

A Case Study of Developments in Rural Health in Difficult Economic Times: Nemaha County, Nebraska

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INTRODUCTION

The U.S. health care crisis is especially strong in rural communities. The experience of Nemaha County, a small county located in southeastern Nebraska, illustrates the reach of these problems into counties that are somewhat stable during times of economic turbulence.

Nemaha County faces some 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 Nemaha County

Nemaha County is home to approximately 7,085 people.¹ Auburn is the county seat and the county's largest town, with a population of about 3,267.²

Nemaha County was one of the initial eight counties of the Nebraska Territory. Its location along the Missouri River makes it an ideal place for food cultivation.

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

- Nearly one in five Nemaha County residents are 65 years or older (19%), compared to 12% of the nation as a whole.³ In general, elderly Americans have greater and more complex health care needs.
- In 2007, 13% of all Nemaha County residents and 15% of the county's children were living in poverty. During this period, U.S. poverty rates were 13% overall and 18% among children.³ Poverty is associated with health care access problems for the low-income population and financial difficulties for local health care providers.

¹ 2008 U.S. Census Bureau.

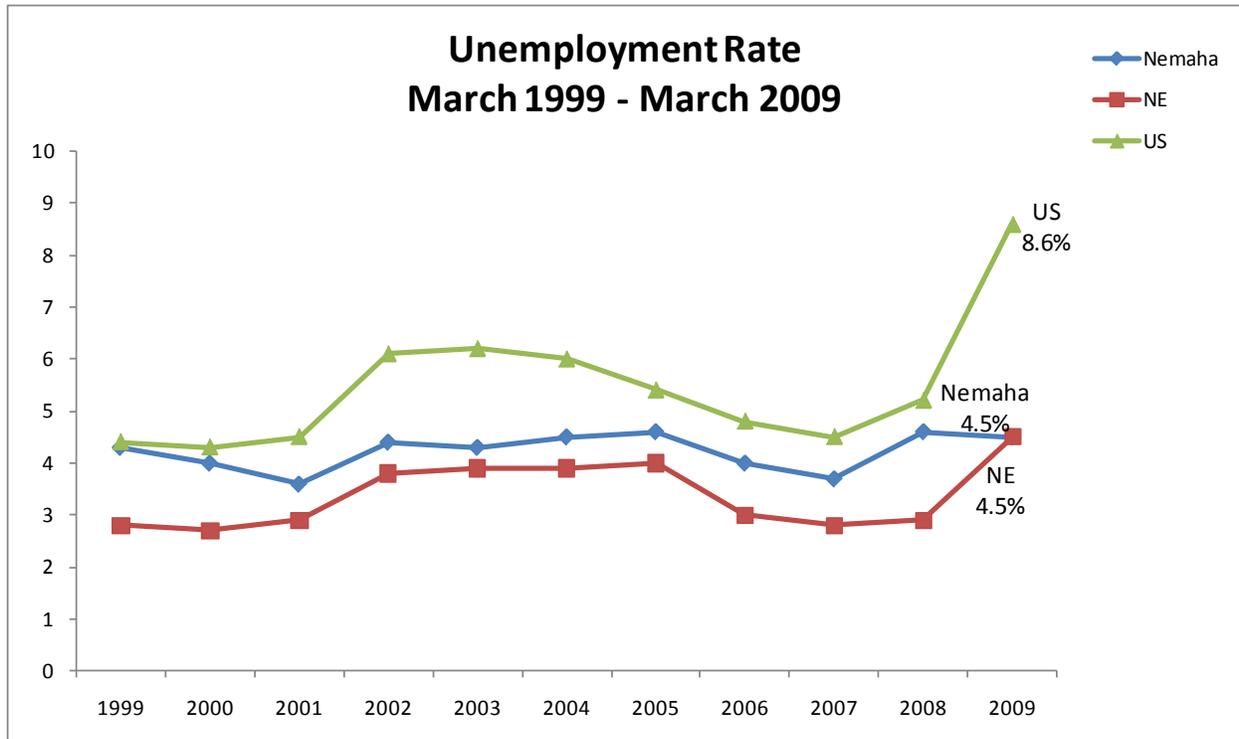
² 2007 U.S. Census Bureau.

