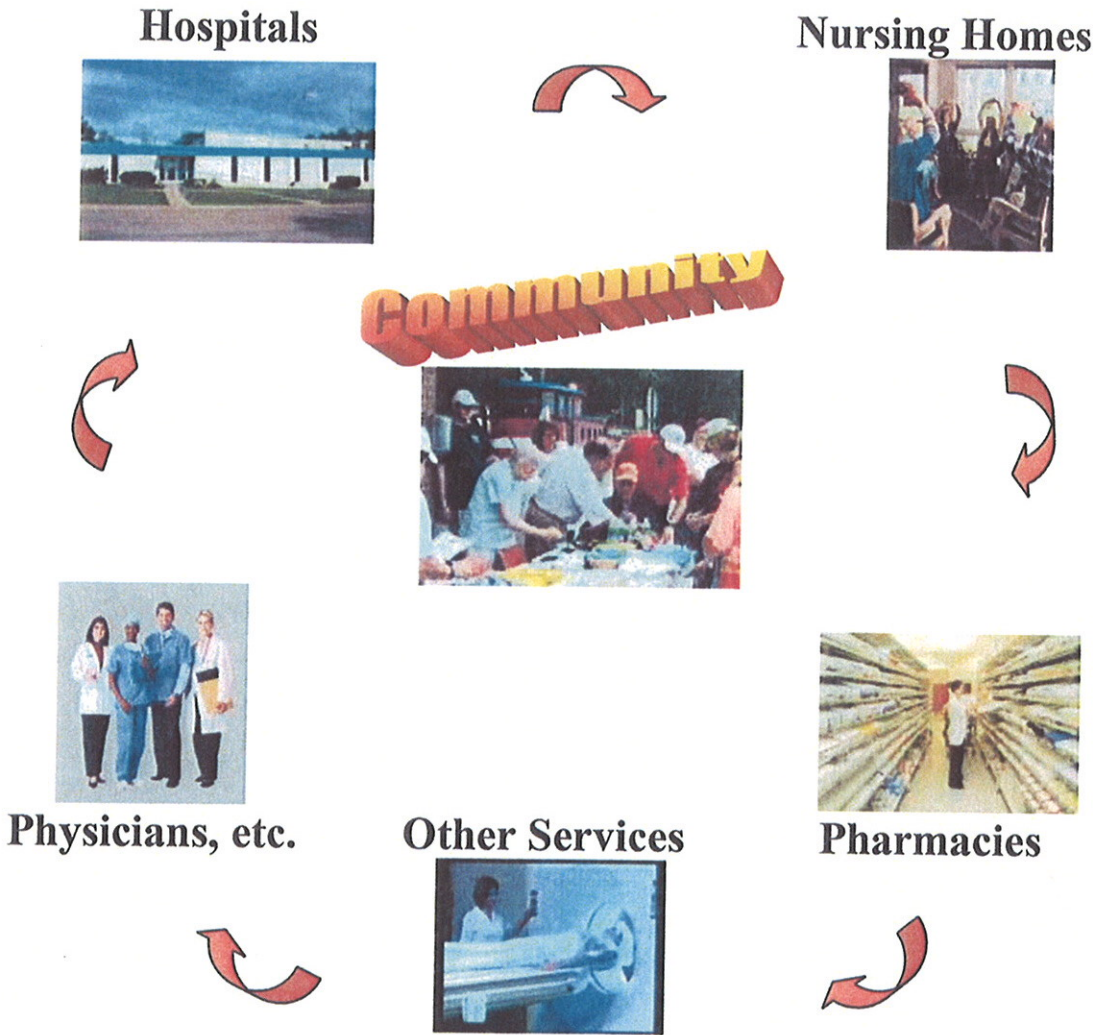


Appendix A

The Economic Impact of the Health Sector on the McCurtain Memorial Hospital Medical Service Area



