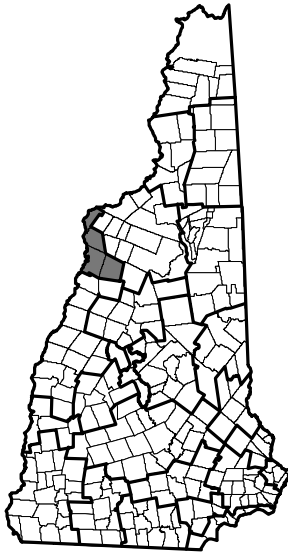


Haverhill Healthcare Service Area



This narrative is part of a larger effort, the *New Hampshire Regional Health Profiles*, and grew out of a mandate established by the Legislature in its passage of SB 183 in 1999. That bill amended RSA 126A to include a requirement for the Department of Health and Human Services to continually assess the health status of the State's residents and to make its findings available in a report issued every two years.

This narrative was jointly developed by the Dartmouth Hitchcock Alliance and the Department and is the first to be issued under this legislation. The *Regional Profiles* provide a means for residents, community leaders, planners and providers to gain a better understanding of the health status of the State's residents and communities.

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Overview of the HSA

The Haverhill Healthcare Service Area (HSA) consists of the following towns in New Hampshire. The hospital's service area also includes communities in Vermont. This profile describes the health of the residents of the four New Hampshire towns. This HSA covers 160 square miles in New Hampshire, with approximately 38 people per square mile. This population, relative to the State, is generally older.

Town Name	1998 Pop Est	% of HSA Pop	% of HSA Self Pay Admissions	Ratio of Self-Pay Admissions to Pop Pct	1996 Per Capita Income	Pop Density (persons per sq. mi.)	Miles to Nearest Hospital*
Bath	819	13%	4%	0.3	\$14,680	22	4
Benton	318	5%	41%	7.9	\$8,024	7	9
Haverhill	4,196	69%	48%	0.7	\$13,897	82	10
Monroe	755	12%	6%	0.5	\$15,747	34	20
HSA Total	6,088				\$13,925	38	
New Hampshire	1,185,000				\$18,697	132	

* = Nearest Hospital may be in a different HSA

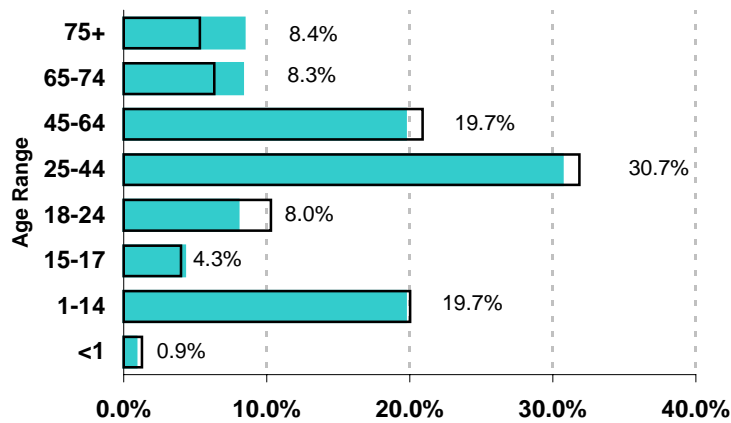
- 1998 Population Estimate = New Hampshire Office of State Planning
- Percent of HSA Self Pay Admissions = Each community's share of individual overnight hospital admissions for the full HSA that are recorded as "Self Pay" on the Uniform Hospital Discharge Data Set for 1998
- Ratio of Self-Pay Admissions to Population Percentage = Percent of HSA self-pay admissions divided by the percent of HSA population. A higher ratio reflects a greater proportion of individuals within a community who must cover the costs of hospitalization from their personal resources, i.e., they do not have health insurance coverage for the hospitalization.
- 1996 Per Capita Income = Office of State Planning, from the Department of Revenue Administration
- Population Density = Total square miles from the Office of State Planning, divided by the 1998 Population Estimate
- Miles to Nearest Hospital = mileage from a community to the nearest hospital that may not be the hospital(s) in the HSA, as given in the *1999 New Hampshire Community Profiles*, published by the State Occupational Information Coordinating Committee (SOICC) of New Hampshire

Demographic Profile

Percentage of Population by Age

Shaded and Labeled bars = HSA population profile

Outlined bar = State population profile



Graphics are based on data provided in the Primary Care Data Set, 1993-1997, which stated “State, city, and town population counts for New Hampshire have been obtained by applying the proportions from the 1995 New Hampshire Population Projections for Counties by Age and Sex to the 1995 Population Estimates of New Hampshire Cities and Towns; both of which were prepared by the New Hampshire Office of State Planning (OSP). The population figures for 1995 were chosen for use in calculating rates since this year represents the midpoint of the five years of study, 1993 through 1997... Since the town-specific age and sex population estimates are based on town-wide estimates applied to county level projections, it is assumed that there is an unknown amount of error in the individual components of the estimates. However, when combining towns together to construct HSAs, much of the variability in the town-specific estimates is assumed to be canceled.” *Primary Care Access Data, 1993-1997*

Health Profile

The points offered below are provided as an overview of the health of the HSA in the three *Regional Profile* focus areas: *Current Health*, *Use of Health Care* and *Risks to Future Health*. These are provided as a representative sample of findings presented in the data tables and should not be construed as the most important findings. Readers are urged to review the data tables to better understand the conditions and circumstances of this HSA.

