

# THE RURAL SOUTH: Preparing for the Challenges of the

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## Who loses? What happens when a community loses its health care infrastructure?

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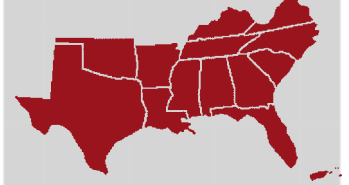
Changes in the Medicare payment policy imposed by the Balanced Budget Act (BBA) in 1997 are causing severe financial stress on rural health providers. The impact on rural hospitals clearly illustrates how access to primary health care in many rural communities may be jeopardized. BBA payment changes include:

- ♦ reductions in the annual increase in inpatient payments to a level below hospital costs;
- ♦ outpatient payments;
- ♦ payment for home health services; and
- ♦ payment for skilled nursing care.

Two national studies have been completed to illustrate the impact of the BBA on rural hospitals. An Ernst and Young [6] study conducted for the Health Care Financing Authority (HCFA), shows that the total operating margins for small hospitals (less than 100 beds) are expected to decrease from 5.1 percent before the BBA to -5.6 percent by the year 2009. The Lewin Group's research study [8] for the American Hospital Association (AHA) found that even if hospitals are able to hold costs at a percentage point less than the rate of increase in the market basket index, the margin for rural hospitals for all Medicare payments would be -7.04 percent in the year 2002. For rural hospitals of fewer than 50 beds, the outcome would be even worse with payments resulting in a margin of -12.94 percent. These conditions, unless changed, will cause many rural hospitals to close. In fact, the Oklahoma Hospital Association estimated that 23 rural hospitals in that state are in danger of closing within the next three years if solutions for their financial solvency are not found.

A key safety net feature allowing for the creation of the Critical Access Hospital (CAH) was included in the BBA. This reflects a new provider type eligible for full cost Medicare reimbursement. As community and hospital leaders anticipate the financial stress brought about by BBA and whether to convert their financially

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stressed hospital to a CAH or close, it is critical that local leaders know the importance of the health sector on their local economy. In essence if a community loses a hospital or other health care providers, who loses ultimately? It is the objective of this document is to outline the importance of the health sector to the local economy. More specifically the briefing will demonstrate:

- ♦ the importance of the health sector for industrial and business growth;
- ♦ the importance of the health sector for retirement growth;
- ♦ how the health sector promotes job growth; and
- ♦ the importance of the health sector for community employment, income, retail sales, and sales taxes.

**Health Services and Rural Development**

The nexus between health care services and rural development is often overlooked. At least three primary areas of commonality exist. A strong health care system can help attract and maintain business and industry growth, and attract and retain retirees. A strong health care system can also create jobs in the local area.

**The Importance of the Health Sector for Business and Industrial Growth**

Studies have found that quality-of-life (QOL) factors are playing a dramatic role in business and industry location decisions. Among the most significant of those QOL variables are health care and educational services (Table 1).

**Table 1. Services that Impact Rural Development**

Type of Growth	Services Important to Attract Growth
Industrial and Business	Health and Education
Retirees	Health and Safety

Health care services are important for at least three reasons.

First, as noted by a member of the Board of Directors [2] of a community economic development corporation, good health and education services are imperative to industrial and business leaders as they select a community for location. Employees and participating management may offer strong resistance if they are asked to move into a community with substandard or inconveniently-located health services.

Second, when a business or industry makes a location decision, it wants to ensure that the local labor force will be productive, and a key factor in productivity is good health. Thus, investments in health care services can be expected to yield dividends in the form of increased labor productivity.

The cost of health care services is the third factor that is considered by business and industry in development decisions. A 1990 site selection survey by Lyne [9] concluded that corporations are taking a serious look at health care costs. Sites which provide health care services at a low cost are sometimes given priority. In fact, 17 percent of the respondents indicated that their companies used health care costs as a tie-breaking factor between comparable sites.

