isolated, but they rarely venture beyond those areas.

While not an issue that affects everyone in the county, rural isolation presents a significant barrier for those living outside Middlebury, Vergennes, and Bristol, specifically those without transportation, the elderly, and children who are home alone.

Food and Nutrition

About half the interviewees mentioned food. Everyone who spoke about food and nutrition spoke positively about the good foods available in Addison County. On the survey, *lack of proper nutrition* as an impediment to health received an average ranking of 4.42 (with 1 being ‘most important’). Several people noted options for local foods, such as farmers markets and community-supported agriculture (CSAs). One interviewee said that Addison County is better than most areas in terms of access to fresh and local foods. A few of the people who mentioned food talked about the advantage of living in an agriculturally based county. Even the schools and food assistance programs try to use fresh, local foods, noted one interviewee. Another interviewee said that since living in Vermont, she has seen a greater emphasis in schools and families on eating local food, growing your own food, and eating fruits and vegetables than where she lived before. She can see this play out in the young people who have come to work with her and seem more conscious of healthy nutrition and locally grown foods than those who came before them.

“You can see the difference between families where one kid will have fruits and veggies and a really healthy 7-grain sun butter and jelly sandwich and then we have another family, and they bring in a can of Spaghetti-Os. It’s easier, and sadly, it’s cheaper, to buy that can of Spaghetti-Os than to buy those fresh fruits and veggies.”

Financial barriers to nutrition

Several of those who talked about food said there is great food available, but for those without money, it is harder to buy healthy or local foods because they are often more expensive than shelf-stable processed foods. One interviewee believes that fresh food in the winter is also difficult for those in poverty to afford because there is a lack of processing and storage facilities

here. The long winters and short growing season, one person noted, are another barrier to having fresh foods all year around.

Cultural barriers

While poverty is one barrier to accessing the abundant good food here, another major barrier, as some noted, is lack of knowledge about good nutrition. Two interviewees said this is especially relevant for kids because the parents' lack of knowledge of or desire to make healthy food



choices affects their child's health and ability to make healthy choices. Choosing healthy foods also comes down to what people prioritize. One organization held healthy living classes that ran for 12 weeks on topics such as nutrition and diabetes preventions, but they were very poorly attended and suffered from attrition. Another interviewee reported that for some people facing drug addiction, drugs are the only thing they think about, so healthy eating is something that takes a back seat to obtaining more of their drug.

There is abundant healthy, fresh, local food here in Addison County, but whether people can take advantage of these good foods comes down to their choices, knowledge, income, priorities, or some combination of those factors. It seems that if people choose and can pay, they can eat a very healthy diet living here in Addison County.

Family Environment

Family environment—values, habits, the parents' upbringing, friends, the mental and physical health of other family members—is something that came up in almost half the interviews, especially in the context of children's health. Half of the participants indicated that they *somewhat agree* with the statement *In Addison County...most residents have adequate social support from family or friends*. Three interviewees were adamant that the family environment, including all that was described above, is the biggest factor that helps or hinders health.

As an influence on mental health

Several interviewees brought up the issue of mental health. One noted that mental illness or addiction in the family is a major factor influencing the health of a child or other family members. Another interviewee believes that the key to improving psychological and emotional health of children is breaking the cycle of dysfunctional families that raise dysfunctional kids. One interviewee talked about the connection he sees between unsupportive families and children who end up having behavioral or criminal troubles. However, one person said that lots of families do not want mental health services involved with their kids until there is some sort of crisis.

That same interviewee noted that children are profoundly affected not just by the immediate family environment, but also by family relationships, trauma, and attachment. Another interviewee believes that parents in general have become less supportive over the past 35 years, and are less able to be good role models for their kids. Someone else stated that there appears to be a lack of knowledge about proper parenting of children, especially from birth to five years of age.

Influence of family environment on treatment or services

Another time when family environment is important is when a child or family member needs treatment or help for a problem. One interviewee said that the success of dealing with a

“They might be in a home where there’s smoking and drinking and drugs and the kids are going to be exposed to that, so the kids are going to follow suit. I think it’s generational.”

child's behavioral or emotional problem depends on the extent to which the family is willing to be involved. Because children are surrounded by their family environment, it is important to have the family on board for treating a child. Another provider explained that children's emotional problems are often a reflection of something going on in their family or the emotional problems of a parent, which makes it difficult to treat a child's problem without fixing the parent's or family's problems.

The bottom line is, for children, the family is usually the root cause of positive or negative influences in their lives. One interviewee noted that given the relatively good health of the community at large, it seems to be the given family environment that has more of an impact on a child's health than the community environment.

Stigma and Fear

Almost half the people interviewed identified some sort of stigma or fear that went along with either their service or other services in the county. Some of these stigmas are so strong, they are barriers to care-seeking, while other stigmas seem to make people more skeptical of certain services. These stigmas and fears fall into four categories: mental health, age, addiction, and income.

"Parents are more inclined to go to medical doctors than they are to go to psychologists or therapists...there's a stigma associated with it."

Mental health

Several interviewees noted stigma and lack of comfort around seeking mental health services. One interviewee specifically mentioned how parents are often reluctant to seek services for their child because it may mean recognizing a problem in your child that cannot be fixed by simply changing something about the environment.

