

## A Case Study of Rural Health Care in the Economic Downturn

### INTRODUCTION

Many rural communities have long faced challenges related to health care access and cost. These persistent problems have been exacerbated by the recent economic downturn. This case study describes the current health care environment in Ashe County, a western North Carolina mountain community. The circumstances in Ashe County mirror those in many rural areas across the country:

- An aging population with relatively high rates of poverty;
- A vulnerable local economy;
- Substantial health care access barriers;
- Difficult financial circumstances for the local hospital and other health providers; and
- High out-of-pocket health care costs for residents.

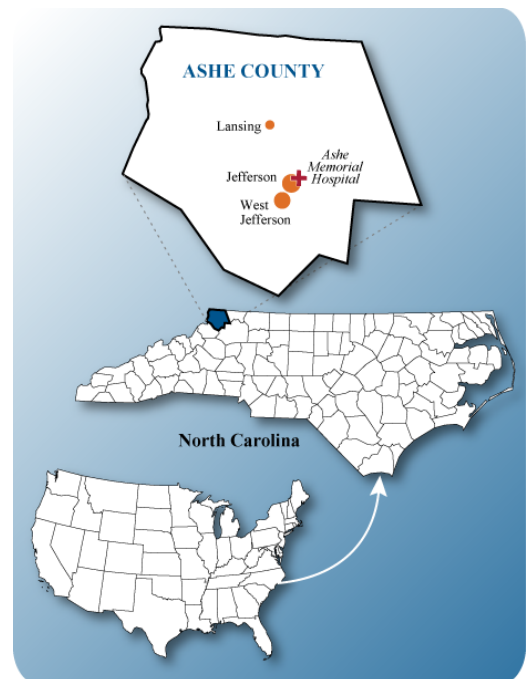
### PORTRAIT OF ASHE COUNTY

Around 26,000 people live in Ashe County. Jefferson, population of about 1,400, is the county seat. The county's commercial hub is nearby West Jefferson, population of about 1,100.<sup>1</sup>

Ashe County has a rich history ranging from the hunting expeditions of Daniel Boone in the 1770s to the establishment of furniture manufacturing and textile industries in the first half of the 20<sup>th</sup> century.<sup>2</sup> The mountain landscape and local crafters and artisans continue to draw visitors today.

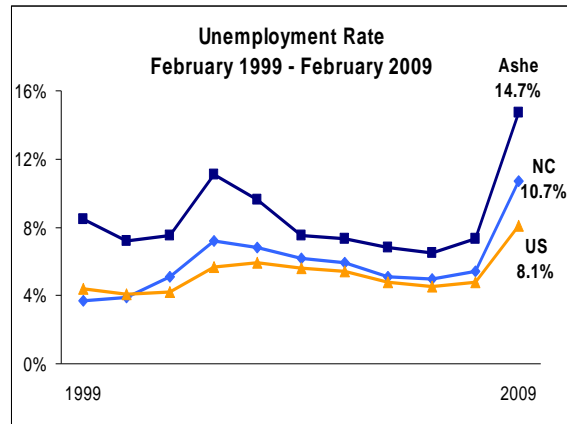
The Ashe County community, like many rural areas, is older and poorer than the U.S. overall.

- Nearly 1 in 5 Ashe County residents are 65 years or older (19%), compared to 13% of the nation as a whole.<sup>3</sup>
- Between 2005 and 2007, 18% of all Ashe County residents and 28% of the county's children were living in poverty. During this time period, U.S. poverty rates were 13% overall and 18% among children.<sup>4</sup>



These characteristics result in greater and more complex health care needs, access problems for the low-income population and financial difficulties for local health care providers.

Ashe County has been hit hard by the current economic downturn. Several large employers have recently shuttered their doors, including a high-end cabinet maker, two electronics manufacturing plants, and two American brand car dealerships. County officials estimate that between 350 and 400 jobs have been lost in the past 2 years. By February 2009, the unemployment rate in Ashe County had climbed to 14.7%, double what it was one year previously (7.3% in February 2008). This rate is significantly higher than the unemployment rates in North Carolina and the U.S. overall.<sup>5</sup> As a local hospital executive put it, “we tend to lead the decline and trail the recovery.”



