#### INTRODUCTION/EXECUTIVE SUMMARY:

Principally involved in this project were three individuals: Ron Hallman, Vice President of Development and Public Relations at Porter Hospital, Madison Styrbicki, a junior at Middlebury College who spent her January-Term working to conduct a series of interviews throughout the month, and myself, Heidi Sulis, as project coordinator. I received my Master's in Public Health from Yale University, School of Epidemiology and Public Health in 1985; and then managed the Department of Community Health Outreach at Porter Hospital for the 21-year period, spanning December of 1989 through May of 2011. My resume including my academic and professional experience along with my volunteer activities is included at the end of this document.

At the outset of this project, a number of resources were read, reviewed and/or reevaluated in order to better prepare for our interviews and position ourselves to assess and draw meaningful conclusions from our findings. Included in this review were: Porter Medical Center's 2004 Act 53 Community Needs Assessment, Healthy Vermonters 2010, The Health Disparities of Vermonters, 2010, AHEC's 2011 Snapshot of the Vermont Primary Care Workforce, and Vermont's 2010 Blueprint for Health.

Another document that was thoroughly reviewed, and will be included in its entirety in our completed CHNA, is the 2009 Addison County Community Needs Assessment, entitled, *The Health of Our Community*, completed by our local Middlebury District Office of the Vermont Department of Health. As the "process" was initially outlined to us through a power point presentation, it was explained that we could use pre-existing pieces of information collected by other organizations. Given the breadth of this assessment - explanation of service area, data review and a survey conducted by themselves of 180 Addison County residents in the fall of 2009 - combined with the fact that there isn't a new body of data/numbers to look at just yet, it seemed nothing less than prudent to incorporate this entire document into our completed needs assessment.

Additionally, and unique to this year's CHNA is a brand-new assessment/survey that was initiated by Jessica Holmes, both a faculty member and economist at Middlebury College and Board Member of Porter Hospital. Collaborating with staff, board and trustees at the College and Hospital, and working closely with Ron Hallman and some of her students, in the summer of 2011, Jessica developed an on-line survey to assess the community's perceptions of medical care access and quality of care in Addison County.

Between October and December, 2011, links to this survey were emailed to all faculty and staff at Middlebury College, all members of the Addison County Chamber of Commerce, and all affiliates of Porter Medical Center (both employees and board members). In addition, the Addison Independent, one of our local newspapers, published an article about the survey, with a link to it, and Porter Hospital also posted the survey link on its webpage, with the hopes of further increasing community participation.

A total of 510 individuals participated in the survey, the results of which will be made available in the addendum of the final document. While it should be noted that this survey primarily focused on participants' perceptions of Porter Medical Center and the role it plays within our service area - a single entity to be considered within a much larger field of players - it nonetheless validly captures the "consumer's perspective," within a specific context, and is the first survey of its kind to have been done in our community. So long as we hold it within the proper context, it does add merit and value to the CHNA as a holistic document.

Finally, between January and October of 2012, a total of 25 interviews were conducted primarily with professionals and individuals who represent a wide variety of community organizations and/or constituents that cut across all socio-economic strata including those individuals who are marginalized within our communities. Included in this group, listed below, are health care providers, legislators, Middlebury's town planner, and a variety of administrators. We did not conduct any focus groups, and admittedly are shy on the consumer perspective, at least from "face-to-face" encounters, but feel confident that through the lens and perspective of many individuals interviewed, we certainly captured consumers' concerns.