In some instances, the differences between the HSA and the State are described as significant. This refers to a difference being “statistically significant.”

- When the source of the data is the 1999 NH Health Insurance Coverage and Access Survey (NH HICAS), the difference is significant at the 95% confidence level, i.e., when the range between the upper and lower confidence intervals for the HSA is higher or lower than the range for the State confidence interval (the confidence ranges do not overlap).
- When the source of data is the Primary Care Access Data set (PCAD), a difference is also significant at the 95% confidence level, based on a “z test score,” a test for statistical significance, i.e., when this test statistic is “significant,” there is 95% confidence that the rates being compared are different for reasons other than “random chance.”
- Because a finding is statistically significant, i.e., not due to chance alone, the difference may not be of sufficient magnitude to be practical or meaningful to understanding the health issue or for developing strategies.
- A finding that a difference is not statistically significant may not mean that there is no value to paying attention to the difference, i.e., not being statistically significant does not mean that it is not important or necessary to consider the underlying health issues for indicators that are different between the HSA and the State, particularly on indicators that seem to show a trend or relationship, such as between indicators associated with births.

All rates in this narrative have been age-adjusted. The calculation of age-adjusted rates makes it possible to compare the rates between an HSA and the State. The proportion of the population in each age range varies from HSA to HSA and between an HSA and the State. Thus, it would be misleading to compare HSA rates to the State rate unless the rates were adjusted for this variation in the distribution of age ranges.

Please refer the *Technical Notes* section for an explanation of the age-adjustment calculation and the calculations for statistical significance and confidence intervals.

Unless noted in the text, the data date and source are given in [] at the end of each point. Key to abbreviations:

- NHES = New Hampshire Employment Security
- NH HICAS = *New Hampshire Health Insurance Coverage and Access Survey, 1999*; Office of Planning and Research, Department of Health and Human Services.
- PCAD = *Assessing New Hampshire’s Communities: Primary Care Access Data, 1993-1997*; Health Statistics and Data Management Bureau, Office of Community and Public Health.
- UHDDS = Uniform Hospital Discharge Data Set, maintained by the Health Statistics and Data Management Bureau, Office of Community and Public Health.
- US Census = Taken from 1990 Census of Population and Housing Summary Tape File 3A (STF3A), 1990 US Census data, US Department of Commerce

Observations on Current Health

- 94.4% of the residents in this HSA characterized their health as “good,” “very good,” or “excellent” in the 1999 NH Health Insurance Coverage and Access Survey. This was comparable to the State rate of 94.8%.
- According to the 1999 NH Health Insurance Coverage and Access Survey 9.9% of residents of the HSA had a chronic condition lasting at least a year. This was significantly higher than the State rate of 5.9%.
- Based on findings from the 1990 US Census, 3.6% of the residents were out of the workforce due to a disability. This was greater than the State average of 2.9%.
- In this HSA the rate of “premature deaths” (deaths occurring between 18 and 64 years) was 2.6 per 1000 population. This was the same as the State rate. [1993-1997; PCAD]

Observations on Use of Health Care:

- In this HSA 19.7% of the population over age 65 were not “extremely” or “very” confident in their ability to access health care. This was comparable to the State average of 19%. [1999; NH HICAS]
- 7.1% of the population over age 65 in this HSA had no usual source of health care. This was comparable to the State average of 6.9%. [1999; NH HICAS]
- In this HSA 13.4% of the individuals under the age of 65 did not see a physician in the year prior to the 1999 NH Health Insurance Coverage and Access Survey. This was higher than the State average of 11.7%. [1999; NH HICAS]
- In this HSA 32% of the individuals under the age of 65 did not have a dental visit in the year prior to the 1999 NH Health Insurance Coverage and Access Survey. This was significantly higher than the State average of 21.9%. [1999; NH HICAS]

Ambulatory Care Sensitive Conditions = medical conditions that may not require inpatient hospitalization (a stay of at least one night) if timely and appropriate primary care is received.

