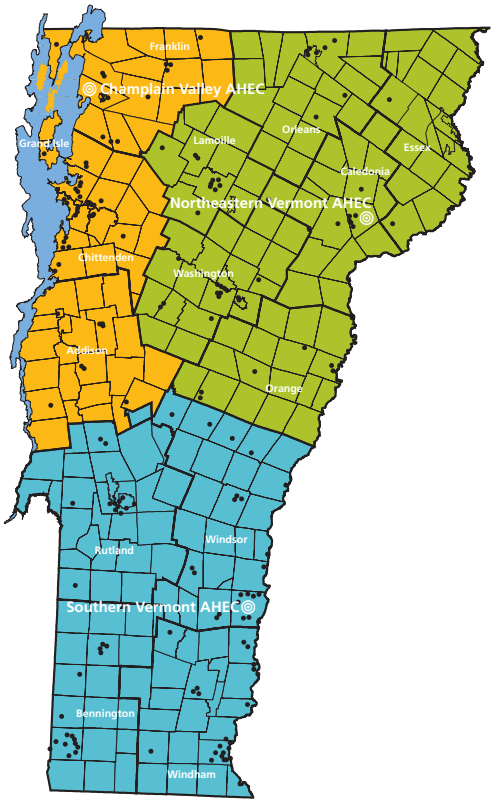
AHEC's Vermont Primary Care

SUMMARY REPORT 2006



Prepared by the Vermont AHEC Network

Southern Vermont Area Health Education Center
Champlain Valley Area Health Education Center
Northeastern Vermont Area Health Education Center

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Vermont Area Health Education Centers (AHEC)
The Vermont Area Health Education Centers (VT AHEC) Program was established in 1996 by the University of Vermont College of Medicine's Office of Primary Care and is funded through multiple grants and contracts including: Federal HRSA Title VII, State of Vermont, Vermont Department of Health, University of Vermont College of Medicine, Fletcher Allen Health Care, Vermont's 13 community hospitals, and private foundations.

The statewide infrastructure of VT AHEC consists of a program office and three regional centers, each a separate 501(c)(3), non-profit organization capable of providing support for community healthcare systems. VT AHEC is working to strengthen Vermont's community health systems and the health of Vermonters; it is a partnership between the Northeastern Vermont AHEC (serves Orleans, Essex, Lamoille, Caledonia, Washington, and Orange counties), Champlain Valley AHEC (serves Franklin, Chittenden, Addison, and Grand Isle counties), Southern Vermont AHEC (serves Rutland, Windham, Windsor, and Bennington counties), and the University of Vermont College of Medicine AHEC Program Office. VT AHEC works to increase the supply, stability and education of Vermont's healthcare workforce, and provides a link between the University of Vermont College of Medicine and Vermont's communities. The VT AHEC is a true academic-community partnership.

The mission of VT AHEC is to improve Vermont's public health by establishing educational partnerships with Vermont communities, health professionals, and its health training programs.

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Working collaboratively, VT AHEC seeks to promote an adequate and appropriate health care workforce throughout the state, bring quality improvement programming to our community health care systems and support community health education.

Each year, Vermont's three Area Health Education Centers survey the primary care clinicians in their AHEC region. The purpose of these surveys, conducted in early fall, is to inventory health care providers for whom AHEC programs and services are provided, to have timely information to address shortages in the workforce and to ensure that the services and support of AHEC programs are made available to primary care clinicians throughout each AHEC region. Findings from these surveys reflect a "point in time" and are not intended to provide comprehensive statistical information or to replace the bi-annual survey of all Vermont physicians conducted by the Vermont Department of Health.

PRIMARY CARE PHYSICIANS

The 2006 surveys conducted by the Champlain Valley AHEC, the Northeastern Vermont AHEC and the Southern Vermont AHEC, identified a total of 263 primary care practice sites throughout the State of Vermont. In 2006, these practices were staffed by 575 primary care physicians and 266 mid-level providers, including nurse practitioners, physician assistants and certified nurse midwives.

In order to estimate the adequacy of the primary care workforce, the data collected were used to calculate the full time equivalency for each health care provider and compare that to the national recommendations for an "average" primary care healthcare workforce. Full time equivalency (FTE) refers to the amount of time each health care provider is practicing his or her profession. See endnotes of this report for a description of FTE calculations.