Services for the elderly

A provider of services to the elderly found that for many people, the stigma associated with receiving an old-age-associated service diminishes as the person receives the service and sees the value in it. Many elderly people also fear ending up in a nursing home, which often prevents them from seeking services—even services they can receive while staying in their own home.

Substance abuse treatment

Five interviewees mentioned the stigma associated with substance abuse. One believes there is more of a stigma around opiates addiction than alcohol. These interviewees said that having an addiction can be a barrier to seeking treatment for that addiction or any other health-related services; the addicted person fears the judgment they will receive from providers. Another talked about the stigma around those who will provide medical or other services to people with a drug addiction, which is a barrier to people with a drug addiction getting treatment or other health care.

The stigma of poverty

The final stigma has to do with income. One interviewee noted that many service users feel ashamed to be receiving government assistance, especially if it happens in a public way. Another noted that higher income women do not seek help with domestic violence as often as lower income women, though the rates are the same, regardless of income level. This may be because of the mistaken belief that domestic and partner violence do not occur in higher income brackets, or perhaps because higher income women are receiving support elsewhere.

The sorts of stigma and fears associated with mental health, aging, addiction, and income are by no means unique to Addison County. However, they still act locally as a barrier to some people who might need certain services.

Wait Times

While not actually a health issue, the topic of wait times for health services came up in nearly half of the interviews. Interviewees talked about wait times with regards to several different services: child care, housing for the elderly, mental health care, substance abuse, and dental care.

Many interviewees stated that there are a lot of services and resources in the county, but a lot of waiting.

For child care

One interviewee noted that there are wait times for childcare regardless of ability to pay. One interviewee who works with children said that kids often do not get off the waitlist and into childcare until age 3. Another who works with children said that often kids are on several waitlists, but may not inform other childcare providers that they have gotten into childcare elsewhere, so sometimes waitlists seem longer than they actually are.

Other wait lists

For the elderly, one interviewee said it is sometimes 5 years before someone is able to get into senior housing or assisted living. Several people talked about waitlists for mental health services, dental care, and treatment for substance abuse. For dental care, one noted that it is harder to get in if you are not already seeing someone at a dental practice. Wait time to get onto a drug treatment program has decreased over the past year with more people administering suboxone, said an interviewee. Some people stated that their organizations have specifically tried to reduce waitlists. The issue of wait times goes back to the underlying finding that there are excellent health services, just not enough of them.

Community Culture

The vast majority of interviewees who spoke about the community culture only spoke positively. Several people noted that there is generally a lot of awareness of health and wellness here. Other interviewees gave the following positive characterizations of the community, with one or two mentions each:

- the strong community connections here help people be healthier and happier;
- Middlebury and other towns in Addison County seem to be caring communities in general, where people are willing to help each other;
- the community cares about stopping domestic violence;
- the community values buying, growing, and eating healthy and local foods;
- there is a strong culture of volunteerism in everything from fire departments to volunteer drivers.

Two interviewees talked about the relationship between the rural nature of Addison County and the strong community-oriented culture. One said that having a small, dispersed population means that people come together because there are not a lot of people. Another said that living in the smaller towns in the county, it is easier to identify people in your town in need, so people are more likely to make an effort to help that person or family. Having connections with people and a sense of belonging contributes to health, and that sense of connection and community does not seem to be lacking here in Addison County.

Housing

Almost half of those interviewed brought up the issue of housing, and one interviewee stated that housing seems to be the biggest stress on service users. However, one interviewee believes that this used to be a bigger problem 10 years ago, and has since improved. Housing was not included anywhere on the survey, but one interviewee did include it in the *other* category and ranked it number one as an impediment to healthy living.

A few interviewees specified that the problem with housing is the lack of affordability. One interviewee characterized this problem as one that reaches all levels of house price. According



to this person, more new houses were being built annually up until the 2008 recession, but from 2008 to this year, most towns have only had an average of five new houses built per year. He thinks this is due to high land prices, which make it very expensive to build new structures.

Particular populations appear to be more affected by this housing shortage:

- High housing prices pose a problem for the **elderly** because good-quality assisted living facilities are either extremely expensive or have several year long waitlists. As a result, many elders end up staying in their homes when it is no longer safe for them.
- The lack of inpatient psychiatric care means a lack of housing for **people with severe mental illness**, making it harder to treat them in place since they may be living in shelters or in the woods.
- A **lack of sober housing** in the county is something another interviewee brought up.
- Several interviewees talked about the lack of shelter and emergency housing spaces as well; some people end up living in hotels paid for by the state, which is costly for the state and probably not the best solution for the people living there.

And of course, low-income persons across the board struggle to pay for housing.

Although there have been efforts to alleviate the housing shortage, it seems that lack of housing of various types persists, especially for those who are elderly, low-income, or suffering from severe mental illness.

Recreation Opportunities

To be in the best health, people must maintain healthy lifestyles including a nutritious diet and regular exercise. Eleven of the people interviewed brought up recreation opportunities of Addison County, in one way or another. One person's survey responses indicated as an impediment to healthy living, *infrastructure to support healthy, safe activities (walking cycling)* and ranked it as 3rd most important of all health factors. Most viewed the opportunities available as generally positive, but some noted the lack of walkability of certain places, especially in rural areas with no sidewalks and long distances to destinations.

