Southwestern Vermont Health Care's 2004 Act 53 Community Needs Assessment



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Abstract

During 2004, Southwestern Vermont Health Care (SVHC) conducted a Community Needs Assessment to determine the health care needs of the communities it serves. SVHC gathered both community perceptions of health and health care and public health data for the assessment. To gather community perceptions, SVHC used interviews from 61 community leaders and a random telephone survey of 400 individuals. Data on the public health measures came from the Vermont Department of Health and an adult behavioral risk telephone survey of 1600 individuals

The findings of the study were presented to the SVHC Needs Assessment Steering Committee to identify priorities to be addressed. Chronic disease is behind the majority of deaths in the SVHC service area. The choices people make have the greatest effect on most chronic disease. Public health information and the community perceptions indicate that residents in the SVHC service area need to have healthier lifestyles to improve community health. The communities and the steering committee identified diet, physical activity, and substance abuse (drug, alcohol and tobacco use) as priorities to address in the SVHC service area.

In addition, community members stated a need to expand or improve all types of health care. Using public health data as a guide, the Steering Committee chose to prioritize the more feasible access issues: Mental Health and Substance Abuse Treatment, Dental Care, Emergency Care (stabilization and transport), Insurance and Regulatory Issues (border state restrictions that limit access), and Chronic Disease Screening.

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Executive Summary

The purpose of this assessment is to identify the health and health care needs of the population served by Southwestern Vermont Health Care (SVHC) and to prioritize these needs with the assistance of community leaders and residents. The communities involved in the assessment are those within the SVHC service area and include these four regions: Southshire of Bennington County, Northshire of Bennington County, Deerfield Valley of Windham County and the Hoosick Area of New York. To understand the health and health care needs of the population, SVHC conducted a two-phase study. The first phase collected information on individuals' perceptions regarding the health and health care needs of their community. The second phase collected information on a variety of public health measures. Findings of the assessment were presented to the Needs Assessment Steering Committee, made-up of 17 community leaders from across the SVHC service area, who identified priorities to be addressed based on the assessment findings.

The priorities identified by the Needs Assessment Steering Committee are:

- Nutrition and Physical Activity
- Substance abuse (alcohol, tobacco and other drugs)
- Access to Health Care
 - o Mental health and substance-abuse treatment
 - Dental care
 - o Emergency care (transport and stabilization)
 - o Border states' insurance and regulatory restrictions limiting access to care
 - o Chronic Disease screening

These priorities were selected based on the understanding that the majority of deaths by residents in the SVHC service area and statewide are caused by chronic disease, with heart disease and cancer alone contributing to almost half of all deaths. Because it was recognized that people's lifestyle choices play into their risk of developing chronic disease, it was thought important to target those behaviors that have the greatest impact on chronic disease, namely, diet and physical activity, and substance abuse (drug, alcohol and tobacco use). These behaviors also were identified by residents and community leaders in the SVHC service area to be the top priority health issues affecting area residents. Public health data also support the need to improve these behaviors, considering that residents in the SVHC service area did not perform as well as residents statewide on indicators related to these behaviors. Finally, access to health care was considered a priority health issue to address because, not only did residents and community leaders in the SVHC service area feel a need to expand or improve all types of health care, but public health data also supported the need to address the issue. However, the specific types of access issues selected as priorities were chosen based on both community need and their likelihood to be improved by the community.

After the priorities were identified, community forums were held in each of the four regions of the SVHC service area. The purpose of the forums was to report out the findings of the assessment and to solicit public comment on the relevance of the priorities identified for the region. A total of 73 individuals attended the meetings, ranging from 13-22 individuals at each of

the four forums. Forum participants confirmed that the priorities identified by the Needs Assessment Steering Committee were appropriate for their region. Also, some areas had additional insight into the needs of their community. These comments were recorded by region of the SVHC service area to be retained for review at the biennial assessment update held in 2006. At the biennial update, the Needs Assessment Steering Committee will reflect on the comments from the community forums, comments received on an ongoing basis regarding the assessment, other updated community health information and strategies used to address the priorities. This information will be used by the Needs Assessment Steering Committee to monitor progress toward addressing the priorities identified as well as to evaluate continuation or revision of the priorities to ensure that the most important health needs of the community are being addressed.

Information from this needs assessment will be used by SVHC's strategic planning process where strategies are identified to address SVHC priorities. A new grant program also will be designed by SVHC to address some of the priorities identified by the Needs Assessment Steering Committee. Finally, this information will be used by the State of Vermont to inform the Health Resource Allocation Plan, where statewide priorities for health care will be identified along with resources to meet those priorities.

This assessment was completed in December 2004 to satisfy Act 53, which requires all hospitals in Vermont to conduct a community health assessment designed to understand the health and health care needs of the communities they serve. The law also requires all Vermont hospitals to update the needs assessment every two years (the first of which to be completed by January 1, 2007); and to conduct a full needs assessment, consisting of both qualitative and quantitative information, every four years (to be completed by January 1, 2009).

Methodology

The Communities Involved

The communities involved in the assessment are within the SVHC service area and include these four regions and their corresponding towns:

Southshire of Bennington County (which includes Bennington, North Bennington, the village of Old Bennington, Pownal, Shaftsbury and Woodford)

Northshire of Bennington County (which includes Arlington, Dorset, Manchester, Rupert, Sandgate and Sunderland)

Deerfield Valley of Windham County (which includes Dover, Halifax, Jacksonville, Searsburg, West Dover, Whitingham and Wilmington)

Hoosick Area of New York (which includes Berlin, Buskirk, Cambridge, Eagle Bridge, the town of Hoosick, the village of Hoosick Falls, North Hoosick, Petersburgh and White Creek)

Needs-Assessment Process

To understand the health and health care needs of the population, SVHC conducted a two-phase study. The first phase collected information on community leaders' and residents' perceptions regarding the health and health care needs of their community. The second phase collected information on a variety of public health measures. The findings of the two-phase study were then presented to the Needs Assessment Steering Committee, which identified priorities to be addressed. Once priorities were identified, four community forums were conducted, one in each region of the SVHC service area. The purpose was to share the findings of the assessment and to solicit public comment as to the appropriateness of the priorities identified for the region. The information will be used to inform SVHC Strategic Planning Process and the Vermont Health Resource Allocation Plan.

Phase I: Method Used to Understand Community Perceptions Regarding Health and Health Care Needs

To understand the community's perception regarding the most important health and health care needs, information was collected in two ways. First, in-depth phone interviews were conducted with 61 key community leaders from the SVHC service area, approximately 15 from each region (for a complete list of community leaders interviewed, please see Acknowledgement, pg 80). These leaders were identified by the SVHC Needs Assessment Steering Committee and included individuals representing a variety of backgrounds.

Key leader interviews were conducted with:

24 government leaders, which included 11 representatives from local government, seven associated with local schools, and six involved with law enforcement;

15 health care leaders, which comprised physicians, nurses, rescue-squad personnel, and mental health and substance-abuse practitioners;

12 community organization/social service leaders, which included eight individuals representing community organizations and social service agencies, and four people associated with faith organizations; and

10 business leaders.

The second way that information was collected was from phone interviews with a random sample of 400 individuals across the SVHC service area (one hundred individuals from each region of the SVHC service area). Interviews were conducted with the health care decision-makers of the households contacted. About two-thirds (68.1%) of these health care decision-makers interviewed were women, and about one-third (31.9%) were men. Residents' median age was 46 years. They tended to be fairly long-term residents, with more than one-half (55.6%) having lived in their towns for 20 years or more. Residents were generally well-educated, with about three-fifths (63.5%) having at least some college education.

Phase II: Method Used to Obtain Public Health Measures

Public health measures were obtained from two sources, the Vermont Department of Health (VDH) and SVHC. VDH provided information on a variety of public health measures, including leading causes of death, hospital utilization, lifestyle behaviors and access to health care measures. However, with the exception of hospital utilization, data obtained from VDH did not include SVHC's New York-based service area, which holds 20% of the population SVHC serves; nor did it provide information specific to each region of the SVHC service area, which was thought to be important to identifying differences among regions.

To compensate for this, SVHC set out to obtain information on adult behavioral risk. SVHC selected to study behavioral risks because it was well documented in the scientific literature that lifestyle behaviors impact most on a community's health, with 50% of all deaths attributed to behaviors. By having an understanding of the behavioral risks in each region of the SVHC service area, SVHC could better understand the health and health care needs of the population. Also, it was decided to study adult rather than youth behaviors, because youth behavior information was available for each region of the SVHC service area through the Youth Risk Behavior Survey from VDH and the Hoosick Area Communities That Care Survey.

To understand adult behavioral risk, SVHC used a Center for Disease Control (CDC) Survey known as the Behavioral Risk Factor Surveillance Survey (BRFSS). This survey is conducted in every state in the United States. The same research firm used by the State of New York and Vermont to conduct the BRFSS was hired, and the same CDC protocol was applied to the survey methods. A phone survey was conducted with a random sample of 1600 individuals (400 individuals from each region of the SVHC service area). The information was analyzed to provide information on each region of the SVHC service area as well as on the service area as a whole. A statistical test was applied to the data to identify whether significant differences existed among the regions.

Methods Used to Identify Priorities

The findings of the two-phase study were presented to the Needs Assessment Steering Committee on October 6, 2004. The Steering Committee is composed of 17 key community leaders, with representation from each of SVHC's four regions. Steering Committee members were selected based on their work within the community or as a result of recommendations solicited from town managers and/or select board chairs from towns with populations greater than 2,000.

The following represents the composition of the Steering Committee (for a complete list of Steering Committee Members, please see Acknowledgement, pg 80):

- **3 government leaders** (1 town supervisor, 1 school board chair, 1 select board member);
- 7 health care leaders (2 physicians, 1 nurse practitioner, 1 retired nurse, 1 Director of United Counseling Service, 1 District Director for the Vermont Dept. of Health, 1 District Manager of the Vermont Dept. for Children and Families, Economic Services Division);
- **6 community organization/social service leaders** (3 Healthier Community Partnership Coordinators, 1 Executive Director of United Way, 2 "other" community representatives);
- 1 business leader; and
- **2 SVHC staff** (1 CEO, 1 VP Marketing and Planning).

The Committee reconvened on October 20, 2004, to identify priorities. Identification of priorities was based on consensus of the group. Steering Committee members were first asked to identify priorities specific to each region of the SVHC service area and to identify priorities for the service area as a whole.

The priorities identified by the Needs Assessment Steering Committee are:

- Nutrition and Physical Activity
- Substance abuse (alcohol, tobacco, and other drugs)
- Access to Health Care
 - o Mental health and substance-abuse treatment
 - o Dental care
 - o Emergency care (transport and stabilization)
 - o Border states' insurance and regulatory restrictions limiting access to care
 - o Chronic disease screening

SVHC's Plan for Updating the Community Health Assessment Biennially

The community health assessment will be updated by January 1, 2007. The purpose of this update is to monitor progress toward addressing the priorities identified by the Needs Assessment Steering Committee as well as to evaluate continuation or revision of the priorities to ensure that the most important health needs of the community are being addressed. Public health data relevant to the priorities will be updated (if available) and presented to the Needs Assessment Steering Committee along with strategies used to address the priorities. In addition, public comments from the community forums, comments received on an ongoing basis regarding the assessment and other relevant information will be presented to the Committee for its review.

2004 Annual Public Meeting

Community Forums: Community Forums were held in each of the four regions of the SVHC service area to report out the findings of the assessment and to solicit public comments on the appropriateness of the priorities identified for each region.

The forums were held in collaboration with each Healthier Community Partnership in the SVHC service area (Catamount Partnership for Community Health, Deerfield Valley Community Partnership, and the Greater Hoosick Area Communities That Care Coalition). Individuals from a variety of backgrounds received invitations via personalized letters, e-mails, save-the-date cards, partnership newsletters, announcements at meetings, and school newsletters. Specifically, invitations were sent to all 61 key community leaders who were interviewed for the assessment, local public officials, school board members, superintendents of schools, select board chairs, town managers, Healthier Community Partnership members, Chambers of Commerce directors, Rotary Club presidents, child-care directors, housing project managers, physicians, SVHC trustees, SVHC Regional Advisory Board members, Deerfield Valley Advisory Board members and other opinion leaders. The community at large also was invited via SVHC's Wellness Connection Newsletter, which is inserted in all the local papers (roughly 33,000 copies). Also, press releases were placed in all the local papers along with a public notice. And, finally, some local papers featured an article regarding the assessment.

The following community forums were held

Southshire: 9 Nov. 2004, Bennington Firehouse, 130 River St., Bennington 4:30-6:00 p.m. **Northshire:** 10 Nov. 2004, Manchester Town Hall, Main Meeting Room, 6039 Main Street (Rte 7A), Manchester Center 8:30-10:00 a.m.

Hoosick Area of N.Y.: 16 Nov. 2004, Hoosick Town Offices, New York State Armory, 80 Church St., Hoosick Falls 6:00-7:30 p.m.

Deerfield Valley: 19 Nov. 2004, Twin Valley School Library, 1 School St., Wilmington, 6:45-7:45 PM. This was being held during a Community Night, which begins at 5:30 p.m.

A total of 73 individuals attended the meetings, ranging from 13-22 individuals at each forum. At the meetings, the conversations confirmed that the priorities identified by the Needs Assessment Steering Committee reflected the needs of each region. Also, some areas had additional insight into the needs of their community. In the Northshire of Bennington County, it was felt that the cost of prescription drugs limited access to the drugs. Noting that, oftentimes, people struggle between eating and paying rent, or taking their medication. It was also believed that the lack of public transportation limits access to health care. In the Hoosick Area of New York, it was believed that not only do border state insurance restrictions limit access to health care in Vermont, but that legislative and other regulatory restrictions also limit access to Vermont medical services. Finally, in the Deerfield Valley, it was believed that reducing social isolation and increasing services to the elderly would improve elder health. It was felt that most community members are unaware of services available to them, and that there is a need to assist individuals with navigating through these services.

Public comments were recorded by region of the SVHC service area, to be retained for review at the biennial assessment update held in 2006. At the biennial update, the Needs Assessment

Steering Committee will reflect on the comments from the community forums. In addition, the Steering Committee will review comments received on an ongoing basis regarding the assessment, other updated community health information and information regarding strategies used to address the priorities. This information will be used by the Needs Assessment Steering Committee to assess whether the priorities and/or their strategies are still appropriate or need revision to be most effective at addressing the health needs of the community.

Mechanism for Receiving Ongoing Public Comment

SVHC has set up a specific e-mail address on its Website to receive ongoing public comment regarding the assessment (communityhealth@phin.org). Individuals who may not have access to the Internet can relay their comments by contacting SVHC's Director of Community Health and Wellness either by phone (802) 447-5438 or mail at 100 Hospital Drive, Bennington VT 05201. All comments will be recorded by region of the SVHC service area and retained for review at the biennial assessment update. In addition, SVHC will hold an annual public meeting in collaboration with the three Healthier Community Partnerships in its service area (Catamount Partnership for Community Health, Deerfield Valley Community and Greater Hoosick Communities That Care Coalition) for the purpose of soliciting comment on strategies to address priorities.

Needs Assessment Data and Discussion

I. Demographics

Table 1.1 shows that the SVHC service area has an older population when compared with the State of Vermont, with 16.9% of the population ages 65 and over compared with 13.2% statewide. Table 1.2 demonstrates that families in the SVHC service area experience a slightly higher rate of poverty than on average for Vermont. Table 1.3 indicates that, as with the rest of the state, the SVHC service area is primarily White (non-Hispanic).

Table I.I 2003 Population Estimates				
Benr	nington Service	e Area		
Age	Area	Vermont		
<1	405	6,698		
1-4	1,689	27,104		
5-9	2,300	37,840		
10-14	2,914	43,904		
15-17	1,853	27,276		
18-19	1,198	21,355		
20-24	2,422	42,465		
25-29	1,822	31,826		
30-34	2,142	37,283		
35-39	2,633	43,752		
40-44	3,314	51,666		
45-49	3,335	52,368		
50-54	3,203	47,737		
55-59	2,667	38,298		
60-64	2,210	27,930		
65-69	1,709	21,486		
70-74	1,700	19,196		
75-79	1,396	16,433		
80-84	982	11,773		
85+	1,162	12,720		
Total	41,056	619,110		
% 0-19	25.2%	26.5%		
% 65+	16.9%	13.2%		

Table 1.2 Vermont Individuals with Income Below 100% and 200% Federal Poverty Level (FPL)*

Bennington Service Area					
Status	Area	Vermont			
Individuals with Known Poverty Status	39,371	588,053			
Families below 100% FPL	3,989	55,506			
Percent of families below 100% FPL	10%	9%			
Families below 200% FPL	11,609	156,874			
Percent of families below 200% FPL	29%	27%			

^{*} Based on individuals with known income from Census 2000

Table 1.3 Count and Percent of Vermont Population by Race and Ethnicity*					
Ве	ennington Ser	vice Area			
Ethnicity Data Type Area Vermont					
Hispanic or Latino	Count	367	5,492		
(any race)	%	0.9%	0.9%		
White (non-	Count	39,511	585,430		
Hispanic)	%	97.1%	96.2%		
***	Count	39,774	589,258		
White	%	97.8%	96.8%		
Agian	Count	260	5,255		
Asian	%	0.6%	0.9%		
Black or African	Count	156	3,048		
American	%	0.4%	0.5%		
American Indian	Count	0.2%	2,438		
and Alaska Native	%	93	0.4%		
041	Count	408	8,889		
Other	%	1.0%	1.5%		
Total population	Count	40,670	608,827		

^{*} Based on Census 2000. Categories do not add up to Total Population due to rounding.

2. Overall Measures of Community Health and Hospital Utilization

Leading Causes of Death

Leading causes of death (Table 2.1) inform us that residents in the SVHC service area tend to be dying primarily from chronic disease, as is the rest of the State of Vermont; with Heart Disease and Cancer contributing to almost half of all deaths. However, Cancer is the No. 1 cause of death in the SVHC service area, compared with Heart Disease Statewide. Also worth noting is that SVHC's 5th leading cause of death differs from the State of Vermont. The 5th leading cause of death for the SVHC service area is Alzheimer's Disease and for the State of Vermont it is Unintentional Injuries (see Table 2.2). In fact, SVHC residents are dying nearly twice the rate from Alzheimer's Disease compared with the rest of the state, even when age-adjusted (41.5 SVHC vs. 21.8 VT).

Table 2.1 Top 5 Leading Causes of Death*							
	Benningto	n Service A	rea	Vermont (overall)		
Cause of Death	Number of Deaths	Rate per 100,000 **	Rank	Number of Deaths	Rate per 100,000 **	Rank	
Malignant Neoplasms	518	207.9	1	6172.0	199.7	2	
Diseases of the Heart	485	186.3	2	7004.0	225.1	1	
Chronic Lower Respiratory Diseases	164	64.9	3	1441.0	47.5	4	
Cerebrovascular Diseases	158	61.7	4	1675.0	54.8	3	
Alzheimer's Disease	106	41.5	5	641.0	21.8	8	
All Causes	2042	806.9	n/a	25338.0	819.3	n/a	

^{*} Data is based on 1998 to 2002 Vital Records -- Death Data

 $[\]ensuremath{^{**}}$ Age-adjusted to U.S. Standard 2000 population

Table 2.2 Top 10 Leading Causes of Death* Statewide					
Vermon	nt				
Cause of Death	Number of Deaths	Rate per 100,000**	Rank		
Diseases of the Heart	7004	225.1	1		
Malignant Neoplasms	6172	199.7	2		
Cerebrovascular Diseases	1675	54.8	3		
Chronic Lower Respiratory Diseases	1441	47.5	4		
Accidents (Unintentional Injuries)	1106	36.1	5		
Diabetes	806	26.2	6		
Influenza & Pneumonia	731	21.2	7		
Alzheimer's Disease	641	21.8	8		
Suicide	390	12.5	9		
Nephritis, Nephrotic Syndrome & Nephrosis	301	10.1	10		
All Causes	25338	819.3	n/a		

^{*} Data is based on 1998 to 2002 Vital Records -- Death Data

Inpatient Procedures

Table 2.3 shows that residents within the SVHC service area, compared with Vermont residents, experience significantly more echocardiograms, Computed Axial Tomography (CT) scans of the head and abdomen, other procedures that assist delivery, repair of current obstetric lacerations and cardiac stress tests. For residents living in the SVHC service area, these procedures were performed in 2002 more times than any other procedure. In fact, of the procedures performed on Vermont residents in 2002, 41% of echocardiograms, 48% of CT scans of the head and abdomen and 51% of cardiac stress tests were performed on residents who lived within the SVHC service area. Furthermore, the top 10 single-level procedures performed on residents in the SVHC service area (see Table 2.3) differ from those performed on residents statewide (see Table 2.4) For example, although echocardiograms and CT scans of the head and abdomen are among the top 10 procedures for residents in the SVHC service area, they are not among the top 10 for residents statewide.

^{**} Age-adjusted to U.S. Standard 2000 population

Table 2.3 Rate per 1,000 by Top 10 Clinical Classifications Software (CCS) Single Level Procedure Groups by Hospital Service Area*

Bennington Service Area					
	Area		St	ate	
CCS Group	Observed	Age- Adjusted Rate per 1,000 Population	Observed	Rate per 1,000 Population	
Diagnostic ultrasound of heart (echocardiogram)	202	4.0 **	497	0.8	
Computerized axial tomography (CT) scan head	195	3.9 **	392	0.6	
Other procedures to assist delivery ¹	160	8.6 **	2,099	6.7	
CT scan abdomen	116	2.6 **	258	0.4	
Repair of current obstetric laceration ¹	112	6.0 **	1,095	3.5	
Cardiac stress tests	96	2.0 **	188	0.3	
Cesarean section ¹	94	5.0	1,307	4.2	
Percutaneous transluminal coronary angioplasty (PCTA)	84	1.8	1,379	2.2	
Hysterectomy, abdominal and vaginal ¹	81	3.9	1,154	3.7	
Respiratory intubation and mechanical ventilation	76	1.7	813	1.3	

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by area observed values for CCS groups, newborns excluded.

**Age-adjusted rate significantly different from state rate at the .05 level, controlling for multiple comparisons

I Sex-specific population used in rate calculation

Table 2.4 State Rate per 1,000 by Top 10 Clinical Classifications Software (CCS) Single Level Procedure Groups*

Vermont		
CCS Group	Observed	Rate per 1,000 Population
Other procedures to assist delivery ¹	2,099	6.7
Percutaneous transluminal coronary angioplasty (PCTA)	1,379	2.2
Cesarean section ¹	1,307	4.2
Hysterectomy, abdominal and vaginal ¹	1,154	3.7
Repair of current obstetric laceration ¹	1,095	3.5
Hip replacement, total and partial	943	1.5
Arthroplasty knee	924	1.5
Other therapeutic procedures	864	1.4
Diagnostic cardiac catheterization, coronary arteriography	829	1.3
Respiratory intubation and mechanical ventilation	813	1.3

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by state observed values for CCS groups, newborns excluded.

