



Center for Rural Health

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School of Medicine & Health Sciences

The Economic Importance of St. Joseph's Hospital and Health Center to Stark County, North Dakota



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*Connecting resources and knowledge to strengthen
the health of people in rural communities.*

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Introduction

St. Joseph's Hospital and Health Center ("St. Joseph's") is 25-bed, critical access hospital located in Dickinson, ND. As a hospital and accredited level IV trauma center, St. Joseph's provides comprehensive care for a wide range of medical and emergency situations. St. Joseph's operates three specialized clinics, and has three affiliated clinics in order to offer an all encompassing level of health care. In addition to this, St. Joseph's also operates two medical clinics, Beach Medical Clinic and Killdeer Medical Clinic, located in nearby counties. **Please note that this report is addressing impacts within Stark County only. Thus, any impacts from the Beach and Killdeer Medical Clinics are not included in this report.**

St. Joseph's offers a wide range of services including diagnostics, nutrition services obstetrics and a comprehensive range of rehabilitation care for both inpatient and outpatient. The acute care services consist of the medical /surgical/ pediatric unit, the intensive care unit, and the transitional care unit which provides inpatient care to patients of all ages. There is a complete surgical team to perform a vast range of specialties including orthopedics. They have a regional dialysis unit which provides chronic in-center hemodialysis for adolescent and adult patients with End Stage Renal Disease, along with a respiratory/sleep diagnostic program.

St. Joseph's has a vision to provide quality, compassionate care and they are drive by core values that include reverence, integrity, compassion and excellence. St. Joseph's mission is as follows:

Nurture the healing ministry of the Church by bringing it new life, energy and viability in the 21st century. Fidelity to the Gospel urges us to emphasize human dignity and social justice as we move toward the creation of healthier communities.

Objective

The purpose of this study is to illustrate the economic impact that St. Joseph's Hospital and Health Center has on the economy of Stark County. The objective is to show how St. Joseph's positively affects its local economy by quantifying the facility's effect on employment levels and labor income.

Health Care Overview

In rural America, the local hospital exists to meet the emergent and non-emergent needs of the community. That commitment is to the patients and their families by striving to provide the highest degree of health care for all needs. Rural Americans are guided by hometown values-

committed to quality services, continuity of care, assurance of qualified staff, and family involvement.

While the hospital is vital in that it provides medical services to all residents, it typically is also one of the largest employers in the county. Health care facilities are a source of external dollars, because most of their funding comes from sources outside the community such as the federal and state government. For many communities, the hospital is a source of millions of dollars in outside revenue. On the state level, the North Dakota Healthcare Association states that, “community hospitals contribute an estimated \$1.8 billion dollars in direct impacts to North Dakota’s economy,” in 2008 alone.

In addition, hospitals are a significant employer, hiring both professional and nonprofessional staff in order to provide the care needed in the community. Those employees, in turn, buy goods and services from local businesses. Over 18,800 people were employed by community hospitals in 2008 as either part-time or full-time employees, according to the North Dakota Healthcare Association. North Dakota has 38 rural hospitals: 36 Critical Access Hospitals and two Indian Health Services hospitals. In North Dakota, those Critical Access Hospitals have annual payrolls. For each payroll and benefit dollar expended, additional dollars of income are created in other industries. Thus the healthcare system is a vital component of the county’s fiscal well-being, providing not only much needed medical services but also a significant contribution to the county’s economy. A strong case exists for the economic benefits that rural hospitals bring to the cities and counties where they exist.

Approach and Methods

This report will first define the area of study and corresponding statistics. Next, an input-output analysis will be used to show the influence of the health sector on this area and its population. An input-output analysis models the interrelationship among all sectors – industry, households, government, health care, retail, faith, etc. – within an economy. It uses a multiplier effect to estimate the secondary impacts within an entire economy attributable to a change in a single sector. In other words, the multiplier effect refers to the way impacts from a primary source multiply to create secondary impacts throughout the rest of the economy.