Two interviewees noted that Addison County is not conducive to walking or biking. There are no bike paths and no sidewalks outside of the immediate downtown areas, forcing people to drive, even short distances. Another interviewee said that a limit to recreation and physical activity in Addison County is the lack of indoor winter exercise options.

Available recreation opportunities

Most who spoke about physical activity and recreation spoke about the positive side of living in Addison County in this regard. They said that there are plenty of opportunities for physical activity, if people choose to take advantage of them. Among the options in the county, people mentioned the TAM (the Trail Around Middlebury), tennis courts, gyms, an indoor pool, hiking trails, road biking, skiing, state parks, and natural swimming holes. Several interviewees attributed much of the recreation options to the incredible outdoor environment. One noted that there is better access here than in most places to outdoor recreation. However, one interviewee prefaced the praise of outdoor recreation by saying that it applies if one has money and knowledge.

“For a part of our population in Vermont, those of us who are more fortunate, more privileged, more able, who have money...who are really secure on our basic needs, for us, living in Vermont is like living in a state park.”



Infrastructure

A few of the interviewees who talked about recreation and physical activity talked about psychological barriers to healthy physical activity. One person noted that rural living often gives people the illusion of exercise because they are surrounded by nature, so they do not make a point of exercising. In fact, people living in rural places probably have fewer sidewalks and thus they drive more.

Another interviewee pointed out how kids' physical activity lies in the parents' hands and not enough parents are making their kids go outside to play. One interviewee who helps more families get outside with their kids noted that for many people, activities such as hiking and camping are associated with alcohol use for parents.

Three interviewees noted different types of recreation opportunities that exist in the county: cultural, intellectual, and artistic opportunities, which were described as abundant, especially for a county of this size. Overall, there seem to be opportunities for recreation of various sorts, if people choose to take advantage of it. However, there are also places where walking and biking are impeded by a lack of sidewalks and bike paths.



Child Care

While everyone who talked about child care seemed to think that the quality of child care here was excellent, most agreed that the need for child care was greater than the amount available. On the survey, *child care/programs for children after school* received an average ranking of 4.53, which placed the issue as the 8th most important factor influencing health.

Availability and wait times

Interviewees each described a variety of availability and access issues in child care:

- Children are often on a waitlist until age 3 before they get care.
- There is a lack of after school child care and a lack of child care in the summer. One interviewee noted that the safety of children being left home alone for long hours, especially during the summer, is a concern of those working with children in the county.
- Another interviewee believes that everyone who wants child care gets it eventually, but the problem is the hours: there is no early morning or evening child care. This is especially important for single parents who are trying to work enough hours to get out of poverty.
- There is a lack of teen programs and teen centers. One interviewee noted that there have been new teen centers opened over the past 10 years, but the number of teens they serve has not begun to reach the number of teens in the county.

Not only can child care be a barrier to the parent's health or job, one interviewee noted that it can sometimes prevent parents from furthering their own education.



Cost

About half the children in childcare are on government subsidies, noted two interviewees, so cost is a barrier for some residents. Cost provides a barrier especially to those who earn too much for government subsidies, but not quite enough to pay for their children's care, noted two interviewees. One interviewee explained that this often leads middle-income families to send their kids to unofficial family or neighborhood "day cares" where the quality of care varies

widely among settings. Cost is an issue, but one interviewee said that there is a shortage of child care regardless of one's ability to pay. While the child care options in the county were generally regarded as offering excellent quality of care, the amount of care available—like with many other services—seems to be the problem.

Health Insurance and Policy

Vermont is head and shoulders above the rest of the country when it comes to insurance coverage, which was evident in the way in which most people talked about insurance. However, there are problems that are masked by looking at the high rate of people with insurance. On the survey, *ability to pay* was on average the biggest barrier to accessing health care and services. However, one person clarified that it may also be *perceived ability to pay*.

High levels of insurance coverage

A few interviewees talked about the recent expansions of health care access in Vermont and in the nation. Almost everyone is insured, despite the recent failure of the single payer system that one interviewee explicitly said would have been a great advance. Several people interviewed said that the Dr. Dynasaur program for kids is an excellent health insurance plan. Over the past few years, one interviewee said there have been significantly fewer uninsured people coming for health care, meaning that people no longer have as great of a need for free health services.

Underinsurance

Despite high rates of insurance, several interviewees noted that there are problems with underinsurance. Many people have high enough deductibles that they will not seek care, have no dental coverage, or have minimal mental health coverage. Even with insurance, one interviewee said she regularly sees people who come to her organization making the choice between paying for necessary medications and paying the rent. A related barrier that one person mentioned was not just cost, but *perceived cost*; people often lack the knowledge of the insurance system or resources available to get the care they need at a reasonable price.

A larger scale problem that two interviewees noted is the way in which the US health care operates to not serve health, but to meet the pressures of insurance company policies, reimbursement schemes, and incentives for ordering tests. One of these interviewees believes there has been a decline in health care quality over the years because of the insurance-driven care.

Overall, insurance coverage rates are very high, which is very positive, though some people still do not receive adequate medical care with their given insurance plans. Vermont is still operating within the larger US system in which health services are driven by health insurance.