## ACCESS TO HEALTH INSURANCE

Historically, Ashe County has had a high uninsurance rate. In 2005, 19% of Ashe County residents were uninsured, compared to 16% of all U.S. residents.<sup>6-7</sup> Given recent job losses, the rate of uninsurance likely is higher now. Nationally, a 1 percentage point increase in the unemployment rate is associated with an increase in the uninsured of about 1 million people.<sup>8</sup>

Typical of rural areas, many employers in Ashe County are small businesses, which often face barriers to offering health insurance to their employees. In 2006, 81% of employers in Ashe County had less than 10 employees, compared to 73% of all U.S. employers.<sup>9</sup> According to local leaders, there are businesses with as many as 24 employees that cannot afford to offer health insurance. In many of the small businesses that are still able to offer insurance, employees are covered by high deductible plans, with deductible levels of \$2,000 or more.

Further, Ashe County has relatively more businesses in industries like construction and relatively fewer “white collar” businesses than in the nation overall.<sup>10</sup> Jobs in the construction industry are less likely to come with health insurance than are professional services jobs.<sup>11</sup>

On the economy:

“We tend to lead the decline and trail the recovery.”

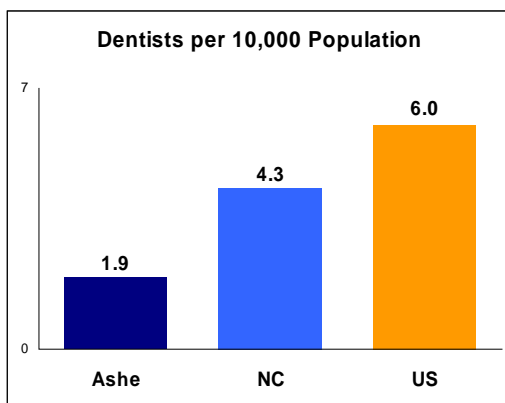
*Ashe County hospital executive*

Given the reduced access to private insurance, many Ashe County residents rely on public health coverage. In June 2008, 17% of Ashe County residents were covered by Medicaid or the Children’s Health Insurance Program, compared to 15% of the state’s entire population.<sup>12</sup>

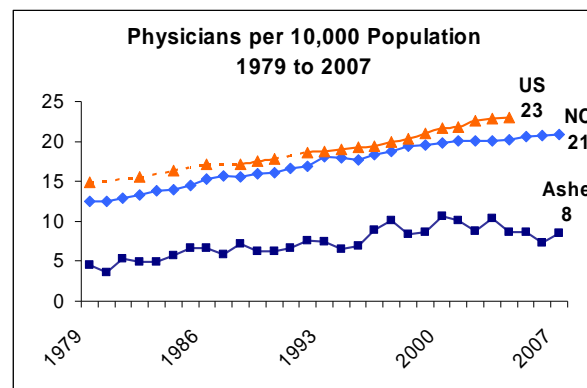
## ACCESS TO HEALTH CARE PROVIDERS

Ashe County has a low supply of health care providers. The county's physician-to-population ratios for both primary care and specialist physicians are lower than the ratios for North Carolina and the U.S. overall. County leaders are particularly concerned about the lack of access to specialty care and dental care. There are less than 2 dentists for every 10,000 residents, well below national rates.<sup>13</sup> Further, there are no physicians in Ashe County with a primary specialty related to mental health.<sup>14</sup>

Recruitment of new health care providers is often difficult in rural communities. This is true for a variety of reasons, including the financial challenges of practicing in a rural environment, as illustrated by the circumstances of Jefferson's local hospital.