I Sex-specific population used in rate calculation

Table 2.5 State Rate per 1,000 for CCS Groups in the Top 10 for One or More Hospital Service Area*

Vermont		
CCS Group	Observed	Rate per 1,000 Population
Psychological and psychiatric evaluation and therapy	659	1.1
Upper gastrointestinal endoscopy, biopsy	630	1.0
Appendectomy	630	1.0
Colorectal resection	612	1.0
Treatment, fracture or dislocation of hip and femur	600	1.0
Artificial rupture of membranes to assist delivery ¹	536	1.7
Diagnostic ultrasound of heart (echocardiogram)	497	0.8
Blood transfusion	484	0.8
Other vascular catheterization, not heart	475	0.8
Electrographic cardiac monitoring	406	0.7
Computerized axial tomography (CT) scan head	392	0.6
Fetal monitoring ¹	274	0.9
CT scan abdomen	258	0.4
Indwelling catheter	241	0.4
Cardiac stress tests	188	0.3
Electrocardiogram	53	0.1

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by state observed values for CCS groups, newborns excluded.

Inpatient Utilization

One way to measure the major reasons for hospitalization is to look at Major Diagnostic Categories (MDC). MDCs are 25 groupings of related diagnoses, each of which is tied to a set of Diagnostic Related Groups (DRGs). Table 2.6 indicates that, in 2002, the major reasons for hospitalization for residents in the SVHC service area were for heart and circulatory problems, followed by respiratory conditions. Five MDCs comprised 65% of all inpatient discharges of residents in the SVHC service area. The top five leading reasons for hospitalization of residents in the SVHC service area in 2002 were for Heart and Circulatory, Respiratory, Digestive, Delivery and Abortion, and Musculoskeletal. This is consistent with the top five leading reasons for hospitalization of residents statewide (see Table 2.7). However, when we compare the discharge rate for these five leading hospitalizations to residents statewide, we find that residents in the SVHC service area are discharged at a significantly higher rate for all but Musculoskeletal.

I Sex-specific population used in rate calculation

Table 2.6 Rate per 1,000 Inpatient Clinical MDC Groups by Hospital Service Area*

Bennington Service Area									
	_	Area	Sta	ate					
MDC	Observed	Age- Adjusted Rate per 1,000 Population	Observed	Rate per 1,000 Population					
Heart & Circulatory	968	19.8 **	9,979	16.2					
Respiratory	622	13 **	5,807	9.4					
Digestive	526	11.7 **	5,502	8.9					
Delivery & Abortion ¹	459	24.6 **	6,602	21					
Musculoskeletal	449	9.4	5,450	8.9					
Brain & C.N.S.	331	7.2 **	3,168	5.1					
Mental Illness	162	4.2	3,093	5					
Endocrine	158	3.4 **	1,628	2.6					
Kidney & Urinary	153	3.2	1,690	2.7					
Female Reproductive ¹	130	6.2	1,674	5.3					
Liver & Pancreas	124	2.9	1,439	2.3					
Skin & Breast	124	2.8 **	1,211	2					
Substance Abuse	74	1.8 **	638	1					
Infection	72	1.6	984	1.6					
Injury & Toxic Effects	66	1.6	839	1.4					
Ear, Nose, Mouth & Throat	51	1.2	636	1					
All Other	43	0.9 **	1,326	2.2					
Spleen & Blood	39	0.9	526	0.9					
Lymphatic	39	0.9	616	1					
Male Reproductive ¹	23	0.9	447	1.5					
Trauma	10	0.3	115	0.2					
Eye	7	0.1	76	0.1					
Burns	3	0.1	31	0.1					
* 2002 Hospital Discharges for VT Residen	2	0.1	30	0					

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by area observed values for MDC groups, newborns excluded. **Age-adjusted rate significantly different from the state rate at the .05 level, controlling for multiple comparisons. I Sex-specific population used in rate calculation

Table 2.7 State Rate per 1,000 Top Inpatient Clinical MDC Groups*							
Ver	mont						
MDC	Observed	Rate per 1,000 Population					
Heart & Circulatory	9,979	16.2					
Delivery & Abortion ¹	6,602	21					
Respiratory	5,807	9.4					
Digestive	5,502	8.9					
Musculoskeletal	5,450	8.9					
Brain & C.N.S.	3,168	5.1					
Mental Illness	3,093	5					
Kidney & Urinary	1,690	2.7					
Female Reproductive ¹	1,674	5.3					
Endocrine	1,628	2.6					
Liver & Pancreas	1,439	2.3					
All Other	1,326	2.2					
Skin & Breast	1,211	2					
Infection	984	1.6					
Injury & Toxic Effects	839	1.4					
Substance Abuse	638	1					
Ear, Nose, Mouth & Throat	636	1					
Lymphatic	616	1					
Spleen & Blood	526	0.9					
Male Reproductive ¹	447	1.5					
Trauma	115	0.2					
Eye	76	0.1					
Burns	31	0.1					
H.I.V.	30	0					

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by state observed values for MDC groups, newborns excluded.

Table 2.8 indicates that, in 2002, the most frequent diagnosis for residents in the SVHC service area was for Vaginal Delivery without Complicating Diagnoses. This is very consistent with the most frequent diagnosis for residents statewide (see Table 2.9). However, the second most frequent diagnosis for residents in the SVHC service area — Simple Pneumonia and Pleurisy Age > 17 with Complicating Conditions — differs from that statewide. When we compare the rate of this diagnosis with that observed statewide, we find that residents in the SVHC service area experience a significantly higher rate of this diagnosis (Table 2.8). The second most

I Sex-specific population used in rate calculation

frequent diagnosis for residents statewide is Psychosis (Table 2.9). When we compare the rate of this diagnosis with that observed for residents in the SVHC service area, we find that residents in the SVHC service area experience a significantly lower rate of this diagnosis

The top 25 DRGs for residents in the SVHC service area are consistent with those observed statewide, with the exception of three diagnoses (Tables 2.8 and 2.9). The three diagnoses observed for residents in the SVHC service area, but NOT among those statewide, are: Kidney and Urinary Tract Infections Age >17 With Complicating Conditions, Respiratory Infections and Inflammations Age >17 With Complicating Conditions, and Nonspecific CVA and Precerebral Occlusion Without Infarct (Table 2.8). The three diagnoses observed for residents statewide, but NOT for residents in the SVHC service area, are: Rehabilitation, Vaginal Delivery with Complicating Diagnosis, and Percutaneous Cardio Proc with AMI (which is a procedure not conducted at SVMC).

Table 2.8 Age Adjusted Rate p Diagnosis Related Groups (DRG) by He				
Bennington Service Area				
		Area	St	ate
DRG	Observed	Age-Adjusted Rate per 1,000 Population	Observed	Rate per 1,000 Population
Vaginal delivery w/o complicating diagnoses	273	14.6	3,975	12.7
Simple pneumonia & pleurisy age >17 w/ CC	173	4.5 **	1,646	3.5
Heart failure & shock	152	3.0 **	1,275	2.1
Chronic obstructive pulmonary disease	134	27**	1,007	-1.6
Major joint & limb reattachment proc	131	2.7	1,704	2.8
Esophagitis, gastroenteritis & misc digest disorders age >17 w/ CC	103	3.0 **	863	1.8
Cesarean section w/o CC1	87	4.7	1,130	3.6
Circulatory disorders w AMI & C.V. comp disch alive	77	1.5 **	542	0.9
Uterine & adnexa proc for non-malignancy w/o CC1	74	3.6	947	3.0
Psychoses	71	1.9 **	1.827	3.0
Chest pain	68	1.0	653	1.1
Kidney & UT infections age >17 w/ CC ²	65	1.7 **	405	0.9
Cardiac arrhythmia & conduction disorders w/o CC	64	1.3 **	455	0.7
G.L hemorrhage w/ CC	64	1.3	576	0.5
Nutritional & misc metabolic disorders age >17 w/ CC2	63	1.6	554	1.2
Major small & large bowel proc w CC	-58	1.2	607	1.0
Percutaneous cardio proc w/ non-drug eluting stenf w/o AMI	58	1.2	801	1.3
Atherosclerosis w/ CC	56	1.1 **	446	0.7
Cardiac arrhythmia & conduction disorders w/ CC	54	1.1	612	1,0
Circ disorders w/ AMI no CV compl	53	1.1 **	446	.0.7
Specific cerebrovascular disorders except TIA	52	1,0	745	15
Respiratory infections & inflammations age >17 w/ CC	51	1.3 **	383	10.8
Esophagitis, gastroenteritis & misc digest disorders age >17 w/o CC	49	1.5	458	1,0
Neuroses except depressive	49	1.4	536	0.5
Nonspecific CVA & precerebral occlusion w/o infarct	43	(),9 **	217	0.4

^{** 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by area observed values for DRGs, newborns excluded.

^{***} Age-adjusted rate significantly different from state rate at the .05 level, controlling for multiple comparisons

Sex-specific population used in rate calculation

Age-specific population used in rate calculation

Vermont		
DRG	Observed	Rate per 1,000 Population
Vaginal delivery w/o complicating diagnoses ¹	3,975	12.7
Psychoses	1,827	3.0
Major joint & limb reattachment proc	1,704	2,8
Simple pneumonia & pleurisy age >17 w/ CC ²	1,646	3.5
Heart failure & shock	1,275	2.1
Cesarean section w/o CC ¹	1,130	3.6
Chronic obstructive pulmonary disease	1,007	1.6
Uterine & adnexa proc for non-malignancy w/o CC1	947	3.0
Rehabilitation	890	1.4
Esophagitis, gastroenteritis & misc digest disorders age >17 w/ CC ²	863	1.8
Percutaneous cardio proc w/ non-drug cluting stent w/o AMI	801	1.3
Specific cerebrovascular disorders except TIA	745	1.2
Chest pain	653	1.1
Cardiae arrhythmia & conduction disorders w/ CC	612	1.0
Major small & large bowel proc w/ CC	607	1,0
G.I. hemorrhage w/ CC	576	0.9
Nutritional & misc metabolic disorders age >17 w/ CC ²	554	1.2
Vaginal delivery w/ complicating diagnoses ¹	546	1.7
Circulatory disorders w AMI & C.V. comp disch alive	542	0.9
Neuroses except depressive	536	0.9
Percutaneous cardio proc w/ AMI	490	0.8
Esophagitis, gastroenteritis & misc digest disorders age >17 w/o CC ²	458	1.0
Cardiac arrhythmia & conduction disorders w/o CC	455	0.7
Circ disorders w/ AMI no CV compl	446	0.7
Atherosclerosis w/ CC	446	0.7

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by state observed values for DRGs, newborns excluded.

**Age-adjusted rate significantly different from state rate at the .05 level, controlling for multiple comparisons

¹Sex-specific population used in rate calculation

²Age-specific population used in rate calculation

Table 2.10 State Rate per 1,000 for other Diagnosis Related Groups (DRG) in the Top 25 for One or More Hospital Service Area*

Vermont		
DRG	Observed	Rate per 1000 Population
Kidney & UT infections age >17 w/ CC ²	405	0.9
Septicemia age > 17 ²	388	0.8
Respiratory infections & inflammations age >17 w/ CC ²	383	0.8
Cellulitis age >17 w CC ²	382	0.8
Appendectomy w/o complicated principal diag w/o CC	377	0.6
Disorders of pancreas except malignancy	371	0.6
Medical back problems	363	0.6
Depressive neuroses	354	0.6
Hip & femur proc except major joint age >17 w/ CC2	346	0.7
Coronary bypass w/ cardiac cath	331	0.5
Renal failure	316	0.5
Other circulatory system diagnoses w CC	309	0.5
Bronchitis & asthma age 0-172	306	2.1
Respiratory system diagnosis w/ ventilator support	304	0.5
Perm cardiac pacemaker implant w/o AMI, heart failure, or shock	276	0.4
Diabetes age >35 ³	274	0.8
Circulatory disorders except AMI, w/ card cath w/o complex diag	270	0.4
Alcohol/drug abuse or dependence w/o rehab therapy w/o CC	262	0.4
Angina pectoris	255	0.4
Other factors influencing health status	253	0,4
Alcohol/drug abuse or dependence w/ CC	243	0.4
Lower extremity & humer proc except hip, foot, femur age >17 w/o CC ²	240	0.5
Respiratory neoplasms	237	0.4
Back & neck proc except spinal fusion w/o CC	225	0.4
Syncope & collapse w/ CC	218	0.4
Nonspecific CVA & precerebral occlusion w/o infarct	217	0.4
Major small & large bowel proc w/o CC	217	0.4
Chemotherapy	195	0.3
Simple pneumonia & pleurisy age >17 w/o CC ²	184	0.4
Pulmonary edema & respiratory failure	166	0.3
G.I. hemorrhage w/o CC	148	0.2
Nutritional & misc metabolic disorders age >17 w/o CC2	145	0.3
Alcohol/drug abuse or dependence, left AMA	124	0.2

^{* 2002} Hospital Discharges for VT Residents with Stays in VT, NH, NY, or MA Hospitals sorted descending by state observed values for DRGs, newborns excluded.

^{**}Age-adjusted rate significantly different from state rate at the .05 level, controlling for multiple comparisons

¹Sex-specific population used in rate calculation

²Age-specific population used in rate calculation

³Age-adjusted rate for DRG 294 based on 35+ population data rather than 36+ data

Inpatient Utilization by Age

Table 2.13 shows that Southwestern Vermont Medical Center (SVMC) experienced 4,585 inpatient stays. Of these, the rate varied considerably by age group. Seniors 65+ comprised more than half (51.2%) of the inpatient stays at SVMC in 2002 (see Tables 2.11 to 2.13).

Statewide hospitalization rates varied considerably by age; however, the degree to which each age group experienced hospitalizations differed from that of SVMC (Tables 2.11 to 2.14). For example, SVMC experienced approximately 10% more hospitalizations by seniors 65+ in 2002, compared with the state (seniors made up 42.5% of all hospitalizations statewide, compared with 51.2% for SVMC). At the same time, SVMC experienced fewer hospitalizations from the other age groups compared with the state.

The leading reason for hospitalization of children ages 17 and under for both SVMC and Vermont were for respiratory conditions (Tables 2.11 and 2.14). The next most common reason for hospitalization for both SVMC and Vermont was for digestive disorders.

The leading reason for hospitalization of individuals ages 18-44 for both SVMC and Vermont were for maternity conditions (Tables 2.11 and 2.14). In 2002, maternity conditions accounted for 47.9% of all inpatient discharges for this age group at SVMC and 42.4% for this age group in Vermont. The next most common reason for hospitalization for this age group at SVMC was for Digestive Ailments, which accounts for 11.7% of all hospitalizations for this age group, compared with 7.6% statewide. In contrast, the second most common reason for hospitalization for this age group in Vermont is Mental Illness, which accounts for 11.1% of all Vermont hospitalizations, opposed to .5% for SVMC.

For individuals ages 45-64 years of age, the most frequent reason for hospitalization was for Heart and Circulatory problems for both SVMC and Vermont (Tables 2.12 and 2.14). In 2002, Health and Circulatory problems accounted for 21.8% of all inpatient discharges for this age group at SVMC and 23.2% for this age group in Vermont.

For individuals ages 65 and over, the most frequent reason for hospitalization in 2002 was for Heart and Circulatory problems, comprising more than one-quarter of all inpatient discharges in this age at SVMC and those statewide (Tables 2.12 and 2.14). The next leading cause of hospitalizations at SVMC and those statewide were for treatment for Respiratory conditions.

Inpatier	Table 2.11 Inpatient Major Diagnostic Categories (MDCs)* Ages 0-17 and 18-44										
					ical Center						
		Age (Age 1	8-44				
MDC	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total			
Heart & Circulatory	0	0.0%	48	1.9%	35	3.0%	581	4.0%			
Respiratory	52	29.2%	583	23.5%	41	3.5%	509	3.5%			
Digestive	27	15.2%	363	14.6%	135	11.7%	1,110	7.6%			
Delivery & Abortion	16	9.0%	152	6.1%	554	47.9%	6,176	42.4%			
Musculoskeleta l	23	12.9%	209	8.4%	88	7.6%	873	6.0%			
Brain & C.N.S.	15	8.4%	210	8.5%	35	3.0%	460	3.2%			
Endocrine	13	7.3%	134	5.4%	23	2.0%	291	2.0%			
Kidney & Urinary	3	1.7%	91	3.7%	28	2.4%	223	1.5%			
Liver & Pancreas	2	1.1%	27	1.1%	41	3.5%	374	2.6%			
Skin & Breast	4	2.2%	43	1.7%	26	2.2%	259	1.8%			
Female Reproductive	0	0.0%	14	0.6%	65	5.6%	693	4.8%			
Infection	4	2.2%	109	4.4%	12	1.0%	144	1.0%			
Injury & Toxic Effects	5	2.8%	63	2.5%	28	2.4%	313	2.2%			
Substance Abuse	0	0.0%	1	0.0%	18	1.6%	315	2.2%			
Ear, Nose & Throat	6	3.4%	132	5.3%	6	0.5%	167	1.1%			
Spleen & Blood	4	2.2%	86	3.5%	10	0.9%	78	0.5%			
Lymphatic	0	0.0%	131	5.3%	0	0.0%	54	0.4%			
Male Reproductive	0	0.0%	5	0.2%	0	0.0%	9	0.1%			
Mental Illness	0	0.0%	10	0.4%	6	0.5%	1,618	11.1%			
All Other	0	0.0%	27	1.1%	1	0.1%	187	1.3%			
Trauma	3	1.7%	21	0.8%	3	0.3%	68	0.5%			
Eye	1	0.6%	15	0.6%	1	0.1%	17	0.1%			
Burns	0	0.0%	7	0.3%	0	0.0%	15	0.1%			
H.I.V.	0	0.0%	0	0.0%	0	0.0%	23	0.2%			
Total	178	100.0%	2,481	100%	1,156	100.0%	14,557	100%			

Total 178 100.0% 2,481 100% 1,156 *2002 Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Table 2.12
Inpatient Major Diagnostic Categories (MDCs)* Ages 45-64 and 65+

				•	,						
	Southwestern Vermont Medical Center										
		Age 4	5-64		Age 65+						
MDC	Hospital	% of	State	% of	Hospital	% of	State	% of			
MIDC	Actual	Hospital	Actual	State	Actual	Hospital	Actual	State			
	Count	Total	Count	Total	Count	Total	Count	Total			
Heart &	196	21.8%	3,013	23.2%	629	26.8%	6,134	27.6%			
Circulatory			-								
Respiratory	135	15.0%	1,214	9.3%	452	19.2%	3,519	15.8%			
Digestive	157	17.4%	1,493	11.5%	297	12.6%	2,521	11.3%			
Delivery & Abortion	0	0.0%	8	0.1%	0	0.0%	0	0.0%			
Musculoskeleta	0.0	10.00/	1 400	11.50/	224	12.00/	2.024	10.70/			
1	98	10.9%	1,488	11.5%	324	13.8%	2,824	12.7%			
Brain & C.N.S.	62	6.9%	768	5.9%	162	6.9%	1,533	6.9%			
Endocrine	29	3.2%	372	2.9%	93	4.0%	728	3.3%			
Kidney &	22	2.4%	358	2.8%	96	4.1%	902	4.1%			
Urinary											
Liver & Pancreas	37	4.1%	528	4.1%	62	2.6%	534	2.4%			
Skin & Breast	35	3.9%	354	2.7%	57	2.4%	497	2.2%			
Female	31	3.4%	600	4.6%	13	0.6%	263	1.2%			
Reproductive		J. 4 /0	000	4.070			203	1.2/0			
Infection	22	2.4%	265	2.0%	32	1.4%	444	2.0%			
Injury & Toxic Effects	13	1.4%	209	1.6%	22	0.9%	229	1.0%			
Substance	15	1.7%	287	2.2%	11	0.5%	70	0.3%			
Abuse											
Ear, Nose & Throat	10	1.1%	149	1.1%	20	0.9%	184	0.8%			
Spleen & Blood	10	1.1%	110	0.8%	17	0.7%	226	1.0%			
Lymphatic	8	0.9%	180	1.4%	22	0.9%	183	0.8%			
Male											
Reproduct.	8	0.9%	175	1.3%	14	0.6%	268	1.2%			
Mental Illness	4	0.4%	883	6.8%	10	0.4%	332	1.5%			
All Other	5	0.6%	466	3.6%	12	0.5%	763	3.4%			
Trauma	1	0.1%	26	0.2%	1	0.0%	22	0.1%			
Eye	1	0.1%	22	0.2%	3	0.1%	29	0.1%			
Burns	1	0.1%	8	0.1%	1	0.0%	8	0.0%			
H.I.V.	1	0.1%	9	0.1%	0	0.0%	0	0.0%			
Total	901	100%	12,985	100%	2,350	100%	22,213	100%			

^{*2002} Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Table 2.13
Inpatient Major Diagnostic Categories (MDCs)* TOTAL

Southweste	ern Vermont Medical Center						
		То	tal				
MDC	Hospital	% of	State	% of			
MDC	Actual	Hospital	Actual	State			
	Count	Total	Count	Total			
Heart & Circulatory	860	18.8%	9,776	18.7%			
Respiratory	680	14.8%	5,825	11.2%			
Digestive	616	13.4%	5,487	10.5%			
Delivery & Abortion	570	12.4%	6,336	12.1%			
Musculoskeletal	533	11.6%	5,394	10.3%			
Brain & C.N.S.	274	6.0%	2,971	5.7%			
Endocrine	158	3.4%	1,525	2.9%			
Kidney & Urinary	149	3.2%	1,574	3.0%			
Liver & Pancreas	142	3.1%	1,463	2.8%			
Skin & Breast	122	2.7%	1,153	2.2%			
Female Reproductive	109	2.4%	1,570	3.0%			
Infection	70	1.5%	962	1.8%			
Injury & Toxic Effects	68	1.5%	814	1.6%			
Substance Abuse	44	1.0%	673	1.3%			
Ear, Nose & Throat	42	0.9%	632	1.2%			
Spleen & Blood	41	0.9%	500	1.0%			
Lymphatic	30	0.7%	548	1.0%			
Male Reproductive	22	0.5%	457	0.9%			
Mental Illness	20	0.4%	2,843	5.4%			
All Other	18	0.4%	1,443	2.8%			
Trauma	8	0.2%	137	0.3%			
Eye	6	0.1%	83	0.2%			
Burns	2	0.0%	38	0.1%			
H.I.V.	1	0.0%	32	0.1%			
Total	4,585	100.0%	52,236	100.0%			