Those interviewed included:

Joanne Calvi, Jeff Heath and Staff – Middlebury District Office, VDH

Kerri Duquette-Hoffman – Women Safe

Rachel Guy – Middlebury Office, Planned Parenthood

Neil Gruber, Executive Director – Helen Porter Healthcare and Rehabilitation Center

Senator Claire Ayer, Legislator, Addison County

Mike Fisher, Representative, Addison County

Larry Goetschius, Executive Director – Addison County Home Health and Hospice

Bob Thorn, Executive Director – Community Services of Addison County

Eileen Fuller, MD – Middlebury Family Health

Harvey Green, DDS – Harvey Green Dentistry

Kate McGowan and Helen Friesmuth – United Way of Addison County

Mike Fernandez – Resident of Bristol and Board Member, Porter Hospital

Christopher Mason, Police School Resource Officer – Middlebury Police Department

Sharon Koller, Student Assistant Program Counselor – Mount Abe Union High School

Tom Fontana, School-based Clinician – Vergennes Union High School

Melanie Clark, Coordinator, Addison County Youth Prevention and Control Grants

Jeanne Montross, Executive Director - HOPE

Fred Dunnington, Town Planner - Town of Middlebury

Gretchen Gaida Michaels, MD – Bristol Internal Medicine

Poppy Cunningham, RN and Donna Bailey, Co-Director - Addison Co. Parent/Child Center

Julie Arel, MSW, MPH – Executive Director/Open Door Clinic

Joanne Corbett, MSW, ACSW, LICSW - Executive Director/Elderly Services

Jody Brakeley, MD – Pediatrician

Martha Redpath, CNM and Heather Kidde Brown, CNM – Tapestry Midwifery

James L. Daily – President/Porter Medical Center

Clearly emerging from the body of interviews done between January and July, and further corroborated by consumer surveys completed between 2009 and 2012 are the following challenges/priorities for our future consideration and focus:

- Access to primary care providers, to insurance, to comprehensive services
- Substance Abuse/Addiction Opiate addiction, abuse and addiction of/to
  prescription drugs and narcotics
- Mental Health
- Dental Health
- Obesity Nutrition Exercise
- Homelessness

This really comes as no surprise as we saw most of these issues surfacing back in 2004, and then again explicitly articulated through the work of our local Health Department's 2009 Community Assessment. A significant number of additional concerns and challenges were also addressed during the interviewing process, all of which will follow in our Summary of Interviews.

#### ADDISON COUNTY - OVERVIEW OF OUR COMMUNITY

Addison County is located in the lower Champlain Valley of Vermont with Lake Champlain and the Adirondacks to our west and the Green Mountains to our east. The unique landscape of Addison County – the fertile farmlands of the Champlain Valley and the predominantly wooded settings near the foothills of the Green Mountains – provides a variety of lifestyles and a nicely balanced blend of light industry and dairy farming. Addison County is rural and known for its dairy farming. It has the most farm acreage in the state and leads the state in the value of agricultural products sold. The County is home to three local newspapers, seven service or fraternal organizations and more than 100 faith communities. The major employers in the county include Middlebury College, Porter Medical Center and Goodrich Corporation, now a part of United Technologies (UTC Aerospace Systems).

Addison County is bordered to the north by Chittenden County, Vermont's most densely populated county, which includes Vermont's largest city (Burlington) and its surrounding suburbs. The northern portion of Addison County is considered a "commutable" distance to Burlington so residents have the option of traveling north for employment, healthcare, shopping and other services. Addison County is bordered to the south by Rutland County. Rutland County is the home of Vermont's second largest city, Rutland. Residents who live in the southern portion of Addison County have the option of traveling to Rutland County for work, healthcare, etc. The southern most communities of Addison County - Leicester, Whiting and Orwell - are part of school supervisory unions that primarily serve Rutland County students. Addison County is bordered to the east by Windsor, Orange and Washington Counties. For the eastern Addison County communities of Hancock and Granville, accessing services within our county is challenging particularly in winter as this typically necessitates traveling over mountains.

According to the U.S. Census Bureau, the 2009 population of Addison County was 36,760. This number reflects a 2.2% increase from April, 2000 and also represents approximately 6% of the State's total population. In Addison County, 21% of the population comprises persons aged 18 and under, 5% - persons under the age of 5, and 13.3% persons aged 65 years and older. By gender, there is nearly an even split with 50.3% females and 49.7 percent males in the county. The median age is 36. Y race and ethnicity, 96% of the population is Caucasian and Latinos represent the most prevalent among ethnic groups at 1.2%. In 2008, the median household income was \$56,585 and 9.5% of the County's population was below poverty level. The unemployment rate as of March, 2009 was 8.2%.