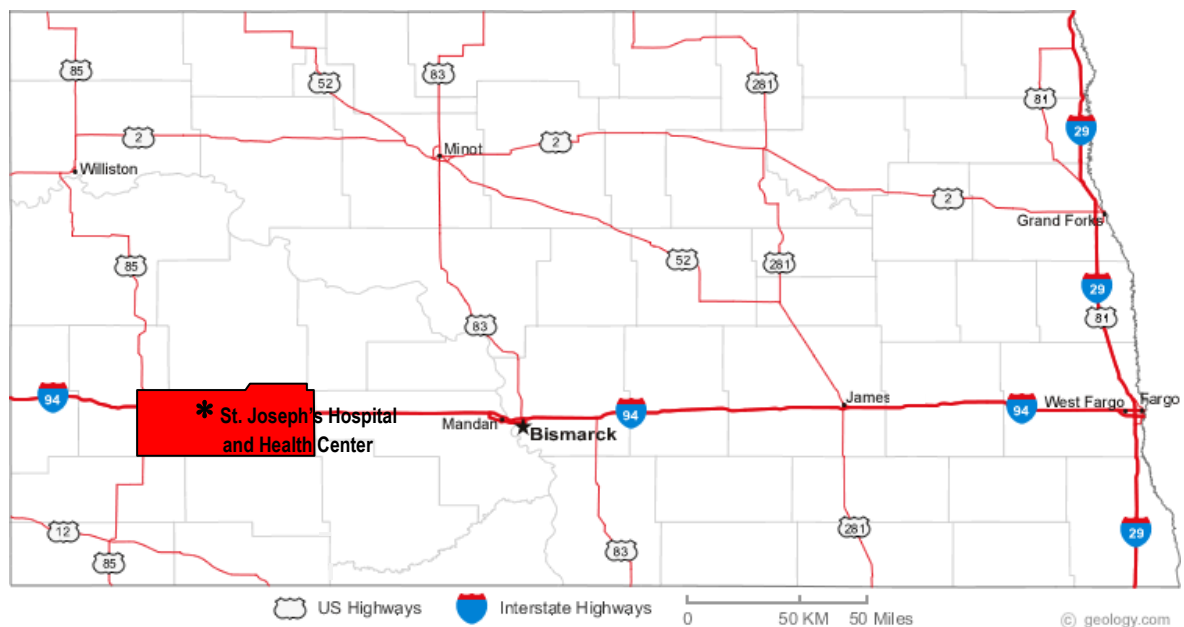
A type-II multiplier will be used in this report to derive secondary effects in two areas of St. Joseph’s: employment and labor income. The multipliers for employment and labor income have been calculated using the IMPLAN economic impact modeling software and data from The Minnesota IMPLAN Group, Inc. IMPLAN uses existing economic data in an input-output model. It uses a geographical database for model construction and impact analysis. IMPLAN was used to develop a countywide model of Stark County to derive the economic impact of St. Joseph’s

services. As mentioned above, St. Joseph's operates Beach and Killdeer Medical Clinics in nearby counties. The impacts of these clinics have been omitted as they operate outside of the Stark County border. Thus, employment and income values for these clinics were removed before applying economic multipliers.

Defining the Study Area

Stark County, North Dakota makes up the economy for this impact study. It is located in western North Dakota and is made up of 1,338 square land miles and houses 16.9 people per square mile (U.S. Census Bureau). St. Joseph's Hospital and Health Center is located in the county seat, Dickinson. Dickinson is approximately 98 miles west of Bismarck, ND along U.S. Interstate 94. The population of Dickinson was 16,010 in the 2000 census. Figure 1 highlights the location of Stark County and St. Joseph's Hospital and Health Center.

Figure 1 - Stark County, North Dakota



Study Area Statistics

According to 2009 fiscal year records, St. Joseph's in Dickinson employed a total of 457 full-time and part-time workers and provided \$16,444,391 in income and benefits to these employees. A breakdown of employment and labor income can be seen in figure 2. These values are direct impacts that St. Joseph's contributed to the Stark County economy in the year.

