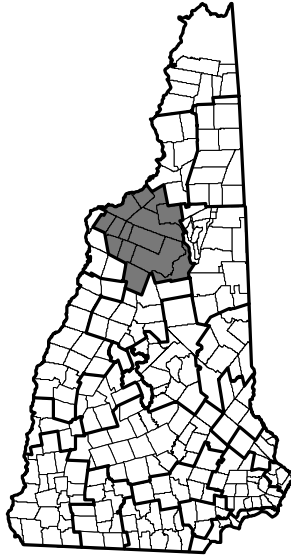


Littleton Healthcare Service Area



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

In New Hampshire, the Littleton Healthcare Service Area (HSA) consists of 13 towns. Together these 13 towns had an estimated population of about 18,500 in 1998 and cover an area of 640 square miles, resulting in a population density of 29 people per square mile. Compared with New Hampshire overall, the Littleton region has fewer young adults and more middle aged and elderly adults. The figure in the Demographic Profile graphically displays the population difference between this HSA and the State.

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*
Bethlehem	2,152	12%	11%	0.9	\$14,046	24	3
Carroll	625	3%	5%	1.5	\$16,001	12	13
Dalton	854	5%	0%	0.1	\$14,995	31	10
Easton	230	1%	6%	4.6	\$21,169	7	13
Franconia	864	5%	0%	0.0	\$19,329	13	7
Landaff	356	2%	0%	0.0	\$14,976	13	14
Lincoln	1,413	8%	8%	1.0	\$17,292	11	23
Lisbon	1,771	10%	12%	1.2	\$13,155	67	11
Littleton	6,052	33%	33%	1.0	\$14,760	121	-
Lyman	417	2%	0%	0.0	\$15,870	15	15
Sugar Hill	494	3%	0%	0.0	\$30,479	29	5
Whitefield	1,970	11%	20%	1.9	\$12,848	57	11
Woodstock	1,269	7%	5%	0.8	\$14,514	22	17
HSA Total	18,467				\$15,292	29	
New Hampshire	1,185,000				\$18,697	132	

* = Nearest Hospital may be in a different HSA

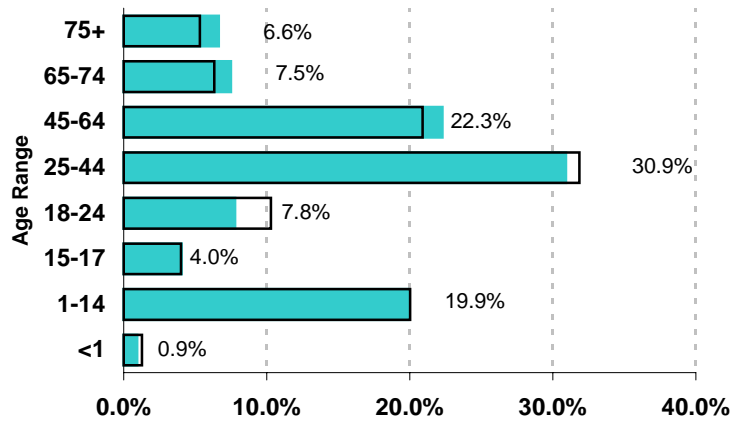
- 1998 Population Estimate = New Hampshire Office of State Planning
- Percent of HSA Self Pay Admissions = Each community's share of individual overnight hospital admissions for the full HSA that are recorded as "Self Pay" on the Uniform Hospital Discharge Data Set for 1998
- Ratio of Self-Pay Admissions 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

- According to findings from the 1999 NH Health Insurance Coverage and Access Survey 94.4% of the population under age 65 in this HSA had a health status of “good,” “very good” or “excellent”. This was comparable to the State average of 94.8%.
- According to the 1999 NH Health Insurance Coverage and Access Survey 6.6% of the population under age 65 in this HSA had a chronic condition that lasted more than one year. This was a slightly higher than the State average of 5.9%.
- According to the 1990 US Census, 3.5% of the population had a work disability and were not in the work force. The State average was 2.9%.
- The rate of “premature deaths” (deaths between ages 18 and 64) in the HSA was 3.1 per 1000 population. The State rate was 2.6 per 1000 in the same age group. [1993-1997; PCAD].
- The Littleton HSA does not differ significantly from the State in the rate of low birth weight births (4.9 per 1000 live births, vs. 5.2 per 1000 live births). [1993-1997; PCAD]

Observations on Use of Health Care

- The percentage of people in the HSA under the age of 65 who were not “extremely” or “very” confident in their access to health care services was higher than the State average: 23.5% vs. 19%. [1999; NH HICAS]
- According to the 1999 NH Health Insurance and Coverage Survey 7.5% of the population under age 65 in the HSA had no usual source of medical care., The State average was 6.9%.
- 13.9% of the population under the age of 65 in the Littleton HSA had not seen 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%.
- The HSA population under age 65 was less likely than the population statewide to have had a dental visit in the year prior to the 1999 NH Health Insurance Coverage and Access Survey. The HSA average was 26% and the State average was 21.9%.