Using the Graduate Medical Education National Advisory Committee Report (GMENAC) standard of 78 FTE primary care physicians per 100,000 population and based on the U.S. Census Bureau's 2005 estimated population of 623,050 in Vermont, the recommended FTE for overall primary care in Vermont is 486. The 2006 AHEC surveys found that the actual total FTE in Vermont for primary care physicians was 502.3. However, when determining the FTE for the total of all primary care specialties (includes Internal Medicine, Family Medicine, OB/GYN, and Pediatrics), the actual FTE is 503.6. The GMENAC recommended FTE for the total of all primary care specialties is 500.9.

Although it appears from the above numbers that Vermont has a sufficient supply of primary care physicians, a closer examination of each primary care specialty (Family Medicine, Internal Medicine, OB/GYN and Pediatrics) as well as the geographic distribution of practice sites, reveals areas of both adequacy and shortage. Also, it is important to note that the GMENAC recommendations, published in 1980, do not factor in the aging of Vermont's population, now the second oldest state in the country. The prevalence of chronic medical conditions and special needs among the elderly is high, which translates to an increased need for community-based care as well as increased demands on an already limited health care workforce. The aging of the population in Vermont will place additional demands on the health care system. While Vermonters are aging so is the Vermont workforce; the aging workforce is among the factors leading to a declining supply of clinicians. Additionally, the number of U.S. medical school graduates going into Internal Medicine and Family Medicine disciplines has dramatically decreased. Therefore both the need for and shortage of primary care physicians is expected to increase in Vermont and nationally. Focused attention on recruitment, retention and education is essential to address these supply issues.

2006 PRIMARY CARE PHYSICIANS

County	Physicians	Practice Sites
Caledonia	26	11
Orleans	17	10
Essex	4	2
Lamoille	24	14
Washington	52	25
Orange	18	8
Addison	40	18
Chittenden	182	54
Franklin	39	23
Grand Isle	3	3
Rutland	41	25
Bennington	32	21
Windham	47	26
Windsor	50	23
TOTAL	**575**	**263**

Primary Care Specialties

The AHEC surveys collect data by primary care specialties which include Family Medicine, Internal Medicine, OB/GYN and Pediatrics. This information clearly identifies specific workforce shortages.

Physician Primary Care Specialties	Physicians	Actual FTE	Recommended FTE
Family Medicine	241	208.6	201.8
Internal Medicine	144	132.2	175
OB/GYN	86.5	70.1	57.4
Pediatrics	103.5	92.7	66.7

The data indicate that the greatest shortage in Vermont is in the specialty of Internal Medicine. Although there appears to be more a than an adequate supply of Family Medicine, OB/GYN and Pediatric physicians, the geographic distribution of their practice sites, discussed under each AHEC regional summary, indicates that there are significant shortfalls in many areas of the state.

Mid-Level Providers by County	No.
Caledonia	15
Essex	3
Orleans	15
Lamoille	10
Washington	21
Orange	15
Addison	8
Chittenden	86
Franklin	15
Grand Isle	2
Rutland	24
Bennington	13
Windham	20
Windsor	19
TOTAL	**266**

Mid-level Providers

Mid-level providers play an important role in the delivery of primary care services and often fill important gaps in those areas that lack an adequate supply of physicians. The total count of mid-level providers in primary care practices which include nurse practitioners, physician assistants and certified nurse midwives is 266. Their reported FTE total is 172.3. Overall, the percentage of time mid-level providers are practicing is significantly less than that of physicians: 64.8% versus 87.6%.

Mid-Level Specialties	Providers	Actual FTE
Nurse Practitioners	157	97.9
Physician Assistants	79	58.5
Certified Nurse MidWives	30	15.9
TOTAL	**266**	**172.3**

Overall Access to Care

An important indicator of the adequacy of the healthcare workforce is the level of access to primary care services in Vermont. The AHEC surveys include data on the number of physicians accepting or not accepting new patients. The 2006 surveys found that overall, 28% of primary care physicians were not accepting new patients at the time of the surveys. The highest percentages were in Washington County (63.5%), Lamoille County (41.7%) and Orleans County (37.5%). The two specialties accepting the fewest patients were Family Medicine and Internal Medicine.

Primary Care Specialty	Physicians	Not Accepting New Patients	% Not Accepting New Patients
Family Medicine	241	84.5	35.1%
Internal Medicine	144	63	43.8%
OB/GYN	86.5	4	4.8%
Pediatrics	103.5	10.5	10.1%

Survey Findings by AHEC Region

CHAMPLAIN VALLEY AHEC

Addison, Franklin, Chittenden and Grand Isle Counties

There are 264 primary care physicians practicing in the Champlain Valley AHEC's four county region for a population of 242,195. Their total specialty FTE is 219.5 compared to a recommended FTE of 195. Although there appears to be an adequate number of primary care physicians in the region, a closer look at primary care specialties reveals areas of shortages in two specialties: Family Medicine and Internal Medicine.