*2002 Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

	In	patient M	lajor Dia		e 2.14 Categoi	ies (MD	Cs)* ST	ATE		
	Vermor			•		· · · · · · · · · · · · · · · · · · ·	~~ , ~~~	3000		
	Age 0-1		Age 18-	-44	Age 45-	-64	Age 65	+	Total	
MDC	State Actual Count	% of State Total	State Actual Count	% of State Total	State Actual Count	% of State Total	State Actual Count	% of State Total	State Actual Count	% of State Total
Heart & Circulatory	48	1.9%	581	4.0%	3,013	23.2%	6,134	27.6%	9,776	18.7%
Delivery & Abortion	152	6.1%	6,176	42.4%	8	0.1%	0	0.0%	6,336	12.1%
Respiratory	583	23.5%	509	3.5%	1,214	9.3%	3,519	15.8%	5,825	11.2%
Digestive	363	14.6%	1,110	7.6%	1,493	11.5%	2,521	11.3%	5,487	10.5%
Musculoskeletal	209	8.4%	873	6.0%	1,488	11.5%	2,824	12.7%	5,394	10.3%
Brain & C.N.S.	210	8.5%	460	3.2%	768	5.9%	1,533	6.9%	2,971	5.7%
Mental Illness	10	0.4%	1,618	11.1%	883	6.8%	332	1.5%	2,843	5.4%
Kidney & Urinary	91	3.7%	223	1.5%	358	2.8%	902	4.1%	1,574	3.0%
Female Reproductive	14	0.6%	693	4.8%	600	4.6%	263	1,2%	1,570	3,0%
Endocrine	134	5.4%	291	2.0%	372	2.9%	728	3.3%	1,525	2.9%
Liver & Pancreas	27	1,1%	374	2.6%	528	4.1%	534	2.4%	1,463	2.8%
All Other	27	1.1%	187	1.3%	466	3.6%	763	3.4%	1,443	2.8%
Skin & Breast	43	1.7%	259	1,8%	354	2.7%	497	2.2%	1,153	2.2%
Infection	109	4.4%	144	1.0%	265	2.0%	444	2.0%	962	1.8%
Injury & Toxic Effects	63	2,5%	313	2.2%	209	1.6%	229	1.0%	814	1.6%
Substance Abuse	1	0.0%	315	2.2%	287	2.2%	70	0.3%	673	1.3%
Ear, Nose & Throat	132	5.3%	167	1.1%	149	1.1%	184	0.8%	632	1,2%
Lymphatic	131	5.3%	54	0.4%	180	1.4%	183	0.8%	548	1.0%
Spleen & Blood	86	3,5%	78	0.5%	110	0.8%	226	1.0%	500	1.0%
Male Reproductive	5	0.2%	9	0.1%	175	1.3%	268	1.2%	457	0.9%
Trauma	21	0.8%	68	0.5%	26	0.2%	22	0.1%	137	0.3%
Eye	15	0.6%	17	0.1%	22	0.2%	29	0.1%	83	0.2%
Burns	7	0.3%	15	0.1%	8	0.1%	8	0.0%	38	0.1%
H.I.V.	0	0.0%	23	0.2%	9	0.1%	0	0.0%	32	0.1%
Total	2.481	100.0%	14,557	100.0%	12,985	100.0%	22,213	100.0%	52,236	100.0

Table 2.17 shows that, of the 4,585 inpatient stays at SVMC in 2002, almost half (48.7%) were accounted for by 25 DRGs. The leading cause of hospital stays for both SVMC and the state were a result of Vaginal Delivery without Complications (Tables 2.17 and 2.18). This diagnosis occurred in mostly the 18-44 age group and accounts for more than one-quarter of all inpatient stays for this age group. The remaining top 25 DRGs were primarily for conditions of those ages 45 and older, suggesting that hospital services are driven by conditions associated with an older population.

Table 2.15 Ages 0-1								
	Southwe	stern Vermo	ont Medical C	enter				
		Age	e 0-17			Age	18-44	
DRG	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Flospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
373-Vaginal delivery w/o compl diagnoses	13	7.3%	110	4.4%	346	29.9%	3,762	25.8%
89Simple pneumonia & pleurisy age>17 w CC	. 0	0.0%	- 0	0.0%	6	0.5%	61	0.4%
127Heart failure & shock	0	0.0%	2	0.1%	11_	0.1%	19	0,1%
88COPDChronic Obstructive Fulmon Dis	.0	0.0%	0	0.0%	1	0.1%	26	0.2%
209Maj joint & limb proc of lower extremity	0	0.0%	0	0.0%	- 6	0.5%	54	0.4%
182-Digestive diseases age>17 w CC	0	0.0%	0	0.0%	25	2.2%	153	1.1%
371Cesarean section w/o CC	4	0.6%	12	0.5%	106	9.2%	1,071	7.4%
121Circ disord w AMI & maj compl, disch alive	0	0.0%	0	0.0%	0	0.0%	6	0.0%
143Chest pain	0.	0.0%	0	0.0%	5.	0.4%	89	0.6%
132Atherosclerosis w CC	0	0.0%	0	0.0%	2	0.2%	16	0.1%
139-Cardiac arrhythmia & conduction dis w/o CC	0	0.0%	- 4	0.2%	4	0.3%	36	0.2%
359Uterine & adnexa procnon-malig w/o CC	0	0.0%	8	0.3%	44	3.8%	472	3.2%
183Digestive dis age>17 w/o CC	. 0	0.0%	0	0.0%	26	2,2%	164	1.1%
320Kidney & UT infections age>17 w CC	0	0.0%	0	0.0%	10	0.9%	45	0.3%
174G.I. hemorrhage w CC	.0.	0.0%	2	0.1%	1	0.1%	17	0.1%
138-Cardiac arrhythmia & conduction dis w CC	0	0.0%	2	0.1%	3	0.2%	24	0.2%
122Circ dis w AMI w/o maj compl disch alive	.0	0.0%	0	0.0%	6	0.5%	37	0.3%
296Nutrit & metab disorders age>17 w CC	0	0.0%	0	0.0%	5	0.4%	41	0.3%
14Intracranial hemorr & stroke w infarct	0	0.0%	2	0.1%	2	0.2%	21	0.1%
148Major bowel procedures w CC	0	0.0%	8	0.3%	3	0.3%	75	0,5%
79Respiratory infect & inflam age>17 w CC	0	0.0%	0	0.0%	1	0.1%	65	0.4%
243Medical back problems	3	1.7%	8	0.3%	13	1.1%	85	0.6%
277Cellulitis age>17 w CC	0	0.0%	- 0	0.0%	8	0.7%	58	0.4%
210-Hiip/femur proc ex maj joint age>17 w CC	0	0.0%	0	0.0%	3	0.3%	18	0.1%
15Nonspec CVA & precer occlus w/o infarct	0.	0.0%	0	0.0%	1	0.1%	4	0.0%
Total for top 25 DRGs	14	7.9%	150	6.0%	602	52.1%	6,254	43.0%
Total for all other DRGs	164	92.1%	2,331	94.0%	554	47.9%	8,303	57.0%
Total all DRGs	178	100.0%	2,481	100.0%	1.156	100.0%	14,557	100.0%

^{*2002} Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Table 2.16 Inpatient Top 25 Diagnosis Related Groups (DRG)* Ages 45-64 and 65+ Sorted Descending by Hospital Total

	Southwes	stern Verm	ont Medical C	enter				
		Age	45-64		Age 65+			
DRG	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
373Vaginal delivery w/o compl diagnoses	0	0.0%	- 2	0.0%	0	0.0%	0	0.0%
89Simple pneumonia & pleurisy age>17 w CC	29	3,2%	291	2,2%	160	6.8%	1,307	5.9%
127Heart failure & shock	22	2.4%	179	1.4%	151	6.4%	1,135	5.1%
88COPDChronic Obstructive Pulmon Dis	43	4.8%	279	2.1%	110	4.7%	756	3.4%
209Maj joint & limb proc of lower extremity	-31	3.4%	469	3.6%	110	4.7%	1,082	4.9%
182Digestive diseases age>17 w CC	43	4.8%	239	1.8%	68	2.9%	471	2.1%
371Cesarean section w/o CC	0	0.0%	3	0,0%	0	0.0%	0	0.0%
121-Circ disord w AMI & maj compl, disch alive	11	1,2%	85	0.7%	83	3.5%	471	2.1%
143Chest pain	34	3.8%	297	2.3%	46	2.0%	324	1.5%
132Atherosclerosis w CC	15	1.7%	152	1.2%	54	2.3%	316	1.4%
139Cardiac arrhythmia & conduction dis w/o CC	34	2.7%	139	1.1%	41	1.7%	303	1.4%
359Uterine & adnexa procnon-malig w/o CC	21	2,3%	347	2.7%	4	0.2%	69	0.3%
183Digestive dis age 17 w/o CC	20	2.2%	167	1.3%	22	0.9%	158	0.7%
320Kidney & UT infections age>17 w CC	6	0.7%	58	0.4%	52	2.2%	293	1.3%
174G.I. hemorrhage w CC	9	1.0%	109	0.8%	57	2.4%	460	2.1%
138-Cardiae arrhythmia & conduction dis w CC	10	1.1%	130	1.0%	53	2.3%	472	2.1%
122-Cire dis w AMI w/o maj compl disch alive	25	2.8%	189	1,5%	33	1.4%	251	1.1%
296Nutrit & metab disorders age>17 w CC	4	0.4%	106	0.8%	53	2.3%	421	1.9%
14Intracranial hemorr & stroke w infarct	9	1.0%	153	1,2%	50	2.1%	586	2.6%
148Major bowel procedures w CC	19	2.1%	176	1.4%	38	1.6%	323	1.5%
79Respiratory infect & inflam age>17 w CC	12	1,3%	63	0,5%	46	2.0%	284	1.3%
243-Medical back problems	8	0,9%	95	0.7%	29	1.2%	196	0.9%
277Cellulitis age>17 w CC	13	1.4%	111	0.9%	22	0.9%	194	0.9%
210Hiip/femur proc ex maj joint age>17 w CC	2	0,2%	-40	0,3%	36	1.5%	292	1.3%
15Nonspec CVA & precer occlus w/o infarct	9	1.0%	53	0.4%	30	1.3%	169	0.8%
Total for top 25 DRGs	387	43.0%	3,633	28.0%	1,231	52.4%	9,482	42.7%
Total for all other DRGs	514	57.0%	9,352	72.0%	1,119	47.6%	12,731	57.3%
Total all DRGs	901	100.0%	12,985	100.0%	2,350	100.0%	22,213	100.0%

^{*2002} Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Table 2.17 Inpatient Top 25 Diagnosis Related Groups (DRG)* TOTAL Sorted Descending by Hospital Total

Southwestern Vern	nont Medic	al Center		
		Tot	tal	
DRG	Hospital	% of	State	% of
DRO	Actual	Hospital	Actual	State
	Count	Total	Count	Total
373Vaginal delivery w/o compl diagnoses	359	7.8%	3,874	7.4%
89Simple pneumonia & pleurisy age>17 w CC	195	4.3%	1,659	3.2%
127Heart failure & shock	174	3.8%	1,335	2.6%
88COPDChronic Obstructive Pulmon Dis	154	3.4%	1,061	2.0%
209Maj joint & limb proc of lower extremity	147	3.2%	1,605	3.1%
182Digestive diseases age>17 w CC	136	3.0%	863	1.7%
371Cesarean section w/o CC	107	2.3%	1,086	2.1%
121Circ disord w AMI & maj compl, disch alive	94	2.1%	562	1.1%
143Chest pain	85	1.9%	710	1.4%
132Atherosclerosis w CC	71	1.5%	484	0.9%
139Cardiac arrhythmia & conduction dis w/o CC	69	1.5%	482	0.9%
359Uterine & adnexa procnon-malig w/o CC	69	1.5%	896	1.7%
183Digestive dis age>17 w/o CC	68	1.5%	489	0.9%
320Kidney & UT infections age>17 w CC	68	1.5%	396	0.8%
174G.I. hemorrhage w CC	67	1.5%	588	1.1%
138Cardiac arrhythmia & conduction dis w CC	65	1.4%	628	1.2%
122Circ dis w AMI w/o maj compl disch alive	64	1.4%	477	0.9%
296Nutrit & metab disorders age>17 w CC	62	1.4%	568	1.1%
14Intracranial hemorr & stroke w infarct	61	1.3%	762	1.5%
148Major bowel procedures w CC	60	1.3%	582	1.1%
79Respiratory infect & inflam age>17 w	59	1.3%	412	0.8%
243Medical back problems	53	1.2%	384	0.7%
277Cellulitis age>17 w CC	43	0.9%	363	0.7%
210Hiip/femur proc ex maj joint age>17 w	41	0.9%	350	0.7%
15Nonspec CVA & precer occlus w/o infarct	40	0.9%	226	0.4%
Total for top 25 DRGs	2,234	48.7%	19,519	37.4%
Total for all other DRGs	2,351	51.3%	32,717	62.6%
Total all DRGs	4,585	100.0%	52,236	100.0%
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^{*2002} Hospital Inpatient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Table 2.18 Inpatient Top 25 Diagnosis Related Groups (DRG)* STATE Sorted Descending by Hospital Total

			Statewic	le						
DRG	Age 0-17		Age 18-44		Age 45-64		Age 65+		Total	
	State Actual Count	% of State Total								
373Vagmal delivery w/o compl diagnoses	110	4.4%	3,762	25.8%	2	0.0%	0	0.0%	3,874	7.4%
89-Simple pneumonia & pleurisy age>17 w CC	0	0.0%	61	0.4%	291	2.2%	1,307	5.5%	1,659	3.2%
430Psychoses	6	0.2%	893	6.1%	543	4.2%	174	0.8%	1,616	3.1%
209-Maj joint & limb proc of lower extremity	0	0.0%	54	0.4%	469	3.6%	1,082	4.9%	1,605	3.1%
127Heart failure & shock	2	0.1%	19	0.1%	179	1.4%	1,135	5.1%	1,335	2.6%
371 Cesarean section w/o CC	12	0.5%	1,071	7.4%	3	0.0%	0	0.0%	1,086	2.1%
88 COPDChronic Obstructive Pulmon Dis	0.	0.0%	26	0.2%	279	2.1%	756	3.4%	1.061	2.0%
462 Rehabilitation	15	0.6%	107	0.7%	255	2.0%	625	2,8%	1,002	1.9%
359 Uterine & adnexa proc-non-malig w/o CC	- 8	0.3%	472	3.2%	347	2,7%	69	0.3%	896	1.7%
182 Digestive diseases age>17 w CC	- 0	0.0%	153	1.1%	239	1.8%	471	2.1%	863	1.7%
517 Percutaneous card proc w stent w/o AMI	- 0	0.0%	37	0.3%	359	2.8%	393	1.8%	789	1.5%
14- Intracranial hemorrhage & stroke w infarct	2	0.1%	21	0.1%	153	1.2%	586	2.6%	762	1.5%
143 Chest pain	0	0.0%	89	0.6%	297	2.3%	324	1.5%	710	1.4%
138 Cardiac arrhythmia & conduction dis w CC	2	0.1%	24	0.2%	130	1.0%	472	2.1%	628	1,2%
174- G.I. hemorrhage w CC	2	0.1%	17	0.1%	109	0.8%	460	2.1%	588	1.1%
148 Major bowel procedures w CC	- 8	0.3%	75	0.5%	176-	1.4%	323	1.5%	582	1.1%
296 Nutrit & metab disorders age>17 w CC	0.	0.0%	41	0.3%	106	0.8%	421	1.9%	568	1.1%
121- Circ disord w AMI & maj compl, disch alive	-0	0.00%	-6	0.0%	85	0.7%	471	2.1%	562	1.1%
427 Neuroses except depressive	0	0.0%	370	2.5%	162	1.2%	10	0.0%	542	1.0%
183 Digestive diseases age>17 w/o CC	-0	0.0%	164	1.1%	167	1.3%	158	0.7%	489	0.9%
516 Percutaneous card proc w AMI	- 0	0.0%	45	0.3%	239	1.8%	205	0.9%	489	0.9%
372- Vaginal delivery w compl diagnoses	-11	0.4%	474	3.3%	0	0.0%	0	0.0%	485	0.9%
132 Atherosclerosis w CC	0	0.0%	16	0.1%	152	1.2%	316	1.4%	484	0.9%
139 Cardiac arrhythmia & conduction dis w/o CC	4	0.2%	36	0.2%	139	1.1%	303	1.4%	482	0.9%
122 Circ disord w AMI w/o maj compl. disch alive	0	0.0%	37	0.3%	189	1.5%	251	1/1%	477	0.9%
Total for top 25 DRGs	167	6.7%	7,507	51.6%	4,590	35.3%	9,442	42.5%	21,706	41.6%
Total for all other DRGs	2,314	93,3%	7,050	48.4%	8,395	64.7%	12,771	57.5%	30,530	58.4%
Total all DRGs	2,481	100%	14,557	100%	12,985	100%	22,213	100%	52,236	100%

^{*2002} Hospital Inputient Stays for VT Residents and Non-Residents Excluding Newborns (MDC 15)

Outpatient Utilization by Age

Procedures related to the digestive system were the most common among outpatient procedures in 2002 at SVMC and hospitals statewide (see Tables 2.21 and 2.23). Digestive system procedures accounted for 41.7% of all SVMC's outpatient procedures and 31.9% of the procedures performed statewide. This was followed by operations on the Musculoskeletal system for SVMC (17%) and hospitals statewide (14.7%).

The most frequently performed outpatient procedure at SVMC and hospitals statewide in 2002 varied according to age group (Tables 2.19 to 2.23). For children under 18 years of age, the most common outpatient procedure category at SVMC and hospitals statewide was operations on the nose, mouth and pharynx. Among this age group, SVMC performed nearly twice as many of these operations in 2002 (42.1%) compared with hospitals statewide (23%).

For patients ages 18-44, the most commonly performed outpatient procedures at SVMC and hospitals statewide were operations on the digestive system. These were followed by operations on the Musculoskeletal system. These two outpatient procedures accounted for more than half (52.9%) of all SVMC outpatient procedures for this age group in 2002, and 38.2% of all procedures performed for this age group statewide (Tables 2.19 and 2.22).

The most frequently performed outpatient procedures in 2002 at SVMC and hospitals statewide for individuals ages 45-65 were operations on the digestive system. Digestive system problems accounted for more than half (53.2%) of all SVMC outpatient procedures for this age group, and 45.7% of procedures performed statewide for this age group. This was followed by diagnoses related to operations on the Musculoskeletal system. These two outpatient procedures (operations of the digestive system and on the Musculoskeletal system) accounted for 70.3% of all SVMC outpatient procedures for this age group, and 61% of all procedures performed for this age group statewide (Tables 2.20 and 2.22).

For patients ages 65 and over, the most commonly performed outpatient procedures at SVMC and hospitals statewide were operations of the digestive system, followed by operations of the eye. These two outpatient procedures accounted for 64.7% of all SVMC outpatient procedures for this age group, and 61.1% of all procedures performed for this age group statewide (Tables 2.20 and 2.23).

