



Center for Rural Health

The University of North Dakota
School of Medicine & Health Sciences

The Economic Importance of Community Memorial Hospital to McLean County, North Dakota



Elizabeth Huso, B.S.

North Dakota Rural Hospital Flexibility Program
The University of North Dakota Center for Rural Health

May 2010

Funded by

The U.S. Department of Health and Human Services
Health Resources and Services Administration
Federal Office of Rural Health Policy

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

Table of Contents

Introduction.....3

Objective.....3

Health Care Overview4

Approach and Methods.....4

 Defining the Study Area5

 Study Area Statistics6

Results7

The Fiscal Status of North Dakota Hospitals.....8

Conclusion.....8

References.....9

Introduction

Community Memorial Hospital (CMH) is a 25-bed Critical Access Hospital located in Turtle Lake, North Dakota. Since its origination in 1962, CMH has been providing an expanding level of quality health care for local residents. Today, the facility offers patients a wide range of acute care services along with a number of additional care programs. These care programs include a Level V emergency department, skilled nursing and intermediate swing bed care, respite care, hospice, adult day care, and home health services.

CMH also operates a Rural Health Clinic in nearby Washburn, North Dakota. This facility, Washburn Family Clinic, provides local residents a full range of Family Practice services including care of chronic conditions, lab and x-ray, physical therapy, and surgical consults.

CMH holds a mission that is committed to providing excellent service and care for its patients. Their mission statement is as follows:

Based on the Gospel values and our own heritage of healing, the mission of Community Memorial Hospital is to use our community presence as a means of touching and caring for people in a Christ-like manner, and to always exhibit the hospitality as reflected in the Rule of St. Benedict: "Let all be received as Christ"

The vision of Community Memorial Hospital is to

Extend Christ's healing ministry through excellence of service and collaborative partnerships.

The facility works to carry out its mission and vision while focusing on its core values of community, respect, stewardship, healing presence, and personal and professional growth.

Objective

The purpose of this study is to illustrate the economic impact that Community Memorial Hospital has on the economy of McLean County. The objective is to show how CMH positively affects its local economy by quantifying its effects on employment levels and labor income. This report will also address the important role that CMH has in offering services to the residents of McLean County.

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 Hospital 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 Hospital Association. North Dakota has 38 rural hospitals: 36 Critical Access Hospitals and two Indian Health Services hospitals. The payroll and benefit dollars that these hospitals expend cycle through the local economy to generate additional dollars of income 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.

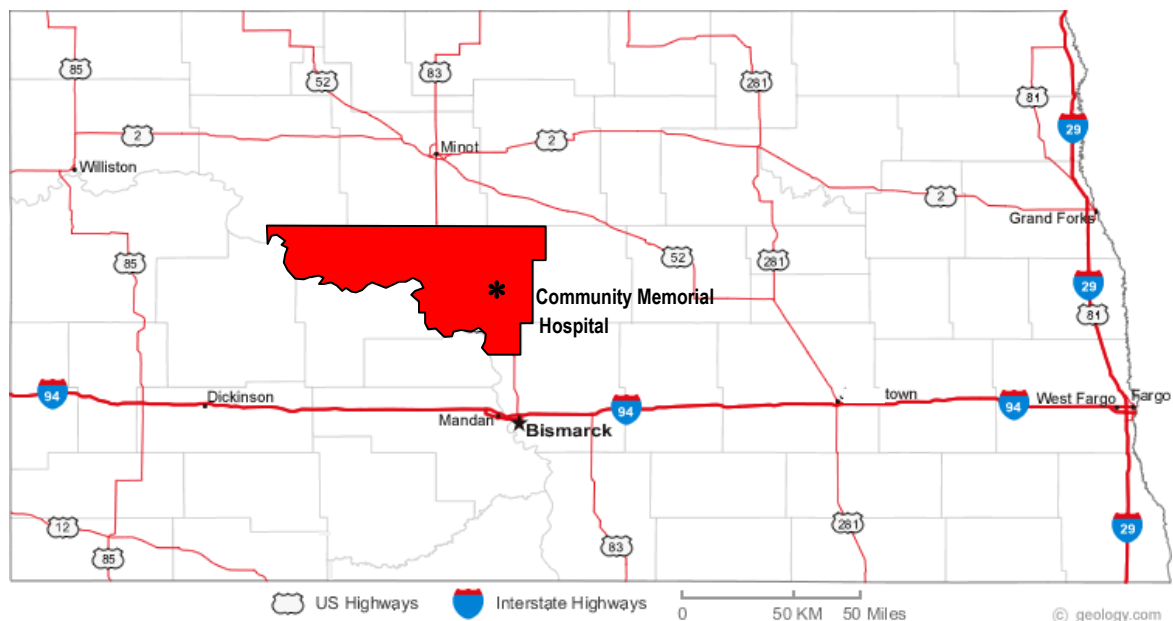
A type-II multiplier will be used in this report to derive secondary effects in two areas of Community Memorial Hospital: employment and labor income. The multipliers for employment and labor income have been calculated using the IMPLAN economic impact modeling software and data from The Minnesota IMPLAN 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 McLean County to derive the economic impact of CMH's services.