Regarding education, most towns in Addison County offer preschools and all have elementary education programs. For secondary education, students go to consolidated school districts which serve neighboring communities. There are three school districts in Addison County: Addison Central Supervisory Union, Addison Northeast Supervisory Union and Addison Northwest Supervisory Union. In addition to traditional secondary schools, the Patricia A. Hannaford Career Center offers an integrated work and learning program to students in all three districts. Public School Enrollment for FY'09 was:

2,713 for pre K-6, 772 for grades 7 & 8, and 1,679 for grades 9-12. The 2007-08 high school completion rates for our three respective high schools were 92.8%. In addition to public schools, Addison County is the home of Middlebury College, a prestigious liberal arts college, a branch of the Community College of Vermont, and Northlands Jobs Corps., a residential and educational training program for economically challenged youth ages 16-24.

# **Population Centers:**

# Middlebury

Middlebury, the shire town of Addison County, was chartered in 1761 and was settled just after the Revolutionary War. Today, the village is listed on the National Register of Historic Places and is home to many shops, businesses and architecturally distinguished churches and public buildings. It is the largest community in the county with a population of approximately 8,200. Middlebury is home to prestigious Middlebury College, the region's largest employer. Middlebury is the hub for medical services in the county with Porter Hospital, a critical access

Hospital with 25 beds, Helen Porter Healthcare and Rehabilitation Center and the majority of area physician offices.

### Vergennes

Established in 1788, Vergennes is Vermont's oldest and first incorporated city. It is home to about 2,800 residents and encompasses approximately 1,200 acres of land that was carved from the three neighboring towns of Ferrisburgh, Panton and Waltham. Vergennes is home to United Technologies, another large employer in the region. In the last decade, Vergennes experienced a downtown revitalization, which began with significant renovations to the Vergennes Opera House. At one time, Vergennes' Main Street consisted primarily of boarded up window fronts but it is now thriving with notable restaurants and shopping.

#### **Bristol**

Bristol, known as the "Gateway to the Green Mountains", was founded in 1762 and is currently home to approximately 3,800 residents. Bristol has a vibrant main street and a strong artist community. The town supports a busy recreation department with a myriad of classes, a clay studio, skate park, teen center and skating rink. Bristol's town green has been part of the village throughout its history. The Bristol Band has presented outdoor summer concerts on the town green every Wednesday since shortly after the Civil War. The green also hosts 4<sup>th</sup> of July events, farmers' markets, Movies in the Park, the Harvest Festival and many other activities. Finally, a truly unique feature about Bristol is that garbage and recycling is picked up by horse-drawn wagon.

## **Smaller Towns and Villages:**

Approximately 60% of Addison County's residents live outside the three population centers. These outlying towns are small and rural with few local services. These communities are governed by select boards and most have their own elementary school. There are small stores with some food choices but limited fresh produce. The large grocery stores are located in the population centers along with other shopping, banking and healthcare services. Transportation is a significant issue in our county. Addison County Transit Resources provides bus and volunteer driver services but these services are somewhat limited and work for some but not all situations. Agencies such as Parent Child Center, Addison County Home Health and Hospice and Elderly Services provide transportation for their clients for specific purposes but in general, transportation is a concern for those who do not drive and those without a reliable vehicle.

There are ample opportunities for outdoor physical activity in Addison County but in outlying communities there is concern that the roads are dangerous for walking and biking due to fast moving traffic and narrow shoulders. There are few, if any, sidewalks and people often drive short distances because of this. There are no fitness clubs or other indoor facilities for classes and open gym time. There is no paid recreation staff in the outlying towns; some have volunteer recreation or trail committees whose activities are dependent upon the interest and energy of those involved.