³ 2000 U.S. Census Bureau.

Although many counties similar to Nemaha County have been hit hard by the current economic downturn, Nemaha County's economy has been fortunate to have been only slightly impacted.⁴

Nemaha County has not seen any major job losses or business closures as a result of the recent economic downturn. However, there has been a slow-down of companies' growth as signaled by layoffs due to lack of work opportunities, including at a cabinet manufacturing and metal plating company.⁵

By March 2009, the unemployment rate in Nemaha County had reached 4.5%, an increase from 3.5% in March 2008. The county's unemployment rate is comparable to the overall state rate of and much lower than the national rate of 8.6%.⁶



Source: U.S. Bureau of Labor Statistics.

DIMINISHING ACCESS TO HEALTH CARE

Historically, Nemaha County has had a high uninsurance rate.

In 2005, 12.2% of Nemaha County residents were uninsured, which was on par with the state percentage.⁷ Nationally, the percentage was higher at 15.9%.⁸

Nationally, every one percentage increase in the unemployment rate is associated with an increase in the uninsured of approximately one million people.⁹ However, states with larger increases in the unemployment rate have larger percentage increases in the number of uninsured.¹⁰

⁴ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

⁵ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

⁶ U.S. Bureau of Labor Statistics (June 2009).

⁷ 2005 U.S. Census Bureau (June 2009) <http://www.census.gov/cgi-bin/hhes/sahie/sahie.cgi>.

⁸ 2005 U.S. Census Bureau (June 2009) <http://www.census.gov/hhes/www/hlthins/hlthin05/hlth05asc.html>.

Rural residents have less access to job-based health insurance.

Nemaha County is fortunate to have a few substantial employers, including the Nebraska Public Power District, which employs approximately 750 people. Other employers within the county include Ariens Company, a lawn equipment manufacturing company; Armstrong Cabinets, a cabinet manufacturing company; and Macmillan Metal, a metal plating company.¹¹

Many Nemaha County residents rely on public health insurance.

In 2007, 1,425 Nemaha County residents (20.1%) were enrolled in Medicare.¹² In 2008, the average monthly eligible for Medicaid in Nemaha County was 871 persons. Of those 871 Medicaid eligible persons, 489 were children receiving either CHIP or Medicaid.¹³

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

With only five physicians in the county,¹⁴ the county's physician-to-population ratio is lower than ratios for Nebraska and the United States overall: 71 physicians to 100,000¹⁵ population as compared to 199 physicians to 100,000 population for Nebraska¹⁶ and 214 physicians to 100,000 population for the United States overall.¹⁷

Rural county leaders are particularly concerned about the lack of access to health care services. There are about four dentists for every 10,000 residents in Nemaha County,¹⁸ well below the national rate (six dentists per 10,000 population). Furthermore, there are no physicians in Nemaha County with a primary specialty related to mental health.¹⁹

FINANCIAL DIFFICULTIES OF LOCAL PROVIDERS

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

Nemaha County Hospital, a 20-bed critical access hospital located in Auburn, has served the residents of Nemaha since 1963. Nemaha County Hospital currently has 101 employees, with 80 full-time equivalents.²⁰

Unlike many rural hospitals, Nemaha County Hospital is not vulnerable to changes in physician supply. They have a stable supply of physicians ranging in age from the mid-30s to late-50s who plan on

⁹ 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>.

¹⁰ 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.

¹¹ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

¹² Centers for Medicare and Medicaid Services. <http://www.cms.hhs.gov/MedicareEnrpts/>.

¹³ Personal Communication, Ann Linneman, Program Analyst/Lead, Nebraska Department of Health and Human Services (June 18, 2009).

¹⁴ Health Professions Tracking Service, UNMC, 2008.

¹⁵ Health Professions Tracking Service, UNMC, 2008.

¹⁶ Health Professions Tracking Service, UNMC, 2007.

¹⁷ New York Center for Health Workforce Studies (October 2006).