Educational Opportunities

Only about a quarter of the interviewees talked about educational opportunities, but all of them spoke about it positively. Several noted the high quality of schools here, which gives kids a good educational foundation. One interviewee said that the high schools are also offering more alternative pathways to graduation, which helps to award diplomas to kids who otherwise may have dropped out. Two interviewees mentioned that there are opportunities for adult education, career training, and mid-career retraining available, but some of these services are underutilized by both individuals and employers. In the survey, educational opportunities did not seem to be a big barrier to health. However, three people crossed out the word “opportunities” and ranked education as a major issue instead. It seems that educational *attainment* is more of a problem than availability of educational opportunities.



Other Miscellaneous Topics

Topics covered in this section are those that three or fewer interviewees brought up. However, certain interviewees who did bring them up thought some of them (such as dental care) were of greater importance than other things that were brought up more frequently (such as child care).

Dental care

Several interviewees talked about problems with dental care in Addison County. They said there are simply not enough providers, and it is hard to get into a practice, regardless of ability to pay. One said that many insurance plans do not cover dental services, so many people view dental care as a luxury—even if they are insured.



Physical climate

Vermont’s winter is long, and one interviewee saw this as a barrier to health because it limits outdoor physical activity and reduces the vitamin D naturally available. Another said that long winters pose a problem for serving the homeless, since it is imperative that the emergency shelter run longer throughout the year.

Youth

Two people talked about disengaged youth between the ages 16 and 24 who are neither employed nor in school. Aside from their lack of purpose, the youths’ situation is concerning because they are not easily reachable through a school, teen center, or

employer, and therefore may not be getting the medical, educational, or other help they might need.

Hours of operation

Hours of operation were mentioned by two interviewees. One said that medical office hours are a barrier to care, and that more evening hours would expand access to more people. Another spoke of hours for child care, saying that there is a lack of early morning or after 6 pm child care.

Alternative medicine

One interviewee talked about the alternative medicine options available in Addison County as a positive thing for health. She specifically mentioned acupuncture, chiropractic, and herbal medicines.

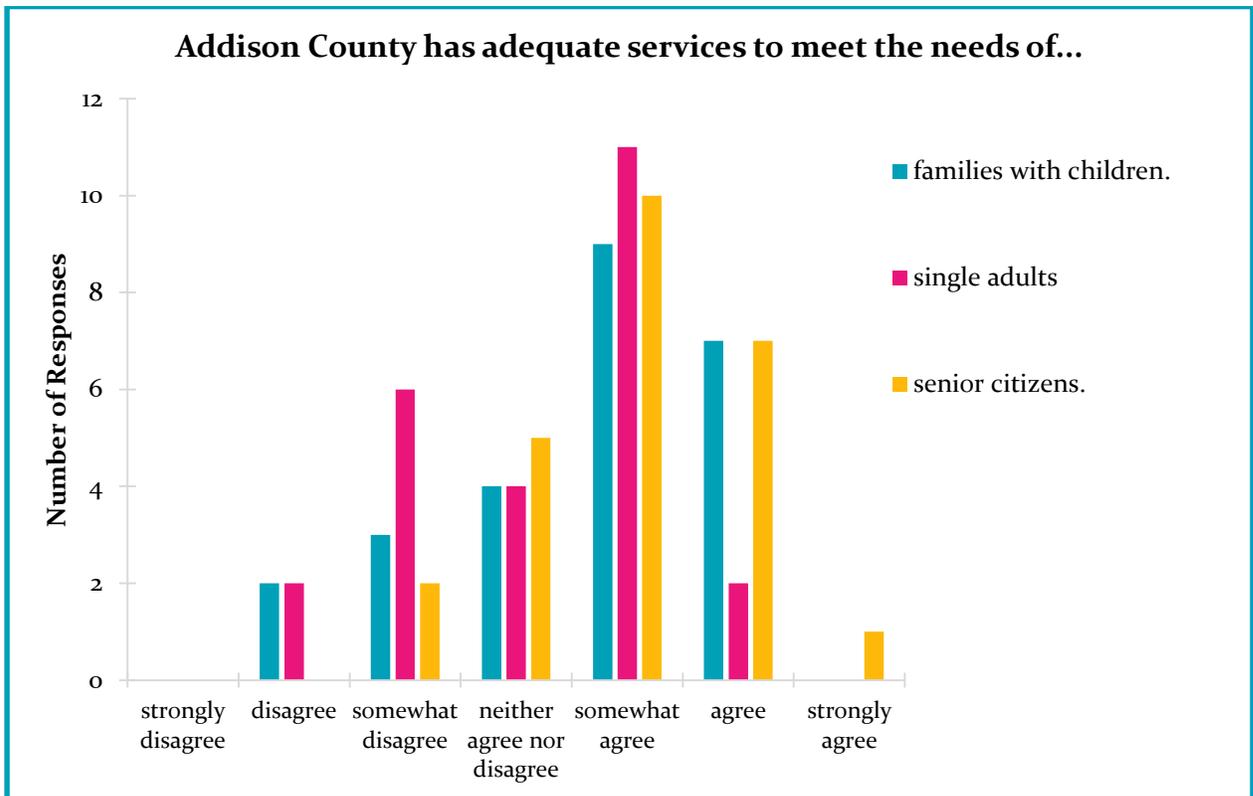
Safety

One interviewee mentioned the low crime rate in Addison County and in Vermont in general, making it a safe place to live.