Table 2.19 Outpatient Clinical Classifications Software (CCS) High Level Procedure Groups* Ages 0-17 and 18-44

Southwestern Vermont Medical Center Age 18-44 Age 0-17 CCS Group Hospital o of State Hospital % of State o of o of Actual Hospital Actual Hospital Actual Actual State State Count Total Count Total Count Total Count Total 19.3% Operations on the digestive system 7.0% 30 529 7.8% 363 28.4% 4,266 80 18.7% 24.5% 18.9% Operations on the musculoskeletal system 1,203 17.7% 313 4,188 Operations on the eye 9 2.1% 291 4.3% 19 1.5% 318 1.4% 0.9% 9.5% Operations on the nervous system 3 0.7% 58 115 9.0% 2,097 5 1.2% 48 0.7% 231 18.0% 2,617 11.8% Operations on the female genital organs 10 2.3% 1,246 18.4% 98 7.7% 15.2% 3,364 Operations on the skin & breast 180 42.1% 1,563 23.0% 56 4.4% 847 3.8% Operations on the nose, mouth & pharynx Operations on the ear 86 20.1% 1,209 17.8% 14 1.1% 113 0.5% 17 0.7% 0.9% 1.3% 351 Operations on the urinary system 3 63 1.6% Operations on the respiratory system 2 0.5% 48 0.7% 11 0.9% 113 0.5% 0 0.0% 0.4% 17 1.3% 313 1.4% Operations on the cardiovascular system 28 20 4.7% 270 4.0% 11 0.9% 245 Operations on the male genital organs 1.1% Operations on the hemic & lymphatic system 0 0.0% 28 0.4% 4 0.3% 65 0.3% Obstetrical procedures 0 0.0% 82 1,2% 8 0.6% 2,658 12.0% Operations on the endocrine system 0 0.0% 10 0.1% 3 0.2% 83 0.4% Misc diagnostic & therapeutic procedures 0 0.0% 109 1.6% 0 0.0% 481 2.2% Total 428 100.0% 6,785 100.0% 1.280 100.0% 22,119 100.0%

^{*2002} Hospital Oupatient Procedures for Residents and Non-Residents

Table 2.20 Outpatient Clinical Classifications Software (CCS) High Level Procedure Groups* Ages 45-64 and 65+

	Southwest	ern Vermon	t Medical (Center				-	
	100	Age 4	5-64		Age 65+				
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	
Operations on the digestive system	1,033	53.2%	11,876	45.7%	782	47.4%	6,916	36.4%	
Operations on the musculoskeletal system	332	17.1%	3,971	15.3%	176	10.7%	1,498	7.9%	
Operations on the eye	85	4.4%	1,256	4.8%	285	17.3%	4,687	24.7%	
Operations on the nervous system	122	6.3%	2,440	9.4%	121	7.3%	1,495	7.9%	
Operations on the female genital organs	97	5.0%	841	3.2%	17	1.0%	182	-1.0%	
Operations on the skin & breast	140	7.2%	2,528	9.7%	89	5.4%	1,319	6.9%	
Operations on the nose, mouth & pharynx	36	1.9%	499	1.9%	20	1.2%	270	1.4%	
Operations on the ear	2	0.1%	82	0.3%	12	0.7%	82	0.4%	
Operations on the urinary system	32	1.6%	633	2.4%	48	2.9%	814	4.3%	
Operations on the respiratory system	22	1.1%	241	0.9%	46	2.8%	292	1.5%	
Operations on the cardiovascular system	-22	1.1%	946	3.6%	25	1.5%	1,026	5,4%	
Operations on the male genital organs	12	0.6%	186	0.7%	18	1.1%	119	0.6%	
Operations on the hemic & lymphatic system	4	0.2%	97	0.4%	10	0.6%	84	0.4%	
Obstetrical procedures	0	0.0%	.3	0.0%	0	0.0%	0	0.0%	
Operations on the endocrine system	2	0.1%	107	0.4%	Ö	0.0%	23	0.1%	
Misc diagnostic & therapeutic procedures	0 —	0.0%	262	1.0%	0	0.0%	206	1.1%	
Total	1,941	100.0%	25,968	100.0%	1,649	100.0%	19,013	100.0%	

^{* 2002} Hospital Oupatient Procedures for Residents and Non-Residents

Table 2.21 Outpatient Clinical Classifications Software (CCS) High Level Procedure Groups* TOTAL

Southwestern Vermont Medical Center Total **CCS** Group Hospital % of % of State Actual Hospital Actual State Count Total Count Total 2,208 41.7% 23,587 Operations on the digestive system 31.9% 901 17.0% Operations on the musculoskeletal system 10,860 14.7% Operations on the eye 398 7.5% 6,552 8.9% 361 Operations on the nervous system 6.8% 6,090 8.2% Operations on the female genital organs 350 6.6% 3,688 5.0% Operations on the skin & breast 337 6.4% 8.457 11.4% Operations on the nose, mouth & pharynx 292 5.5% 3,179 4.3% Operations on the ear 114 2.2% 1,486 2.0% 100 2.5% Operations on the urinary system 1.9% 1,861 81 1.5% 694 0.9% Operations on the respiratory system Operations on the cardiovascular system 64 1.2% 2,313 3.1% Operations on the male genital organs 61 1.2% 820 1.1% Operations on the hemic & lymphatic system 18 0.3% 274 0.4% Obstetrical procedures 8 0.2% 2,743 3.7% Operations on the endocrine system 5 0.1% 223 0.3% Misc diagnostic & therapeutic procedures 0 0.0%1,058 1.4% 5,298 100.0% 73,885 100.0% Total

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Table 2.22 Outpatient Clinical Classifications Software (CCS) High Level Procedure Groups* STATE Ages 0-64

	Ve	rmont				
CCS Group	Age	0-17	Age	18-44	Age	45-64
	State	% of	State	% of	State	% of
	Actual	State	Actual	State	Actual	State
	Count	Total	Count	Total	Count	Total
Operations on the digestive	529	7.8%	4,266	19.3%	11,876	45.7%
system			ŕ		ŕ	
Operations on the musculoskeletal	1,203	17.7%	4,188	18.9%	3,971	15.3%
system						
Operations on the skin & breast	1,246	18.4%	3,364	15.2%	2,528	9.7%
Operations on the eye	291	4.3%	318	1.4%	1,256	4.8%
Operations on the nervous system	58	0.9%	2,097	9.5%	2,440	9.4%
Operations on the female genital	48	0.7%	2,617	11.8%	841	3.2%
organs						
Operations on the nose, mouth &	1,563	23.0%	847	3.8%	499	1.9%
pharynx						
Obstetrical procedures	82	1.2%	2,658	12.0%	3	0.0%
Operations on the cardiovascular	28	0.4%	313	1.4%	946	3.6%
system						
Operations on the urinary system	63	0.9%	351	1.6%	633	2.4%
Operations on the ear	1,209	17.8%	113	0.5%	82	0.3%
Miscellaneous diagnostic &	109	1.6%	481	2.2%	262	1.0%
therapeutic procedures						
Operations on the male genital	270	4.0%	245	1.1%	186	0.7%
organs						
Operations on the respiratory	48	0.7%	113	0.5%	241	0.9%
system						
Operations on the hemic &	28	0.4%	65	0.3%	97	0.4%
lymphatic system						
Operations on the endocrine	10	0.1%	83	0.4%	107	0.4%
system						
Total	6,785	100.0%	22,119	100.0%	25,968	100.0%

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Table 2.23 Outpatient Clinical Classifications Software (CCS) High Level Procedure Groups* STATE Ages 65+ and TOTAL

Vermont				
	Age	65+	То	tal
CCS Group	State	% of	State	% of
	Actual	State	Actual	State
	Count	Total	Count	Total
Operations on the digestive system	6,916	36.4%	23,587	31.9%
Operations on the musculoskeletal system	1,498	7.9%	10,860	14.7%
Operations on the skin & breast	1,319	6.9%	8,457	11.4%
Operations on the eye	4,687	24.7%	6,552	8.9%
Operations on the nervous system	1,495	7.9%	6,090	8.2%
Operations on the female genital organs	182	1.0%	3,688	5.0%
Operations on the nose, mouth & pharynx		1.4%	3,179	4.3%
Obstetrical procedures	0	0.0%	2,743	3.7%
Operations on the cardiovascular system	1,026	5.4%	2,313	3.1%
Operations on the urinary system	814	4.3%	1,861	2.5%
Operations on the ear	82	0.4%	1,486	2.0%
Miscellaneous diagnostic & therapeutic procedures	206	1.1%	1,058	1.4%
Operations on the male genital organs	119	0.6%	820	1.1%
Operations on the respiratory system	292	1.5%	694	0.9%
Operations on the hemic & lymphatic system	84	0.4%	274	0.4%
Operations on the endocrine system	23	0.1%	223	0.3%
Total	19,013	100.0%	73,885	100.0%

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Table 2.26 shows that, of the 5,298 outpatient procedures conducted at SVMC in 2002, more than half (55.5%) were accounted for by 10 Clinical Classifications Software (CCS) Single Level Procedure Groups. The top 10 outpatient procedures performed at SVMC in 2002 were consistent with those performed at hospitals statewide, with the exception of three procedure groups (Tables 2.24 - 2.28). Among the top 10 CCS procedures performed at SVMC, and NOT among those statewide, are: Excisions of Skin Lesion, Inguinal and Femoral Hernia Repair, and Other OR Therapeutic Procedures on Joints. Among the top 10 CCS procedures performed statewide, and NOT among those at SVMC, were: Suture of Skin and Subcutaneous Tissue, Insertion of Catheter or Spinal Stimulator and Injection Into Spinal Canal, and Decompression of Peripheral Nerve. Tables 2.24 through 2.28 also indicate that the majority of the top 10 CCS procedures performed by SVMC and statewide were performed with individuals ages 45 and older, suggesting that hospital outpatient procedures are driven by conditions associated with older adults.

Table 2.24 Top 10 Outpatient Clinical Classifications Software (CCS) Single Level Procedure Group* Ages 0-17 and 18-44 Sorted Descending by Hospital Total

Southwestern	Vermont M	ledical Cen	ter		_			
		Age	0-17		Age 18-44			
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
Other non-OR lower GI therapeutic procedures		0.0%	9	0.1%	35	2.7%	330	1.5%
Colonoscopy & biopsy		0.2%	51	0.8%	58	4.5%	1,024	4.6%
Upper gastrointestinal endoscopy, biopsy		0.9%	106	1.6%	68	5.3%	901	4.1%
Lens & cataract procedures		0.0%	13	0.2%	5	0.4%	74	0.3%
Other therapeutic procedures on muscles & tendons	- 11	2.6%	120	1.8%	72	5.6%	716	3.2%
Insertion of catheter or spinal stimulator & injection into spinal canal		0.0%	4	0.1%	61	4.8%	733	3.3%
Excision of skin lesion	6	1.4%	147	2.2%	34	2.7%	508	2.3%
Inguinal & femoral hernia repair	7	1.6%	173	2.5%	47	3.7%	410	1.9%
Other OR therapeutic procedures on joints	7	1.6%	88	1.3%	47	3.7%	510	2.3%
Excision of semilunar cartilage of knee	4	0.9%	53	0.8%	29	2.3%	517	2.3%
Total for top 10 CCS procedure groups	40	9.3%	764	11.3%	456	35.6%	5,723	25.9%
Total for all other CCS procedure groups	388	90.7%	6,021	88.7%	824	64.4%	16,396	74.1%
Total all CCS procedure groups	428	100,0%	6,785	100.0%	1,280	100.0%	22,119	100.0%

^{* 2002} Hospital Oupatient Procedures for Residents and Non-Residents

Table 2.25 Top 10 Outpatient Clinical Classifications Software (CCS) Single Level Procedure Groups* Ages 45-64 and 65+ Sorted Descending by Hospital Total

Southwestern	Vermont M	edical Cer	iter					
	11111	Age	45-64		Age 65+			
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
Other non-OR lower GI therapeutic procedures		22.8%	3,261	12.6%	348	21.1%	2,163	11.4%
Colonoscopy & biopsy		15.0%	5,163	19.9%	190	11.5%	2,622	13.8%
Upper gastrointestinal endoscopy, biopsy		7.0%	1,314	5.1%	136	8.2%	977	5.1%
Lens & cataract procedures		2.6%	833	3.2%	213	12.9%	4,028	21.2%
Other therapeutic procedures on muscles & tendons		4.800	941	3.6%	53	3.2%	368	1.9%
Insertion of catheter or spinal stimulator & injection into spinal canal		3.8%	1,116	4.3%	89	5.4%	895	4.7%
Excision of skin lesion	60	3.1%	612	2.4%	43	2.6%	417	2.2%
Inguinal & femoral hernia repair	48	2.5%	524	2.0%	38	2.3%	336	1.8%
Other OR therapeutic procedures on joints	47	2.4%	371	1.4%	13	0.8%	110	0.6%
Excision of semilunar cartilage of knee	58	3.0%	847	3.3%	16	1.0%	222	1.2%
Total for top 10 CCS procedure groups	1,301	67.0%	14,982	57.7%	1,139	69.1%	12,138	63.8%
Total for all other CCS procedure groups	640	33.0%	10,986	42.3%	510	30.9%	6,875	36.2%
Total all CCS procedure groups	1.941	100.0%	25,968	100.0%	1.649	100.0%	19,013	100.0%

^{* 2002} Hospital Oupatient Procedures for Residents and Non-Residents

Table 2.26 Top 10 Outpatient Clinical Classifications Software (CCS) Single Level Procedure Groups* TOTAL Sorted Descending by Hospital Total

Southwestern Vermont Medical Center						
		Tota	al			
CCS Group	Hospital	% of	State	% of		
	Actual	Hospital	Actual	State		
	Count	Total	Count	Total		
Other non-OR lower GI therapeutic procedures	825	15.6%	5,763	7.8%		
Colonoscopy & biopsy	541	10.2%	8,860	12.0%		
Upper gastrointestinal endoscopy, biopsy	344	6.5%	3,298	4.5%		
Lens & cataract procedures	268	5.1%	4,948	6.7%		
Other therapeutic procedures on muscles & tendons	230	4.3%	2,145	2.9%		
Insertion of catheter or spinal stimulator & injection into spinal canal	224	4.2%	2,748	3.7%		
Excision of skin lesion	143	2.7%	1,684	2.3%		
Inguinal & femoral hernia repair	140	2.6%	1,443	2.0%		
Other OR therapeutic procedures on joints	114	2.2%	1,079	1.5%		
Excision of semilunar cartilage of knee	107	2.0%	1,639	2.2%		
Total for top 10 CCS procedure groups	2,936	55.4%	33,607	45.5%		
Total for all other CCS procedure groups	2,362	44.6%	40,278	54.5%		
Total all CCS procedure groups	5,298	100%	73,885	100%		

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Table 2.27 Top 10 Outpatient Clinical Classifications Software (CCS) Single Level Procedure Groups* STATE Ages 0-64 Sorted Descending by Hospital Total

	V	ermont				
	Age	0-17	Age	18-44	Age	45-64
CCS Group	State Actual Count	% of State Total	State Actual Count	% of State Total	State Actual Count	% of State Total
Other therapeutic procedures	51	0.8%	1,024	4.6%	5,163	19.9%
Colonoscopy & biopsy	9	0.1%	330	1.5%	3,261	12.6%
Suture of skin & subcutaneous tissue	13	0.2%	74	0.3%	833	3.2%
Lens & cataract procedures	106	1.6%	901	4.1%	1,314	5.1%
Other non-OR lower GI therapeutic procedures	870	12.8%	1,399	6.3%	386	1.5%
Other therapeutic procedures on muscles & tendons	4	0.1%	733	3.3%	1,116	4.3%
Insertion catheter/spinal stimulator/injection into spinal canal	80	1.2%	2,537	11.5%	3	0.0%
Upper gastrointestinal endoscopy, biopsy	120	1.8%	716	3.2%	941	3.6%
Decompression peripheral nerve	147	2.2%	508	2.3%	612	2.4%
Excision of semilunar cartilage of knee	53	0.8%	517	2.3%	847	3.3%
Total for top 10 CCS procedure groups	1,453	21.4%	8,739	39.5%	14,476	55.7%
Total for all other CCS procedure groups	5,332	78.6%	13,380	60.5%	11,492	44.3%
Total all CCS procedure groups	6,785	100.0%	22,119	100.0%	25,968	100.0%

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Table 2.28 Top 10 Outpatient Clinical Classifications Software (CCS) Single Level Procedure Groups* STATE Ages 65+ and TOTAL Sorted Descending by Hospital Total

	Vermont			
	Age 65+		Total	
CCS Group	State Actual Count	% of State Total	State Actual Count	% of State Total
Other therapeutic procedures	2,622	13.8%	8,860	12.0%
Colonoscopy & biopsy	2,163	11.4%	5,763	7.8%
Suture of skin & subcutaneous tissue	4,028	21.2%	4,948	6.7%
Lens & cataract procedures	977	5.1%	3,298	4.5%
Other non-OR lower GI therapeutic procedures	195	1.0%	2,850	3.9%
Other therapeutic procedures on muscles & tendons	895	4.7%	2,748	3.7%
Insertion catheter/spinal stimulator/injection into spinal canal	0	0.0%	2,620	3.5%
Upper gastrointestinal endoscopy, biopsy	368	1.9%	2,145	2.9%
Decompression peripheral nerve	417	2.2%	1,684	2.3%
Excision of semilunar cartilage of knee	222	1.2%	1,639	2.2%
Total for top 10 CCS procedure groups	11,887	62.5%	36,555	49.5%
Total for all other CCS procedure groups	7,126	37.5%	37,330	50.5%
Total all CCS procedure groups	19,013	100%	73,885	100%

^{* 2002} Hospital Outpatient Procedures for Residents and Non-Residents

Emergency Utilization by Age

In 2002, SVMC Emergency Department (ED) experienced 16,528 visits (see Table 2.31). Tables 2.31 and 2.32 indicate that the leading diagnoses for ED visits for both SVMC and the State are for Injury and Poisoning, accounting for approximately one-third of all visits. Also, Injury and Poisoning are the primary diagnoses for ED visits among all age groups for both SVMC and Vermont (Tables 2.29 to 2.32). However, the degree to which Injury and Poisoning occurred

among the various age groups differed, with younger age groups experiencing these diagnoses more frequently than the older age groups.

Contrary to inpatient utilization, ED utilization was driven in 2002 by the younger age groups for both SVMC and Vermont (Tables 2.29 - 2.32). The age cohort representing the greatest utilization of ED services was for those 18-44, accounting for more than 40% of all ED visits for both SVMC and Vermont. The age cohort representing the second greatest utilization of ED services was for those 0-17, accounting for 22.3% of all ED visits for SVMC and 19.9% of all ED visits statewide. The age cohort representing the least amount of utilization of ED services was for those ages 45-64, comprising 17.1% of all ED visits for SVMC and 18.9% of all ED visits statewide.

	Southv	vestern Verm	ont Medical C	enter				
		Age	0-17			Age	18-44	
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
Injury & poisoning	1,522	41,2%	18,995	44.7%	2,143	32,2%	32,413	33.9%
Symptoms, signs & ill-defined conditions	575	15.6%	5,094	12.0%	799	12.0%	10,209	10.7%
Diseases of the respiratory system	489	13.3%	6,248	14.7%	595	8.9%	9,422	9.9%
Musculoskeletal system & connective tissue	233	6.3%	1.141	2.7%	708	10.6%	7,824	8.2%
Diseases of the nervous system & sense organs	326	8.8%	4,465	10.5%	645	9.7%	7,968	8.3%
Diseases of the circulatory system	32	0.9%	287	0.7%	232	3.5%	3,108	3.3%
Diseases of the digestive system	161	4.4%	1,717	4.0%	501	7.5%	7,896	8.3%
Diseases of the genitourinary system	62	1.7%	909	2.1%	323	4.9%	4,946	5.2%
Mental disorders	65	1.8%	690	1.6%	289	4.3%	4,809	5.0%
Diseases of the skin & subcutaneous tissue	79	2.1%	799	1.9%	159	2.4%	2,486	2.6%
Infectious & parasitic diseases	85	2.3%	1,407	3.3%	107	1.6%	1,539	1.6%
Endocrine nutritional, metabolic & immunity disorders	15	0.4%	330	0.8%	31	0.5° u	820	0.9%
Residual codes, unclassified, all Ecodes	20	0.5%	164	0.4%	39	0.6%	463	0.5%
Complications of pregnancy & childbirth	5	0.1%	87	0.2%	7.3	1,1%	1,385	1,5%
Neoplasms	0	0.0%	20	0.0%	2	0.0%	108	0.1%
Diseases of the blood & blood-forming organs	4	0.1%	. 27	0.12%	7	0.1%	86	0.1%
Conditions originating in the perinatal period	14	0.4%	111	0.3%	0	0.0%	1	0.0%
Congenital anomalies	-3	0.1%	37	0.1%	1	0.0%	2.3	0.0%
Total	3,690	100.0%	42,528	100.0%	6,654	100.0%	95,506	100.0%

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.30 Emergency Department Clinical Classifications Software (CCS) High Level Diagnosis Groups* Ages 45-64 and 65+

Southwestern Vermont Medical Center Age 65+ Age 45-64 CCS Group of Hospital State Actual Hospital % of Hospital State Actual % of State Hospital % of State Actual Count Total Count Total Actual Coun Total Count Total 11,194 19.5% Injury & poisoning 761 26.9% 27.7% 653 7,118 20.0% Symptoms, signs & ill-defined conditions 338 12.0% 4,004 270 8.0%8.40 318 11.2% 4,382 10.8% 567 16.9% 5,355 15.1% Diseases of the respiratory system Musculoskeletal system & connective tissue 270 9.5% 3,366 8.3% 238 7.1% 2,326 6.5% Diseases of the nervous system & sense organs 219 3,269 8.1% 177 5.3% 1,935 5.4% 7.7% 4,505 19.8% 6,943 19.5% Diseases of the circulatory system 281 9.9% 11.1% 663 2 941 299 Diseases of the digestive system 7.9% 7.30 .. 8.9% 2.882 8.196 Diseases of the genitourinary system 105 3.7% 1,767 154 1,793 5.0% 4.4% 4.6% Mental disorders 96 3.4% 1,792 4.4% 51 1.5% 665 1.9% Diseases of the skin & subcutaneous tissue 1,204 81 2,4% 849 2.4% 82 2.9% 3.0% Infectious & parasitic diseases 39 1.4% 534 1.3% 32 1.4% Endocrine, nutritional, metabolic & immunity disorders 50 98 1.8% 772 1.9% 2.9% 1,082 3.0% Residual codes, unclassified, all Ecodes 26 0.9% 320 0.8% 19 0.6% 346 1.0% 0.0% 0.0% 0 0.0% 9 0.0% 0 Complications of pregnancy & childbirth 0 10 ().48 a 0.7% 44 1.4% 213 Diseases of the blood & blood-forming organs 97 10 0.3% 11 0.4% 0.2% 0.6% Conditions originating in the perinatal period 0 0.0% 0 0.0% 0 0.0950 0.0% Congenital anomalies 0 0.0% 8 0.0% 0 0.0% 9 0.0% 2,828 100.0% 40,462 100.0% 3,356 100.0% 35,518 100.0% Total

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.3 I Emergency Department Clinical Classifications Software (CCS) High Level Diagnosis Groups* TOTAL

Southwestern Vermo	ont Medical	Center		
		To	otal	
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
Injury & poisoning	5,079	30.7%	69,720	32.6%
Symptoms, signs & ill-defined conditions	1,982	12.0%	22,299	10.4%
Diseases of the respiratory system	1,969	11.9%	25,407	11.9%
Musculoskeletal system & connective tissue	1,449	8.8%	14,657	6.8%
Diseases of the nervous system & sense organs	1,367	8.3%	17,637	8.2%
Diseases of the circulatory system	1,208	7.3%	14,843	6.9%
Diseases of the digestive system	1,183	7.2%	15,436	7.2%
Diseases of the genitourinary system	644	3.9%	9,415	4.4%
Mental disorders	501	3.0%	7,956	3.7%
Diseases of the skin & subcutaneous tissue	401	2.4%	5,338	2.5%
Infectious & parasitic diseases	263	1.6%	3,983	1.9%
Endocrine, nutritional, metabolic & immunity disorders	194	1.2%	3,004	1.4%
Residual codes, unclassified, all E codes	104	0.6%	1,293	0.6%
Complications of pregnancy & childbirth	78	0.5%	1,481	0.7%
Neoplasms	56	0.3%	933	0.4%
Diseases of the blood & blood-forming organs	32	0.2%	423	0.2%
Conditions originating in the perinatal period	14	0.1%	112	0.1%
Congenital anomalies	4	0.0%	77	0.0%
Total	16,528	100%	214,014	100%

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.35 shows that, of the 16,528 ED visits at SVMC in 2002, 57.4% were accounted for by 20 Clinical Classifications Software (CCS) Single Level Diagnosis Groups. The top 20 ED diagnoses at SVMC in 2002 were consistent with those statewide, with the exception of three (Tables 2.35 and 2.36). Among the top 20 CCS diagnoses for ED visits at SVMC, and NOT among those statewide, were: Other Aftercare, Nausea and Vomiting, and Fever of Unknown Origin. Among the top 20 CCS ED procedures statewide, and NOT among those at SVMC, were: Urinary Tract Infections, Otitis Media and Related Conditions, and Fracture of Lower Limb. Tables 2.33 through 2.36 also indicate that the top 20 CCS diagnoses for ED visits at SVMC and statewide are most represented in the younger age groups and decrease with age.