¹⁸ 2006 Area Resource File.

¹⁹ 2006 Area Resource File.

²⁰ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

remaining long-term.²¹ However, Nemaha County Hospital employees are aging, with 31 out of 101 employees over the age of 55 years.²²

A high proportion of Nemaha County Hospital's patients are insured by Medicare, and a few are insured by Medicaid. Eighty percent of inpatient admissions and 50% of outpatient admissions are of Medicare beneficiaries. Although Nemaha County Hospital receives Medicare reimbursement based on allowable costs plus 1%, they still incur bad debt from those who cannot cover the full cost of care.²³

Approximately 10% of patients at Nemaha County Hospital are unable to cover the full cost of their care, either because they lack insurance coverage or because they face high out-of-pocket costs under the insurance they do have.²⁴

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, less than 20% of inpatient admissions and 50% of outpatient admissions for Nemaha County Hospital.

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.²⁵

In Nemaha County, the number of patients who cannot afford to pay for their health care has slightly increased in the past six months.

The amount of charity care provided at Nemaha County Hospital has increased slightly in the past year. However, the hospital's charity care program is not widely utilized, mostly because people are deterred by the amount of paperwork. In order to be eligible for this program, the patient would first have to be refused by Medicaid. The program serves about 1% of the patients.²⁶

These cost issues were fueled by increases in both uninsurance and under-insurance. As local businesses look to curb health care costs, Nemaha health providers have noticed a moderate increase in the number of patients with very high deductible health plans.²⁷ Many of these patients cannot afford to meet their deductibles, forcing them to either forgo care or rely on charity care from local providers.

²¹ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

²² Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

²³ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

²⁴ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

²⁵ Ziller EC, Coburn AF, Anderson NJ, Loux SL. Uninsured rural families. (2008). *Journal of Rural Health*, 24(1), 1-11. Accessed May 18, 2009.

²⁶ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

²⁷ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

In rural communities, an increasing number of residents cannot afford their prescribed medications. Rural privately insured individuals are less likely to have prescription drug coverage than those in urban areas.²⁸ In Nemaha County, providers typically work with the drug companies to get prescription drugs for free or at reduced rates for those who cannot afford their prescribed medications. Currently, about 1% of residents cannot afford their prescription drugs; however, the number is expected to increase.²⁹

ADDRESSING 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.

Access to information technology is uneven in rural communities.

- Adoption of electronic health records by hospitals in rural areas has been slower than in metropolitan areas.
- Nemaha County's one medical practice has electronic medical records, and the county hospital has had health information technology since 2003. However, the practice and hospital systems do not communicate with each other.³⁰

Reasons for hospitalization and mortality in rural areas can be related to characteristics of the rural environment.

- In Nemaha County, residents are more likely than the average Nebraska resident to be hospitalized because of pneumonia, heart disease, and gastrointestinal issues.³¹
- Nemaha County also has higher rates of mortality due to accidents (124.2 deaths per 100,000 population), chronic lung disease (55.2 per 100,000 population), heart disease (262.2 per 100,000 population), cancer (262.2 per 100,000 population), Alzheimer's disease (138.0 per 100,000 population), pneumonia (82.8 per 100,000 population), nephritis and nephrosis (41.4 per 100,000 population), and suicides (27.6 per 100,000 population) than Nebraska.³²

CONCLUSION

Experiences in Nemaha County, Nebraska, demonstrate that rural counties with a history of stability in the local economy and in the health care system have been prey to the same economic stress as other counties that are less well off. Given this trend, significant changes in health care finance, delivery, and organization are needed to ensure continuous access to essential services.

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²⁸ Ziller EC, Coburn AF, and Yousefian AE. (2006). Out-of-pocket health spending and the rural underinsured. *Health Affairs*, 25(6), 1688-1699. Accessed May 26, 2009.

²⁹ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

³⁰ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

³¹ Personal Communication, Marty Fattig, CEO, Nemaha County Hospital (June 23, 2009).

³² Nebraska Department of Health and Human Services <http://www.hhs.state.ne.us/ced/vs.htm#Deaths>.