Oklahoma Office of Rural Health
OSU Center for Rural Health

Oklahoma Cooperative Extension Service
Oklahoma State University

September 2011

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on the McCurtain Memorial Hospital Medical Service Area

**Community Health Engagement Process documents available online at:
www.okruralhealthworks.org**

Lara Brooks, Assistant Extension Specialist, OSU, Stillwater
Phone: 405-744-6083, Fax: 405-744-9835, Email: lara.brooks@okstate.edu

Brian Whitacre, Assistant Professor and Extension Economist, OSU, Stillwater
405-744-6083

Jack Frye, Area Extension Rural Development Specialist, OSU, Ada
580-332-4100

Brad Bain, McCurtain County Extension Director, Idabel
580-286-7558

Corie Kaiser, Assistant Director, Oklahoma Center for Rural Health, Oklahoma City
405-840-6500

Val Schott, Director, Oklahoma Center for Rural Health, Oklahoma City
405-840-6500

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Medical facilities have a tremendous medical and economic impact on the community in which they are located. This is especially true with health care facilities, such as hospitals and nursing homes. These facilities not only employ a large number of people and have a significant payroll, but they also draw a large number of people from rural areas that need medical services into the community. The overall objective of this study is to measure the economic impact of the health sector on the McCurtain Memorial Hospital medical service area. The specific objectives of this report are to:

1. Review economic trends of the health sector for the U.S. and McCurtain County;
2. Identify the population for the medical service area of McCurtain County;
3. Summarize the direct economic activities of the health sector;
4. Review concepts of community economics and multipliers; and
5. Estimate the secondary and total impacts of the health sector on the McCurtain Memorial Hospital medical service area.

No recommendations will be made in this report.

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 following section looks at how the health care sector impacts these areas.

Services that Impact Rural Development

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

Business and Industry 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 the QOL variables are health care services, which are important for at least three reasons.

First, as noted by a member of the Board of Directors of a community economic development corporation, the presence of good health and education services is 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.

Secondly, 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. Research shows that corporations take a serious look at health care costs in determining site locations. Sites that provide health care services at a lower cost are given higher consideration for new industry than sites with much higher health care costs.

Health Services and Attracting Retirees

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., moderate 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 found that four items were the best predictors of retirement locations: safety, recreational facilities, dwelling units, and health care. Another study found that nearly 60 percent of potential retirees said health services were in the “must have” category when considering a retirement community. Only protective services were mentioned more often than health services as a “must have” service.

Health Services and Job Growth

A factor important to the success of rural economic development is job creation. *The health care sector is an extremely fast growing sector, and based on the current demographics, there is every reason to expect this trend to continue.* Data in **Table 1** provide selected health expenditures and employment data for the United States. Several highlights from the national data are:

- In 1970, health care services as a share of the national gross domestic product (GDP) were 7.2 percent. This increased to 16.2 percent in 2008;
- Per capita health expenditures increased from \$356 in 1970 to \$7,681 in 2008;
- Employment in the health sector increased almost 341.0 percent from 1970 to 2008; and

- Annual increases in employment from 2003 to 2008 ranged from 2.0 percent to 4.0 percent.

In addition, the Bureau of Labor Statistics projects substantial increases in health care expenditures from 2010 through 2020. In fact, the U. S. Department of Health and Human Services, Centers for Medicare and Medicaid Services predict that health care expenditures will account for 18.6 percent of GDP by 2016 and increase to 19.8 percent of GDP in 2020. Per capita health care expenditures are projected to increase to \$11,099 in 2016 and to \$13,709 in 2020. Total health expenditures are projected to increase to \$4.6 trillion in 2020.

