

A Case Study of Developments in Rural Health in Difficult Economic Times: Leake County, Mississippi

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INTRODUCTION

The U.S. health care crisis is especially strong in rural communities. The experience of Leake County, a rural Mississippi county, embodies these problems.

Leake County faces challenges common to most rural areas:

- 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,
- High out-of-pocket health care costs for residents, and
- Less access to health information technology and other infrastructure that is important for health care quality.

These persistent health care challenges for rural communities have been amplified by the current economic downturn.

PORTRAIT OF LEAKE COUNTY

As of 2008, Leake County's total population was estimated to be 22,844 people,¹ with Carthage, the largest city and county seat, representing approximately 20% of the county's population (4,808 people²).

Located in the center of the state of Mississippi, Leake County has an atmosphere of country-style living, with larger metropolitan cities only a short distance with three highways crossing the county.³

As in most rural places, in Leake County the population is older and poorer than the U.S. population overall.

- In general, elderly Americans have greater and more complex health care needs. Nearly one in seven Leake County residents are 65 years or older (13.9%), compared to 12.5% for the state and 12.0% of the nation as a whole.⁴
- High rates of poverty are associated with health care access problems for low-income populations, and those problems often create greater financial difficulties for local health care providers. In 2007, 20.5% of all Leake County residents were living in poverty compared to 13.0% nationally. Among children 18 years and under in 2007, 31.3% were living in poverty in contrast to 18.0% nationally.⁵

¹ U.S. Census Bureau, 2008. State and County Quickfacts. (June 2009).

² U.S. Census Bureau, 2007. Population Estimates. (May 2009).

³ Leake County Development Association. (May 2009) <http://www.leakeida.com/1RP.html>.

⁴ U.S. Census Bureau, 2007. State and County Quickfacts. (June 2009).

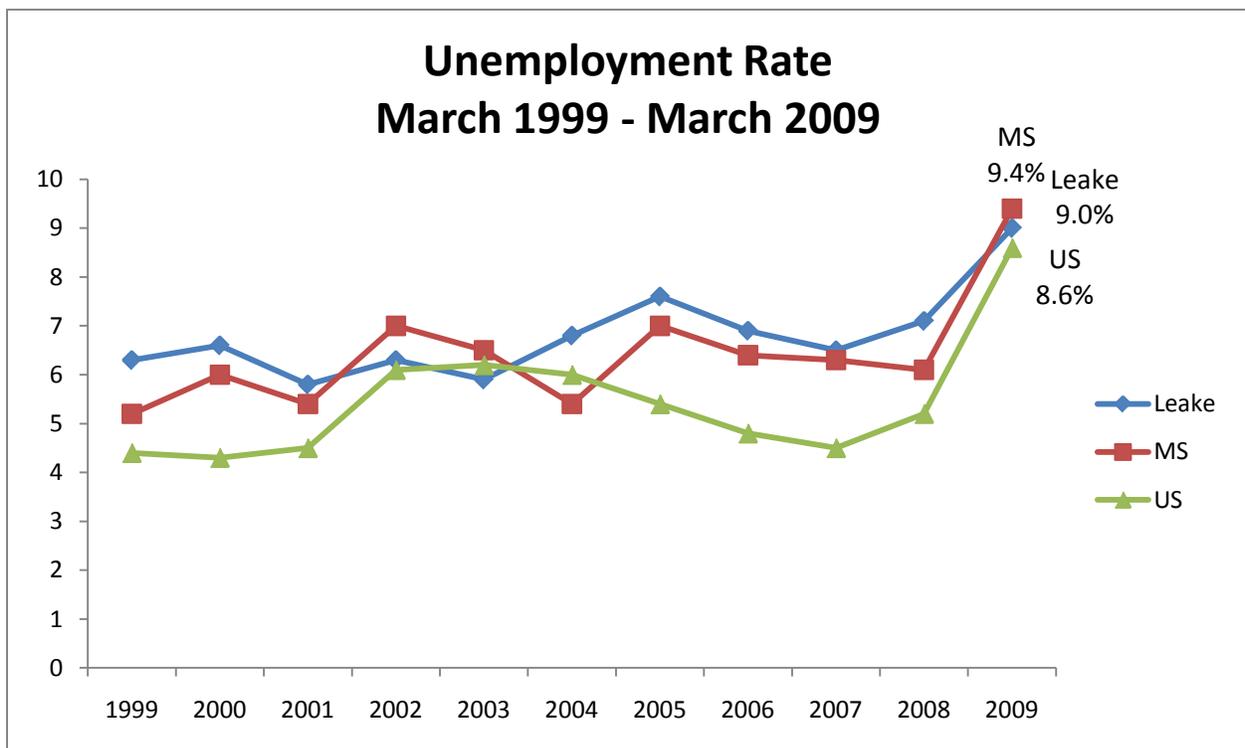
⁵ U.S. Census Bureau, 2007. Small Area Income and Poverty Estimates (June 2009).