IV. FINDINGS BY SPECIFIC POPULATION IN THE COUNTY

There were no interview questions that asked about specific groups, but interviewees nonetheless characterized subpopulations within the county as having unique needs.



Children

The two biggest issues that came up relevant to children are family environment and child care. Over half of the participants *somewhat agreed* or *agreed* that *Addison County has adequate services to meet the needs of...families with children*. Many people thought family environment has the biggest positive or negative impact on a child's health. The mental health of the family members contributes to this. Family is where children see positive or negative modeling and form important attachments. Another way in which the family is important is for implementing plans to help improve a child's physical or mental health or behavior. Parenting was also an issue that affects kids: several people discussed the problem of parents not having the knowledge necessary to be a good parent.

"We really have a good comprehensive care system for maternal care and newborn care. People come here from other counties to deliver babies here because they like the quality of the newborn care here."

Child care

It seems that there is high quality child care here in Addison County, but there is just not enough and not always enough hours. Another issue with child care for middle-income families is that they make too much money for government assistance with child care, but not enough to pay the full cost themselves, causing their children to receive child care from non-professional caregivers.

Exercise

The benefits of physical activity on children's health is well known. Some interviewees noted that many parents will not send their kids outside to play, even if it is safe to do so.

Emotional/behavioral problems

Interviewees noted that behavioral issues and certain mental health issues specifically affect children. The shortage of psychiatry, especially child psychiatry, is a barrier to these kids getting necessary help. The shortage of mental health services also impedes their mental health and behavior. Ultimately, it is up to the parents whether or not to seek services and bring their child for help, confronting the stigma and fear often associated with care-seeking for such problems.

Positive factors

There are factors that really help children's health in particular in Addison County. Interviewees noted good schools and educational opportunities. Also, Dr. Dynasaur, the state health insurance for kids, is a high-quality program, so kids are sure to have good insurance coverage.

However, children's health ultimately comes back to what their parents do to promote the physical and emotional health of their kids as well as themselves.

Middle Income

Six interviewees talked about issues that specifically affect those who make too much money to qualify for government assistance, yet not quite enough to pay for everything they need and be financially stable. Interviewees used different terms to describe this group: middle class, lower-middle class, working poor, working class. However, they were all referring to the group with the challenge described above.

One interviewee said she has seen people who are working, working harder and making less money over the years, which has pushed people who used to be middle class onto the edge of poverty.

One interviewee noted that we have a system of government assistance that forces people into poverty to get financial help, rather than encourages them to get out of poverty and gain financial stability. People in the middle are left in a difficult financial situation and may be underserved in certain ways.

“There’s that middle working class where they make just enough not to qualify for any services or for any state support, but they really aren’t making enough to survive. It becomes tricky for them to make ends meet.”

Child care and elder care

Paying for childcare and elder care is a way in which those in the middle lose out, along with their loved ones. Inability to pay for professional child or elder care leads to kids being left home alone or in informal day care settings (which may or may not be of good quality) and elderly people remaining in their homes without assistance when it is unsafe.

Transportation

Transportation is a barrier for those who are not old enough or poor enough to qualify for free rides, but may be ill and in need of ongoing transportation assistance.

Challenges with affordability of services is certainly not unique to Addison County or Vermont. However, even with a caring and connected community, social bonds are not enough to fill in the gaps left by unaffordable and therefore unattainable services.

Elderly and Aging Population

Four people interviewed specifically talked about the challenges that come with an increasingly aging population as there is in Vermont in general and Addison County in particular. One interviewee noted that not only is the population aging, but people are living longer. On the survey, *senior citizens* was the category of people for whom participants were in the most agreement that there are adequate services. The biggest issues that are facing elderly people seem to be transportation and housing. The elderly population is one of the major populations served by the bus system and the free ride system. As one interviewee pointed out, everyone, regardless of income or location, will need transportation assistance eventually as they age.

Housing for the elderly

For elderly people who can stay in their homes, one issue they may face is isolation and loneliness, especially if they are live in a rural location. Some may also be less safe in their homes if they have disabilities or illnesses that require more care. However, if an older person wants or needs to go into assisted living or a nursing home, the problem is that there are very long waitlists and living in such settings is often cost prohibitive.

Isolation and Emotional Health

Rural isolation may also affect older people psychologically, especially if they are immobile. Long winters prevent many elderly people from going outside and being active for fear that they will fall.

However, many people agree that Addison County has excellent medical services and services for the elderly, which help people grow old here in a happy and healthy way, despite other barriers.

People Who Abuse Substances

Well over half the interviewees spoke about substance abuse, and in talking about substance abuse, many revealed specific issues facing those who are addicted to drugs or alcohol. The most commonly mentioned issue was lack of available services for the addiction, including suboxone treatment, methadone treatment, or counseling specifically for addiction.

Other issues facing people who abuse substances are barriers related to stigma. One interviewee said that substance abusers often will choose not to seek other medical services because of the stigma associated with addiction; they fear being judged by their doctor or other service provider. One noted that this is especially difficult for pregnant women who are, or formerly were, addicted, as most obstetricians will not see such complicated cases. When someone is addicted to a substance, that is the only thing on their mind, explained two of the interviewees: when someone is addicted, it is nearly impossible to address other health issues that require a change in behavior because the patient is overwhelmingly preoccupied with obtaining more of the substance that they need, at the expense of other concerns. One interviewee said that a culture that condones heavy alcohol use serves as another barrier to those struggling with addiction and whether to quit.