Table 2.32 Emergency Department Clinical Classifications Software (CCS)
High Level Diagnosis Groups* STATEWIDE

		V	ermont							
	Age	0-17	Age	18-44	Age 45-64		Age	e 65+	T	otal
CCS Group	State Actual Count	% of State Total	State Actual Count	% of Sta Total						
Injury & poisoning	18,995	44.7%	32,413	33.9%	11,194	27.7%	7,118	20.0%	69,720	32.6%
Diseases of the respiratory system	6,248	14.7%	9,422	9.9%	4,382	10.8%	5,355	15.1%	25,407	11.9%
Symptoms, signs & ill-defined conditions	5,094	12.0%	10,209	10.7%	4,004	9.9%	2,992	8.4%	22,299	10.4%
Diseases of the nervous system & sense organs	4,465	10.5%	7,968	8.3%	3,269	8.1%	1,935	5.4%	17,637	8:2%
Diseases of the digestive system	1,717	4.0%	7,896	8.3%	2,941	7.3%	2,882	8.1%	15,436	7.2%
Diseases of the circulatory system	287	0.7%	3,108	3.3%	4,505	11.1%	6,943	19.5%	14,843	6.9%
Musculoskeletal system & connective tissue	1,141	2.7%	7,824	8.2%	3,366	8.3%	2,326	6.5%	14,657	6.8%
Diseases of the genitourinary system	909	2.1%	4,946	5.2%	1,767	4.4%	1,793	5:0%	9,415	4.4%
Mental disorders	690	1.6%	4,809	5.0%	1,792	4.4%	665	1.9%	7,956	3.7%
Diseases of the skin & subcutaneous tissue	799	1.9%	2,486	2.6%	1.204	3.0%	849	2.4%	5,338	2.5%
Infectious & parasitic diseases	1,407	3.3%	1,539	1.6%	534	1.3%	503	1.4%	3,983	1.9%
Endocrine, nutritional, metabolic & immunity disorders	330	0.8%	820	0.9%	772	1.9%	1.082	3.0%	3,004	1.4%
Complications of pregnancy & childbirth	87	0.2%	1,385	1.5%	9	0.0%	.0	0.0%	1,481	0.7%
Residual codes, unclassified, all Ecodes	164	0.4%	463	0.5%	320	0.8%	346	1.0%	1,293	0.6%
Neoplasms	20	0.0%	108	0.1%	298	0.7%	507	1.4%	933	0.4%
Diseases of the blood & blood-forming organs	27	0.1%	86	0.1%	97	0.2%	213	0.6%	423	0.2%
Conditions originating in the perinatal period	-111	0.3%	1	0.0%	0	0.0%	- 0	0.0%	112	0.1%
Congenital anomalies	37	0.1%	23	0.0%	8	0.0%	. 9	0.0%	77	0.0%
Total	42,528	100.0%	95,506	100.0%	40,462	100.0%	35,518	100.0%	214,014	100.0%

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.33 Top 20 Emergency Department Clinical Classifications Software (CCS) Single Level
Diagnosis Groups* Ages 0-17 and 18-44 Sorted Descending by Hospital Total

		Ag	e 0-17		Age 18-44				
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	
Superficial injury, contusion	354	9,6%	4,500	10.6%	425	6.4%	7,119	7.5%	
Sprains & strains	192	5.2%	3,220	7.6%	532	8.0%	8,942	9.4%	
Open wounds of extremities	170	4.6%	1,899	4.5%	356	5.4%	4,569	4.8%	
Abdominal paur	117	3:2%	1,374	3.2%	394	5,9%	4,808	5.0%	
Other upper respiratory infections	233	6.3%	3,282	7.7%	247	3.7%	3,901	4.1%	
Other non-traumatic joint disorders	117	3.2%	440	1.0%	234	3.5%	1,724	1.8%	
Spondylosis, disc & other back problems	41	1.1%	303	0.7%	284	4.3%	3,797	4.0%	
Other injuries & cond due to external causes	161	4.4%	2,356	5.5%	222	3.3%	3,227	3.4%	
Open wounds of head, neck, & trunk	225	6.1%	2,267	5.3%	112	1.7%	1,554	1,6%	
Headache, including migraine	48	1.3%	400	0.9%	283	4.3%	3,409	3.6%	
Nonspecific chest pain	24	0.7%	168	0.4%	151	2.3%	1,767	1.9%	
Other connective tissue disease	71	1.9%	342	0.8%	182	2.7%	2,066	2.2%	
Other lower respiratory disease	89	2.4%	731	1.7%	133	2.0%	1,445	1.5%	
Fracture of upper limb	163	4.4%	1,981	4.7%	95	1.4%	1,632	1.7%	
Pneumonia (except TB or STD related)	46	1.2%	418	1.0%	25	0,4%	448	0.5%	
Other aftercare	59	1.6%	531	1.2%	109	1.6%	975	1.0%	
Nausea & vomiting	107	2.9%	635	1.5%	106	1.6%	1,034	1.1%	
Skin & subcutaneous tissue infections	37	1.0%	416	1.0%	108	1.6%	1,653	1.7%	
Fever of unknown origin	185	5.0%	1,143	2.7%	27	0.4%	247	0.3%	
Disorders of teeth & jaw	19	0.5%	255	0.6%	202	3.0%	3,704	3.9%	
Total for top 20 CCS groups	2,458	66.6%	26,661	62.7%	4,227	63.5%	58,021	60.8%	
Total for all other CCS groups	1,232	33.4%	15,867	37.3%	2,427	36,5%	37,485	39,2%	
Total all CCS groups	3,690	100.0%	42,528	100.0%	6,654	100.0%	95,506	100.0%	

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.34 Top 20 Emergency Department Clinical Classifications Software (CCS) Single Level Diagnosis Groups* Ages 45-64 and 65+ Sorted Descending by Hospital Total

		And	45-64	1		10	e 65+	
Tan Areas		Age	45-04			.Ag	e ust	
CCS Group	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total	Hospital Actual Count	% of Hospital Total	State Actual Count	% of State Total
Superficial injury, contusion	133	4.7%	2,220	5.5%	125	3,7%	1,574	4.4%
Sprains & strains	156	5.5%	2,490	6.2%	71	2.1%	794	2.2%
Open wounds of extremities	143	5.1%	1,684	4.2%	66	2.0%	643	1.8%
Abdominal pain	116	4.1%	1,679	4.1%	65	1,9%	910	2.6%
Other upper respiratory infections	45	1.6%	961	2.4%	26	0.8%	356	1.0%
Other non-traumatic joint disorders	84	3.0%	743	1.8%	75	2.2%	602	1.7%
Spondylosis, disc & other back problems	100	3.5%	1,425	3.5%	77	2.3%	807	2.3%
Other injuries & cond due to external causes	69	2.4%	1,055	2.6%	49	1.5%	639	1.8%
Open wounds of head, neck, & trunk	53	1.9%	505	1.2%	43	1,3%	466	1.3%
Headache, including migraine	66	2.3%	1,172	2.9%	25	0.7%	274	0.8%
Nonspecific chest pain	115	4.1%	1,873	4.6%	107	3,2%	1,263	3.6%
Other connective tissue disease	77	2.7%	1,024	2.5%	65	1.9%	649	1.8%
Other lower respiratory disease	78	2.8%	803	2.0%	72	2.1%	933	2.6%
Fracture of upper limb	45	1.6%	713	1.8%	51	1.5%	588	1.7%
Pneumonia (except TB or STD related)	46	1.6%	545	1.3%	190	5.7%	1,509	4.2%
Other aftercare	79	2.8%	495	1.2%	50	1.5%	331	0.9%
Nausea & vomiting	36	1.3%	315	0.8%	28	0,8%	319	0.9%
Skin & subcutaneous tissue infections	64	2.3%	846	2.1%	55	1.6%	584	1.6%
Fever of unknown origin	12	0.4%	163	0.4%	19	0,6%	193	0,5%
Disorders of teeth & jaw	15	0.5%	453	1.1%	5	0.1%	66	0.2%
Total for top 20 CCS groups	1,532	54.2%	21,164	52.3%	1,264	37,7%	13,500	38.0%
Total for all other CCS groups	1,296	45.8%	19,298	47.7%	2,092	62.3%	22,018	62.0%
Total all CCS groups	2,828	100.0%	40,462	100.0%	3,356	100,0%	35,518	100.0%

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.35 Top 20 Emergency Dept. Clinical Classifications Software (CCS) Single Level Diagnosis Groups* TOTAL Sorted Descending by Hospital Total

Southweste	ern Vermont M	edical Center		
		Total		
CCS Group	Hospital	% of	State	% of
CCS Gloup	Actual	Hospital	Actual	State
	Count	Total	Count	Total
Superficial injury, contusion	1,037	6.3%	15,413	7.2%
Sprains & strains	951	5.8%	15,446	7.2%
Open wounds of extremities	735	4.4%	8,795	4.1%
Abdominal pain	692	4.2%	8,771	4.1%
Other upper respiratory infections	551	3.3%	8,500	4.0%
Other non-traumatic joint disorders	510	3.1%	3,509	1.6%
Spondylosis, disc & other back problems	502	3.0%	6,332	3.0%
Other injuries & cond due to external causes	501	3.0%	7,277	3.4%
Open wounds of head, neck, & trunk	433	2.6%	4,792	2.2%
Headache, including migraine	422	2.6%	5,255	2.5%
Nonspecific chest pain	397	2.4%	5,071	2.4%
Other connective tissue disease	395	2.4%	4,081	1.9%
Other lower respiratory disease	372	2.3%	3,912	1.8%
Fracture of upper limb	354	2.1%	4,914	2.3%
Pneumonia (except TB or STD related)	307	1.9%	2,920	1.4%
Other aftercare	297	1.8%	2,332	1.1%
Nausea & vomiting	277	1.7%	2,303	1.1%
Skin & subcutaneous tissue infections	264	1.6%	3,499	1.6%
Fever of unknown origin	243	1.5%	1,746	0.8%
Disorders of teeth & jaw	241	1.5%	4,478	2.1%
Total for top 20 CCS groups	9,481	57.4%	119,346	55.8%
Total for all other CCS groups	7,047	42.6%	94,668	44.2%
Total all CCS groups	16,528	100%	214,014	100%

^{*2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

Table 2.36 Top 20 Emergency Department Clinical Classifications Software (CCS) Single Level
Diagnosis Groups* STATE Sorted Descending by State Total

			Vermo	ont						
	Age	0-17	Age	18-44	Age	45-64	Age	e 65+	T	otal
CCS Group	State Actual Count	‰ of State Total	State Actual Count	% of State Total						
Sprains & strains	3,220	7.6%	8,942	9.4%	2,490	6.2%	794	2.7%	15,446	7.2%
Superficial injury, contusion	4,500	10.6%	7,119	7.5%	2,230	5.5%	1,574	4.4%	15,413	7.2%
Open wounds of extremities	1,899	4.5%	4,569	4.8%	1,684	4.2%	643	1.8%	8,795	4.1%
Abdominal pain	1,374	3.2%	4,808	5.0%	1,679	4.1%	910	2.6%	8,771	4.1%
Other upper respiratory infections	3,282	7.7%	3,901	4.1%	961	2.4%	356	1.0%	8,500	4.0%
Other injuries/conditions due to external causes	2,356	5.5%	3,227	3.4%	1,055	2.6%	639	1.8%	7,277	3.4%
Spondylosis, disc & other back problems	303	0.7%	3,797	4.0%	1,425	3.5%	807	2.3%	6,332	3.0%
Headache, including migraine	-400	0.9%	3,409	3.6%	1,172	2.9%	274	0.8%	5,255	2.5%
Nonspecific chest pain	168	0.4%	1,767	1.9%	1,873	4.6%	1,263	3.6%	5,071	2.4%
Fracture of upper limb	1,981	4.7%	1,632	1.7%	713	1.8%	588	1.7%	4,914	2.3%
Open wounds of head, neck, & trunk	2,267	5,3%	1,554	1.6%	505	1.2%	466	1.3%	4,792	2.2%
Disorders of teeth & jaw	255	0.6%	3,704	3.9%	453	1.1%	- 66	0.2%	4,478	2.1%
Other connective tissue disease	342	0.8%	2,066	2,2%	1,024	2,5%	649	1.8%	4,081	1.9%
Other lower respiratory disease	731	1.7%	1,445	1,5%	803	2.0%	933	2.6%	3,912	1.8%
Urinary tract infections	445	1.0%	1,771	1,9%	556	1.4%	777	2,2%	3,549	1.7%
Other non-traumatic joint disorders	440	1.0%	1,724	1,8%	743	1.8%	602	1.7%	3,509	1.6%
Skin & subcutaneous tissue infections	416	1.0%	1,653	1,7%	846	2,1%	584	1.6%	3,499	1.6%
Otitis media & related conditions	2,418	5.7%	843	0.9%	165	0.4%	43	0.1%	3,469	1.6%
Pneumonia (except TB or STD related)	418	1.0%	448	0.5%	545	1.3%	1,509	4.2%	2,920	1.4%
Fracture of lower limb	663	1.6%	1,043	1.1%	619	1.5%	345	1.0%	2,670	1.2%
Total for top 20 CCS groups	27,878	65.6%	59,422	62,2%	21,531	53.2%	13,822	38.9%	132,653	57.3%
Total for all other CCS groups	14,650	34.4%	36,084	37.8%	18,931	46.8%	21,696	61.1%	91,361	42.7%
Total all CCS groups	42,528	100.0%	95,506	100.0%	40,462	100.0%	35,518	100.0%	214,014	100.0%

^{#2002} Emergency Department Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

3. Cancer

Information from the Vermont Department of Health

Table 3.1 shows that residents in the SVHC service area have a higher incidence of cancer (510.2) per 100,000 residents than the rest of the state (488.4). This is consistent with what we have seen in Tables 2.1 and 2.2, where SVHC residents experience a higher rate of death from cancer compared with the rest of the state. The types of cancer having a higher incidence among residents in the SVHC service area are Lung Cancer and Melanoma.

	Table 3.1 Incidence of Cancer*											
Benningt	ton Service	Area										
	Aı	rea	Vermont	(overall)								
Туре	Rate per 100,000	Cases Per Year	Rate per 100,000	Cases Per Year								
Female Breast Cancer (Invasive)	125.2	32	138.0	463								
Colon and Rectum (Invasive)	55	27	57.9	353								
Lung (Invasive)	80	39	67.7	413								
Melanoma of the Skin (Invasive)	32.3	14	24.4	151								
Prostate (Invasive)	157.5	34	157.7	426								
Cervix (Invasive)	8.5	~~	9.6	31								
All Site Groupings Combined (includes in situ bladder)	510.2	244	488.4	2,998								

^{*} Database is Vermont Cancer Registry 1997-2001.

Community Input

When we asked community leaders and residents what they believe are the major health problems affecting area residents, more than one-fourth (29.5%) of community leaders discussed cancer on an unaided basis, as did one-fourth (24.1%) of residents. In fact, Cancer was more likely to be mentioned by residents than any other health issue on an unaided basis. However, considering that 27.8% of residents could not identify, on an unaided basis, a major health problem affecting area residents, we also asked residents to select among a list of choices which health issue should be the top priority with regard to improving the health of area residents. In this case, 32.6% of residents selected Chronic Disease Prevention, such as cancer and heart disease, as a top priority; which was the second greatest issue next to Diet and Activity to be selected by residents.

As one community leader said, "[There's] a lot of cancer showing up. Two to three people I've spoken with have non-lymphatic Hodgkin's. Many individuals believed that cancer was higher in the SVHC region compared with any other region, with some attributing this to environmental

^{**} Rates are age-adjusted to the 2000 U.S. (18 age groups) standard. Confidence intervals are 95% for rates.

^{~~}Indicates that statistics is not displayed due to less than 6 cases.

causes (e.g., chemicals used in farming). Residents' perspectives seem to be consistent with the data, given that residents in the SVHC service area have a much higher incidence of cancer than the rest of the state, and it is the No. 1 cause of death in the SVHC service area.

Priorities

Cancer was not selected as a priority to be addressed because it was concluded by the Needs Assessment Steering Committee that targeting behaviors such as diet, physical activity and substance use (drug, alcohol and tobacco use) would affect all chronic diseases, including cancer.

4. Maternal/Child Health

Information from the Vermont Department of Health

According to Table 4.1, maternal and child health indicators show that, in 2002, almost all mothers in the SVHC service area (90.2%) received prenatal care in their first trimester. This is greater than the percentage of moms receiving prenatal care statewide (88.9%). However, almost half (48.6%) of the mothers in the SVHC service area had excessive weight gain during pregnancy, a slightly greater percentage than that experienced by mothers statewide (43.3%). And a greater percentage of mothers in the SVHC service area smoked during pregnancy (26.9%) compared with those statewide (20.1%). However, the percentage of births to newborns with low birthweight (<2,500 grams) is comparable to that of the state (approximately 5%).

Table 4.1		
Maternal / Child Hea	lth*	
Bennington Service Area		
Vital Statistic	Area	Vermont (overall)
% of Mothers Who Received 1st Trimester Prenatal Care	90.2%	88.9%
% of Mothers Who Received Adequate Prenatal Care	87.1%	82.2%
% of Mothers Who Reported Using Tobacco During Pregnancy (any trimester)	26.9%	20.1%
% of Births Weighed <2500 Grams (singleton births only)	4.7%	4.6%
% of Mothers With Inadequate Weight Gain During Pregnancy (full term births only)	19.2%	21.3%
% of Mothers With Excessive Weight Gain During Pregnancy (full term births only)	48.6%	43.3%

^{*} Data is based on 2000 to 2002 Vermont resident births.

Community Input

Maternal and child health were not mentioned by either residents or community leaders during the interview process with regard to issues that affect the health of the local community.

Priorities

Maternal and child health issues were not identified as priorities to address. However, any impact on the priorities identified will affect the health of women and children.

5. Mental Health and Substance Abuse

Information from the Vermont Department of Health

Community Indicators for Mental Health and Substance Abuse: Table 5.1 shows that the percentage of adults who are at risk for heavy drinking, at risk for binge drinking and who drink and drive is comparable to statewide percentages. It also shows that rates for adults at risk of depression and suicide are similar to the state rates.

Table 5.1 Adult Mental Hea Substance Abuse Ris		
Bennington Service Area		
Risk Factor	Area	Vermont (overall)
At Risk for Heavy Alcohol ¹	6.0%	7.2%
At Risk for Binge Drinking ²	17.8%	17.8%
At Risk for Depression	11.6%	11.3%
Drinking and Driving	4.1%	4.3%
Intentional Self-Harm (Suicide)		
Number of Deaths	17	390
Intentional Self-Harm (Suicide)		
Age-Adjusted Death Rate ³	8.3	12.5

^{*2000} to 2003 Behavioral Risk Factor Surveillance System Data. Age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

Inpatient Utilization for Mental Illness and Substance Abuse: In 2002, SVMC had a total of 57 inpatient visits with a mental illness or substance abuse diagnosis, with 18 visits for mental illness and 39 visits for substance abuse (see Table 5.2). However, this does not represent the

I Greater than 2 per day for Men, and greater than I per day for women 2 Greater than or equal to 5 drinks or more consumed on one or more occasions

³ Years of 1998 to 2002; Vital Records data (death certificates); age-adjusted to U.S. Standard 2000 Population, and rate is per 100,000 population

volume of patients seeking care for these problems in our service area. For example, when we look at the total number of inpatient visits for Bennington County residents who sought care for mental illness in 2002. Bennington County residents experienced 120 inpatient visits for mental illness, with only 14% (17 out of 120) discharged from SVMC (see Table 5.3). When we look at the percentage of inpatient visits for Bennington County residents who sought care for substance abuse, we find that SVMC provided care for 62% (32 out of 52) of those visits (Table 5.3). This suggests that local residents diagnosed with mental illness or substance abuse are seeking care at locations other than SVMC. This is consistent with the fact that only a small percentage of SVMC's total inpatient visits (1.5%) were of those diagnosed with mental illness or substance abuse, compared with 7.7%, on average, for all Vermont hospitals (see Table 5.4). When we look at the total number of visits for those being treated with mental illness or substance abuse at SVMC, 68% (38 out of 56 discharges) were for substance abuse (Table 5.4). Also, among those diagnosed with mental illness or substance abuse at SVMC, the diagnosis observed more frequently than any other was for Alcohol/Drug Abuse or Dependence with a Complicating Condition, with 39% (22 out of 56) of the discharges receiving this diagnosis (Table 5.4). This is consistent with Table 5.5, showing us that the most frequent diagnosis for Bennington County residents was for alcohol withdrawal, with 37% (21 out of 57) of the discharges receiving this diagnosis. Table 5.6 demonstrates that the average length of stay for a mental health or substance-abuse problem is shorter at SVMC than for hospitals statewide. The average length of stay for those diagnosed with a mental illness is 3.8 days at SVMC, compared with 8.3 days statewide. The average length of stay for those diagnosed with a substance-abuse issue is 3.5 days at SVMC, compared with 5.8 days statewide.