## The Importance of Health Sector for Retirement Growth

A strong and convenient health care system is important to retirees, a special group of residents whose spending and purchasing can be a significant source of income for the local economy. Many rural areas have environments (e.g., good climate and outdoor activities) that enable them to be in a good position to attract and retain retirees. The amount of spending embodied in this population, including the purchasing power associated with Social Security, Medicare, and other transfer payments, is substantial. Additionally, middle and upper income retirees often have substantial net worth. Although the data are limited, several studies suggest health services may be a critical variable that influences the location decision of retirees. For example, one study [11] found that four items were the best predictors of retirement locations: safety, recreational facilities, dwelling units, and health care. Another study [10] found that nearly 60 percent of potential retirees noted that health services were a “must have” attribute when considering a retirement community. Only protective services were mentioned more often than health services as a “must have” service (see Table 1).

### Health Sector and Job Growth

A factor important to the success of rural economic development is job creation. Nationally, employment in health care services increased by 24 percent from 1990 to 1997, and by more than 200 percent since 1970 (see Table 2). In rural areas, employment in health-related services often accounts for 10-15 percent of total employment. This is reflected in the fact that the hospital is often the second largest employer in a rural community.

It is also important to note that the health sector is a growing sector. Table 2 shows how health services, as a share of gross domestic product (GDP), have increased over time. In 1970, Americans spent \$73.2 billion on health care, accounting for 7.1 percent of the GDP. In 1997, health care costs ballooned to over \$1.1 trillion, or about 13.5 percent of the GDP. If current trends continue, it will not be long before Americans will be spending 20 percent of GDP on health care. Capturing this economic growth can only help rural communities.

## The Issues

As a result of the passage of the Balanced Budget Act of 1997, many rural hospitals and health care providers have experienced financial stress due to reductions in Medicare payments associated with health services. Many people fail to realize how much the health sector contributes not only to the well-being of local residents, but also to the economic vitality of a community.

### Importance of the Health Sector

- ♦ Quality care services serve to attract businesses to the community and help promote greater productivity on the part of the local labor force.
- ♦ A strong and accessible health care system helps to attract and retain retirees, people who have the potential to expand many resources locally.
- ♦ Health services are a key economic engine in rural communities, representing a sizable number of jobs in many rural localities.

### Implications

- ♦ The decline of the health sector translates into a decline in the economic health of many rural communities.
- ♦ High-quality health service is vital to a community’s hopes of attracting industries, businesses, or retirees to the area.
- ♦ Reduction in the health infrastructure of a community disproportionately hurts its most vulnerable populations—the poor, medically fragile, elderly, and children.
- ♦ Local leaders must be pro-active in strengthening their communities’ health infrastructure.

“Good health and education services are imperative to industrial and business leaders as they select a community for location.”

**Table 2. National Health Expenditures and Employment Data**

Year	Total Expenditures (Billions \$)	Per Capita Expenditures	Expenditures as a Percent of GDP	Employment In Health Sector (Thousands of Jobs)
1970	73.2	\$341	7.1	3,053
1980	247.3	\$1,052	839	5,278
1990	699.5	\$2,691	12.2	7,814
1996	1,035.1	\$3,759	13.6	9,477
1997	1,100.0	\$3,923	13.5	9,710

Despite cost containment, national expenditures are certain to accelerate in the future, because of a projected increase in income and population (especially the elderly) and new drugs and medical technology. Smith and colleagues [12] project national spending for health to double between 1996 and 2007.

**Local Impacts of the Health Sector on Income Employment, Retail Sales, and Sales Taxes**

To illustrate the economic impact of the health sector on a community’s economy, an application of an impact model [a] is presented for Noble County, Okla. Then, summary impact statistics for several Oklahoma counties are presented to provide generalized statistics.