Figure 2 - Direct Impact Data

Direct Impact Data		
Direct Economic Impact of St. Joseph's Hospital & Health Center on Stark County		
St. Joseph's Hospital & Health Center	Employment (Full Time & Part Time)	Income (Wages & Benefits)
Facility Employment		
Hospital	416	
Clinic *	14	
Home Health & Hospice	27	
Labor Income		
Hospital		\$ 15,081,871
Clinic *		\$ 655,396
Home Health & Hospice		\$ 707,124
Total Direct Economic Impact	457	\$ 16,444,391

* Excluding services from the Beach and Killdeer Medical Clinics

SOURCE: Local data received from St. Joseph's Hospital & Health Center - FYE June 30, 2009

Results

The economic impact of St. Joseph's is not limited to the direct effect of employment and income it provides for the county. This direct impact also generates a secondary impact. The secondary impact looks at the relationship of the facility and its employees with other sectors in the county; it is the sum of all labor income and jobs that are created outside of the health sector. When the health center, or its employees, does commerce with other businesses in the county, it is demanding services and creating income for employees from those other businesses. For example, a secondary impact from St. Joseph's could include an employee of the hospital buying groceries at the local grocery store or the hospital purchasing cleaning supplies from a local retail store.

Using the IMPLAN data, as discussed above, employment and labor income multipliers were derived for health care services in Stark County. These multipliers were applied to the St. Joseph's direct data. A breakout of the multipliers and their effects can be seen in figure 3.

Figure 3 - Total Economic Impact

Total Economic Impact				
Total Impact of St. Joseph's Hospital & Health Center on the Stark County Economy				
Area of Impact	Direct Impact	Multiplier	Secondary Impact	Total Impacts
Employment				
Hospital	416	1.66613	277	693
Clinic *	14	1.97834	14	28
Home Health & Hospice	27	1.24551	7	34
Total Employment Impact	457		297	<u>754</u>
Labor Income				
Hospital	\$ 15,081,871	1.5182	\$ 7,814,837	\$ 22,896,708
Clinic *	\$ 655,396	1.6029	\$ 395,109	\$ 1,050,505
Home Health & Hospice	\$ 707,124	1.2473	\$ 174,870	\$ 881,994
Total Labor Income Impact	\$ 16,444,391		\$ 8,384,817	<u>\$ 24,829,208</u>

* Excluding services from the Beach and Killdeer Medical Clinics

SOURCE: Direct data received from St. Joseph's Hospital & Health Center - FYE June 30, 2009
Multipliers from Minnesota IMPLAN Group, Inc - 2007 data

The total economic impact on employment and labor income by St. Joseph's is the sum of the direct impact that the facility provides and the secondary impact that the facility creates through demand. The 457 jobs that St. Joseph's provides directly, creates another 297 jobs in the county outside of the facility, making a *total economic impact of 754 jobs*. Likewise, the \$16,444,391 that St. Joseph's provides its employees generates another \$8,384,817 of income in the county, providing Stark County with a *total impact of \$24,829,208 in labor income* for the year.

The Fiscal Status of North Dakota Hospitals

St. Joseph's is a vital component of the county's fiscal well-being. In North Dakota, in general, this vital resource is in trouble. If the local hospital took on the persona of the patients served, the North Dakota rural hospital would be listed as being in critical condition. A recent assessment of the financial performance of 34 Critical Access Hospitals in North Dakota reflects that those hospitals are experiencing a mean operating margin of -3.1% (Blue Cross Blue Shield Reimbursement Workgroup, 2009). For some critical access hospitals in North Dakota this amounts to a loss of more than \$500,000 a year. Compare this -3.1% operating margin to a national study of Critical Access Hospital Financial Indicators that shows the average total

margin of Critical Access Hospitals nationally is +3.64% (Flex Monitoring Team, 2009). More importantly, the losses sustained by rural hospitals are not recent in origin and, for several facilities, have existed four or more years.

Conclusion

St. Joseph's Hospital and Health Center greatly affects the Stark County economy by generating 754 jobs and over \$24.8 million in labor income both inside and outside the health sector. In addition, the demand for medical services will grow as the senior population of Stark County continues to increase. St. Joseph's Hospital and Health Center positively impacts Stark County as it generates jobs and labor income, improves the quality of life for county residents and keeps commerce active within the county.

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