



The Economic Impact of Health Care in West Virginia

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Executive Summary

According to a June, 2002 United States Department of Commerce report, health services represented over \$3.5 billion of West Virginia's gross state product. However, despite strides made in recent years, Appalachia remains critically short of doctors. In West Virginia, the federal government has designated all or part of 50 of the state's 55 counties as medically underserved.

Health care represents an important part of the state's economy, particularly in the rural sector. In an era when rural economies are struggling to keep pace with their urban counterparts, the health care sector represents a potential bright spot in the economic landscape.

There are four major roles that health care can play in spurring economic development through both financial and non-financial avenues: **1) keeping local health care dollars at home, 2) attracting external dollars into communities, 3) attracting and retaining new industry and 4) promoting a healthy and productive workforce.**

This study examines the economic impact of the health care sector in West Virginia, but further opportunities for additional services can be developed. If local health care systems are able to expand, there will be a broad range of corresponding economic effects achieved across West Virginia. However given recent trends in healthcare, such expansion seems unlikely. A recent study demonstrated that thirty- four hospitals in West Virginia had lost an average of five percent of their doctors as a result of the current medical liability and insurance crisis. Without substantive medical liability reform and stability in the professional liability insurance market such opportunities for economic development associated with the health care sector will not be realized and the adverse consequences will continue to erode West Virginia's fragile.

Since 27 of West Virginia's 55 counties border other states, there exists a very real prospect that West Virginians will cross state borders to obtain the quality of health care services that they need. As physicians leave West Virginia and services are reduced or curtailed, patients will abandon traditional patterns of care in search of quality care that is also affordable.

Introduction

Few communities, particularly rural ones, have realized the full potential of local health care as an economic and community development tool. Rural communities have an extraordinary opportunity to improve their local economies and develop health care as a local business. Every health care service provided locally benefits the community in two ways. First, it improves people's health and secondly, it improves the health of the economy. Unfortunately, the opportunity to realize either of these benefits is severely jeopardized by shortcomings in the current medical liability system and the lack of substantive reforms.

This report documents the economic impact of West Virginia's health care system. This report is divided into three major sections. The first section describes the role of health care in rural economic development. The second section examines the current status of the state's economy and the relative status of the health care industry. The third section demonstrates the direct and indirect economic impact of the health care system on the local economy.

The Role of Health Care in Economic Development

West Virginia employs more than 74,000 residents in health care, with total payrolls of more than \$2 billion. This gives West Virginia a national ranking of *number two* in the percentage of private sector workforce employed in health care. Approximately 35,000 West Virginians base their careers in West Virginia's hospitals and health systems. These hospitals directly employ thousands of nurses and physicians, in addition to hundreds of other professional, technical and support staff in skilled nursing services, home health agencies, hospices, ambulance companies, and other services.

The wage scale in the health care sector varies widely, notwithstanding professional and regional differences, it contributes mightily to the total gross state product. The average hourly wage in this sector is \$15.04. By comparison, the state's average hourly mining wage is \$24.08, retail is \$7.12, and construction is \$15.58.

INDUSTRY	UNITS	EMPLOYMENT	TOTAL WAGES	AVG. ANNUAL WAGE
MINING	861	22,457	1,124,685,481	\$50,081
HEALTH SERVICES	3,231	74,805	2,339,891,565	\$31,279
CONSTRUCTION	5,420	34,197	1,108,468,865	\$32,414
RETAIL TRADE	10,113	131,777	1,950,650,796	\$14,802

Source: Research, Information and Analysis. WV Bureau of Employment Programs. June 2002

Maintaining these positions as well as attracting more individuals to these high paying, quality positions is of critical importance because while most other sectors have experienced job losses, the service sector, which includes health care, continues to grow. The economic outlook for West Virginia predicts that job growth will be concentrated in these service-producing sectors.

In fact, hospitals are among the top employers in counties around the state. These facilities are the heart and soul of a community. A hospital often provides a snapshot of the community it serves.

The role of health care in economic development is based on financial and non-financial connections to the rest of the local economy. Financial connections are based on the link between the health care provider's expenditures and revenues and other local firms' expenditures and revenues.

Health care and other industries often mutually support one another through purchases and sales. These financial connections create a larger local economy. Non-financial connections are based on the health care sector's role in keeping local physicians, promoting a more productive workforce and attracting and retaining industry. Although these may be measured through financial outcomes, generally the link is more indirect.