Champlain Valley AHEC Primary Care Specialties	Physicians	Actual FTE	Recommended FTE
Family Medicine	96	75.6	78.7
Internal Medicine	63	57.2	68.1
OB/GYN	47	40.1	22.3
Pediatrics	58	46.6	25.9

In addition to regional shortages, the geographic distribution of primary care practices in the four counties indicates significant areas lacking basic health cares services, particularly in Grand Isle and the eastern sections of Addison, Franklin and Chittenden Counties.

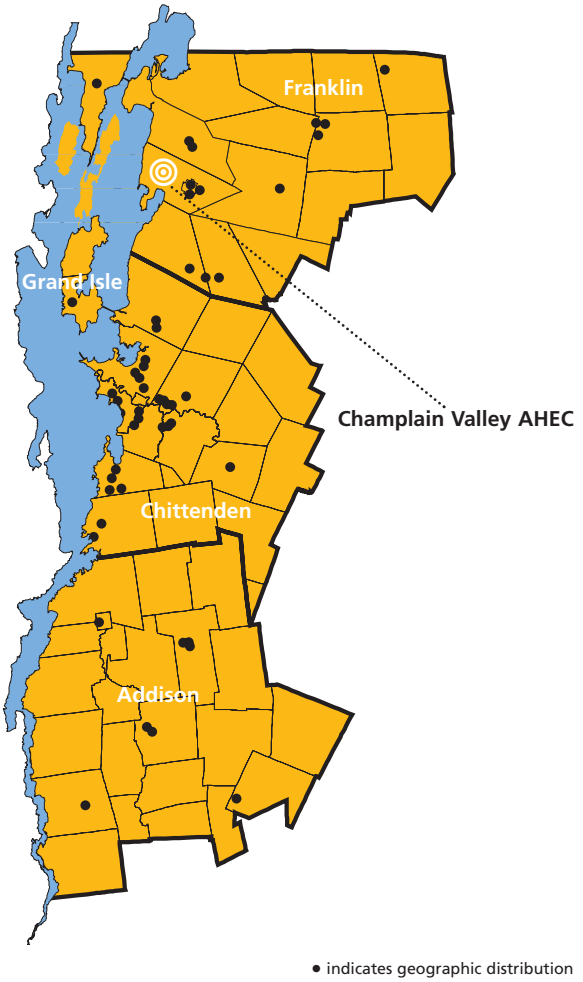
Mid-level Providers: A total of 111 mid-level providers practice in the Champlain Valley AHEC region. Their FTE total is 68.1. Nearly 78% of these providers are in Chittenden County.

CVAHEC Mid-Level Specialties	Providers	Actual FTE
Nurse Practitioner	63	37.5
Physician Assistant	33	23.4
CNM	15	7.2

It is important to note that the number and location of primary care practices do not fully demonstrate the extent to which there is sufficient access to health care.

At the time of the survey, many primary care physicians were not accepting new patients. This alone is an important indicator of adequacy of Vermont's health care workforce. In the Champlain Valley AHEC region, 25% of primary care physicians were not accepting new patients at the time of the survey.

By far the greatest number of specialties closed to new patients was Internal Medicine (42% not accepting new patients) and Family Medicine (32% not accepting new patients).



● indicates geographic distribution

NORTHEASTERN VERMONT AHEC

Caledonia, Essex, Orleans, Lamoille, Washington and Orange Counties

There are 141 primary care physicians in the Northeastern Vermont AHEC's six county region. This represents a decline over the prior year from 144 physicians. With a total estimated population of 177,942 the recommended FTEs among all primary care specialties is 143.7. The actual number of FTEs within the region is 130.7, substantially less than the recommended number. The specialties with the greatest shortages are Internal Medicine and to a lesser extent OB/GYN.