“Until that problem [substance abuse] is taken care of in an individual, they’ll never have a healthy diet, and dental care, and everything else that comes along with it.”

One interviewee discussed partner relationships between substance abusers. She said domestic violence tends to be more violent when substances are involved. Often, couples are harder to separate in this situation as well because one may be the provider of drugs for the other.

A few of the interviewees mentioned the effect of substance abuse on the children of substance abusers. They said having a parent who was a substance abuser is a barrier to the child’s physical and emotional wellbeing. Another has observed an increase in the number of children with two parents who are substance abusers.

Lack of sober housing is an issue that faces those recovering from substance abuse. Transportation serves as a barrier to many substance abusers, one interviewee said: many substance abusers fall into a cycle where they drive under the influence, have their license suspended, drive without a license, get caught, lose their license, cannot get to work, lose their job, and end up using more substances to cope with the downward spiral.

In Closing

The findings summarized above represent the perspectives of local service providers, speaking in their professional capacity, who have observed and are concerned about the issues presented in this report. Some issues and themes were expressed by numerous interviewees; some were expressed by just one or two people. These findings emerged through one-on-one interviews, which were kept short out of respect for the busy schedules of the interviewees. The interviews were conversational and qualitative; the goal was to identify and explicate issues, but not to quantify them at the population level. Thus, the rate at which the population experiences the challenges outlined here remains unknown; such a detailed county- or town-level assessment would no doubt be of tremendous benefit to local organizations. Details about the interview questions, participating organizations, data collection tools, and analytic methods employed in the present study appear in the appendices, which follow this section.

Appendices

1. LIST OF PARTICIPATING ORGANIZATIONS AND PEOPLE

Date	Organization	Person	Position
06_22	Otter Creek Child Care	Linda January	Acting Director
06_22	Elderly Services, Inc.	Pat Carpenter	Social Worker
06_23	Counseling Services of Addison County	Bob Thorn	Executive Director
06_23	Mary Johnson Children's Center	Barbara Saunders	Co-Director
06_25	Turning Point Center	Bill Brim	Executive Director
06_29	Vermont Adult Learning	Joe Przyperhart	Center Coordinator
06_29	Vermont Department of Health	Moira Cook	District Director
06_29	WomenSafe	Kerri Duquette-Hoffman	Domestic Violence Program Coordinator
07_01	Addison County Regional Planning Commission	Adam Lougee	Executive Director
07_02	Addison County Home Health and Hospice	Marcia Wheeler	RN, Interim Clinical Director and Hospice Team Leader
07_02	Patricia A. Hannford Career Center	Lynn Coale	Director/Superintendent
07_13	Addison County Parent/Child Center	Donna Bailey	Co-Director
07_13	Addison County Transit Resources	Jim Moulton	Executive Director
07_14	Open Door Clinic	Heidi Sulis	Executive Director
07_15	United Way of Addison County	Kate McGowan	Executive Director
07_20	Addison Central School	Suzanne Hodsden	Principal's Confidential Secretary
07_21	Domestic Violence to Responsible Choices	Melissa Deas	Director/Co-Facilitator
07_22	Charter House	Doug Sinclair	President and Housing Program Director
07_27	Ripton Elementary School	Tracey Harrington	Principal
07_29	Rainbow Pediatrics	Jack Mayer	Pediatrician
07_30	Bristol Internal Medicine	Patty Lewis	APRN
07_30	Bristol Internal Medicine	William Porter	MD
08_05	Middlebury Police Department	Chris Mason	School Resource Officer
08_05	Tapestry Midwifery and Women's Health	Heather Brown Kidde	CNM
08_06	Community College of Vermont	Jennifer Stefani	Financial Aid Counselor/Office Manager

2. SURVEY INSTRUMENT

Addison County Health Study

This survey is meant to be brief and very general. There is no right or wrong answer, please answer the questions as best you can. There will be time to elaborate on these in the interview.

It is easy for most people to live a healthy life in Addison County.

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

In Addison County...

... most residents' medical needs are being met.

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

... most residents' mental health needs are being met.

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

... most residents have adequate social support from family or friends.

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

Addison County has adequate services to meet the needs of ...

... families with children

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

... single adults

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

... senior citizens

1-----2-----3-----4-----5-----6-----7
 strongly disagree disagree somewhat disagree neither agree nor disagree somewhat agree agree strongly agree

**Please rank the following barriers to accessing health care and social services.
Put a 1 next to the most important barrier(s), a 2 next to the 2nd most important barrier(s),
and so on.**

- Availability of services
- Awareness about existing services
- Service providers' hours of operation
- Transportation to/from services
- Language interpretation/translation
- Ability to pay
- Other: _____

**Please rank the following impediments to healthy living in Addison County.
Put a 1 next to the most important impediment(s), a 2 next to the 2nd most important
impediment(s), and so on.**

- Poverty
- Disability
- Unemployment
- Work conditions
- Transportation
- Proximity to services
- Elder care
- Child care/Programs for children after school
- Lack of education opportunities
- Lack of proper nutrition
- Drug/alcohol use
- Violence in the home
- Other: _____

3. INTERVIEW QUESTIONS

Interview Questions

The following numbered questions were asked at every interview. Those questions with letters may have been asked as follow-up questions if necessary.