Quite simply, a strong health care system can help foster economic development in any one of a number of non-financial ways.

Financial Impacts

Keeping Local Health Care Dollars At Home

The most important financial role for a local health care system is to keep local health care dollars at home. There are many sources of local health care dollars including private insurance, consumer out-of-pocket payments, and Medicare and Medicaid transfer payments. If these expenditures leave the community, they represent a loss of potential jobs and income to local residents. Payment for services that are outside of the local area, remains an important issue for many health care providers and communities.

Not only are health care jobs a significant part of the local economy but health care employers and employees are important purchasers of goods and services, supporting many local businesses. Nurses, physicians, volunteers and others, working in health care provide an important source of income for other members of the community working in construction, retail, restaurants, and other services.

Jobs that pay well produce strong consumers within the local economy. Health care facilities such as hospitals and long term care facilities purchase, goods and services, such as laundry and waste management services, food, electricity and office products. Increased employment in health care and other areas depends upon capturing the private and public sources of local medical expenditures.

Exporting Services / Importing Capital

The ability of health care providers to attract patients from outside their community enables such facilities to act as an export industry. The local health care industry exports its services and, quite frankly, its reputation, while attracting outside patients and outside dollars into the local community. This exporting may be based on the availability of state-of-the art facilities and services or reputation of the providers. In either case, import of external dollars from these outside patients represent an inflow of revenue into the community's economy allowing a community to acquire more goods and services from other communities.

The end result is that the spending connections created by this import of external dollars create new jobs and new income in the community.

Supply-Demand Gaps: Keeping Health Care Dollars at Home

Identification of a community's supply-demand gap will assist a community in keeping health care dollars at home. A supply-demand gap occurs when a local economy does not supply (provide) the goods or services demanded (needed or wanted) by an individual or a community. As a result, residents must make purchases outside their own community. These purchases represent leakage from the local economy and can serve to reduce the number of potential employment and income opportunities in a community.

Non-Financial Connections

Attracting and Recruiting Industry

When chambers of commerce, development groups and other such business entities consider means of economic development, they often overlook health care as having the ability to attract and recruit firms based on community services. Economic development brochures and location packets often detail the benefits of locating in a particular region. It is no secret that health care and the access to such services are a major selling point. The current crisis, which is shared to a lesser degree by some other states as well, puts West Virginia at a huge disadvantage in efforts to recruit new business and industry. Although West Virginia is currently ranked 49th in the nation in terms of economic

development efforts, without greater efforts to change the medical liability laws in West Virginia and stabilize the professional liability insurance market, we will continue to see physicians leave the state and access to health care will be severely jeopardized – as will our efforts in economic development.

Company surveys have shown that health care is an important consideration in locating facilities. Retirees and workers are more likely to choose a location with access to quality health care. The existence of quality health care services can lower health care costs for firms, employees and provides a value-added service for firms in occupational health.

Promoting a Healthy and Productive Workforce

A productive workforce is of the utmost importance in attracting new firms and retaining existing firms. While West Virginia often showcases its available workforce, local health care providers can improve the health and productivity of the local workforce by promoting preventive care, thus leading to long-term economic benefits. The health status of local workers can be an important ingredient in productivity and the recruitment of new businesses. A less healthy workforce may be considered a cost burden by some industries. The current crisis not only jeopardizes access to health care, but it jeopardizes productivity and steps toward economic growth as well.

The combination of changing demographics, growth in health care service employment and the increase in medical transfer payments clearly indicate that the health care system may be a major player in future economic development for West Virginia. West Virginia's policy makers, health care community, and business leaders must recognize this fact. West Virginia must recognize health care as a substantial economic sector and pursue strategies for growth in that sector.

Economic development agencies, business groups and local governments should play more active roles in promoting the health care sector as a key partner in generating new economic opportunities.

Economic Impact Analysis

Basic Introduction

According to a June 2002 United States Department of Commerce report, Health Services represents \$3.5 billion of the gross state product. Comparatively, mining activities represent \$2.8 billion of the gross state product while the manufacturing sector represents \$6.7 billion.

A local economy consists of inflows and outflows. The inflows represent external dollars coming into the community, bolstering the size and strength of the economy. Inflows of external dollars represent, for example, federal and state expenditures, money spent by tourists and other people from outside the community who spend within the local economy.