Similar to other rural communities, Leake County has been hit hard by the current economic downturn but is still recovering from past economic declines.

In the early 1980s, a large portion of the local economy was built on the garment industry (i.e., plant manufacturing operations, sewing centers, etc.), which employed about 2,000 people. Over the course of 10 to 15 years, the 13 to 16 manufacturers scattered throughout the county left due to outsourcing. As a result of this gradual economic downturn, the local economy has been slow to recover.

Unable to recruit and sustain local business development, businesses left the county; Leake County and other surrounding areas employing local residents have suffered.⁶ By March 2009, the unemployment rate in Leake County had reached 9.0%, a 3 percentage point increase from March 2008. This current rate is comparable to the state and national levels of unemployment, with Mississippi at 9.4% unemployment and the United States at 8.6% unemployment.⁷

These economic challenges have amplified the health care crisis in Leake County and rural areas throughout the country.



Source: U.S. Bureau of Labor Statistics.

⁶ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

⁷ U.S. Bureau of Labor Statistics (June 2009).

DIMINISHING ACCESS TO HEALTH CARE

Historically, Leake County has had a high uninsurance rate.

In 2005, 21.4% of Leake County residents were uninsured compared to 19.5%⁸ statewide and 15.9% of all United States residents.⁹

Nationally, every one percentage increase in the unemployment rate is associated with an increase in the uninsured of approximately one million people.¹⁰ However, states with larger increases in the unemployment rate have larger percentage increases in the number of uninsured.¹¹

Rural residents have less access to job-based health insurance, which partly explains their higher rates of uninsurance.¹²

Currently, the largest employer in Leake County is Tyson Foods, Inc., which employs between 2,000 and 3,000 people; the other leading employers in the county are two corrections facilities (one public and one private), the Leake County School district with five K-12 buildings, and the Leake County Memorial Hospital.¹³

Therefore, many Leake County residents rely on public insurance.

As of 2009, approximately 18.4%¹⁴ of Leake County residents were enrolled in Medicare, 19.2%¹⁵ were enrolled in CHIP, and 22.2%¹⁶ were enrolled in Medicaid, compared to national rates of 14.9%,¹⁷ 8.9%,¹⁸ and 20%,¹⁹ respectively.

Like most rural areas, Leake County has a low supply of health care providers.

With only 10 physicians in the county, its physician-to-population ratios for both primary care and specialist physicians are lower than ratios for the United States overall—0.4 physicians per 3,000

⁸ U.S. Census Bureau, 2007. Small Area Income and Poverty Estimates (accessed June 2009)

<http://www.census.gov/did/www/saie/data/statecounty/index.html>.

⁹ U.S. Census Bureau, 2005. (June 2009) <http://www.census.gov/hhes/www/hlthins/hlthin05/hlth05asc.html>.

¹⁰ Holahan J, Garrett AB. (2009). *Rising unemployment, Medicaid and the uninsured* (Report #7850). Kaiser Commission on Medicaid and the Uninsured. Available at <http://www.kff.org/uninsured/upload/7850.pdf>.

¹¹ Holmes M, Ricketts T, King J. (2009). Updating uninsured estimates for current economic conditions: state specific estimates. Chapel Hill, NC: Cecil G Sheps Center for Health Services Research. Available at http://www.shepscenter.unc.edu/new/FindingsBrief_UninsuredUnemployment_Mar2009.pdf.