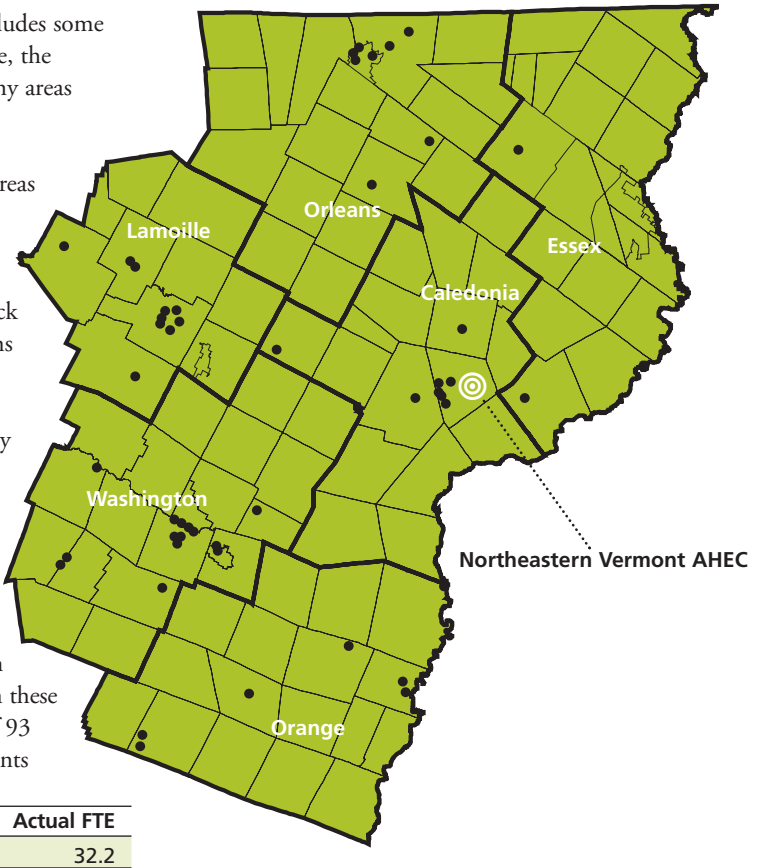
The number of mid-level providers in the Northeastern Vermont AHEC region has steadily increased over the past ten years, serving to fill important gaps in the provision of primary care services. The 2006 survey found that there were a total of 79 mid-level primary care clinicians in the six county areas with a total FTE of 52.1. Nearly 42% of the FTE for these mid-levels are in those counties that are most underserved: Orange, Orleans and Essex.

Northeastern VT AHEC Primary Care Specialties	Physicians	Actual FTE	Recommended FTE
Family Medicine	65	61.5	58.1
Internal Medicine	35	33.2	50.1
OB/GYN	24.5	15.8	16.4
Pediatrics	16.5	20.2	19.1

Because the Northeastern Vermont region includes some of the most rural and isolated areas of the state, the geographic distribution of practices leaves many areas without adequate service.

Essex County as a whole and the more rural areas of Orleans, Orange, Caledonia, Washington and Lamoille counties lack geographically accessible health care services. In addition, Essex, Orleans and Orange counties overall lack an adequate number of primary care physicians for their populations.

Of equal importance in measuring the adequacy of our primary care workforce is to identify the number of providers who have closed their practices to new patients. In the Northeastern Vermont AHEC region, nearly 35% of primary care physicians reported that they were not accepting new patients at the time of the 2006 survey. The greatest number was in Washington, Lamoille and Orleans counties. In these three counties 50 primary care providers out of 93 (53.8%) had closed their practices to new patients



NVAHEC Mid-Level Specialties	Providers	Actual FTE
Nurse Practitioner	52	32.2
Physician Assistant	19	15.0
CNM	8	4.9

● indicates geographic distribution

SOUTHERN VERMONT AHEC

Rutland, Bennington, Windham and Windsor Counties

There are 170 primary care physicians practicing in the four counties of the Southern Vermont AHEC region, serving a population of 202,908. The recommended FTE for primary care physicians among specialties for this population size is 163.4. The 2006 survey found that the actual FTE for primary care is 153. Although there is clearly a sufficient number of family medicine and pediatric FTE physicians, shortages exist in Internal Medicine and OB/GYN.