Table 5.2 Vermont Resident Discharges: Mental Illness and Substance Abuse By DRG Episodes and Unduplicated Count of People Served by Hospital 2002*

MDC		DRG	Data Type		Hospit	al		State	0
,,,,,,,	MDC DRG 424 O.R. Proc W Principal Diagnos Mental II 425 Acute Adjustment React Psychol. Dysfur 426 Depressive Neu 427 Neuroses Except Depre 428 Disorders Of Personality & Im Companie Disturbances & Marketands 429 Organic Disturbances & Marketands 430 Psychol. Dysfur 428 Companie Disturbances & Marketands 430 Psychol. Dysfur 428 Companie Disturbances & Marketands 430 Organic Disturbances & Marketands 431 Childhood Mental Disorder Diage Mental Health Total 433 Alcohol/Drug Abuse Or Dependent Disconder Diage Alcohol/Drug Abuse Or Dependent Disconder Discon		Episodes	2	I		12		
MDC 19: 42 Mental Health 42 43 MDC 20: Substance Abuse 52	424	Mental Illness	People	2	14	0.20	12	*	0.39
	100	Acute Adjustment Reaction &	Episodes	9			135		
	425	Psychol. Dysfunction	People	8	1 6	0.28	127	1	1.18
	lác		Episodes	0	17.00	-	395		
	426	Depressive Neuroses	People	0	14.	0.00	371	11	2.41
	int	Marson Barrel Branches	Episodes	0	1		585		
	424 O. 425 426 427 428 429 430 431 432 Mental H 433 521 Al 520: ance see 523 Substan	Neuroses Except Depressive	People	0	+	0.00	437	+	2.97
424 425 426 427 MDC 19: 428 Mental Health 429 430 431 432 Me 433 521 MDC 20: Substance Abuse 523	100	Disorders Of Personality & Impulse	Episodes	0	12.		98		
18-14-15 To 18-15	424 O.R. Proc W Principal Diagnoses of Mental Illne 425 Acute Adjustment Reaction Psychol. Dysfuncti 426 Depressive Neurose 427 Neuroses Except Depressi 428 Disorders Of Personality & Imput Contr 429 Organic Disturbances & Mental Acute Adjustment Reaction Psychology 430 Psychose 431 Childhood Mental Disorder 432 Other Mental Disorder Diagnose 433 Alcohol/Drug Abuse Or Dependent Left AM 521 Alcohol/Drug Abuse Or Dependent W Control 620 Alc/Drug Abuse Or Dependent Rehab. W/O Control 633 Alcohol/Drug Abuse Or Dependent Rehab. W/O Control 644 Alc/Drug Abuse Or Depend W	People	0		0.00	77	+.	0.94	
91.55 (885)	DRG 424 O.R. Proc W Principal Diagnos Mental II 425 Acute Adjustment React Psychol. Dysfun 426 Depressive Neu 427 Neuroses Except Depre 428 Disorders Of Personality & Im Co 429 Organic Disturbances & M Retard 430 Psych 431 Childhood Mental Disorder Diag Mental Health Total 432 Other Mental Disorder Diag Mental Health Total 433 Alcohol/Drug Abuse Or Depend 521 Alcohol/Drug Abuse Or Depend 522 Rehab. W/G 523 Alc/Drug Abuse Or Depend Rehab. W/G Substance Abuse Total	Organic Disturbances & Mental	Episodes	- 5		17	99		
ricalui	429	Retardation	People	5	+	0.20	94	+	1.02
MDC 19: Amental Health Amental Healt	120	Davidhanas	Episodes	2	1		2,020		
	430	Fsychoses	People	2	$\bar{+}$	0.20	1,666	14.	6.61
	121	Childhaad Montal Disardore	Episodes	0			66		
	431	Childhood Mental Disorders	People	0	<u>+</u>	0.00	66	#	1.22
	132	Other Mantal Digarder Digarages	Episodes	0		-	18		
	432	Other Memar Disorder Diagnoses	People	0	1+	0.00	16	4.	0.39
	Mon	tal Haalth Total	Episodes	18			3,428		
	Mich	iai ricatti 10tai	People	17	4	0.42	2,467	12 ± 35 27 ± 95 71 ± 85 37 ± 98 77 ± 99 94 ± 020 6666 ± 18 16 ± 428 467 ± 19 04 ± 19 0	17,1-
	122	Alcohol/Drug Abuse Or Dependence,	Episodes	7	1		119	-	
	455	Left AMA	People	7	1 ± 1	0.28	104	+	1.19
	521	Alcohol/Drug Abuse Or Dependence	Episodes	22			649		
VIDC 20:	321	WCC	People	21	<u> </u>	0.48	543	×8.	3.68
	522	Alc/Drug Abuse Or Depend W	Episodes	0		+	9		
MDC 19: Mental Health MDC 20: Substance Abuse	322	Rehab. W/O CC	People	0	\pm	0.00	9	#	0.28
	523	Alc/Drug Abuse Or Depend W/O	Episodes	9			235		
	020	Rehab. W/O CC	People	9	+	0.28	211	+	1.80
	ç.,	betance Abuse Total	Episodes	39	1 1		1,016		
	Su	Polarice Abuse Total	People	36	14	0.63	788	+	6.94
Me			Episodes	57	12	production ,	4,444		
IVIC	rittat 11	moss and bubstance Mouse I oldi	People	51		0.77	3,162	1961	24.08

^{*}Information is derived from the Hospital Discharge Data Set maintained by the Vermont Health Department, and database extracts provided by the Brattleboro Retreat. MDC and DRG coding for the hospital discharge data set was provided by the Department of Health. MDC and DRG coding for the Brattleboro Retreat was created by the Mental Health Performance Indicator Project based on primary diagnosis. This report excludes Vermont State Hospital.

The State of Vermont does not have unique client identifiers across service providers. For this reason, Probabilistic Population Estimation has been used to provide unduplicated counts of people served (with 95% confidence intervals). Estimates of the number of people served by Massachusetts and New York hospitals are not provided because the data is inadequate to provide probabilistic population estimates. Actual person counts are available for Brattleboro Retreat.

The number of episodes is greater than the number of people when individuals are admitted more than once during the year. The total number of people is less than the sum of the people for the two MDCs when individuals are hospitalized at different times for different disorders during the year.

Table 5.3 Vermont Resident Discharges: Mental Health (MDC 19) & Substance Abuse (MDC 20) by DRG by County 2002* Southwestern Vermont Medical Center Washington Windham Unknown Bennington Franklin / Grand Isle Caledonia Chittenden Orange Addison Orleans Rutland Windsor Lamoille Total MDC DRG () 0. MDC 19: Mental Illness MDC 19 Hospital Total Ð MDC 19 State Total MDC 20: Substance Abuse MDC 20 Hospital Total MDC 20 State Total MDCs 19 and 20 Hospital Total 0. Ø.

MDCs 19 and 20 State Total

^{*}Hospitals are ordered by overall MH/SA utilization. Information is derived from the Hospital Discharge Data Set maintained by the Vermont Department of Health and a database extract provided by the Brattleboro Retreat. Both data sets include all Vermont residents with a major diagnostic category of 19 (Mental Illness) or 20 (Substance Abuse). MDC and DRG coding for the hospital discharge data set was provided by the Department of Health. MDC and DRG coding for the Brattleboro Retreat was created by the Mental Health Performance Indicator Project based on primary diagnosis. This report excludes Vermont State Hospital.

Table 5.4 Vermont Resident Discharges: Mental Health and Substance Abuse by Hospital and DRG Count of Discharges and Percent of All Inpatients 2002*

		Southwestern Vermont Medical Ce	nter		10	
			Hos	pital	All Ver	monters
MDC		DRG	Count of Discharges	Percent of All Inpatients	Count of Discharges	Percent of All Inpatients
	424	O.R. Proc W Principal Diagnoses Of Mental Illness	2	0.1%	12	0.0%
	425	Acute Adjustment Reaction & Psychol. Dysfunction	9	0.2%	135	0.2%
	426	Depressive Neuroses	0	0.0%	395	0.7%
MDC 19:	427	Neuroses Except Depressive	0	0.0%	585	1.0%
Mental	428	Disorders Of Personality & Impulse Control	0	0.0%	98	0.2%
Health	429	Organic Disturbances & Mental Retardation	5	0.1%	99	0.2%
	430	Psychoses	2	0.1%	2020	3.5%
	431	Childhood Mental Disorders	0	0.0%	66	0.1%
	432	Other Mental Disorder Diagnoses	0	0.0%	18	0.0%
MEDICAN	433	Alcohol/Drug Abuse Or Dependence, Left AMA	7	0.2%	119	0.2%
MDC 20: Substance	521	Alcohol/Drug Abuse Or Dependence W CC	22	0.6%	649	1.1%
Abuse	522	Alc/Drug Abuse Or Depend W Rehab. W/O CC	0	0.0%	9	0.0%
riouse	523	Alc/Drug Abuse Or Depend W/O Rehab. W/O CC	9	0.2%	235	0.4%
		MDC 19 & 20 Total	56	1.5%	4440	7.7%
		All Inpatients Total	3735	100%	57481	100%

^{*} Hospitals are ordered by overall MH/SA utilization. Information is derived from the Hospital Discharge Data Set maintained by the Vermont Department of Health and a database extract provided by the Brattleboro Retreat. Both data sets include all Vermont residents with a major diagnostic category of 19 (Mental Illness) or 20 (Substance Abuse). MDC and DRG coding for the hospital discharge data set was provided by the Department of Health. MDC and DRG coding for the Brattleboro Retreat was created by the Mental Health Performance Indicator Project based on primary diagnosis. This report excludes the Vermont State Hospital.

9) and Substance Abuse (MDC 20) Primary Diagnoses by County by Hospital	Southwestern Vermont Medical Center	Caledonia Calitenden Essex Franklin / Grand Isle Crange Ortange Ortange Washington Windbam Windbam Windbam Windbam	1 5	4	0 3	0 0 2					1 1 18	0 1 1 21	0 1 9	0 1 3	0 0 0 2		0 1 1 1	0 0 1		1 4 30
Table 5.5 Mental Health (MDC 19) and Substand	Southwe		30011 Conversion disorder	2930 Acute delirium	29041 As dementia w delirium	Senile delirium	29620 Mdd one epis-nos	Psychosis nos	30001 Panic disorder	3004 Neurotic depression	TotalT	29181 Alcohol withdrawal	Drug-induced delirium	2910 Delirium tremens	Drug hallucinosis	Drug withdrawal syndrome	30300 Ac alcohol intox-unspec	30301 Ac alcohol intox-cont	30500 Alcohol abuse-unspec	Total

Top 10 primary diagnoses for all Vermont residents, sorted in descending order by statewide total, by MDC

Table 5.6 Vermont Resident Inpatient Length of Stay Mental Health (MDC 19) and Substance Abuse (MDC 20) by Secondary Mental Health and Substance Abuse Diagnoses 2002*

	Southv	vestern Vermont Medical C	enter	
MDC	Data	Data Type	Hospital	State
		Episodes	18	3,428
	Total MDC19	Patient Days	69	28,365
		Average Length of Stay	3.8	8.3
	No Secondary	Episodes	14	1,201
	Diagnosis	Patient Days	48	11,622
		Average Length of Stay	3.4	9.7
MDC 19:	One Secondary	Episodes	3	866
Mental	Diagnosis	Patient Days	5	7,231
Health		Average Length of Stay	1.7	8.3
	Two Secondary	Episodes	1	623
	Diagnoses	Patient Days	16	4,503
		Average Length of Stay	16.0	7.2
	Three +	Episodes	0	729
	Secondary	Patient Days	0	4,818
	Diagnoses	Average Length of Stay	0.0	6.6
		Episodes	39	1,016
	Total MDC 20	Patient Days	136	5,943
		Average Length of Stay	3.5	5.8
	No Secondary	Episodes	10	410
	Diagnosis	Patient Days	51	2,763
		Average Length of Stay	5	7
MDC 20:	One Secondary	Episodes	15	305
Substance	Diagnosis	Patient Days	33	1,703
Abuse		Average Length of Stay	2.2	5.6
	Two Secondary	Episodes	13	161
	Diagnoses	Patient Days	45	732
		Average Length of Stay	3.5	4.5
	Three +	Episodes	1	140
	Secondary	Patient Days	7	745
	Diagnoses	Average Length of Stay	7.0	5.3

Emergency Utilization for Mental Illness and Substance Abuse: Emergency utilization for mental illness or substance abuse shows that local residents classified as having mental illness or substance abuse are seeking care at SVMC emergency room. Table 5.7 shows that, of the 668 visits Bennington County residents made to emergency departments for mental illness or substance abuse, 95% (634) of the visits were to SVMC's Emergency Department (ED). When we look at the total volume of SVMC's ED visits, mental illness and substance abuse comprise only a fraction (3.3%) of all visits (see Table 5.8).

		erger			Vermo										
CCS Group	Addison	Bennington	Caledonia	Chittenden	Essex	Franklin	Grand Isle	Lamoille	Orange	Orleans	Rutland	Washington	Windham	Windsor	Total
Alcohol-related mental disorders	1	82	0	0	0	0	0	- 0	0	0	6	0	2	0	0)
Substance-related mental disorders	Ð	45	0	1	0	0	0	0	0	0	1	0	1	0	48
Senility & organic mental disorders	0	17	0	0	0	0	0	0	0	- 0	0	0	1	0	18
Affective disorders	.0	96	0	0	0	0	0	0	0	0	2	0	2	0	10
Schizophrenia & related disorders	0	26	0	0	0	0	0	0	0	0	0	0	1	0	27
Other psychoses	0	34	0	0	-0	0	0	0	0	0	0	0	1	0	35
Anxiety, somatoform, dissociative, personality disorders	0	122	0	ă.	-0	0	ø	ō	0	0	2	ū	1	1	12
Preadult disorders	0	21	0	- 0	0	0	0	0	0	0	0	0	1	- 0	22
Other mental conditions	1	187	0	3	0	0	0	0	1	0	1	0	3	0	19
Personal history of mental disorder/problems, screening	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	2	634	0	5	0	0	0	0	-1	0	12	0	13	1	66

*Data for these analyses include ER visits by Vermont residents in 2001 and 2002. These data sets exclude Brattleboro Retreat. NH Hitchcock Psych, and VA White River Junction. Analyses were run on all Vermont acute care hospitals as well as NH DMHC and include only primary diagnoses. CCS codes 66-75 include diagnoses such as 'post-concussion syndrome', 'acute reaction to stress', 'sychogenic breathing problems', and other disorders that may not be captured in MDCs 19 or 20.

Table 5.8 Clinical Classifications Software (CCS) Codes 66-75 Percent of Emergency Department (ED) Visits by Hospital *

Southwestern Vermont Medical Center			
CCS Group	Total	Percent of ED Mental Health Visits	Percent of all ED visits
Alcohol-related mental disorders	91	13.6%	0.5%
Substance-related mental disorders	48	7.2%	0.2%
Senility & organic mental disorders	18	2.7%	0.1%
Affective disorders	100	15.0%	0.5%
Schizophrenia & related disorders	27	4.0%	0.1%
Other psychoses	35	5.2%	0.2%
Anxiety, somatoform, dissociative, & personality disorders	127	19.0%	0.6%
Pre-adult disorders	22	3.3%	0.1%
Other mental conditions	196	29.3%	1.0%
Personal history of mental disorder/problems, screening	4	0.6%	0.0%
Total number of Mental Health visits	668	100.0%	3.3%
Total number of ED visits	20081		100.0%

^{*}Data for these analyses include emergency room visits by Vermont residents in 2001 and 2002. These data sets exclude Brattleboro Retreat, NH Hitchcock Psych, and VA White River Junction. Analyses were run on all Vermont acute care hospitals as well as NH DMHC and include only primary diagnoses. CCS codes 66-75 include diagnoses such as 'post-concussion syndrome', 'acute reaction to stress', psychogenic breathing problems', and other disorders that may not be captured in MDCs 19 and 20.

Community Input

During the interview process with community leaders and residents, we asked, "What do you believe are the major health problems affecting area residents?" Community leaders and residents were asked to describe the health problem they perceive on an unaided basis, in their own words. With regard to problems relating to abuse or addiction, about two-fifths (41%) of community leaders discussed substance-abuse and addiction problems on an unaided basis, as did one-seventh (15.3%) of residents. As one resident said: "Probably the smoking and drinking, and the many things that are related to that. What I mean is that, there are so many people in this town that are dealing with alcoholism and smoking, that it is very obvious to other people that are around. In fact, substance abuse was mentioned among the top three issues by community leaders and residents as affecting the health of area residents. With regard to problems relating to mental health, a fairly small proportion (6.6%) of community leaders discussed mental health problems on an unaided basis, as did a small proportion (2.8%) of residents.

We also asked community leaders and residents several questions about their perceptions of health care resources available to area residents. To understand more about which type of care is

of greatest need for expansion or improvement, we asked respondents to "select from the following types of care the top priority to address in terms of improving the health of area residents: primary, specialty, emergency, dental care, substance-abuse care, mental health care or hospital care." Only a small proportion of residents believed that substance-abuse care (6.2%) and mental health care (4.4%) should be top priorities. On the other hand, about one-fifth of community leaders identified each of these issues as the highest priority (21.3% substance abuse and 18% mental health). When we look at the top three types of care mentioned by residents and community leaders, mental health care did not rank among the top three by either of these groups. However, substance-abuse care was among the top three types of care mentioned by community leaders, but not by residents.

United Counseling Service (UCS), the local Mental Health Organization in the SVHC service area, states in its Local Mental Health System of Care Plans for Adult Mental Health (see Appendix A) that its greatest challenge in adult outpatient services is the capacity to handle the volume of needs resulting in a waiting list for adult outpatient services. These plans also suggest that, in a crisis situation, psychiatric time to assess referrals to the local residential crisis center (Battelle House) is insufficient. Additionally, there are insufficient case-management services available to provide for persons admitted with high case management needs.

Priorities

The Needs Assessment Steering Committee identified substance abuse as a top priority health issue to be addressed. It was recognized that, to reduce substance abuse, a full-scale prevention, treatment and recovery program is needed. It also was recognized that access to mental health and substance-abuse treatment should be a priority issue to address, as access to this type of care is limited in the area.

6. Chronic Disease

Information from the Vermont Department of Health

Table 6.1 indicates that a greater proportion of residents in the SVHC service area have been told by their physician that they have a chronic disease, compared with those statewide.

Table 6. I Adults with Chronic Disease*			
Bennington Service Area			
Risk Factor	Hospital Service Area	Vermont (overall)	
Ever told by a doctor that you have Diabetes ¹	5.6%	5.2%	
Currently diagnosed with Asthma ¹	8.7%	8.2%	
Ever told by a doctor that you have Coronary Heart Disease ²	5.1%	4.6%	
Ever told by a doctor that you have Myocardial Infarction ²	3.1%	4.5%	
Ever told by a doctor that you have COPD ³	4.8%	3.9%	

^{* 2000} to 2003 Behavioral Risk Factor Surveillance System Data.

I Age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

² Based on 2000, 2001 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

³ Based on 2000, 2002 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

Community Input

When we asked community leaders what they believe are the major health problems affecting area residents, more than one-fourth (29.5%) of community leaders discussed cancer on an unaided basis, and 29.5% mentioned cardiac problems. Other types of chronic disease were not likely to be mentioned by community leaders.

Residents also were likely to mention cancer and heart disease on an unaided basis, with 24.1% of residents mentioning cancer and 14.2% having mentioned cardiac problems. Residents were also likely to mention other types of chronic disease but to a much less degree. For example, 7% of residents mentioned diabetes and 3.6% mentioned respiratory problems such as asthma. However, considering 27.8% of residents could not identify, on an unaided basis, a major health problem affecting area residents, we also asked residents to select among a list of choices which health issue should be the top priority with regard to improving the health of area residents. In this case, 32.6% or residents selected chronic disease, such as cancer and heart disease, as a top priority; which was the second greatest issue, next to Diet and Activity, to be selected by residents.

Priorities

Chronic Disease was not selected as a priority need to address because it was concluded by the Needs Assessment Steering Committee that targeting behaviors that affect chronic disease such as diet, physical activity and substance abuse would have the greatest impact on reducing or delaying the onset of these diseases. However, access to chronic disease screenings was identified as a priority to address because it would allow for early detection of chronic disease, which could lead to better health outcomes for those with the disease.

7. Prevention

Information from the Vermont Department Of Health

Adult Prevention Practices and Screenings: Immunizing elders against Influenza and Pneumonia is important, considering that these illnesses are a leading reason for hospitalization among people ages 65 and older. Table 7.1 indicates that 76.3% of adults 65 and older in the SVHC service area have had a flu shot, a similar rate to that experienced statewide (74.3%). However, in the SVHC service area, a greater proportion of residents 65+ have had a Pneumonia shot (74.6%), compared with those statewide (66.2%).

Cancer screening detects cancer early on when it is most treatable. Table 7.1 shows that a smaller proportion of women in the SVHC service area have had a Pap Smear Test (82.4%) compared with women statewide (86.0%). Also in the SVHC service area, a smaller proportion of women ages 40 and over have had a Mammogram within the past 2 years (72.3%), compared with women statewide (75.0%). With regard to Sigmoidoscopy or Colonoscopy, a greater proportion of residents in the SVHC service area are obtaining these tests (56.0%), compared with those statewide (47.8%).

Table 7.1 Adult Prevention*		
Bennington Service Area		
Preventative Measure	Area	Vermont (overall)
Aged 65+ Who Had Flu Shot in Past 12 Months ¹	76.3%	74.3%
Ever Had a Pneumonia Shot Aged 65+1	74.6%	66.2%
Ever Had a Pap Smear Test ¹	93.1%	95.5%
Had Pap Smear Test Within Past 3 Years ¹	82.4%	86.0%
Had Mammogram Within Past 2 Years ¹	48.4%	49.8%
Had Mammogram Within Past 2 Years Aged 40+1	72.3%	75.0%
Ever Had a Sigmoidoscopy / Colonoscopy ²	56.0%	47.8%
Ever had a Blood Stool Test using Home Kit ²	56.7%	52.6%

^{* 2000} to 2003 Behavioral Risk Factor Surveillance System Data.

Prevention Quality Indicators: Prevention Quality Indicators give an indication of how well our primary care system is performing at reducing preventable hospitalizations. Table 7.2 suggests that, in general, residents in the state of Vermont are performing better on all of the Quality Indicators, with the exception of angina, compared with residents nationwide. However, residents in the SVHC service area do NOT perform as well as either the nation or the state on a number of Quality Indicators. These include: Angina, Bacterial Pneumonia, Chronic Obstructive Pulmonary Disease, Diabetes with long-term complications and Perforated Appendix. Also, when comparing rates of residents in the SVHC service area with those statewide, we find that residents in the SVHC service area are performing worse than the state of Vermont on ALL Quality Indicators, with the exception of Diabetes uncontrolled and Hypertension. This suggests that there is a failure in the primary care system in the SVHC service area at reducing numerous preventable hospitalizations.

I Based on 2000, 2002 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

² Based on 2000 to 2002 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+ unless stated otherwise

		Bennington S	Service Area				
		Area		Vermont			US 2000
Prevention Quality Indicator	Count	Population	Risk- Adjusted Rate	Count	Population	Risk- Adjusted Rate	Risk- Adjusted Rate
Adult Asthma ¹	168	155,255	105.4	1,325	2,306,520	57,9	113.3
Angina ²	156	155,255	90.1	1,896	2,306,520	82.4	66.1
Bacterial Pneumonia ³	1,155	203,350	498.9	9,931	3,044,135	319.4	374.3
Chrne Obstretve Pulmnry Dis	647	155,255	370.3	4,954	2,306,520	217.1	279.6
Congestive Heart Failure ⁵	712	155,255	350.1	7,131	2,306,520	309.7	512.3
Dehydration ⁶	269	203,350	113.5	2,287	3,044,135	75.8	134.5
Diabetes Long Term Compl	221	155,255	126.2	1,941	2,306,520	83.0	120.8
Diabetes Short Term Compf	59	155,255	40.4	746	2,306,520	34.0	51.2
Diabetes Uncontrolled	10	155,255	3.6	160	2,306,520	6.4	28.5
Hypertension ¹⁰	23	155,255	8.4	278	2,306,520	10.9	45.2
Low Birth Weight ¹¹	112	2,086	53.7	1,726	32,135	53.7	56,8
Lower Extremity Amputation ¹²	63	155,255	33.2	782	2,306,520	33.5	41.9
Pediatric Asthma ¹³	59	48,095	125.3	530	737,615	76.7	200.6
Pediatric Gastroenteritis ¹⁴	32	48,095	72.6	348	737,615	52.5	108.6
Perforated Appendix ¹⁵	61	174	349.4	848	2,647	316.8	313.9
Urinary Infection 16	285	203,350	116.3	2,822	3,044,135	91.1	145.9

^{*} Data for VT Residents Discharged as Inpatients from VT, NH, NY, and MA Hospitals from 1998-2002 from the Agency for Healthcare Research and Quality

Descriptions below are from the HCUPnet website http://hcnp.ahrq.gov/HCUPnet.asp.