Table 1
United States Health Expenditures and Employment Data
1970-2009; Projected for 2010, 2013, 2016, 2019, & 2020

Year	Total Health Expenditures (\$Billions)	Per Capita Health Expenditures (\$)	Health as % of GDP (%)	Health Sector Employment (000)	Avg. Annual Increase in Employment (%)
1970	\$74.8	\$356	7.2%	3,052 ^a	
1980	255.7	1,110	9.2%	5,278 ^a	7.3%
1990	724.0	2,853	12.5%	7,814 ^a	4.8%
2000	1,378.0	4,878	13.8%	10,858 ^a	3.9%
2001	1,495.3	5,240	14.5%	11,188 ^a	3.0%
2002	1,637.0	5,682	15.4%	11,536 ^a	3.1%
2003	1,772.2	6,098	15.9%	11,817 ^b	N/A
2004	1,894.7	6,458	16.0%	12,055 ^b	2.0%
2005	2,021.0	6,827	16.0%	12,314 ^b	2.1%
2006	2,152.1	7,198	16.1%	12,602 ^b	2.3%
2007	2,283.5	7,561	16.2%	12,947 ^b	2.7%
2008	2,391.4	7,845	16.6%	13,290 ^b	2.6%
2009	2,486.3	8,086	17.6%	13,543 ^b	1.9%
Projections					
2010	2,584.2	8,327	17.6%		
2013	2,980.4	9,349	17.6%		
2016	3,632.0	11,099	18.6%		
2019	4,346.5	12,952	19.4%		
2020	4,638.4	13,709	19.8%		

SOURCES: Bureau of Labor Statistics (www.bls.gov [August 2011]); U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services, National Health Expenditures 1970-2009 and National Health Expenditure Projections 2010-2020 (<http://www.cms.hhs.gov/nationalhealthexpenddata> [August 2011]).

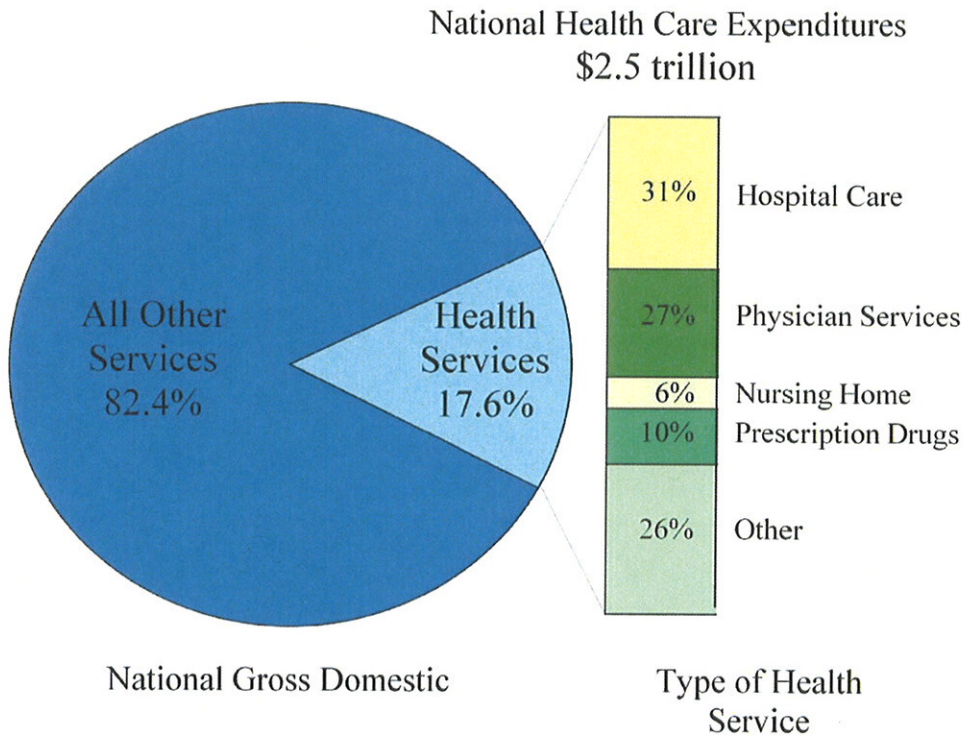
N/A - Not Available.