Source<sup>b</sup>



Source<sup>c</sup>

## FINANCIAL DIFFICULTIES OF LOCAL PROVIDERS

Ashe Memorial Hospital, a 25 bed critical access hospital located in Jefferson, has served the residents of Ashe County since 1941. The only hospital in the county, it is one of the county's largest employers, with over 300 full-time equivalents. Ashe Memorial Hospital faces the same financial problems as many small, rural hospitals.<sup>15</sup>

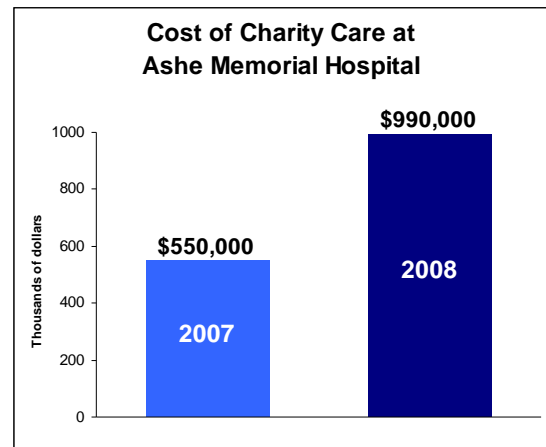
Ashe Memorial is very vulnerable to changes in physician supply. It took several years to recover financially from the loss of a general surgeon between August 2006 and April 2007.

The insurance coverage patterns in the hospital's patient population also present financial difficulties for Ashe Memorial. A high proportion of the hospital's patients are insured by Medicare or Medicaid. The hospital earns essentially no profit from Medicare patients, and the cost of treating Medicaid patients has outpaced the revenue for them.<sup>16</sup> Many other patients at Ashe Memorial are unable to cover the full cost of their care, either because they lack insurance coverage or because they face a high level of out-of-pocket costs under the insurance they do have. In many larger hospitals, Medicaid and charity care patients are subsidized by higher reimbursement for persons with private insurance. However, in Ashe County, a relatively low percentage of patients have generous private insurance.

## HEALTH CARE COSTS

The number of patients in Ashe County who cannot afford to pay for their health care has increased markedly in recent years. The cost of charity care provided by Ashe Memorial Hospital almost doubled between 2007 and 2008, growing from approximately \$550,000 to \$990,000. A new safety net program at the hospital's clinic provides medical care for reduced fees, depending on the patient's income. The program enrolled 111 people in the first 3 months of 2009 and has provided 167 visits to these patients. Further, in 2008, a medication assistance program in Ashe County distributed \$2.5 million in free prescription drugs to persons unable to pay for them. Program officials expect this year's statistics to be even higher.

These cost issues are fueled by increases in both uninsurance and under-insurance. As local businesses look to curb health care costs, health providers have noticed a jump in the number of patients with very high deductible health plans. Many of these patients cannot afford to meet their deductibles, forcing them to forgo care or rely on charity care from local providers. This includes many on Medicare, who cannot afford their copayments and have dropped supplemental coverage because they cannot afford the premium.



Some residents who have lost their jobs and health insurance can no longer access care from local providers. The county is a Health Professional Shortage Area, and physicians have more demand for care than they can fulfill and must maintain their own financial stability. In some practices, patients with large outstanding balances on their account can no longer make appointments without upfront payment. The end result is that these patients often seek care in the emergency room, a costly and less appropriate alternative to office-based care.

As a result of these cost issues, many Ashe County residents are going without recommended care. According to local health care providers, there has been a marked decline in rates of preventive care and elective procedures over the past 8 months. Outpatient diagnostic volume at the hospital has decreased somewhere between 8 to 12% in the first quarter of 2009 as some patients have skipped recommended screenings—without the ability to pay for treatment, they do not see the point in getting screened. A local leader told of another patient who did not have the money to receive care for a newly diagnosed cancer. Fortunately, a foundation was able to fund the needed care for this person, but leaders feel that there are hundreds of patients who are falling through the cracks.

## CONCLUSION

Communities across the U.S. are encountering problems with access to insurance coverage, access to health care providers, and increasing health care costs. The experience of Ashe County, North Carolina illustrates the types of acute problems faced in many rural communities.

Nearly 1 in 6 Americans live in non-metropolitan areas. In 25 states, at least one-quarter of the population lives outside metropolitan cities.<sup>17</sup> These individuals and their health care providers have always faced unique challenges, and these issues are even more intense in the current economic downturn.

## SOURCES

Unless otherwise cited, information on the circumstances in Ashe County is based on personal communication with county leaders, April 2009.