#### **DATA REVIEW**

# **Demographics:**

- In 2007, an estimated 36,760 people lived in Addison County, about 6% of the state's total population.
- Addison County is expected to continue to grow slowly, at approximately 2% to the year 2020.
- Addison County has a higher proportion of young people age 0-22 years (38% versus 33% for VT) and a lower proportion of people age 65 and older (11% versus 13% for VT). However, with the lowest birth rate in the nation, Vermonters under the age of 18 years are gradually decreasing while those 55 years and older continue to grow in number.
- **254** adults in Addison County are living with disabilities, 91 people living with disabilities are age 18-64 years while 163 people living with disabilities are 65 years and older. Vermonters living with a disability are projected to increase by 35% between 2007 and 2017. Younger people with disabilities are predicted to increase 22% while older people with disabilities will increase by 42%.
- Addison County has similar educational attainment as the state as a whole, 14% of adults in Addison County have less than a high school diploma, 33% are high school graduates, 28% have some college education and 26% are college graduates.
- Addison County has a slightly lower proportion of people living at less than 200% of poverty than the state as a whole (24% in Addison County vs. 26% in VT).
- Addison County's median household income in 2000 is higher than Vermont's at \$43,142 for Addison County versus \$40,856 for Vermont.
- 70% of people age 16 and older in Addison County are working.
- Addison County's unemployment rate in 2000 was 3.2%. **Unemployment in Addison County climbed to 5.5% in August 2009** although, this is down from the 10-year high recorded in March 2009 of 8.2%.

Sources: US Census Bureau 2000 data, US Census Bureau Current Population Estimates, Vermont Department of Disabilities, Aging and Independent Living, Shaping the Future of Long Term Care and Independent Living June 2008 Report and Bureau of Labor Statistics

# **Quality of Life:**

A 2007 United Way of Addison County community needs assessment asked: What are the best things about living in Addison County? 750 people participated in the assessment and said the following:

- The people of Addison County received the most recognition as one of the best aspects of our community. Respondents said Addison County has "a small town feel where everyone knows everyone."
- Addison County's beauty, agriculture and location were considered among the community's top assets.
- **Local services** were next on the list of best things about Addison County. This included social service organizations, health services and schools.
- The **availability of cultural and recreational activities** was considered a highlight of living in Addison County. Some of the activities mentioned were hiking, hunting, fishing, dancing, skiing, sculpting and painting.

The United Way of Addison County needs assessment also asked: What kinds of problems or issues are you and your community members facing today? Responses were:

- Almost half of the respondents said **financial stability** was the biggest issue facing the community. Tax relief, better paying jobs and the high cost of living were listed as concerns for Addison County residents.
- **Health issues** were also a concern for Addison County residents. Lack of access to affordable care was top of the list of health concerns, while the need for better substance abuse treatment was next.
- Lack of affordable **housing** was also listed as a significant concern.
- Next on the list was access to transportation. This is of particular concern for Addison County residents who live outside of Middlebury, Bristol and Vergennes because lack of transportation affects their ability to access services and to maintain quality employment.

Source: United Way of Addison County, Addison County Speaks - Community Needs Assessment 2007

#### **Access to Healthcare:**

- 14% of adults in Addison County do not have health insurance and 9% have "no personal doctor" vs. 12% statewide and 88%...both higher than the state at 12% and 72% respectively.
- In 2008, Addison County had a higher ratio of primary care providers than it did in 2000. There were 89.3 primary care FTEs per 100,000 people in 2008 up from 77.1 FTEs per 100,000 people in 2000.

Sources: Vermont Department of Health, Health Status Report 2008 Appendix and Vermont Department of Health 2008 Physician Survey

# **Hospitalizations:**

Addison County residents are hospitalized at a rate of 71.6 per 1,000 versus 86.1 per 1,000 statewide. The cost of hospitalizations per capita in Addison County is \$1,037 versus \$1,266 statewide.