^a Based on Standard Industrial Classification (SIC) codes for health sector employment.

^b Based on North American Industrial Classification System (NAICS) for health sector employment.

Figure 1 illustrates that health services accounted for 16.2% of all national expenditures (as reported by the gross domestic product). This figure also breaks the amount spent on health services into various categories. The largest health service type was hospital care, representing 31.0 percent of the total. The next largest type of health services was physician services with 21.0 percent of the total. Community health centers, home health services, and other medical services are allocated in “other” category, which accounts for 32.0 percent.

**Figure 1.
National Health Expenditures
as a Percent of Gross Domestic Product
and by Health Service Type, 2009**



McCurtain County Economic Trends

Data relative to the health sector for McCurtain County are provided in **Table 2**. Data in **Table 2** are from the U. S. Census Bureau County Business Patterns, based on the North American Industry Classification System (NAICS). The table shows employment and payroll for both health services and total county services for McCurtain County. Further, it indicates the percentage of total employment and payroll that health services make up, at the county and state level. This table states how health services have changed over time. Health services employment in McCurtain County increased 28.2 percent from 1,131 employees in 2002 to 1,450 employees in 2009 (**Table 2**). During the same time period, the total county employment decreased 5.5 percent. County health services employment as a percent of total county employment increased from 13.5 percent in 2002 to 18.4 percent in 2009, while the state health services employment as a percent of total state employment increased from 15.1 percent in 2002 to 16.0 percent in 2009. The county saw an increase of 4.9 percent over this eight year period, while the state grew 0.9 percent.

The county health services payroll experienced a more dramatic trend compared to employment. McCurtain County's health services payroll increased 74.5 percent from about \$20.9 million in 2002 to about \$36.4 million in 2009; this compares to an increase of 9.3 percent for the total county payroll (**Table 2**). State health services payroll as a percent of state payroll increased 1.6 percent from 2002 to 2009. County health services payroll as a percent of total county payroll increased from 11.2 percent in 2002 to 17.9 percent in 2009.

Table 2
 McCurtain Memorial Hospital
 Employment and Payroll for County Business Patterns*
 McCurtain County and the State of Oklahoma

Employment				
Based on	Health Services	Total County	Hlth Svcs as a % of Total County	Hlth Svcs as a % of Total State
NAICS ¹	Employment	Employment	Employment	Employment
2002	1,131	8,358	13.5%	15.1%
2003	1,104	8,046	13.7%	15.2%
2004	1,225	8,274	14.8%	15.4%
2005	1,263	8,316	15.2%	15.4%
2006	1,500	8,297	18.1%	15.1%
2007	1,362	7,919	17.2%	15.3%
2008	1,406	7,947	17.7%	15.3%
2009	1,450	7,895	18.4%	16.0%
% Change '02 - '09	28.2%	-5.5%		

Payroll				
Based on	Health Services Payroll	Total County Payroll	Hlth Svcs as a % of Total County Payroll	Hlth Svcs as a % of Total State Payroll
NAICS ¹	(\$1000s)	(\$1000s)	County Payroll	State Payroll
2002	\$20,856	\$185,529	11.2%	15.2%
2003	\$21,831	\$179,767	12.1%	15.2%
2004	\$24,059	\$191,292	12.6%	15.7%
2005	\$25,048	\$207,990	12.0%	15.5%
2006	\$28,942	\$204,236	14.2%	15.1%
2007	\$30,820	\$210,344	14.7%	15.3%
2008	\$34,514	\$214,037	16.1%	15.2%
2009	\$36,389	\$202,764	17.9%	16.8%
% Change '02 - '09	74.5%	9.3%		

Source: U.S. Census Bureau, County Business Patterns; 2002-2009 data (www.census.gov [September 2011]).