The outflows represent losses from the economy that do not create jobs or local income. Outflows include state and federal taxes, non-local purchases of goods and services, and people traveling to other sites for vacation or receiving medical care in another county or urban area.

The economic impact of the health care sector is dependent on a number of factors. In determining the economic impact of a large institution, there are two major purchasing categories to consider: local purchases and non-local purchases. In effect, non-local purchases represent a leakage or loss to a local economy. For health care providers, many purchases, by necessity, must be made from distant locations. The complex technology and equipment of modern medicine is subject to large economies of scale and is only produced in a few places in the nation. This equipment might include x-ray machines, MRI equipment and other surgical equipment. Pharmaceutical supplies and drugs are also subject to these same forces. Further, some types of audit, legal and accounting services must be purchased from urban regions due to the complexity of services.

Economic Impact Multipliers

As local health care expenditures and health care employee expenditures “ripple” through the economy they create a multiplier effect. Multiplier effects are a simplified way of representing these economic effects in a local economy. The multiplier is interpreted as the impact of a one-unit change in sales, employment or income that results in a “x” impact on the local economy. In

essence, the multiplier represents the circulation of local dollars and income. This recycling process creates new job opportunities and higher wages for individuals. Leakage of dollars and income out of the community, via taxes or non-local spending, reduces the size of the multiplier effect and reduces the potential size of the local economy.

There are three types of multiplier effects based on the type of economic impact analysis: direct, indirect, and induced multipliers. The direct multiplier effect is based on an industry's initial economic impact on the community. For example, if a manufacturing plant has revenue of \$5 million dollars, then this figure becomes the direct economic impact on the community.

The indirect multiplier effect is based on industry-to-industry transactions only. For example, health care purchases local laundry, food, landscaping, and floral services. However, the indirect multiplier effect does not include the effect of local employee spending on retail and service sectors in the community such as housing, grocery store or video store purchases. Alternatively, the induced multiplier effect includes both the industry-to-industry transactions and household purchases, which includes employee spending. In some cases, we may wish to only investigate industry transactions and leave out household purchases. The total economic impact is defined as the direct plus indirect plus induced economic effects.

The direct, indirect, and induced multiplier effects can be classified as output or sales, employment, and income multipliers. Sales or output multipliers represent the change in local sales or revenue due to a change in an industry. Employment multipliers are the impact of a one million-dollar change in economic output on the number of jobs in a local economy. Income multipliers represent a one-unit change in economic output on local income. Economic output is measured as a change in total sales for a new or existing business or institution in a region.

Health Care Economic Impact Multipliers

	Direct	Indirect	Induced
Employment Multiplier	Health care jobs	Health care supplier jobs	Local retail and service jobs related to health care employee spending
Income Multiplier	Health care employee income	Health care supplier employee income	Local retail and service income related to health care employee spending
Sales or output multiplier	Health care revenues	Health care supplier revenue	Local retail and service revenue related to health care employee spending

Source: Kentucky Rural Health Works

The employment multiplier demonstrates the relationship between health care expenditures and employment creation in the community. For the West Virginia health care sector, the employment multiplier ranges from 1.2 for nursing homes, 1.54 for hospitals and 1.71 for doctors and dentists.

The employment multiplier indicates that for every 100 health care jobs, an additional 20 to 71 jobs are created in the local economy. These jobs are directly or indirectly tied to local health care system finances.

Summary

The economic activities of the health care sector and its employees serve to create local jobs and can contribute greatly to the local income. Furthermore, the existence or expansion of a new health care facility means that this impact is likely to rise faster than many other local industries over the next decade. With an aging population it may be that health care may be the economic driving force of the next decade. West Virginia could position itself to capture many of the economic and financial benefits. Yet such benefits cannot be realized within the current structure of the medical liability system.

This report should be used as a focus for discussion of the economic development as impacted by health care in West Virginia. First, a community should identify the current economic and financial roles of county health care providers. Second, potential opportunities in the community for new medical services should be identified. Seeking out new opportunities for local services will increase the economic impact of the health care system on the state's economy. Health care services should be examined to enhance the economic role of the health care system in West Virginia.

The ability to achieve the aforementioned goals will be greatly effected by the extent to which we enact substantive medical liability and keep our existing physicians base while attracting new recruits.