Between 2002 and 2007, Addison County ranked 7<sup>th</sup> for hospitalizations among Vermont's 14 counties, where 1 is the best for:

• Pulmonary Heart Disease

Between 2002 and 2007, Addison County ranked 8th for hospitalizations among Vermont's 14 counties, where 1 is the best for:

- Coronary Artery Disease
- Hypertension
- Tobacco Use
- Congestive Heart Failure

Between 2002 and 2007, Addison County ranked 9th for hospitalizations among Vermont's 14 counties, where 1 is the best for:

- Diabetes
- COPD

Source: Vermont Program for Quality in Health Care 2009 Vermont Health Care Quality Report

# **Substance Abuse Related Hospitalizations:**

Between 2002 and 2006, Addison County residents accounted for 4% of the state's total population of people hospitalized for substance abuse related illness.

Between 2002 and 2006, Addison County tied with Essex County for the lowest rate of hospitalizations for opioid abuse and dependence.

Between 2002 and 2006, Addison County ranked 5<sup>th</sup> for hospitalizations among Vermont's 14 counties, where 1 is the best for:

• Cannabis abuse and dependence

Source: Vermont Program for Quality in Health Care 2009 Vermont Health Care Quality Report

#### **Access to Long Term Care:**

- Vermonters increasingly prefer to receive their long term care services at home as evidenced by a contraction of the state's institutional capacity. Over the last twelve years, 600 Vermont nursing facility beds have closed (from roughly 3,900 to 3,300) shifting care into the home and community-based system.
- In 2007, 34% of Addison County adults with disabilities utilized personal care services in their homes; this is higher than the state as a whole at 23.2%.

- In 2007, 55% of Addison County adults with disabilities participated in adult day care services, which is significantly higher than the state's proportion at 14.2%.
- **Vermont's nursing homes served 3,118 residents in 2007.** Although nursing homes make a significant contribution to the state's long term care system, they house only 3.3% of Vermonters age 65 and older and 12.5% of those age 85 and over.
- 29% of Addison County adults with disabilities were served in nursing homes in 2007; this is much lower than the statewide proportion at 39%.

Source: Vermont Department of Disabilities, Aging and Independent Living, Shaping the Future of Long Term Care and Independent Living June 2008 Report.

### **Healthy Lifestyles:**

### **Tobacco Use**

- 19% of Addison County adults smoke cigarettes and half (50%) of Addison County smokers have tried to quit smoking, both are slightly lower than the statewide proportion at 20% and 53% respectively.
- 24% of Addison County pregnant women quit smoking during the first trimester of pregnancy, which is lower than the statewide proportion of pregnant women who quit smoking at 29%.
- **59% of Addison County smokers with children prohibit smoking in their home and 69% prohibit smoking in their car,** versus 66% of smokers prohibiting smoking in their home and 72% prohibiting smoking in their care for the state as a whole.

### **Physical Activity and Nutrition**

- More than half (56%) of Addison County adults engage in recommended amounts of moderate or vigorous physical activity, this is slightly lower than the state proportion at 58%.
- 18% of Addison County adults engage in no leisure time physical activity, this is comparable to the statewide proportion at 19%.
- 68% of individuals in Addison County are not eating 5+ fruits and vegetables each day, comparable to statewide total at 69%.

## **Obesity and Food Security**

- More than one in five (21%) Addison County adults are obese; this is comparable to the statewide proportion at 21%.
- 8% of Addison County residents do not have enough food to eat and enough money to buy food; this is comparable to the statewide proportion at 9%.

#### **Alcohol Abuse**

- 5% of Addison County adults are considered "heavy" drinkers, compared to 7% statewide.
- 13% of Addison County adults are "binge" drinkers, compared to 17% statewide.