¹ The Health Care and Social Assistance NAICS sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities. Industries in this sector are arranged on a continuum starting with those establishments providing medical care exclusively, continuing with those providing health care and social assistance, and finally finishing with those providing only social assistance. The services provided by establishments in this sector are delivered by trained professionals. All industries in the sector shared this commonality of process, namely, labor inputs of health practitioners or social workers with the requisite expertise. Many of the industries in the sector are defined based on the educational degree held by the practitioners included in the industry.

* Data from County Business Patterns exclude self-employed persons, employees of private households, railroad employees, agricultural production workers, and for most government employees (except for those working in wholesale liquor establishments, retail liquor stores, Federally-chartered savings institutions, Federally-chartered credit unions, and hospitals).

Basic economic indicators of the McCurtain County economy are illustrated in **Table 3**. Based on Bureau of Economic Analysis data, the 2009 per capita income for McCurtain County of \$25,883 is lower than the per capita income for the state of Oklahoma and the United States.

Table 3
Economic Indicators for McCurtain County,
the State of Oklahoma and the Nation

Indicator	County	State	U.S.
Total Personal Income (2009)	\$863,722,000	\$132,132,355,000	\$12,168,161,000,000
Per Capita Income (2009)	\$25,883	\$35,837	\$39,635
Employment (2010)	13,570	1,630,925	139,064,000
Unemployment (2010)	1,696	123,765	14,825,000
Unemployment Rate (2010)	11.1%	7.1%	9.6%
Employment (July 2011)*	13,770	1,643,823	140,384,000
Unemployment (July 2011)*	1,427	100,863	14,428,000
Unemployment Rate (July 2011)*	9.4%	5.8%	9.3%
Percentage of People in Poverty (2009)	9.1%	27.0%	14.3%
Percentage of Under 18 in Poverty (2009)	14.5%	37.3%	20.0%
Transfer Dollars (2009)	\$310,564,000	\$25,988,390,000	\$2,131,880,000,000
Transfer Dollars as Percentage of Total Personal Income (2009)	36.0%	19.7%	17.5%

*County and State estimates are considered preliminary

SOURCES: 2011 Bureau of Labor Statistics; 2009 Bureau of Economic Analysis; 2009 U.S. Census Bureau.

According to the Bureau of Labor Statistics, the unemployment rate for McCurtain County was 11.1 percent for 2010, which was higher than the state (7.1 percent) rate and the national (9.6 percent) rate. Moreover, preliminary estimates for July 2011 indicate the unemployment rate for McCurtain County had decreased to 9.4 percent, which was again higher

than the state (5.8 percent) but slightly higher than the nation (9.3 percent). Also, the number of people employed in McCurtain County increased 1.5 percent from 2010 to July 2011. This is a common trend across the state. The number of people unemployed in McCurtain County decreased 15.9 percent during that same time period.

From the U. S. Census Bureau, the percent of people in poverty in McCurtain County was 27.0 percent in 2009, as compared to 16.1 percent for the state and 14.3 percent nationally. The percentage of people under age 18 in poverty in 2009 followed similar trends, with McCurtain County being higher than the state and the nation. Another economic indicator is the percent of personal income that is from transfer payments. Based on Bureau of Economic Analysis data, McCurtain County had 36.0 percent of total personal income from transfer payments, which is lower than the state and the nation. Transfer payments represent that portion of total personal income whose source is state and federal funds. These typically include social security, Medicare, and retirement / disability payments.

Just like other communities, sales tax collections from retail sales are extremely important, if not vital, to the city of Idabel and McCurtain County. **Figure 2** displays the trend of city level sales tax collections for Idabel. In nominal terms, Idabel has experienced a significant increase in sales tax collections. However, when the CPI is applied, inflation-adjusted collections still display a significant increase, especially from 1995 to present. Idabel's sales tax collections well above average for a community of Idabel's size (Population 5,000-10,000). As stated earlier, a healthy health sector is vital in rural development efforts. Local health services can also be very beneficial for local retail activity (Brooks and Whitacre, 2010).