¹² Holve E, Brodie M, Levitt L. (2003). Small business executives and health insurance: findings from a national survey of very small firms. *Managed Care Interface*, 16(9), 19-24. Accessed June 25, 2009.

¹³ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

¹⁴ Mississippi State Department of Health, 2009.

<http://www.msdh.state.ms.us/msdhsite/static/19,1947,242,211.html>.

¹⁵ Mississippi State Department of Health, 2009.

<http://www.msdh.state.ms.us/msdhsite/static/19,1947,242,211.html>.

¹⁶ Mississippi State Department of Health, Division of Medicaid, July 2009.

¹⁷ 2008 Centers for Medicare and Medicaid Services.

<http://www.cms.hhs.gov/MedicareEnRpts/Downloads/HISMI08.pdf>.

¹⁸ 2008 Centers for Medicare and Medicaid Services.

<http://www.cms.hhs.gov/NationalCHIPPolicy/downloads/CHIPEverEnrolledYearGraph.pdf>.

¹⁹ Kaiser Family Foundation, 2006. <http://www.statehealthfacts.org/profileind.jsp?ind=199&cat=4&rgn=1>.

population for primary care²⁰ as compared to the federal shortage area designation of 1 physician per 3,000 population.²¹

Rural county leaders are particularly concerned about the lack of access to specialty care and dental services. There are about three dentists for every 10,000 residents in Leake County,²² well below national rates (six per 10,000 population).²³ Furthermore, there are no physicians in Leake County with a primary specialty related to mental health.²⁴ Certain preventive care services, such as mammography procedures, are not available in Leake County.²⁵

Recruitment of new health care providers is difficult in rural communities.

Recruitment is difficult for a variety of reasons, including the financial challenges of practicing in a rural environment, as illustrated by the circumstances of the local hospital, Leake County Memorial Hospital. According to one administrator, “Leake County has been underserved for a number of years.”²⁶ Two of the five physicians on staff at the local hospital are over the age of 55, leading to increased concern regarding the stability of the current services being provided by the hospital to the county and other surrounding areas. Overall, the county has limited services—no OB/GYN or cardiology services among other specialty services. With two of the long-standing physicians getting ready for retirement, county leaders are working to encourage recruitment efforts to keep those private practices viable.²⁷

FINANCIAL DIFFICULTIES OF LOCAL PROVIDERS

Leake County Memorial Hospital faces the same financial problems as many small, rural hospitals.

Leake County Memorial, the fourth largest employer in the county, is a 25-bed critical access hospital²⁸ with approximately 210 employees, of which 140 are full-time.²⁹

A high proportion of the hospital’s patients are unable to cover the full cost of care received. As the economic downturn persists, the hospital has been experiencing a significant increase in the number of patients coming into the ER for care, and 12% to 14% (approximately double the previous year) are self-pay as a result of job loss. However, approximately one-quarter of those self-pay patients’ medical expenses are expected to go unpaid and therefore increase the hospital’s overall annual write-offs.³⁰

With an aging population, a high proportion of Leake County Memorial Hospital’s patients are insured by Medicare; there are also a significant number of Medicaid patients. Increasing insurance deductibles

²⁰ Area Resource File, 2006. US Census Bureau, 2005.

²¹ Federally Designated HPSA, U.S. Code, Title 42, Chapter 6A, Subchapter II, subpart ii, § 254e.

²² Area Resource File, 2006.

²³ New York Center for Health Workforce Studies (October 2006).

²⁴ Area Resource File, 2006.

²⁵ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

²⁶ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

²⁷ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

²⁸ Leake county Development Association. (May 2009) <http://www.leakeida.com/1RP.html>.

²⁹ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁰ Leake county Development Association. (May 2009) <http://www.leakeida.com/1RP.html>.

and premiums have led other patients to struggle to pay their medical expenses. They are often unable to cover the full cost of their care because either they lack insurance coverage or they face high out-of-pocket costs under the insurance they do have.³¹

In many larger hospitals, Medicaid and charity care patients are subsidized by higher reimbursement for persons with private insurance. However, the percentage of patients with generous private insurance is typically low for most small rural hospitals.