1. From doing some background research on your website, it seems to me like your organization/agency/office does _____ . Is that correct?
Anything else I missed?

Who you ARE serving:

2. Why does the community need your services?
3. Who tends to come for services?
 - a. Demographics? Why?
 - b. Geographically? Why?
4. How has this (who comes and their needs) changed (or not) over the past 5 and 10 years?
5. To what extent do your service users use other organizations/agencies/offices services (similar or different)?
 - a. If similar, why both?
6. Do your service users have needs that are not currently met by either your or other organizations/agencies/offices?

Who you are NOT serving:

7. Are there people or groups in the community who could use your services but you have not been able to reach?
 - a. Why? Is the service not offered? (Beyond your scope, funding, mandate, etc.)
 - b. Or that people are not seeking the service that is offered? (Advertising, visibility, reputation, location, hours, etc.?)
 - c. Outreach? Advertising? Hours? Locations?
8. How have those you are not serving (either because the service is not offered or they do not seek services) changed over the past 5 and 10 years?

Living a healthy life in Addison County in general. I know you answered this question on the survey, but I'd like to talk a bit more about it now. This is a good chance to elaborate on why you chose the answer you did on the survey.

9. How easy is it to meet basic health needs, including medical, mental health, and social support?
10. What are some factors here that allow/help people attain a healthy lifestyle?
 - a. Day-to-day health/wellness?
 - b. Crisis/emergency support?
 - c. Demographics: SES, age, job type, family, ability level?

11. What are some factors that prevent people from attaining a healthy lifestyle?
 - a. Day-to-day?
 - b. Crisis/emergency support?
 - c. Demographics: SES, age, job type, family, ability level?
 - d. Stigmas around seeking services?

Community Engagement:

12. The main goal of this project is to.....we are also funded by.... And want to use this opportunity.....does your organization see any ways in which student volunteers or working with the college could contribute to fulfilling your mission?

4. METHODS

About our methods

This section of the report details the methods used to carry out this study. Although the work was investigative, and we conducted research, we were not testing any particular hypothesis. If anything, we sought to conduct research that was hypothesis-*generating*; our goal was to approach service providers with an open mind and a receptive ear, documenting what these local professionals identify as significant barriers to healthy living. Furthermore, participation in the study was voluntary, creating a convenience sample of relatively small size.

Project ethics

One of our first tasks was to develop a code of ethics to guide our work. We recognized that local service providers often work with vulnerable populations, who at times experience hardships that are stigmatized. And, local organizations must carry out their work in partnership with other organizations, in an environment of strained resources and tight budgets typical of non-profits. Our assumption, guided by the principal investigator's 16-year experience as a volunteer with multiple organizations in the community, was that all local organizations are doing the best they can with the resources they have. Based on that assumption, we developed the following guiding principles:

- We will approach all participants with respect;
- We recognize that our involvement with local organizations should help to unify and strengthen efforts to improve community life, rather than be polarizing or divisive; to that end, we will neither evaluate organizational performance nor call attention to strengths or weaknesses of any particular organization;
- The organization/agency/office can choose which staff member is to be interviewed for the study;
- Interviewees are professionals in their field and are speaking from that perspective.

The focus of the interviews was on the needs of service users of each organization/agency/office and the needs of the people of Addison County at large. Given that focus, we anticipated questions about whether or not we would be approaching service users themselves, or conducting any community-based parallel research. The answer to both questions was no: our study was not a formal needs assessment, and we had no plans to collect even anecdotal information from service users. Such data collection would have required Internal Review Board (IRB) approval to approach

human subjects. It is important to note that professionals, granting interviews in their capacity as experts in their field, are not considered 'human subjects' per IRB guidelines.

Prior to the start of each interview, we provided the following information/requests:

- We asked for permission to record the interview for accuracy and efficiency, and to allow the interviewer to better engage in the conversation (rather than focus on taking notes).
- Interviewees could decline to be recorded.
- We notified interviewees that the report may include quotations. Direct quotes would be used sparingly, and only when: 1) the statement was best expressed by the interviewee; 2) the statement is broad and widely applicable; and 3) the quote was not identifying.
- Quotes would not be attributed to an individual or organization.
- We would not use any quotations that shed a negative light on any organization, including the interviewee's own organization.

It was our hope, and we believe a success, that proactively developing and sharing these ethics and principles allowed interview subjects to speak freely and honestly.

Creating the study sample

Target sample. Our goal was to contact a comprehensive list of **health and social service** organizations and agencies that **provide services directly** to members of the community. We excluded organizations whose focus was on the business community, such as local chambers of commerce and economic development organizations. We contacted a geographically representative sampling of schools as well.

Identification of local organizations. We used a number of methods to identify organizations and individuals to contact:

- first-hand knowledge through the principal investigator's 16-year history of living, working, and volunteering in Addison County;
- perusal of the yellow pages of the phone book;
- internet searches for services available at the county level;
- links and referral sites listed on organizations' web sites; and
- suggestions collected from other participants.

All but the last method was used to identify recipients for the initial mailing. The last method (suggestions collected from other participants) was used for a second round of solicitation.