- In this HSA hospital admissions for rapid onset ambulatory care sensitive conditions occurred at a rate of 8.5 per 1000 population. This was comparable to the State rate of 7.4 per 1000 population. [1993-1998; UHDDS]
- In this HSA hospital admissions for chronic ambulatory care sensitive conditions, such as asthma and diabetes, occurred at a rate of 4.6 per 1000 population. This was equal to the State rate. [1993-1998; UHDDS]

- Rates of ambulatory care sensitive hospital admissions (per 1000 population) for three major age categories were higher in this HSA when compared to the State. [1993-1997; PCAD]

	HSA	State	Ratio (HSA/State)
Pediatric	4.6	4.3	1.1
Adult*	10.1	6.1	1.7
Elder*	75.3	57.4	1.3

(Pediatric = up to age 18; Adult = 18-64; Elder = 65+)

* = Significantly higher

- Compared to the State, residents of this HSA in three major age categories had higher rates of hospitalization (per 1000 population) due to injuries. [1993-1997; PCAD]

	HSA	State	Ratio (HSA/State)
Pediatric	5.9	3.1	1.9
Adult	8.1	6.2	1.3
Elder	30.3	26.2	1.2

(Pediatric = up to age 18; Adult = 18-64; Elder = 65+)

- The most common source of payment for hospital services in the HSA was Medicare (40%), followed by other (16%), HMOs (15%), commercial insurance (14%), Medicaid (11%), and self pay (5%).

Observations on Risks of Future Illness

- Unemployment in this HSA was 2.6% 1999. This was comparable to the State average of 2.7%. [NHES]
- In this HSA the percent of families with incomes under 200% of the federal poverty level was significantly higher than the State average (28.5% vs. 21.4%). [1999; NH HICAS]
- 15.1% of children under age 19 in this HSA received Medicaid and/or Food Stamp benefits. This was significantly higher than the State average of 9.1%. [1993-1997; PCAD]
- 6.6% of the adults in this HSA received Medicaid and/or Food Stamp benefits. This was significantly higher than the State average of 2.1%. [1993-1997; PCAD]
- 89.5% of the adult population under age 65 in this HSA has completed High School, compared to the State rate of 92.2%. The difference is not significant. [1999; NH HICAS]
- Selected birth characteristics for this HSA:
 - ✓ The rate of maternal smoking during pregnancy was 236 per 1000 live births. This was significantly higher than the State rate of 176 per 1000 live births. [1993-1997; PCAD]
 - ✓ The rate of births to unmarried mothers, 255 per 1000 live births, was comparable to the State rate, 223 per 1000 live births. [1993-1997; PCAD]
 - ✓ The rate of births to mothers with less than 12 years of education was comparable to the State rate (96 per 1000 live births in the HSA, vs. 109 per 1000 live births in the State. [1993-1997; PCAD]

- ✓ Compared to the State rate of 207 per 1000 live births covered by Medicaid, the HSA rate of 380 per 1000 live births was significantly higher. [1993-1997; PCAD]
- In the HSA 21%, of people under 65 were without insurance during some portion of the 12 months prior to the 1999 NH Health Insurance Coverage and Access Survey. This was significantly higher than the State average of 11.4%.
- In this HSA 18% of the population under age 65 did not have health insurance, according to the findings from the 1999 NH Health Insurance Coverage and Access Survey. This was significantly higher than the State average of 9.3%.
- According to the findings from the 1999 NH Health Insurance Coverage and Access Survey 43% of the population in this HSA under age 65 did not have dental coverage. This was significantly higher than the State average of 25.7%.

Additional Observations

By reviewing census data, it is possible to learn much about the people living in a community. Unfortunately, the most recent census available is from the 1990 US Census. It will be helpful to compare data from the 2000 census (which is underway) to that from 1990 to see how this HSA has changed in terms of:

- Households with children headed by single parents – In this HSA in 1990 19.3% of the households with children were headed by a single parent (female headed: 15.7%; male headed: 3.6%). The State average was 17% (female headed: 13.1%; male headed: 3.9%). [1990; US Census]
- Income distribution – In this HSA in 1990 27.2% of the families had incomes of less than \$20,000 while 13.3% had incomes above \$50,000. The State averages were 15.2% below \$20,000 and 37.0% above \$50,000. [1990; US Census]
- People isolated by virtue of:
 - ✓ Living alone – In this HSA 25.7% of the households were classified as “single person.” The State average was 21.9%. [1990; US Census]
 - ✓ Not speaking English – In this HSA the 1990 US Census recorded 0.6% of the households as linguistically isolated. The State average was 1.5%.
 - ✓ Not owning a vehicle – In this HSA the 1990 US Census found that 27.1% of the population did not have personal transportation available. The State average was 16.1%.
- The stability of the population as reflected in:
 - ✓ Not relocated over the last 5 years – In this HSA 55.1% of the households lived in the same location for at least 5 years. The State average was 47.8%. [1990; US Census]
 - ✓ Owned rather than rented – In this HSA 78.3% of the population lived in owner-occupied housing compared to the State average of 73.6%. [US Census]