# **Cancer Screening**

- 78% of Addison County women age 40 and older have had a mammogram in the preceding two years, this is about the same as the state as a whole at 77%.
- 87% of Addison County women have had a Pap test in the preceding three years; this is higher than the Vermont proportion at 83%.
- Only 38% of Addison County adults age 50 and older have had a fecal occult blood test in the past two years but this is higher than the state as a whole at 32%.
- 58% of Addison County adults age 50 and older have ever had a sigmoidoscopy or colonoscopy and this is comparable to the statewide proportion at 59%.

#### Maternal and Child Health

- 89% of Addison County pregnant women receive prenatal care within the first trimester of pregnancy, compared to 90% statewide.
- 87% of Addison County pregnant women receive early and adequate prenatal care, compared to 89% statewide.

### **Radon Testing**

• Only 17% of Addison County adults live in homes that have been tested for radon, this is lower than the state as a whole at 22%.

Sources: Vermont Department of Health, Middlebury District Office Community Snapshot Data 2008 and Vermont Department of Health, Health Status Report 2008 Appendix.

### **Health Status:**

Disease prevalence among Addison County adults is comparable to statewide disease prevalence:

<b>F</b>	Addison County	Vermont
Diabetes	6%	6%
Asthma	15%	14%
Hypertension	24%	24%
Obesity	21%	22%
Cardiovascular Disease (MI, Stroke, CV	/D) 7%	7%
Have a Chronic Disease	25%	27%
Have 2 or more Chronic Diseases	8%	9%

#### **Arthritis**

- Almost ¼ (24%) of Addison County adults with chronic joint symptoms have not seen a health care provider about their symptoms. However, this is better than the state as a whole at 28%.
- 39% of Addison County adults with arthritis have limited ability to work for pay due to their arthritis, compared to 31% statewide.
- More than half (52%) of Addison County adults with arthritis have received counseling from their health care provider on physical activity or exercise, this is lower than the Vermont proportion at 58%.

#### **Diabetes**

- Addison County has the second highest rate in the state of diabetesrelated deaths (109 deaths per 100,000 people), this statistically worse than the state as a whole at 91 deaths per 100,000 people.
- However, the rate of hospitalizations for uncontrolled diabetes among Addison County adults age 18-64 years is significantly better than the state as a whole at 2.7 hospitalized per 10,000 for Addison County verses 3.4 for Vermont.
- The proportion of Addison County adults with diabetes receiving the following education, screenings and immunizations is lower than the state as a whole:
  - -- Diabetes education (53% for Addison County vs. 56% for VT)
  - --Annual dilated eye exam (64% for Addison County vs. 72% for VT)
  - --A1C measurement at least twice/year (63% for Addison County vs. 69% for VT)
  - -- Pneumonia vaccination (41% for Addison County vs. 46% for VT)
  - --Cholesterol measured (60% for Addison County vs. 72% for VT)
- The proportion of Addison County adults with diabetes receiving the following screenings and immunizations is better than the state as a whole:
  - -- Annual Foot Exam (80% for Addison County vs. 75% for VT)
  - --Influenza vaccination 48% for Addison County vs. 46% for VT)

#### **Heart Disease and Stroke**

- Addison County's death rate from coronary heart disease is higher than the state as a whole at 150 deaths per 100,000 for Addison County verses 138 per 100,000 for Vermont.
- Addison County's rate of stroke is higher than the state as a whole at 150 per 10,000 for Addison County verses 138 per 10,000 for Vermont.
- **23% of Addison County adults have high blood pressure,** which is comparable to the state as a whole at 22%.
- 73% of Addison County adults have had their cholesterol checked within the preceding five years, compared to 72% statewide.

# **Respiratory Diseases**

- Addison County's death rate from COPD among people age 45 and older is lower than the state as a whole at 108 deaths per 100,000 for Addison County verses 123 per 100,000 for Vermont.
- 1/3 of Addison County adults with asthma have received a written asthma management plan from their health care provider, this is higher than the statewide proportion at 23%.

Sources: Vermont Department of Health, Middlebury District Office Community Snapshot Data 2008 and Vermont Department of Health, Health Status Report 2008 Appendix.