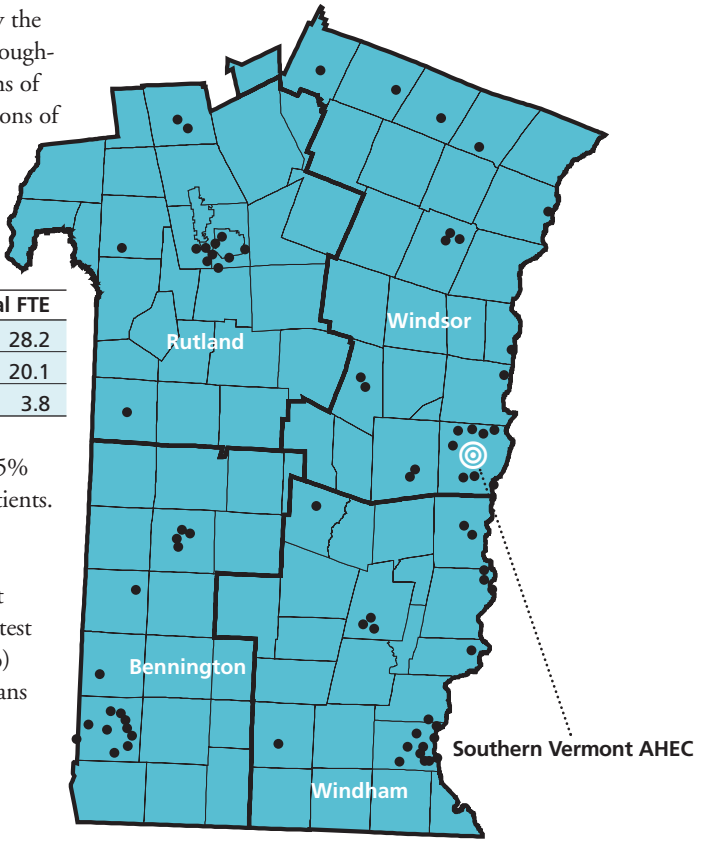
Southern VT AHEC Primary Care Specialties	Physicians	Actual FTE	Recommended FTE
Family Medicine	80	70.7	66.0
Internal Medicine	46	41.8	57.0
OB/GYN	15	15.0	18.7
Pediatrics	29	25.5	21.7

The geographic distribution of primary care practices in this region reveals significant areas lacking health care services. In addition, access to existing practice sites is impeded by the central mountains and the lack of major highways throughout the region. These areas include the western sections of Windham and Windsor counties and the eastern sections of Rutland and Bennington counties.

There are 76 mid-level providers in the Southern Vt. AHEC region with a total FTE of 52.1.

SVAHEC Mid-Level Specialties	Providers	Actual FTE
Nurse Practitioner	42	28.2
Physician Assistant	27	20.1
CNM	7	3.8

The Southern Vermont AHEC survey found that 23.5% of primary care physicians were not accepting new patients. Within the primary care specialties, 28.8% of Family Medicine physicians were not accepting new patients, while 34.8% of Internal Medicine physicians were not open to new patients. Windham County had the greatest number of providers not accepting new patients (28%) followed by Bennington County with 25% of physicians not accepting new patients.



● indicates geographic distribution

Endnotes

1. **Primary Care Clinicians Surveyed**: All physicians and mid-level providers practicing on a regular basis at primary care and Planned Parenthood practice sites are surveyed. Primary care physicians include Family Medicine, Internal Medicine, OB/GYN and Pediatrics. Mid-level providers include Nurse Practitioners, Physician Assistants and Certified Nurse Mid-wives. Per Diem providers have not been included in this report.

2. **Physician Full-Time Equivalency (FTE)**: Full-Time Equivalency for physicians is based on reported office hours and adjusted upwards according to the following formula provided by the U.S. Department of Health and Human Services. It should be noted that the calculation for Overall Primary Care does not result in the same number as the total of the specialties.

Primary Care Specialty	Office Hours		Adjustment Factor		Hours Per Week		Full-Time Equivalency
FP	#	x	1.4	÷	40	=	FTE
IM	#	x	1.8	÷	40	=	FTE
PED	#	x	1.4	÷	40	=	FTE
OBGYN	#	x	1.9	÷	40	=	FTE
All Primary Care	#	x	1.6	÷	40	=	FTE

3. **Mid-Level Full–Time Equivalency (FTE)**: Each mid-level practitioner was counted by his or her specialty type: Physician Assistant, Nurse Practitioner, and Certified Nurse Mid-Wife. Full-Time Equivalency is based only on the reported office hours. No upward adjustment has been made for these positions.

4. **Analysis of Primary Care Need**: The Vermont Department of Health measures the adequacy of primary care physicians for a given geographic area according to the Graduate Medical Education National Advisory Committee Report (GMENAC) guidelines that recommend 78 Full-Time Equivalent Primary Care Physicians per 100,000 population as the average number of physicians required to meet that area's need.

GMENAC Recommendations per Report Issued in 1980	
Overall Primary Care	1 FTE Physician for 1,282 populations
Family Practice	1 FTE Physician for 3,077 populations
Internal Medicine	1 FTE Physician for 3,558.7 populations
Pediatrics	1 FTE Physician for 9,346 populations
OB/GYN	1 FTE Physician for 10,870 populations

The GMENAC standard for "adequacy" of the physician workforce is more than 27 years old and has not been updated. The standard has not been recalculated to factor our rapidly changing medical care delivery system in the United States and especially in Vermont including:

- An aging population
- Increased burden of administrative paper work for health care workforce

As indicated in this report, an increased number of physicians are not accepting new patients. This is a strong indicator of limited access to health care and of the inadequacy of our primary care workforce.