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Employment Spillover Effects of Rural Inpatient Healthcare Facilities

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What Is The Issue?

Rural inpatient healthcare facilities—general medical/surgical hospitals, psychiatric and substance abuse hospitals, specialty hospitals, nursing care facilities, residential mental health facilities, community care facilities for the elderly, and other residential care facilities—provide local jobs and safeguard the health of local residents, improving the economic well-being of local communities. The healthcare industry is growing faster than any other U.S. industry and is projected to add the most jobs of any industry by 2024. However, little is known about the broader economic impacts of this growth in rural areas.

This report estimates the impact of rural healthcare facility jobs (excluding individuals who are self-employed) on total rural (nonmetropolitan) county jobs—and is measured in per capita terms. This report documents changes since 2001 in healthcare and other rural industrial jobs and how employment multiplier impacts differ between rural counties with a core urban area population of 10,000-49,999 (micropolitan) and the most rural counties with a core urban area population of less than 10,000 (rural noncore).

What Did the Study Find?

Inpatient healthcare facilities are large employers in rural communities. In 2001, inpatient healthcare facilities provided over 1.1 million wage and salary jobs in rural communities, or 7.6 percent of total rural wage and salary jobs. At its peak in 2011, inpatient healthcare employment represented over 1.25 million wage and salary jobs, or 8.5 percent of rural wage and salary employment.

Nationwide, employment in the healthcare sector rose before, during, and after the Great Recession, accounting for 39 percent of net private-sector jobs created since 2007. In contrast, rural healthcare employment grew by 9 percent between 2001 and 2011, then declined by 2 percent between 2011 and 2015.

From 2001 to 2015, inpatient healthcare facilities experienced modest employment gains in rural counties, despite the effects of the Great Recession. Micropolitan counties experienced 10-percent growth in inpatient healthcare employment while employment in this sector grew 3 percent in rural noncore counties.

In both micropolitan and rural noncore counties, the majority of inpatient healthcare facility jobs are in general medical/surgical hospitals (52.5 percent for micropolitan counties and 46.4

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percent for noncore counties) or nursing care facilities (25.0 percent and 34.5 percent, respectively).

For rural counties as a whole, our point estimates of multiplier impacts imply that inpatient healthcare facility employment did not generate additional employment in the local economy beyond the people directly employed in the facilities. This could occur if any additional positive employment effects were offset by displacement or competition effects (jobs potentially lost in other industries as workers opt for healthcare facility employment).

In rural areas, on average, 0.99 job was created per inpatient healthcare facility job. We estimate a larger inpatient healthcare facility employment multiplier for more populated and more economically integrated micropolitan counties than for rural noncore counties. In micropolitan counties, on average, there was a larger effect of 1.24 jobs per inpatient healthcare facility job compared to 0.89 job in noncore counties. However, these multiplier estimates are subject to margins of error, as shown in the figure to the right.

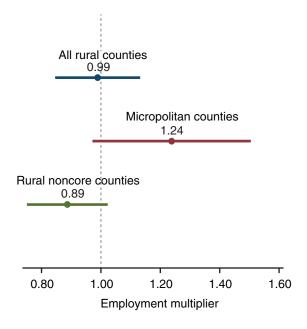
How Was the Study Conducted?

This report uses data from the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW), which tabulates employment and wage information on workers covered by State unemployment insurance or Federal workers covered by Unemployment Compensation for Federal Employees. Some employed persons are excluded from the QCEW data, such as members of the Armed Forces, the self-employed, proprietors, some agricultural workers employed on smaller operations, domestic workers, unpaid family workers, and railroad workers. This report also uses data from the Decennial Census (2000) and Intercensal Population Estimates by county.

The descriptive analysis focused on 1,817 rural counties (from the lower 48 States) for which wage and salary

employment data were disclosed in the QCEW. Regression analysis was used to estimate the impact of inpatient healthcare facility jobs per capita as well as jobs in selected tradable sectors (agriculture, manufacturing, mining, and Federal and State governments) on total rural county jobs per capita. Employment in tradable sectors is assumed to be exogenous or independent of local demand. The regression analysis includes 1,752 rural counties that had inpatient healthcare facility sector jobs in at least 1 year during the study period (2001-15) with complete data on all relevant variables in all 15 years.

Summary figure Inpatient healthcare employment multipliers



Notes: This chart is a graphical representation of results included in Tables 2 and 3. The points represent the inpatient healthcare multipliers for all rural counties, micropolitan counties, and rural noncore counties. The lines represent the 90-percent confidence intervals of the respective multipliers. The multiplier is the total number of jobs in the county in all industries that result from the addition of one inpatient healthcare job. A multiplier equal to 1 implies that there is only a direct impact of that healthcare job. A multiplier greater than one implies that the inpatient healthcare job generated additional jobs in the county in other industries. A multiplier less than one implies that additional healthcare employment displaces jobs in other industries in the county. The U.S. Office of Management and Budget (OMB, 2003) defines nonmetropolitan (rural) counties as counties containing core urban area populations of fewer than 50,000 residents and less than 25 percent of the labor force in a nonmetropolitan county commuting to core counties in an adjacent metropolitan area. Micropolitan counties contain a core urban area population of more than 10,000 but less than 50,000. Rural noncore counties contain a core urban area population of less than 10,000.

Source: USDA, Economic Research Service calculations using the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages data, 2001-15.