Methods of contact. Once the target sample was identified, reaching out to potential participants and maintaining communication was achieved through several methods:

- On May 31, 2015, the principal investigator mailed a letter, printed on Middlebury College letterhead, to 42 organizations. In most cases the letter was addressed to the executive director. In the case of schools, the letter was addressed to the school nurse. Two letters were returned due to an incorrect address. The letter indicated that the interviewer would call the recipient a few weeks later to follow-up. Recipients of the letter were invited to contact the principal investigator by phone or email.
- Middlebury College created a new email account that could be used by both the principal investigator and the interviewer/research assistant.
- We purchased a 'TracFone' with a phone number dedicated to the study.
- In mid to late June, all organizations received a follow-up phone call asking if someone would be willing to participate in this project by doing an interview. There were four organizations for which a phone number was not available. Those received an email.

As mentioned in the previous section, a second round of contacts was made later in the summer to a total of 9 recipients. There were several scenarios for this second round of contacts:

- If the original letter recipient indicated their lack of availability to be interviewed, we contacted another person in the organization at their request.
- If we never received a response, either to the mailing or to the follow-up phone call, we re-sent the letter by email to a different person in the organization; usually this second recipient was someone known personally by the principal investigator, or known to her through other community contacts.
- If a participant identified an organization that we missed, or suggested an individual in the community (e.g. retired persons who had previously worked in health or social services), then we contacted that person by email.

A total of 25 individuals at 24 organizations were interviewed over the course of the summer. Appendix 1 lists the interviewees, their affiliations, and the date of the interviews.

Interviews

If the recipient of the letter or his/her designee was willing to participate, the research assistant arranged an interview time and met the interviewee at the location of his or her choice. Before each interview, the research assistant researched what the organization does so that the focus of the interview could be on the people they serve and the interviewee's perspective on health, and not on the organization's mission.

Interview locations. Almost all interviews were conducted at the office where the interviewee worked, but 3 interviews took place at Carol's Hungry Mind Café in Middlebury, at the request of the interviewees.

Interview protocol. Within the first few minutes of the interview, the research assistant established the following parameters, as outlined in the project ethics section above:

- She asked interviewees if they would mind being recorded. All interviewees agreed to be recorded, and therefore they were.
- She informed the interviewees that very few quotations would be used in the report and no quotations would be attributed. Quotations would only be used if they were general, non-identifying, and better suited to direct quotation rather than paraphrasing.
- She provided clarification on how to fill out the survey (see below), based on feedback from the first few interviewees.

Survey. Next, the interviewees filled out a brief and general survey (see Appendix 2) asking for their opinion of how easy it is to live a healthy life in Addison County, as well as their rankings of the severity of barriers to health. The survey served two purposes:

- to collect very general data from a variety of opinions in a way that is quantifiable;
- to encourage the interviewee to think broadly about the social determinants of health and about mental and social health (not just physical) before the interviewing began.

The survey included seven Likert scale questions and two numerical ranking questions, in which participants provided rankings from most to least important. Interviewees were permitted to assign the same ranking to more than one item number (indicating their belief that two or more items were equally important), and they were not required to rank everything listed.

Interview questions. Following completion of the survey, participants were asked a series of interview questions (see Appendix 3), which took approximately a half hour. The interview questions fell into four categories:

1. who uses the organization's services (i.e. circumstances of service users);

2. who does not use the organization's services (i.e. people who might benefit from the services, but are not using them);
3. the interviewee's perspective on living a healthy life in Addison County in general; and
4. if there is (or could be) collaboration with the College or student volunteers.

See the appendix 3 for the exact interview questions used.

Although the research assistant asked specific questions in each interview, the participants were allowed to steer the conversation in certain directions that seemed important to them. Some were also asked additional follow-up questions specific to the topics they had raised.

Data compilation and analysis

After each interview, the research assistant wrote a list of all the major points that stood out to her during the interview. Then she listened to the recording of the interview. She did not transcribe the interviews, but wrote down all of the relevant points the interviewee made and how the interviewee answered each question.

Once 8 interviews were done, she began to compile a spreadsheet with a list of themes or topics mentioned. She categorized the themes into 4 sections:

1. problems/wants/needs of the community;
2. positive/excellent/health-promoting features of the community;
3. trends and changes over time in the above two categories; and
4. other expressions of the influence of socioeconomic class on life in Addison County.

The spreadsheet contained binary indicators for the presence or absence of each theme or topic mentioned in each interview.

The survey data were also entered into a spreadsheet. For the Likert scale questions, each level of agreement had a number and the number of times each number was chosen was counted. The number of times each response was chosen on the Likert scales was graphed in a bar graph. The average ranking for each item was recorded in a spreadsheet and items that were not ranked received a zero. The average ranking for each item (not including zero) was calculated and graphed. Since the most important factors received lower numbers (i.e. "most important" received a 1), the ranking was subtracted from the maximum to better illustrate visually the hierarchy of the rankings, such that the "most important" item had the tallest bar on the graph.

In keeping with the nature of this project, which was based on a convenience sample interviewed in the absence of hypothesis testing, no tests of statistical significance were conducted.

Report writing

Report writing began in August 2015. Both the principal investigator and the research assistant contributed to the writing of this report and each reviewed the other's work. The findings summarized here do not reflect all of the data in its entirety. The goal of the writing was to create a report that was comprehensive and detailed, yet not unwieldy. The back page of this report instructs the reader on how to get more information.

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