^{** 1998-2000}

^{*** 5}x Census Pop 2000

Excluding obstetric admissions and transfers from other institutions per 100,000 population age 18 years and older

Excluding surgical patients, transfers from other institutions, and obstetric admissions per 100,000 population age 18 years and older

Excluding sickle cell/hemoglobin-S conditions, transfers from other institutions & obstetric/neonatal admissions per 100,000 population

⁴ Excluding obstetric admissions and transfers from other institutions per 100,000 population age 18 years and older

⁵ Excluding patients with cardiac procedures, obstetric conditions, and transfers from other institutions per 100,000 population age 18+

⁶ Excluding transfers from other institutions per 100,000 population

Excluding obstetric admissions and transfers from other institutions per 100,000 population age 18 years and older

⁶ Excluding obstetric admissions and transfers from other institutions per 100,000 population age 18 years and older

Excluding obstetric admissions and transfers from other institutions per 100,000 population age 18 years and older

¹⁰ Excluding patients with cardiac procedures, obstetric conditions, and transfers from other institutions per 100,000 population age 18+

¹¹ Excluding transfers from other institutions per 1000 neonates

¹² Excluding traumatic and obstetric admissions, and transfers from other institutions per 100,000 population age 18 years and older

¹³ Excluding obstetric and neonatal admissions and transfers from other institutions per 100,000 population age less than 18 years

¹⁴ Excluding obstetric and neonatal admissions and transfers from other institutions per 100,000 population age less than 18 years

¹⁵ Excluding obstetric and neonatal admissions and transfers from other institutions per 1000 admissions with appendicitis

¹⁶ Excluding obstetric and neonatal admissions and transfers from other institutions per 100,000 population

Community Input

No discussion on this topic.

Priorities

Considering that the leading causes of death are due to chronic disease, the Needs Assessment Steering Committee identified Chronic Disease Screenings as a priority issue to address.

8. Access

Information from the Vermont Department of Health and the Vermont Department of Aging and Independent Living

Access to Health Care Indicators: Being uninsured is an important barrier to accessing health care because those who are uninsured often delay or forgo care even when they need it (Hadley). Table 8.1 indicates that a greater proportion of residents in the SVHC service area are uninsured (18.4%) compared with those statewide (12.8%). However, the proportion of residents in the SVHC service area who were unable to see a doctor because of cost (8.3%) is similar to that statewide (8.9%). Another indication of a barrier to accessing health care is the percentage of primary care physicians (PCPs) NOT accepting new patients. Table 11.4 indicates that, in 2002, a greater proportion of PCPs in the SVHC service area were NOT accepting new patients compared with that statewide. The problem is particularly evident with PCPs NOT accepting new Medicaid patients and with 35.3% of PCPs in the SVHC service area NOT accepting new Medicaid patients, 10% higher than that observed statewide.

Table 8.1 indicates that access to dental care may be more problematic in the SVHC service area, with 21% of residents not seeing a dentist in the past two years compared with 16% statewide. This problem may be most prominent in the Medicaid population, with 68% of dentists NOT accepting new Medicaid patients (see Table 11.7).

Table 8.1 Access*			
Bennington Service	e Area		
Risk Factor	Service Area	Vermont (overall)	
Unemployed ¹	4.3%	3.8%	
Have Any Kind of Health Plan, Ages 18-64 ¹	81.6%	87.2%	
Time When Could Not Afford to See Doctor ²	8.3%	8.9%	
Last Dental Visit 2 Years or Less ³	79.9%	84.2%	

st 2000 to 2003 Behavioral Risk Factor Surveillance System (BRFSS) Data.

I Based on 2000 to 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+

² Based on 2000 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+

³ Based on 2000 and 2002 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+

Nursing Home Occupancy Rates: Table 8.2 suggests that Nursing Home Occupancy in the SVHC service area is not at capacity, ranging from 65.8% occupancy at Vermont Veterans Home to 91.7% occupancy at Crescent Manor.

Table 8.2 Nursing Home Occupancy Rates*			
Bennington Service Area			
Facility Name	Occupancy Rate**		
Bennington Health and Rehab Center	88.8		
Center for Living and Rehabilitation	90.5		
Crescent Manor Nursing Home	91.7		
Vermont Veterans Home	65.8		
Prospect Nursing Home	89.7		

^{*} FY 2002 Data from the Agency of Human Services Division of Rate Setting

Federally Qualified, Rural and Free Health Centers: There are no Federally Qualified Rural and Free Health Centers in the SVHC service area (see Table 8.3)

Table 8.3 Federally Qualified, Rural and Free Health Centers*				
Bennington Service Area				
n/a				

^{*} From the Vermont Department of Health Office of Rural Health

Community Input

Community leaders and residents in our study were asked several questions regarding the adequacy of several types of care. These include: primary care, specialty care, emergency care, dental care, substance-abuse care and mental health care. Overall, respondents felt that residents' health care needs were not adequately met by available health care resources. They perceived a need to expand or improve services for every type of care asked about. For primary and specialty care, respondents perceived a need for more affordable services and an increased number of available providers and facilities. For emergency services, respondents had concerns about the volunteer ambulance services, which they felt lack the emergency medical training of paid professionals. Because of this, respondents believe that patients are not receiving the highest possible level of care during emergency transport. Also, because of the area being rural, there is concern that it often takes time for ambulances to reach residents' homes following an emergency call, and further time to reach the nearest emergency facility. To compensate for this, they perceived a need to increase the number of conveniently located facilities that are equipped to handle medical emergencies so as to reduce ambulance travel time to emergency facilities.

^{**} Percent of capacity

Respondents perceived a need for more dental care providers in the area and for more affordable services. Specifically, they perceived a need for dentists who accept a wider range of health insurance plans, particularly Medicaid.

With regard to substance-abuse services, respondents felt that the greatest need is for an educational campaign, so that area residents are aware of the problem of substance abuse within their communities and are educated about the symptoms and the availability of treatment options. Respondents also perceived a need for community education about mental health problems, so that residents in need are better equipped to recognize problems and more aware of treatment options.

Respondents felt that here are numerous other barriers preventing residents from obtaining health services. First, residents may not be able to afford health care services. They may be uninsured or underinsured, living in poverty or living on fixed incomes. They may be unable to visit a doctor's office or hospital, or to purchase prescription medications. These residents are more likely to visit doctors or hospitals only when they have a specific medical problem, and to avoid paying for routine checkups. In addition, residents with health insurance coverage may have difficulty affording health care services in situations when the nearest available provider does not accept their coverage. Respondents report that it is particularly difficult to find dentists who will accept a wide range of health insurance plans, and that many area dentists do not accept Medicaid. For these reasons, cost is perceived as a barrier to obtaining primary care, and in particular, dental services.

Another important barrier identified to obtaining health care services was the accessibility of providers. Public transportation in these areas is considered inadequate, and residents who are unable to drive themselves, either because they are elderly, infirm or cannot afford private transportation, may face difficulty arranging for transportation to health care appointments.

Respondents felt that residents experience attitudinal or emotional barriers that prevent them from obtaining health care services. They believe that residents might be fearful of negative outcomes and therefore avoid seeking medical services so that they won't have to hear bad news. Residents may perceive illness as shameful and avoid health care services out of pride. They also may avoid treatment for certain conditions, such as depression or addiction, as a result of stigmas associated with these conditions.

Respondents also felt that some residents may not be obtaining needed health care services because they lack appropriate health education and information. Or that they may not realize the significance of the symptoms they're experiencing; for example, a resident may not be familiar enough with the symptoms of cardiac arrest to know if she or he is having a heart attack. Residents may not understand the importance of preventive care, or they may be suffering from mental health or substance-abuse problems but not realize that they have a problem or that treatment is available.

Given the breadth of health care needs mentioned by community leaders and residents, and to understand what the priority health care needs are, we asked respondents to select from a list the type of health care service that should be a top priority to address. The list of health care services

from which respondents could select included the following: primary care, specialty care, emergency care, dental care, substance-abuse care, mental health care and hospital care. The types of care mentioned most by community leaders were primary care, emergency care and substance-abuse care. Resident responses were similar in that, they, too, were more likely to mention primary care and emergency care. However, residents were less likely to mention substance-abuse care than community leaders, but more likely to mention specialty care.

Priorities

Access to Health Care was selected as a priority issue to address by the Needs Assessment Steering Committee. The specific types of care identified reflect both the needs in the community as well as the community's capacity to improve these issues.

Mental health and substance-abuse treatment

Dental care

Emergency care (transport and stabilization)

Border states' insurance and regulatory restrictions limiting access to care

Chronic Disease screening

9. Lifestyle And Behavior

Information from the Vermont Department of Health

Youth Risk Behaviors: According to Table 9.1, the proportion of youth in the SVHC service area engaged in risky behaviors is comparable to that statewide, with the exception of cigarette use. Cigarette use among youth in the SVHC service area is higher than that observed statewide, with 23.3% of youth in the SVHC service area smoking in 2003 compared with 19.9% statewide. With regard to alcohol and Marijuana use, 38.7% of youth in the SVHC service area had consumed alcohol and one-quarter had used Marijuana in the previous 30 days, which is similar to the proportion of youth engaged in these behaviors statewide. With regard to depression, 23% of youth in the SVHC service area and statewide had feelings of hopelessness every day for two weeks or more in a row that stopped them from doing usual activities. Feelings of hopelessness can be a precursor to suicide. In the SVHC service area, almost 12% of youth made a suicide plan and 7% made a suicide attempt, which is similar to that experienced statewide.

Table 9.1 Youth Risk Behaviors*				
Bennington Service Area				
Risk Factor Service Area Statewide Weighted Data				
cigarette use during the past 30 days	23.3%	19.9%		
alcohol use during the past 30 days	38.7%	39.0%		
marijuana use during the past 30 days	25.2%	24.6%		
made suicide plan during the 12mo	11.9%	13.1%		
suicide attempt during the past 12mo	6.7%	7.0%		
felt sad or hopeless ¹	23.0%	23.3%		

^{* 2003} Vermont Youth Risk Behavior Survey Data (8-12th grade)

I Almost every day for two weeks or more in a row that you stopped doing some usual activities

Adult Lifestyle and Risk Behaviors: Table 9.2 represents various lifestyle behaviors that affect an individual's health and well-being. Smoking is currently the leading cause of preventable death and is associated with several leading causes of death in the United States. In the SVHC service area, 22.3% of adults smoke, which is a greater proportion than in the rest of the state (21.2%). However, of those who smoke in the SVHC service area, 57.8% attempted to quit in the past year, compared with 45.3% of smokers statewide. Being overweight and inactive also plays a role in developing several chronic diseases, such as diabetes, heart disease and some cancers. More than half of residents in the SVHC service area and those statewide are over a healthy weight, and 20% of residents live a sedentary lifestyle. High blood pressure is a risk factor of heart disease and stroke. In the SVHC service area, 24.2% of residents have been told that they have high blood pressure compared with 21.7% of residents statewide. Finally, a greater proportion of residents in the SVHC service area perceive their general health as fair to poor (12.7%) compared with residents statewide (10.9%).

Table 9.2 Adult Lifestyle and Risk Behaviors* Bennington Service Area			
6+ Teeth Lost Due to Disease, Aged 65+1	21.2%	18.8%	
Sedentary Last Month ²	19.5%	20.0%	
Meet Physical Activity Recommendation ³	58.8%	55.1%	
Over Healthy Weight ²	54.9%	53.7%	
Current Smoking (Irregular and Regular) ²	22.3%	21.2%	
Ever Told Blood Pressure is High ³	24.2%	21.7%	
General Health Rated Fair or Poor ²	12.7%	10.9%	
Fallen to Ground/Floor Last 3 Months, Aged 45+4	14.4%	16.4%	
Everyday Smoker Who Quit 1 Day or Longer During Past Year ⁵	57.8%	45.3%	

- * All ages are 18+ unless otherwise stated
- I Based on 2000 and 2002 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+
- 2 Based on 2000 to 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+
- 3 Based on 2000, 2001 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+
- 4 Based on 2000 and 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+
- 5 Based on 2001 to 2003 BRFSS data; age-adjusted to Year 2000 Standard Population; ages 18+

Community Input

During the interview process, we asked community leaders and residents how they would rate the overall health of area residents. Respondents felt that there is room to improve the community's health. Although the majority of both community leaders (75.5%) and residents (72.6%) rated residents' health good or better, only a small proportion (0.0% of community leaders and 7.0% of residents) considered residents' health to be excellent, and large proportions (21.3% community leaders, 16.5% residents) considered residents' health to be fair or poor.

Next, we asked community leaders and residents what they believe are the major health problems affecting area residents. Respondents were asked to describe in their own words the

health problems they perceive on an unaided basis. Specifically, respondents identified the following as health problems affecting residents in their communities:

Problems relating to general wellness, including healthy diet and exercise: About one-half (52.5%) of community leaders and about one-fifth (18.1%) of residents discussed this on an unaided basis. For example, one community leader said, "Most [residents] don't know anything about low-fat cooking. [They] use bacon grease for a lot of stuff."

Problems relating to abuse or addiction: About two-fifths (41.0%) of community leaders discussed substance-abuse and addiction problems on an unaided basis, as did about one-seventh (15.3%) of residents. As one resident said, "Probably the smoking and drinking, and the many things that are related to that. What I mean is that, there are so many people in this town that are dealing with alcoholism and smoking, that it is very obvious to other people that are around."

Cancer: More than one-fourth (29.5%) of community leaders discussed cancer on an unaided basis, as did about one-fourth (24.1%) of residents. A community leader said, "[There's] a lot of cancer showing up. Two to three people I've spoken with have non-lymphatic Hodgkin's."

Heart Problems: More than one-fourth (29.5%) of community leaders discussed heart problems on an unaided basis, as did about one-seventh (14.2%) of residents.

Problems relating to mental health: A fairly small proportion (6.6%) of community leaders discussed mental health problems on an unaided basis, as did a small proportion (2.8%) of residents.

Age-related medical problems: About one-seventh each of community leaders (14.8%) and residents (14.1%) identified age-related health problems, such as Alzheimer's disease, on an unaided basis. "I know there's a lot of senior citizens, so a lot of it is probably arthritis and things like that," one resident said. A community leader talked about the lack of adequate facilities to care for the elderly: "Assisted living—there's nothing in this whole valley. The old folks like myself who get decrepit have to go somewhere else"; and

Other specific medical conditions, diseases or problems: Smaller proportions of residents mentioned diabetes (7.0%) and respiratory problems (3.6%) on an unaided basis. Community leaders and residents also mentioned a variety of other medical conditions (21.3% community leaders and 12.8% residents) with no specific illness or problem mentioned by more than one or two individuals. For example, individuals mentioned influenza, allergies, the common cold, Lyme disease and orthopedic problems.

In addition, it should be noted that a large proportion of residents (27.8%) didn't know what the major health problems were in the area. To compensate for this, we asked residents to select from the following list which issue should be the top priority in terms of improving the health of area residents: diet and exercise, drug and alcohol abuse, tobacco use, mental health, or chronic disease prevention. Residents were significantly more likely to identify diet and exercise (42.1%) as a top priority over any other health issue. About one-third (32.6%) felt that chronic disease prevention, such as cancer and heart disease, should be a top priority. More than one-tenth

(13.4%) consider drug and alcohol abuse a top priority, and a smaller proportion (6.0%) consider tobacco use a top priority. Only about one in 30 residents (2.9%) consider mental health a top priority.

Priorities

Specific lifestyle behaviors and screenings were identified as priorities by the Needs Assessment Steering Committee and included:

- Nutrition and Physical Activity
- Substance abuse (alcohol, tobacco and other drugs)
- Chronic Disease screening

10. Injury and Violence

Information from the Vermont Department of Health

Emergency Room Utilization for Falls, Fire, Motor Vehicle Crashes and Assaults: Table 10.1 shows that the total proportion of injuries seen at SVMC's Emergency Department for falls, fire, motor vehicle crashes and assaults are similar to that statewide. Also, Table 10.1 demonstrates that, among these four types of injuries, injuries from falls represent the greatest proportion of injuries in every age group. Furthermore, falls represent the predominant injury for the 65 and older age group, with 62.5% of injuries seen at SVMC's Emergency Department resulting from falls and 56.6% statewide.

Table 10.1 Discharges for Falls, Fire, Motor Vehicle Crashes, and Assaults*

Southwestern Vermont Health Care					
Age		Hospital	% of	State	% of
	Injury Type	Actual Count	Hospital	Actual	State
			Total	Count	Total
	Fall ¹	467	31.5%	5,451	29.3%
	Fire ²	5	0.3%	46	0.2%
<17	MV Crash ³	57	3.8%	966	5.2%
	Total Injuries ⁴	1,483	100.0%	18,613	100.0%
	Assault ⁵	18	4.2%	218	3.4%
	Fall ¹	426	20.5%	6,471	20.5%
	Fire ²	9	0.4%	146	0.5%
18 to 44	MV Crash ³	140	6.7%	3,003	9.5%
	Total Injuries ⁴	2,079	100.0%	31,582	100.0%
	Assault ⁵	90	4.3%	1,095	3.5%
	Fall ¹	213	28.9%	2,898	27.3%
	Fire ²	5	0.7%	56	0.5%
45 to 64	MV Crash ³	48	6.5%	874	8.2%
	Total Injuries ⁴	738	100.0%	10,609	100.0%
	Assault ⁵	8	1.1%	124	1.2%
	Fall ¹	376	62.5%	3,609	56.6%
	Fire ²	2	0.3%	16	0.3%
65 +	MV Crash ³	30	5.0%	338	5.3%
	Total Injuries ⁴	602	100.0%	6,377	100.0%
	Assault ⁵	1	0.2%	11	0.2%
Total	Fall ¹	1,482	30.2%	18,429	27.4%
	Fire ²	21	0.4%	264	0.4%
	MV Crash ³	275	5.6%	5,181	7.7%
	Total Injuries ⁴	4,902	100.0%	67,181	100.0%
	Assault ⁵	117	2.4%	1,448	2.2%

^{*2002} Emergency Dept. Visits by VT Residents and Non-Residents, Including Visits that Resulted in Admission

I Falls include records with an Écode (in the Ecode field or any diagnosis field) in the range E880-E886.9, E888-E888.9, E957-E957.9, E968.1, and E987-E987.9

² Fire includes records with an Ecode (in the Ecode field or any diagnosis field) in the range E890-E899.9, E958.1, E968.0, and E988.1

³ Motor Vehicle Crashes include records with an Ecode (in the Ecode field or any diagnosis field) in the range E810- E819.9, E958.5, E968.5, and E988.5

⁴ Total injuries includes records with a primary diagnosis in the ICD-9-CM range: 800-909.2, 909.4, 909.9, 910-994.9, 995.5-995.59, and 995.8-995.85

⁵ Assault includes records with an Ecode (in the Ecode field or any diagnosis field) in the range E960-E966.9 and E968- E969.9. Assault counts may duplicate records reported above for falls, fire, or motor vehicle crashes.

Child Victims of Abuse and Neglect: Table 10.2 indicates that SVHC residents under the age of 18 experience a similar rate of physical abuse and neglect compared with the rest of the state. However, rates for sexual abuse in the SVHC service area, for those under 18 years of age, are higher (41.2/10,000 residents) than that observed statewide (30.2/10,000 residents).

Table 10.2 Child Victims of Abuse and Neglect*			
Bennington Service Area			
Risk Factor	Service Area	Vermont (overall)	
Physical Abuse Victims per 10,000 Population	18.8	16.6	
Sexual Abuse Victims per 10,000 Population	41.2	30.2	
Neglect Victims per 10,000 Population	35.0	36.2	

^{*} Vermont Agency of Human Services, Department for Children and Families average of 2002 and 2003 data for population under age 18 (as of April 2002)

Community Input

No discussion on this topic.

Priorities

The priorities identified by the Needs Assessment Steering Committee do not specifically address injuries and child abuse; however, by targeting substance abuse as well has access to mental health treatment, some progress on these issues may tangentially be realized.

II. Work Force

Information from the Vermont Department of Health

Primary Care Physicians Per Population: Table 11.1 indicates that the SVHC service area has more Full Time Equivalent (FTE) Primary Care Physicians (PCPs) per 100,000 residents 18 and older (82.9) compared with the rest of the state (75.2). On the other hand, Table 11.2 demonstrates that the SVHC service area has fewer Full Time Equivalent PCPs per 100,000 residents UNDER age 18 (173.1) than the rest of the state (194.9). This suggests that the SVHC service area has fewer PCPs to serve the under-18 age group than the rest of the state.

Table II.I **Internal Medicine and Family Practice** Physicians Compared to the Adult Population* Bennington Service Area Service Vermont Statistic (overall) Area **Family Practice Physicians** 16.9 206.2 11.2 145.5 **Internal Medicine Physicians** Family Practice and Internal Medicine 28.1 351.7 Physicians Combined **Total Population** 40,947 615,611 Adult Population¹ 31,366 467,635 Family Practice and Internal Medicine 82.9 75.2 Physicians per 100,00 Adult Population¹

I Adult Population is Age 18 and Over

Table 11.2 Pediatric and Family Practice Physicians Compared to the Child Population*			
Bennington Service Area			
Statistic	Service Area	Vermont (overall)	
Family Practice Physicians	16.9	206.2	
Pediatric Physicians	4.0	82.2	
Family Practice and Pediatric Physicians Combined	20.9	288.4	
Total Population	40,947	615,611	
Child Population ¹	9,581	147,976	
Family Practice and Pediatric Physicians per 100,000 Child Population ¹	173.1	194.9	

^{*}Data on physicians is Full Time Equivalent and from the 2002 Department of Health Physician Survey. Data on Population is from April of 2002 as provided by Claritas.

Specialty Care Physicians Per Population: Table 11.3 suggests that there are more FTE specialists per 100,000 population in the SVHC service area compared with that statewide, with the exception of anesthesiologists, general surgeons and child psychiatrists.

^{*}Data on Physicians is Full Time Equivalent and from the 2002 Department of Health Physician Survey. Data on Population is from April of 2002 as provided by Claritas.