**An Oklahoma Example**

A model to estimate the economic impact of the health sector has been developed by Doeksen, Johnson, and Willoughby [3]. It uses data and regional tools that are available at the county level. Noble County, Okla., will be used to demonstrate the model. The county is located in Central Oklahoma and has approximately 11,000 residents. The model has five health sectors which include hospitals; physicians, dentists, and other professionals; nursing homes and other residential facilities; other medical and health services; and pharmacies. Employment and payroll information associated with each sector must be locally collected. For Noble County, the data are presented in Table 3. These are referred to as the direct economic activities and do not include the secondary benefits which arise due to employee and business spending. In Noble County, there are 65 people employed by the hospital, 36 by physicians, dentists, and other professional offices, etc. Total health sector jobs are 231 and a payroll of \$5,031,468.

The secondary benefits are measured by county employment and income multipliers. These multipliers measure all secondary impacts of the health sector dollars as they flow through the county economy. The multipliers and impacts for Noble County are presented in Table 4.

The data in Table 4 clearly demonstrate the impact for each health sector, as well as the total health sector. For example, the hospital has 65 employees and the multiplier for that sector is 1.46. Total employment impact is 95. Thus, the total income from the hospital’s activities is \$2,239,727, generating retail sales of \$671,918, and three cent sales tax collections of \$20,157. Thus, the total impact of the health sector on the economy is 363 jobs, \$7,064,881 in income, \$2,319,464 in retail sales and \$63,585 in sales tax.

**Table 3. Local Data Needed for Health Sector Impact Analysis Noble County, Oklahoma**

<b>Sector</b>	<b>Employees</b>	<b>Payroll</b>
<b>Hospitals</b>	65	1,561,968
<b>Physicians, Dentist and other Professional Offices</b>		
Physicians	24	740,000
Dentist	9	248,000
Optometrists	3	133,500
Other Physicians	0	0
<b>Subtotal</b>	36	1,121,500
<b>Nursing Homes and other Residential Facilities</b>		
Nursing Homes	100	1,510,000
Retirement Centers	0	0
<b>Subtotal</b>	100	1,510,000
<b>Other Medical and Health</b>		
Home Health Care	7	175,000
County Health Department	7	175,000
Other Medical Services	0	0
<b>Subtotal</b>	14	350,000
<b>Pharmacies</b>	16	488,000
<b>Total</b>	231	5,031,468

**Summary Statistics of Application to Nine Counties**

The procedure discussed in the previous section was applied to nine Oklahoma counties. Summary statistics are provided in Table 5.

Key results from these studies include:

- ♦ approximately 9 percent of all employment was directly working in the health sector;
- ♦ about 14 percent of all employment was attributed to the health sector (direct and secondary);
- ♦ employment multipliers ranged from 1.3 to 1.81;
- ♦ income multipliers ranged from 1.45 to 1.87;
- ♦ the hospital often was the second-largest employer in the county; and
- ♦ nursing homes created a large number of jobs in many rural counties.

The analysis provides strong evidence that the economic effects of the health sector on these counties are large. If the health sector increases or decreases in size, the medical health of the county, as well as its economic health, will be greatly affected. To attract industrial firms, businesses, and retirees to any rural community, it is crucial that the area have a high-quality health sector. A vibrant health sector greatly contributes to the economic health of that county. A recent study by Cordes, Sluis, Lamphear, and Hoffman [1] further supports the above results. The researchers concluded that the absolute and relative contribution of the local hospital to the local economy increased as hospital size increased.

**Policy Implication**

Since hospitals and other health infrastructures are critical for the viability of rural communities, policies to help them are crucial. The

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**Table 4. Total Health Sector Impacts for Noble County, Oklahoma**

