
Regional Health Needs Assessment Project
The Economic Impact of Ohio's Critical Access
Hospitals in 2010

TECHNICAL REPORT

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Introduction

This report presents an assessment of the economic contribution of Ohio's thirty-four critical access hospitals to the state's economy in 2010. It examines the impact of critical access hospitals (CAHs) on employment, wages, and state and local taxes in Ohio.

Critical access hospitals are located in rural areas underserved for health care. They are often the only source of emergency and inpatient care within a 30-mile radius, and also offer preventative, risk-reduction, and other hospital-based services that might otherwise be unavailable in smaller communities. As a CAH designated hospital, they receive cost-based Medicare reimbursement, helping them to remain financially stable in low-income rural areas.

Not only do CAHs provide medical access to underserved areas, but they also support jobs and help local economies through their demand for goods and services in these rural communities. In this sense, Critical access hospitals generate economic activity through multiple impacts. These impacts are described in terms of "direct" and "additional". Direct impacts encompass the actual employment, wages and taxes generated by the hospitals. Additional impacts encompass "extra" jobs, wages and taxes generated by hospitals and local businesses buying goods and services from other businesses within the region as well as hospitals' employees and other workers living and re-spending their income in the local economy.

To demonstrate this concept, consider this example. A critical access hospital purchases goods and services from local businesses, thereby generating revenue for these businesses. These businesses then generate revenue for other businesses in the region causing further economic activity. Likewise, a CAH employee may use his or her wages to purchase goods at a local store, thereby generating income for the store's owner. The store's owner can use this income to purchase goods and services from other stores, thus generating income for other local businesses. The cycle will continue until money exits the region. This same concept applies to employment in that through their economic activities, CAHs and their employees support demand for more employment in other industries of the local economy.



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Project Methodology

IMPLAN, an economic modeling tool, was utilized to conduct this analysis. IMPLAN is an input-output economic model used by many public and private institutions for economic assessment. Its customizable features make it a valuable tool for regional and industry-specific economic analysis. Using IMPLAN, state level multipliers were generated which were then applied to direct employment and wage data. Multipliers essentially quantify additional impacts on employment, wages, and taxes. For instance, if a CAH directly employs ten people in the state and through its additional impacts supports six other jobs, then its employment multiplier would be 1.6, implying that each CAH job would support 0.6 other jobs in Ohio. The difference between the calculated total impacts and direct impacts are the “additional impacts” previously described.

The results of our analysis are provided in thirty-five one-page reports, one for each of the thirty-four Ohio critical access hospitals as well a cumulative state level report. The reports contain information on the economic results, as well as the services provided by the hospitals, when available.

Data Sources

Hospital Services and Charity Care

All data pertaining to hospital service numbers and charity care cases were reported by the hospitals in response to a survey. These numbers are excluded from individual reports when not reported.

Employment, Wages and Taxes

Direct employment and wages were provided by the respective hospitals, except in the cases of Hocking Valley Community Hospital, MedCentral Shelby Hospital, Montpelier Hospital, Paulding County Hospital, Selby General, and Wyandot Memorial Hospital, whose direct employment numbers were obtained from Reference USA and whose wages were estimated using IMPLAN. All taxes and additional impacts were calculated using IMPLAN 2010 data matrices.

Reference USA is an Internet-based reference service of Infogroup that is commonly used by students, researchers and small businesses. Their database contains detailed directory information on more than 20 million U.S. based businesses, including number of employees, and is a premier provider of U.S. business and consumer information.

Definitions

-Employment represents annual average employment both full time and part-time.

-Wages include the wages and salaries and all associated benefits and payroll taxes.

-State and Local Taxes include a combination of sales, property, income, excise and other taxes plus different fees and payments.

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Limitations

Utilizing a model such as IMPLAN to assess the economic impact of industry-specific businesses in a given geography has a number of advantages. First, the model is straight forward to use and useful to quantify the kind of economic impacts we wish to assess. Second, IMPLAN explicitly considers the linkages between various sectors of the economy. This is not to say that models like IMPLAN are not without their drawbacks. Economic structures change over time, and the additional impacts that we quantify during one year increase or decrease over the period of the analysis. Also, the additional impacts depend directly on the magnitude of the direct impacts. In this analysis, we relied on the CAHs (and in some instances Reference USA) for data, and if the data for the direct impacts is inaccurate, this will be reflected in the total impacts as well.

State of Ohio

Critical Access Hospital

Economic Impact Report

Ohio's 34 critical access hospitals are located in rural areas underserved for health care. Often they are the only source of emergency and inpatient care within a 30-plus mile radius. Critical access hospitals also offer preventative, risk-reduction, and hospital-based services that might otherwise be unavailable in smaller communities.

All critical access hospitals create jobs and are economic drivers for their communities. The table below shows the aggregate direct impact of Ohio's 34 critical access hospitals on the state's economy in 2010. It also shows the additional Ohio jobs and income generated as a result of Ohio's critical access hospitals and their employees purchasing products and services at Ohio businesses.

Impact	Employment	Wages	State and Local Taxes
Direct Impact*	9,883	\$516,475,446	\$32,170,736
Additional Impacts	10,159	\$305,809,760	\$67,873,789
Total Impact	20,042	\$822,285,206	\$100,044,525

*Direct impact hospital employment was obtained from individual hospitals and Reference USA. Wages, taxes and additional impacts were calculated using IMPLAN 2010 data matrices.

- Ohio's critical access hospitals employed 9,883 people in 2010, generating \$516,475,446 in wages for their employees and \$32,170,736 in state and local taxes.
- An additional 10,159 Ohio jobs and \$305,809,760 in wages were generated through hospitals and employees purchasing products and services at Ohio businesses.
- In total, Ohio's critical access hospitals generated 20,042 Ohio jobs, \$822,295,206 in wages and \$100,044,525 in state and local taxes in 2010.