ESCALATING HEALTH CARE COSTS

Rural residents pay more of their medical costs out of their own pockets than do urban residents.

More than 10% of rural individuals with private coverage spend more than one-tenth of their family income on medical cost, compared to about 6% of their urban counterparts.¹⁰

In Leake County, the number of patients who cannot afford to pay for their health care has dramatically increased over the last year.

The amount of charity care provided at Leake County Memorial Hospital has risen 47%, from \$17,166 in 2007 to \$25,185 in 2008. The hospital's total annual write-offs have experienced similar increases, with about \$1.25 million in write-offs in 2008, which is expected to top out at approximately \$2 million in write-offs by the end of 2009, representing a total expected percent change of 60%.³²

These cost issues are fueled by increases in both uninsurance and under-insurance. As local businesses look to curb health care costs, Leake County health care providers have noticed a large 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 either forgo care or rely on charity care from local providers.

Leake County has had a cooperative safety net charity program for the last 10 years to help curb some of the financial difficulties that many of the county's residents have had or currently are facing. The independently established program, open two days per month until recently, provides critical medical care, medication via donated samples, and some dental care from a variety of providers who volunteer their time. Leake County Memorial Hospital provides the location and some supplies for this free clinic. Currently the free clinic is open only one day per month.³³

In rural communities like Leake County, many residents cannot afford their prescribed medications.

Rural privately insured individuals are less likely to have prescription drug coverage than those in urban areas. Many of those who cannot afford their medications have been getting them through the free clinic, but there are other formal programs. Local pharmacists have also been known to work with the individual and pharmaceutical companies to assist with the rising cost burden of medications.³⁴

³¹ Leake county Development Association. (May 2009) <http://www.leakeida.com/1RP.html>.

³² Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³³ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁴ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

Many Leake County residents are going without recommended care.

In part because the county lacks a variety of services, many people are going without colon and breast exams and are not seeking preventive care measures. Local physicians have explained the decrease in recommended care as a result of the economic downturn, insurance plans that do not cover these types of procedures or care, and the inability of patients to afford the co-pay for the services and procedures that are covered.³⁵

PERSISTENT GAPS IN QUALITY

Many of the quality problems in the U.S. health care system are present in both rural and urban areas. But rural health care providers face some special challenges in their efforts to provide high quality care.

Rural providers have less access to information technology.

- Adoption of electronic health records by hospitals in rural areas has been slower than in metropolitan areas.
- In Leake County, two private practice physicians utilize electronic medical records, but they do not presently communicate with the hospital.³⁶
- Leake County Memorial Hospital is infrastructure-ready to implement health information technology in their local hospital system, but the biggest barrier is the cost. The hospital is expecting to have health information technology up and running by 2011.³⁷

Many health care problems in rural areas can be traced to problems with access to primary or specialist care.

- Common admissions to Leake County Memorial Hospital are for pneumonia, respiratory infections, congestive heart failure, and failure to thrive (i.e., dehydration and malnourishment). Leake County also had higher rates of mortality due to major cardiovascular and heart diseases. Approximately one-third of the hospital's patients come from nursing homes; their health has taken a downturn, and they present with a fever, urinary tract infection, etc.³⁸
- Leake County also has higher rates of mortality due to accidents, of which the major killer was motor vehicle accidents (105.1 deaths per 100,000 population), than does Mississippi overall (54.8 deaths per 100,000 population) and higher rates of heart disease (382 per 100,000 versus 316.7 per 100,000).³⁹

This report illustrates that the cost of maintaining the health care system status quo remains a significant burden to local providers in rural areas like Leake County, Mississippi. Significant changes in health care finance, delivery, and organization are needed to ensure continuous access to essential services.

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³⁵ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁶ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁷ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁸ Personal communication, Robert Faulkner, Hospital Administrator, Leake County Memorial Hospital. (June 24, 2009).

³⁹ <http://www.msdc.state.ms.us/county/Leake.pdf>.