	Hospital	Physicians, Dentist and Other Professionals	Nursing & Protective Care	Other Medical and Health Services	Pharmacies
<b>Employment</b>					
Direct	65	36	100	14	16
Multiplier <sup>a</sup>	1.46	1.54	1.68	1.60	1.44
<b>Total</b>	95	55	168	22	23
<b>Income</b>					
Direct	\$1,561,968	\$1,121,500	\$1,510,000	\$350,000	\$488,000
Multiplier	1.43	1.31	1.36	1.55	1.55
<b>Total</b>	\$2,239,727	\$1,470,967	\$2,058,330	\$541,229	\$754,628
<b>Revenues</b>					
Direct	\$2,123,971	\$2,195,146	\$3,638,554	\$651,769	\$908,752
Multiplier	1.99	1.47	1.49	1.62	1.92
<b>Total</b>	\$4,219,692	\$3,226,206	\$5,415,988	\$1,054,628	\$1,740,715
<b>Retail Sales</b>	\$671,918	\$441,290	\$817,499	\$162,369	\$226,388
<b>Sales Taxes</b>	\$20,157	\$13,239	\$18,525	\$4,872	\$6,792

<sup>a</sup> Multipliers in above table have been rounded. Thus, multiplication of direct effect times multipliers will not equal total effect.

Balanced Budget Act, which allowed for creation of Critical Access Hospitals (CAH) must be further supported and refined. For example, the flexibility to choose an all-inclusive payment option for outpatient services provided by a primary care provider should be revised to allow such services to be reimbursed on a cost basis. Another policy which would help rural hospitals would be to reimburse emergency medical services operated by CAH's. Another example would be to reimburse emergency medical services operated by CAH's on a cost basis for Medicare patients. Medical professionals are often in short supply in rural areas. Any policy impacting the availability or encouragement of providers to move into rural areas should be kept and expanded. Some examples include:

- ♦ reauthorization of the National Health Services Corps (the Corps assists with placing professionals in shortage areas), and
- ♦ support and expansion of the programs that created rural health clinics, federally qualified health centers, and community health clinics.

Only with adequate professionals in viable CAH's and clinics will access to primary care in rural areas exist and in turn help to keep rural communities economically viable.

### Summary

It is clear that if a community loses its hospital infrastructure, the local residents are the big losers as access to primary health care declines, and jobs and wages are lost. The losses mount over time. As documented by Hart,

**Table 5. Summary Results of Applying Model to Nine Oklahoma Counties**

Item	Low	High	All Counties
<b>Percent Direct Employment in Health Sector</b>	7	10	9
<b>Percent Direct and Secondary Employment in Health Sector</b>	9	19	14
<b>Employment Multiplier</b>	1.30	1.81	1.58 <sup>a</sup>
<b>Income Multiplier</b>	1.45	1.87	1.69 <sup>a</sup>

<sup>a</sup> Average of Nine Multipliers

Pirani, and Rosenblatt [7], if a community loses a hospital, in time its doctors will leave. Once this happens, other health services are more likely to depart the community. Furthermore, research demonstrates that the poor and elderly of a community are the main residents to suffer from a reduction in health infrastructure. In a recent article, Sullins, Des Harnass, and Bernard [13] concluded that if a rural hospital closes, the areas most vulnerable population such as the poor, medically fragile, elderly and children suffer negative effects as an outcome of such a closure.

By recognizing that a variety of people will be the losers, it is crucial that community leaders be pro-active in promoting and supporting their health infrastructure. A pilot project by Doeksen, Myers, et al [5], "Operation Rural Health Works," was completed in Oklahoma, Missouri, Kentucky, Pennsylvania, and Nevada. In these states, an economic impact, as presented in this briefing, was conducted for all counties. Since then, the project has been made accessible to professionals in all states. The impact analysis can be used to encourage community leaders to be pro-active in planning their health care system and to encourage community residents to utilize their health care system. Planning of a health care system enables local residents to design a system which is financially viable and also meets the needs of the population. The process should lead to quality care which local resident will utilize. The end result is a viable rural community which will be more successful in the efforts to capture new business and industry, and to attract or retain retirees.

“If the health sector increases or decreases in size, the medical health of the county, as well as its economic health, will greatly be affected.”

**Endnotes**

[a] An expanded version of model results are presented in Doeksen [4] and a detailed version of model is presented in Doeksen [3].

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