I Child Population is Under Age 18

Table II.3 Specialty Care Physicians Compared to Population*			
Bennington Service Area			
Statistic	Service Area	Vermont (overall)	
OBGYN Physicians	5.8	59.1	
Anesthesiologists	3.8	69.1	
Emergency Medicine Physicians	6.3	60.6	
Specialized Internal Medicine Physicians	10.0	96.8	
Total Population	40,947	615,611	
OBGYN Physicians Per 100,000	14.1	9.6	
Anesthesiologist Physicians Per 100,000	9.2	11.2	
Emergency Medicine Physicians Per 100,000	15.4	9.8	
Specialized Internal Medicine Physicians per 100,000	24.5	15.7	
General Surgeons	2.2	43.4	
Orthopedic Surgeons	4.1	50.0	
Other Surgeons	2.8	29.0	
Neurologists	3.6	28.1	
Total Population	40,947	615,611	
General Surgeons per 100,000 Population	5.4	7.0	
Orthopedic Surgeons per 100,000 Population	9.9	8.1	
Other Surgeons per 100,000 Population	6.9	4.7	
Neurologists per 100,000 Population	8.8	4.6	
Child Psychiatrists	0.6	14.5	
Child Population ¹	9,581	147,976	
Child Psychiatrists per 100,000 Child Population ¹	6.7	9.8	
Psychiatrists ²	7.2	101.3	
Radiologists	5.5	64.7	
Urologists	2.6	22.6	
Ophthalmologists	4.6	39.4	
Total Population	40,947	615,611	
Psychiatrists per 100,000 Population	17.7	16.4	
Radiologists per 100,000 Population	13.5	10.5	
Urologists per 100,000 Population	6.4	3.7	
Ophthalmologists per 100,000 Population	11.1	6.4	

^{*}Data on physicians is Full Time Equivalent and from the 2002 Department of Health Physician Survey. Data on Population is from April of 2002 as provided by Claritas. I Child Population is Under Age 18
2Psychiatrists data excludes child psychiatrist data as it is listed separately.

Primary Care Physicians Accepting New Patients: Table 11.4 indicates that a greater proportion of PCPs in the SVHC service area are not accepting new patients, new Medicaid patients or new Medicare patients compared with that observed state-wide. Also, although the greatest proportion of PCPs, in both the SVHC service area and state-wide, are not accepting new Medicaid patients, this is particularly evident in the SVHC service area, where 35.3% of PCPs are not accepting new Medicaid patients compared with 25.1% state-wide.

Table 11.4 Primary Care Physicians (PCPs) and New Patients*			
Bennington Service Ar	ea		
Statistic	Service Area	Vermont (overall)	
PCPs ¹	37.9	492.9	
PCPs Accepting New Patients	29.9	397.3	
PCPs NOT Accepting New Patients	7.8	80.7	
PCPs Accepting New Medicaid Patients	23.5	353.0	
PCPs Not Accepting New Medicaid Patients	12.8	118.5	
PCPs Accepting New Medicare Patients	23.7	289.7	
PCPs Accepting New Medicare Patients	8.7	82.9	
% PCPs Not Accepting New Patients	20.8%	16.9%	
% PCPs Not Accepting New Medicaid Patients	35.3%	25.1%	
% PCPs Not Accepting New Medicare Patients	26.7%	22.2%	

^{*}Data on physicians is Full Time Equivalent and from the 2002 Department of Health Physician Survey.

Data on Population is from April of 2002 as provided by Claritas.

Primary-Care Physicians Over the Age of 60: Table 11.5 shows that SVHC has a slightly greater proportion of physicians over the age of 60 (10.0%) compared with that statewide (8.4%).

I PCPs include OBGYN Physicians

Table 11.5 Primary Care Physicians Over the Age of 60* Bennington Service Area Service Vermont Statistic Area (overall) 37.9 Primary Care Physicians¹ 492.9 Family Practice Physicians 16.9 206.2 **Internal Medicine Physicians** 11.2 145.5 **Pediatric Physicians** 4 82 **OBGYN Physicians** 59 6 Physicians Over the Age of 60 3.8 41.6 Physicians Under the Age of 60 34.1 451.4 % of Physicians Over the Age of 60^2 10.0% 8.4%

Nurses and Other Health Care Positions: Table 11.6 shows that SVHC has an RN Vacancy rate of 2% and a turnover rate of 3%. It also indicates that the positions most difficult to fill and needed most are Radiation Therapists and Radiation Oncology Physicists.

^{*}Data on physicians is Full Time Equivalent and from the 2002 Department of Health Physician Survey. Data on Population is from April of 2002 as provided by Claritas.

I Primary Care Physicians include OBGYN Physicians

² The age of one physician was unknown and excluded when the percentage

Table II.6 **Nurses and Other Health Care Positions***

Southwestern Vermont Medical Center

Nurses		
RN Vacancy Rate	2%	
RN Turnover Rate	3%	
Days to Fill RN Position	30	
Travelers as % of Nurse/CRNA Budget	0%	

Positions Most Difficult to Fill ¹			
Rank	Position	Vacancy Rate	
1	Radiation Therapist	50%	
2	Radiation Oncology Physicist	100%	
3	Medical Technician - Technologist	0%	

Positions More Difficult to Fill in '03 than in '02 ¹		
Rank	Position	
1	Physicist	
2	Radiation Therapist	
3	Language Pathologist	
4	Medical Technician - Technologist	
5	Critical Care Nurses (ER/ICU)	
6	not available	

^{*}All data as of April 1, 2004 unless otherwise noted.

1 A higher rank indicates the position is more difficult to fill.

Dentists Per Population: Table 11.7 indicates that the SVHC service area has more FTE dentists per 100,000 residents (46.2) compared with the state (36.6). Also, the proportion of dentists over the age of 55 is smaller (25%) than that observed statewide (32%). However, the proportion of dentists not accepting new patients and new Medicaid patients is greater in the SVHC service area than statewide. Almost twice as many dentists in the SVHC service area are NOT accepting new patients (21%) compared with those statewide (11%), and 68% of dentists in the SVHC service area are NOT accepting new patients compared with 42% statewide.

Table 11.7 Dentists as Compared to the Population*			
Bennington Service Are	ea		
Statistic	Service Area	Vermont (overall)	
Dentists per 100,000 Population ¹	46.2	36.6	
% General Dentists Over 55 Years of Age ²	25.0%	32.0%	
% Full Time Equivalent Dentists Not Accepting New Patients	21.0%	11.0%	
% Full Time Equivalent Dentists Not Accepting New Medicaid Patients	68.0%	42.0%	

^{*}Data on physicians is Full Time Equivalent and from the 2002 Department of Health Physician

Community Input

Please refer to Community Input under the Access section.

Priorities

Please refer to Community Input under the Access section.

12. Health Care Services

During the interview process, we asked community leaders and residents several questions about their perception of the resources available at SVMC. First, we asked respondents to rate the overall resources that are available at SVMC on a five-point scale, ranging from excellent to poor. Respondents have a strongly positive image of SVMC. The vast majority rated SVMC very good to excellent (69.5% residents, 86.9% community leaders).

Community leaders also were asked to describe in their own words SVMC's greatest strengths, in terms of its health care services, technology and facilities. We used these perceptions to develop a list of responses to survey residents, who were asked which of SVMC's strengths is its greatest.

IData on Population is from 2003

²The age of one dentist was unknown and therefore excluded when the percentage

Respondents felt that SVMC has three major strengths. Each of these was identified as a major strength of the hospital by at least 10% of respondents. Specifically, respondents believe that SVMC's greatest strengths are:

Its personal, friendly staff and caring environment: More than one-half (54.1%) of community leaders described this on an open-ended basis, and more than one-fourth (28.0%) of residents identified this as the medical center's greatest strength. As one community leader said, "I think their staff are the greatest strength. They have a way of making people feel calm, you know, in stressful situations. They are friendly." Another community leader explained, "I think it is that sense that you are an individual. It does bring the experience down to a more palatable one, when you are in a hospital where people seem friendly and genuine and like you really care. I'm not sure that is always the case in hospitals that are large and busy. You get the sense that you have people genuinely interested in doing their best to help you out.";

Its high-quality physicians and staff: About one-half (50.8%) of community leaders described this on an open-ended basis, and about one-fifth (20.2%) of residents identified this as the medical center's greatest strength. One community leader said, "[The nursing staff] are all caring individuals, and they are all bright. They are the brightest and most empathetic that I've ever come across. Their physicians, their departments are all headed by visionary [leaders]. . . . Everyone at that hospital takes their job seriously. . . . They work their butts off and do it for the good of the patient."; and

Its ability to treat a wide range of medical problems: About one-fourth (26.2%) of community leaders described this on an open-ended basis, and about one-seventh (14.5%) of residents identified this as the medical center's greatest strength. One community leader said, "[SVMC] has a very nice physical plant. . . . They have specialists in almost everything, with notable exceptions of child psych and geriatric psych. They do seem to have a pretty good blend of general specialists." Another community leader who has received cancer treatments at SVMC said, "They seem to provide the services I needed. I didn't need to go anywhere else, other than to talk to specialists. I could get all of my chemotherapy here in town, which is a real value when you are trying to fight something and you don't want to travel. It seemed the lab services and technology they need is here."

In addition to these major strengths, respondents felt that SVMC offers a **high quality of medical care**. About one-fourth (24.6%) of community leaders described specific centers of excellence on an open-ended basis, and about one-fifth (19.7%) praised the quality of care overall. About one in 15 (7.9%) residents identified this as the medical center's greatest strength. One community leader described SVMC's greatest strength by saying, "I think it's [their] level of competence. I would say there's general confidence in the area that the system is sound and provides high-quality care."

Respondents also felt that SVMC offers fairly **sophisticated technology and equipment**. More than one-fourth (27.9%) of community leaders described the physical facility as being well-equipped with advanced technology on an open-ended basis, and about one in 15 (7.2%) residents identified this as the medical center's greatest strength. As one community leader said,

"They're very up-to-date in what they have. They continue to upgrade, they continue in their training. You constantly see improvements." Another community leader mentioned, "I know we have a new CTC scan; that is state-of-the-art stuff, state-of-the-art equipment."

About one-third (31.0%) of community leaders described SVMC's **investment in the health needs of the community** as a major strength, and a small proportion (4.0%) of residents identified this as its greatest strength as well. One community leader praised SVMC's CEO, saying, "It seems like his mission and the mission of the hospital is to get very in tune with the community. Doesn't seem like it is a service that sits and waits for the ill to come to them. They try to improve the community so people don't get sick, and I've never seen that in a hospital before." Another community leader described SVMC's proactive measures to enhance the health of the community, saying, "For the past 25 years that I've lived here, they've been very responsive to the community. They developed a same-day surgical unit and a cancer center here so people don't have to travel for these services. They've been very responsive to the broad scope of community health and wellness, such as health care for homebound people and smoking cessation and maternal child health programs. Maternal Child Health saw what they thought was a crisis in the making [regarding] addicted pregnant women; they called together a group to look at this issue that came up with a child protection program."

Community leaders also described several additional strengths on an open-ended basis, including praise for the medical center's efficiency and speed of service (8.2%); the hospital administration (6.6%); its convenient location (6.6%); its physical facility (6.6%); its policies and abilities regarding patient transfers (6.6%); and a variety of other strengths, each of which was only mentioned by one or two individuals (26.2%). Some respondents did not know what they felt SVMC's greatest strengths are (12.5% residents and 3.3% community leaders). Small proportions of residents said that all of these are equal strengths of SVMC (2.6%) or felt that SVMC has no particular strengths (2.7% none and no strengths).

We also asked respondents if they think there is a need for SVMC to expand or improve its health care services, technology and/or facilities. The majority (63.9% residents and 68.9% community leaders) believed SVMC should expand or improve its services, technology, and/or facilities. These findings are generally consistent among community leaders. Two groups of residents are much less likely to perceive a need for expansion and improvement at SVMC: Deerfield-area residents (51.2% vs. 63.9% overall) and residents covered by Medicare (48.4% vs. 63.9% overall). Hoosick-area residents are somewhat more likely to perceive a need for expansion and improvement (73.2% vs. 63.9% overall).

Respondents who believed that SVMC should expand or improve were then asked what types of changes they would most like to see. Community leaders described desired enhancements in their own words. These responses were used to develop a list of responses for the survey of residents, who were asked to select two of the most highly desired enhancements from the list. The types of enhancements respondents would most like to see include:

Improvements and upgrades to the technology and equipment at the hospital: About two-fifths (39.2%) of residents identified this as one of the ways they would most like to see SVMC expand or improve, and about one-fifth (21.4%) of community leaders described expansions and

improvement to technology on an open-ended basis. As one community leader said, "There's always room for expansion and improvement. Technology changes so quickly in the medical profession.";

Increase clinics or satellite centers in surrounding towns: More than one-third (36.9%) of residents identified this as one of their most desired enhancements at SVMC, and about one-seventh (14.3%) of community leaders discussed the need for satellite centers and clinics on an open-ended basis. One community leader said, "I am only interested in getting services out into the smaller towns. What they have is good, but it is difficult for people to go there. It is only 12 miles away from us, but that can be an ocean away when you don't have transportation or need stitches, and need to leave your job and come back or have a sick child in the middle of the night. I'm hoping that they are going to get into outlying regions more. I know it is costly, but it is nice to think about that.";

Expand the hospital, such as by increasing the number of available beds and adding staff: Just under one-third (30.1%) of residents identified this as one of their most desired enhancements. Community leaders described a desire for a general hospital expansion and for adding more staff and services (16.7%), and for improvements and expansions in the Emergency Room specifically (7.1%). One community leader who feels that SVMC should hire more highly trained staff said, "I think their quality of care is being jeopardized because I think they have a nursing shortage, and I think people are being asked to do things they aren't really trained for.";

Expand community services and programs: such as health education programs and support groups. About one-fourth (26.8%) of residents identified this as one of their most desired enhancements, and about one-tenth (11.9%) of community leaders described this on an openended basis. One community leader would like to see SVMC "getting out into the community more. . . . I think what people first and foremost see a hospital for is treatment of illness when you are sick, so some of the activity intended to try to prevent illness, though well-intentioned, to the extent that it is successful, with it being concentrated at the hospital center, it will only reach a certain audience or group of people. We are trying to go where people are within their own communities. . . . To the extent that [SVMC] might be able to do something with outreach, some kind of mobile clinic or screening for cholesterol—going out to the service area on some kind of basis, however frequently, to try to reach people for blood pressure screenings, cholesterol screenings, you know—something related to eye care or ear hearing, things like that."; and

Offer care for a wider range of health problems: About one-fourth (26.5%) of residents identified this as one of their most desired enhancements, and almost one-fourth (23.8%) of community leaders described expanding and implementing services for specific types of care on an open-ended basis. One community leader explained, "I don't believe they have a heart cath lab there. They do have cardiologists, but they send patients out for that. I think they could improve their cancer center. They've done groundbreaking stuff there, but I think there's still room for improvement."

Small proportions of residents did not see a need for any expansion or improvements (8.1% none or none of the above), did not know what expansions or improvements they would like to see (4.7%), or else they identified other enhancements (3.8%). Community leaders also mentioned

administrative enhancements (9.5%), other desired improvements (11.9%) or other desired expansions (9.5%). Some had other comments (14.3%) or said that, although they could not identify specific enhancements they would like to see at SVMC, they felt that the hospital should always be working to expand and improve to meet the changing health needs of the community (19.0%).

These findings are generally consistent among community leaders. In terms of differences among residents, three groups would like to see enhanced technology at SVMC: women, younger residents, and better-educated residents. More affluent and less well-educated residents would like SVMC to offer care for a wider range of problems. Specifically:

Women are more likely to want SVMC to enhance their technology (46.8% vs. 24.9% men), while men are less likely to mention specific desired enhancements (8.9% none vs. 0.7%);

Residents under age 55 are more likely to want SVMC to enhance their technology (43.8% vs. 28.3% age 55 and over), while older residents are less likely to know what enhancements they would want to see (11.6% don't know vs. 1.7% under age 55);

Newer residents (less than five years) are less likely to mention specific desired enhancements (11.3% none vs. 1.5% five years or more);

Better-educated residents (some college or more) are more likely to want SVMC to enhance their technology (45.1% vs. 28.9% high school or less), while less well-educated residents are more likely to want SVMC to offer care for a wider range of health problems (37.5% vs. 20.2%);

Uninsured residents are less likely to mention specific desired enhancements (20.3% none vs. 3.6% overall); and

More affluent residents (incomes of \$25,000 or more) are more likely to want SVMC to offer care for a wider range of health problems (33.1% vs. 15.7% incomes under \$25,000).

In summary, respondents have a strongly positive image of SVMC. It is perceived as an exceptionally friendly, personal hospital, with high-quality, hardworking physicians and staff. Respondents would like to see a variety of enhancements to the hospital to better meet the needs of the community. Respondents want SVMC to keep up-to-date with technological advancements, and they would like to see clinics and satellite centers in the surrounding towns so as to alleviate some of the problems associated with transportation discussed earlier in this report. Some also would like to see a general expansion of the hospital.

Acknowledgements: Community Members and Organizations Who Contributed to this Assessment

We would like to take this opportunity to thank the multitude of community members who helped make this project possible. First and foremost, our Needs Assessment Steering Committee members, who have committed much effort and many hours to represent their respective communities' needs and concerns. Secondly, we wish to recognize the 61 Community Leaders who participated in the in-depth interviews that were conducted to understand perceptions regarding the health and health care needs of their communities. Without their valuable input and contributions, we would have encountered a lack of community connection in the development of this assessment.

Steering Committee Members

Local Businesses

Wesley Mook, Needs Assessment Steering Committee Chair, SVHC Trustee and Assistant Judge, Bennington County

Community Organizations

Joyce Davis, Coordinator, Greater Hoosick Area Communities That Care Partnership Cindy Hayford, Coordinator, Deerfield Valley Community Partnership Lou Imhof, Resident

Keith Michl, SVHC Regional Advisory Board Member, Physician Robin Stromgren, Coordinator, Catamount Partnership for Community Health Kathleen Ward, Medical Billing and Management Consultant, Burnham-Ward LLC Wendy R. Woods, Executive Director, United Way of Bennington

Health Care Professionals

Bonnie Franklin, Retired Nurse, First Congregational Church Member Kevin McDonald, Vice President of Marketing and Planning, SVHC Mary McVean, Family Nurse Practitioner, Manchester Medical Center

Peter C. Park, Physician, Deerfield Valley Health Center and SVHC Regional Advisory Board Member

Ralph Provenza, Director, United Counseling Service

Marcia Russo, District Director, Vermont Department of Health

Eunice Schleif, District Manager, Vermont Department for Children and Families, Economic Services Division

Harvey Yorke, Chief Executive Officer, SVHC

Local Government Officials

Lodie Colvin, Select Board Member, Local Business Owner, Retired Teacher Marilyn Douglas, Town Supervisor, Town of Hoosick Patti Komline, Director of Summer Programs for Burr and Burton Academy

Community Leaders Who Participated in the In-Depth Interviews*

Local Businesses

Robin Andrew, Owner, South Street Cafe

Janet Boyd, Realtor & Farm Owner

Laura Downey, President & Co-owner, Manchester Woodcraft

MaryJane Finnegan, Owner, Wilmington Village Pub

Doug Kilburn, Owner, Kilburn's Convenience Store

Julie Lineberger, Co-owner, LineSync Architecture

Jim Monahan, Pharmacist, Thorpe's Pharmacy Inc.

Don Schneider Sr., President, Cambridge Valley Machining

Nancy Woltman, President, Panache

Community Organizations

Paul Baker, Episcopal Priest, St. Luke's

Delight Cullen, Executive Director, Rural Rensselaer County Council for Health and Human Services

Rabbi Howard Cohen, Rabbi, Congregation Beth El

Charlie Gingo, Director, SRS

Pat Hayes, Secretary, St. Mary's Elementary School

Janice Lerrigo, Assistant Director, Sunrise Family Resource Center

Ellen Maloney, Retired Judge

Susan McNeil, Paralegal

Julie Cunningham, Executive Director, Families First

Rich Jorgensen, Executive Director, Bennington-Rutland Opportunity Council

Ray Warren, Volunteer Coordinator, RSVP

Kate Williams, Northshire Coordinator, Head Start

Health Care Professionals

Jane Boyd, Town & School Nurse, Town of Whitingham / WMHS

Mike Brady, Dentist

Michelle Doucette, Chiropractor

Millie Dunn, Clinical Supervisor, Manchester Health Services / Home Health

Judith Fellows, Substance Abuse & Prevention Counselor, VDH Division of Alcohol & Drug Abuse

Jennifer Fitzgerald, Town Nurse, Town of Wilmington

Peg Gregory, Division Director, Northshire Office, United Counseling Service

Harry Haroutunian, Physician, Mountain Sports Medicine

Marcus Martinez, Physician

David O'Brien, Director of Mental Health & Substance Abuse Services, United Counseling Service

Nancy Scattergood, Physician

Penny Spiezio, President, Cambridge Rescue Squad

Heidi Taylor, Business Administrator, Deerfield Valley Rescue, Inc.

Pat Winstead-Fry, PhD, Nurse

Local Government Officials

John Bacon, Assistant Superintendent, Bennington-Rutland Supervisory Union Carol Barbierri, Executive Director, Arlington Area Childcare George Bell, Chief of Police, Towns of Cambridge and Greenwich Chris Brickell, Corporal, Vermont State Police Gary Briggs, Investigator, Bennington County Sheriff's Dept. Nelson Brownell, Manager of Computer Operations, RPI Bobby Edwards, Chief of Police, Town of Dover

Margery Freed, former RN

Rick Gauthier, Chief of Police, Bennington Police Department Mark Herrick, Senior Patrolman, Dover Police Department

Steve Johnson, Elementary Principal, Hoosick Falls Central Schools

Phil Leonard, retired School Superintendent

Sue Maguire, Principal, Mount Anthony Union High School

Larry McLeod, Town Health Office & Bldg. Inspector, Town of Bennington

Laura Reynolds, Village Mayor, CFO, Village of Hoosick Falls

Dan Severson, 7-12 Principal, Cambridge Central School

Robert Shay, Town Supervisor, Town of White Creek

Barbara Sirvis, President, Southern Vermont College

Fred Skwirut, Town of Wilmington Select Board

Norm Stevens, Town of Whitingham Select Board

JoAnn Trinkle, Town Supervisor, Town of Cambridge

Terry Tyler

^{*}This list excludes four participants who preferred to remain anonymous.

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Appendix A

Local Mental Health System of Care

Plans for Adult Mental Health