In addition to the economic multipliers, population data will be used to display the potential growth of demand for health care services in McLean County.

Defining the Study Area

McLean County, North Dakota makes up the economy for this impact study. The county is located in the central portion of the state, lying above Lake Sakakawea. It is made up of 2,110 square land miles and houses approximately 5 people per square mile (U.S. Census Bureau). CMH is located in the city of Turtle Lake. Turtle Lake is approximately 70 miles north of Bismarck, ND and had a population of 580 in the 2000 census. Figure 1 highlights the location of McLean County and CMH.

Figure 1 - McLean County, North Dakota



Study Area Statistics

According to 2009 fiscal year records, CMH employed a total of 81 full-time and part-time workers and provided \$2,208,039 in income and benefits to these employees. A breakout of these statistics can be seen below in figure 2. These values are direct impacts that CMH contributed to the McLean County economy throughout the year.

Figure 2 - Direct Impact Data

Direct Impact Data		
Direct Economic Impact of Community Memorial Hospital on McLean County		
Community Memeorial Hospital	Employment (Full Time & Part Time)	Income (Wages & Benefits)
Facility Employment		
Hospital	73	
Washburn Family Clinic	8	
Labor Income		
Hospital		\$ 1,932,876
Washburn Family Clinic		\$ 275,163
Total Direct Economic Impact	<u>81</u>	<u>\$ 2,208,039</u>

SOURCE: Local data received from Community Memorial Hospital - FYE 2009

In addition to directly providing the county with employment and labor income, CMH also provides services for an aging population. According to 2009 population estimates by the U.S. Census Bureau, McLean County has a population of 8,310 people with 20.9% of these residents over the age of 65. This is a large percent of people who may have increased needs for health care services. The Population Bulletin from The North Dakota State Data Center shows that the median age for McLean County is 44.1 years (2000). This number is a 6.9 year increase over the previous census and an 18.7 year increase since 1950. This data shows us that *the population in McLean County has in increasing number of residents who are most likely to use CMH's services.* If this trend continues, adults requiring care, especially those aged 65 years and older, will increase. CMH can provide these residents a better quality of life, while at the same time retaining financial activity in the local economy. State level data also greatly supports this argument as the U.S. Census Bureau, Interim State Population Projections predict the state population of residents 65 and older to increase 61.3% between 2000 and 2030 (2005).

Results

The economic impact of Community Memorial Hospital 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 facility, 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 CMH could include an employee 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 McLean County. These multipliers were applied to CMH’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 Community Memorial Hospital on the McLean County Economy				
Area of Impact	Direct Impact	Multiplier	Secondary Impact	Total Impacts
Employment				
Hospital	73	1.14438	11	84
Washburn Family Clinic	8	1.23447	2	10
Total Employment Impact	81		12	<u>93</u>
Labor Income				
Hospital	\$ 1,932,876	1.1485	\$ 286,995	\$ 2,219,871
Washburn Family Clinic	\$ 275,163	1.1854	\$ 51,001	\$ 326,164
Total Labor Income Impact	\$ 2,208,039		\$ 337,997	<u>\$ 2,546,036</u>

SOURCE: Direct data received from Community Memorial Hospital - FYE 2009
Multipliers from Minnesota IMPLAN Group, Inc - 2007 data

The total economic impact on employment and labor income by CMH is the sum of the direct impact that the facility provides and the secondary impact that the facility creates through demand. The 81 jobs that CMH provides directly, creates another 12 jobs in the county outside of the health sector, making a *total economic impact of 93 jobs*. Likewise, the \$2,208,039 that CMH provides its employees generates another \$337,997 of income in the county, providing McLean County with a *total impact of \$2,546,036 in labor income* for the year.

The Fiscal Status of North Dakota Hospitals

Community Memorial Hospital is a vital component of the county's fiscal well-being. In North Dakota, rural hospitals are an essential resource for their local communities; however, many are unfortunately in difficult financial situations. 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

Community Memorial Hospital greatly affects the McLean County economy by generating 93 jobs and over \$2.5 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 McLean County continues to increase. CMH positively impacts McLean County as it generates jobs and labor income, improves the quality of life for county residents, and keeps commerce active within the county.

References

- Blue Cross Blue Shield Reimbursement Workgroup. (2009). *Facility Statement of Operations Summary*. North Dakota.
- Flex Monitoring Team. (2009). *CAH Financial Indicators Report: Summary of Indicator Medians by State*. Chapel Hill: University of North Carolina at Chapel Hill.
- Minnesota IMPLAN Group, Inc. (2007). *IMPLAN North Dakota county data*.
- North Dakota Hospital Association. (2008). *The Economic Pulse of North Dakota*. Bismarck, North Dakota.
- North Dakota State Data Center. (June 2001). Median Age in North Dakota: 1950 to 2000. *The Population Bulletin*, 17(6).
- U.S. Census Bureau. (n.d.) *State & County QuickFacts*. Retrieved May 21, 2010, from <http://quickfacts.census.gov/qfd/states/38/38055.html>
- U.S. Census Bureau. (n.d.) Population Division, Interim State Population Projections. Retrieved May 20, 2010, from <http://www.census.gov/population/projections/35PyrmdND3.pdf>