1. North Carolina Office of State Budget and Management. July 2007 Municipal Estimates by County.  
[http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/demog/munpop07.html](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/munpop07.html) (accessed April 28, 2009).
2. Ashe County Government. <http://www.ashecountygov.com/History.htm> (accessed April 28, 2009).
3. U.S. Census Bureau. 2005-2007 American Community Survey 3-Year Estimates, using American FactFinder. <http://factfinder.census.gov> (accessed April 28, 2009).
4. U.S. Census Bureau. 2005-2007 American Community Survey 3-Year Estimates, using American FactFinder. <http://factfinder.census.gov> (accessed April 28, 2009).
5. Bureau of Labor Statistics. Local Area Unemployment Statistics and Labor Force Statistics from the Current Population Survey. <http://www.bls.gov/> (accessed April 28, 2009).
6. M. Holmes and T. Ricketts. *County Estimates of the Number of Uninsured in North Carolina: 2005 Update*. Cecil G. Sheps Center for Health Services Research and North Carolina Institute of Medicine.  
<https://www.shepscenter.unc.edu/new/NorthCarolinaUninsured2005.pdf> (accessed April 30, 2009).
- 7 C. DeNavas-Walt, B.D. Proctor, and C.H. Lee. *Income, Poverty, and Health Insurance Coverage in the United States: 2005*. U.S. Census Bureau, Current Population Reports, P60-231. U.S. Government Printing Office, Washington, DC, 2006.  
<http://www.census.gov/prod/2006pubs/p60-231.pdf> (accessed April 30, 2009).
8. J. Holahan and A.B. Garrett. *Rising Unemployment, Medicaid and the Uninsured*. Kaiser Commission on Medicaid and the Uninsured, January 2009.  
<http://www.kff.org/uninsured/upload/7850.pdf> (accessed April 30, 2009).
9. U.S. Census Bureau. 2006 County Business Patterns.  
<http://www.census.gov/econ/cbp/index.html> (accessed April 27, 2009).
10. U.S. Census Bureau. 2006 County Business Patterns.  
<http://www.census.gov/econ/cbp/index.html> (accessed April 27, 2009).
11. Agency for Healthcare Research and Quality. *Percent of private-sector establishments that offer health insurance by firm size and selected characteristics* (Table I.A.2), 2006 (July 2008). Medical Expenditure Panel Survey Insurance Component Tables. Generated using MEPSnet/IC. <http://www.meps.ahrq.gov/mepsnet/IC/MEPSnetIC.jsp> (April 30, 2009).

12. North Carolina Division of Medical Assistance, County Specific Snapshots for NC Medicaid Services, February 2009.  
<http://www.dhhs.state.nc.us/dma/countyreports/2009/Cnty005.pdf> (accessed April 30, 2009).
13. North Carolina Health Professions Data System (NC HPDS), Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Board of Dental Examiners.
14. NC HPDS, with data derived from the North Carolina Medical Board.
15. Information on Ashe Memorial Hospital in this section drawn from: R.T. Slifkin, G.H. Pink, and A.D. Radford. *Assessment of the Financial Status of Ashe Memorial Hospital and Strategic Options for Future Stability*. Final Report to Golden Leaf Foundation, February 2008. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
16. Because of its designation as a critical access hospital, Ashe Memorial Hospital is reimbursed for stays by Medicare patients at 101% of cost. So, while the full cost of care for Medicare patients is covered, the hospital makes essentially no profit for services reimbursed by Medicare.
17. The Kaiser Family Foundation [statehealthfacts.org](http://statehealthfacts.org). Data Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey Annual Social and Economic Supplements (accessed April 30, 2009).

### Sources for Images

- A. Bureau of Labor Statistics. Local Area Unemployment Statistics and Labor Force Statistics from the Current Population Survey. <http://www.bls.gov/> (accessed April 28, 2009). Figures are unemployment rates for February of each year. National and NC rates are seasonally adjusted; Ashe County rates are unadjusted.
- B. NC data are for 2007 and are from the North Carolina Health Professions Data System. U.S. data are for 2006 and are from the American Dental Association, 2006.
- C. NC data are from the North Carolina Health Professions Data System. U.S. data are from the U.S. Health Workforce Personnel Factbook and the Area Resource File, Health Resources Services Administration, Bureau of Health Professions.



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