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.

- The HSA rate of hospital admissions for rapid onset ambulatory care sensitive conditions, such as pneumonia and other infections, was similar to the State rate (7.2 per 1000 population vs. 7.4 per 1000 population). [1993-1998; UHDDS]
- The HSA rate of hospitalizations for chronic ambulatory care sensitive conditions, such as asthma and diabetes, was 3.9 per 1000 population. This was slightly lower than the State rate of 4.6 per 1000 population. [1993-1998; UHDDS]

- The rates of hospitalization (per 1000 population) for ambulatory care sensitive conditions across three major age categories were comparable to the State rates. [1993-1997; PCAD]

	HSA	State	Ratio (HSA/State)
Pediatric	5.1	4.3	1.2
Adult	6.7	6.1	1.1
Elder	54.6	57.4	0.9

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

- The rates of hospitalization (per 1000 population) for injuries across three major age categories were not statistically different from the State rates. [1993-1997; PCAD]

	HSA	State	Ratio (HSA/State)
Pediatric	2.0	3.1	0.6
Adult	7.2	6.2	1.2
Elder	25.9	26.2	1.0

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

- 34% of patients from this HSA who received inpatient hospital services (individuals staying at least one night in a hospital) were insured by Medicare, 18% by other insurers and 18% by HMOs, 16% by commercial payors, 8% by Medicaid, and 6% were self pay. [1998; UHDDS]

Observations on Risks to Future Health

- The 1999 unemployment for this HSA was 3.0%. The State rate was 2.7%. [NHES]
- 30.2% of the families in this HSA had an income of less than 200% of the federal poverty level. This was significantly higher than the State average of 21.4%. [1999; NH HICAS]
- 13.7% of the children in this HSA (less than the age of 19) received Medicaid and/or Food Stamp benefits. This was significantly higher than the State average of 9.1%. [1993-1997; PCAD]
- 2.6% 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]
- Selected birth characteristics in this HSA:
 - ✓ The rate of women smoking during pregnancy was significantly higher (262 per 1000 live births) compared to the State (176 per 1000 births). [1993-1997; PCAD]
 - ✓ The rate of births to teens less than 18 was comparable with and the State (13.3 per 1000 live births, vs. 14.4 per 1000 live births). [1993-1997; PCAD]
 - ✓ The rate of births to unmarried mothers was significantly higher compared to the State (324 per 1000 live births vs. 223 per 1000 live births). [1993-1997; PCAD]
 - ✓ The rate of births to women who had not completed High School was significantly higher (136 per 1000 live births) compared to the State (109 per 1000 live births). [1993-1997; PCAD]
 - ✓ The HSA rate of births covered by Medicaid was significantly higher than the State (386 per 1000 live births vs. 207 per 1000 live births). [1993-1997; PCAD]

- 19.9% of the HSA population under age 65 did not have health 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%.
- 18.1% of the HSA population under age 65 did not have health insurance at the time of the 1999 NH Health Insurance Coverage and Access Survey. This average was almost double and significantly higher than the State average of 9.3%.
- 39.3% of the population under age 65 in this HSA did not have dental coverage at the time of the 1999 NH Health Insurance Coverage and Access Survey. 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 1990 22.2% of the households in the HSA were headed by a single parent (female headed: 15.1%; male headed: 7.1%). The State average was 17% of households headed by a single parent (13.1% were female headed and 3.9% were male headed). [1990; US Census]
- Income distribution – In 1990 27.5% of the families in the HSA had incomes below \$20,000 and 20.6% of the families in the HSA had incomes greater than \$50,000. The State average was 15.2% of families with income below \$20,000 and 37% of families with incomes greater than \$50,000. [1990; US Census]
- People isolated by virtue of:
 - ✓ Living alone – In this HSA 25% of the households were classified as “single person” compared to the State average of 21.9%. [1990; US Census]
 - ✓ Not speaking English – In this HSA 1.5% of the households were linguistically isolated. This was the same as the State average. [1990; US Census]
 - ✓ Not owning a vehicle – In this HSA 20% of the population did not have personal transportation compared to a State average of 16.1%. [1990; US Census]
- Population stability, as reflected in:
 - ✓ Not relocated over the last 5 years – In this HSA 48.8% of the households lived in the same location at least 5 years compared to the State average of 47.8%. [1990; US Census]
 - ✓ Owned a home rather than rented – In this HSA 71.9% of the population lived in owner-occupied housing compared to the State average of 73.6%. [1990; US Census]