The Economic Impact of Health Care in Spokane County

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1. Executive Summary

In 2001 total national spending on health was $1.4 trillion or about 14 percent of GDP. This spending, over $5,000 per capita, resulted in the employment of over 10 million workers. While anecdotal opinions exist in abundance, the actual impact of this health care spending on the Spokane County economy is unknown. Because of this, civic and business groups in the community can not accurately determine the potential role of health care industries in economic development plans or proposals. To overcome this deficiency, the Spokane Regional Chamber of Commerce contracted with the Institute for Public Policy and Economic Analysis of Eastern Washington University to conduct an economic impact analysis of the local health care sector. Co-sponsors of the research include Avista Corporation, Inland Northwest Health Services, the Spokane Area Economic Development Council, the Spokane County Medical Society and the Spokane Intercollegiate Research and Technology Institute.

The analysis utilizes data and economic impact multipliers compiled and estimated by the Minnesota IMPLAN Group for its IMPLAN impact analysis modeling system. While the focus of the study is on the direct and total impact of health care in Spokane County, comparisons with impacts in King County and Washington State, as well as with other counties in the Western United States, are considered as well.

Using recent revisions in U.S. Census Bureau industry definitions, the health care sector includes five constituent industries: (1) Hospitals, (2) Physicians, Dentists, and their office staffs, (3) Nursing Care, Facilities. (including residential care), (4) Other Health Care (including ambulatory care), and (5) Other Health Services. The last industry is a collection of several health care related industries, such as home health care, pharmacies and drug stores, direct health and medical insurance carriers, medical technology and equipment manufacturing, pharmaceuticals, apparatus, furniture, instruments, appliances and supplies, ophthalmic and dental goods.

Economic impacts are measured by three indicators: output or sales, employment as total jobs and income paid to employees or received from self-employment. In Spokane County, data for 2001 (the latest year data are available) indicate that the output of the health care sector was $2.6 billion, almost 12 percent of total county output of $21.6 billion and more than twice that of the next leading industry, wholesale trade. Direct employment was 29,300, almost 12 percent of the country labor force of 252,000 and 60 percent larger than that of State and Local Education, the second leading employer. Finally, direct health care employment income was $1.2 billion, 14 percent of total county income of $8.2 billion, and 70 percent larger than the next industry.

Clearly, health care is the leading industry in Spokane County. While still important, the dominance of health care does not carry over to King County where software publishing and aircraft manufacturing compete for industrial leadership. However, when the entire state is considered, health care ranks first by all the measures of economic influence considered but by smaller percentages than in Spokane County.
Economic activities that arise to facilitate and support the production of health industry goods and services represent the indirect impact of the health care sector. Using Spokane County hospitals as an example, their indirect impacts on county output was $360 million, of which $63 million (17 percent) went to the real estate industry, followed by $31 million (9 percent) to wholesale trade. The indirect impact of hospitals on county employment was the equivalent of 4,800 jobs. This produced an additional 697 jobs in real estate (14 percent of the total indirect impact) followed by 433 jobs in employment services (9 percent). Finally, the indirect impact of hospitals on county income was $134 million. This increased wholesale trade incomes by $12 million (9 percent of the total impact) followed by securities and investments with an increase of $10 million (8 percent).

Induced impacts make up the final component of the impact of health care. These are measured by increases in output, employment and income caused by the spending of earnings received either directly from employment in health activities or indirectly from support of health related activities. Again using Spokane County hospitals as an example, their induced impact on county output was $335 million. Of this, $27 million (8 percent of the total induced impact) went for owner-occupied dwellings, followed by $26 million (8 percent) to hospitals. The induced impact of hospitals on county employment was the equivalent of 4,390 jobs, led by an additional 495 jobs in food and drinking places (11 percent of the total impact) followed by 251 jobs as physicians, dentists and their office staffs (6 percent). Finally, the induced impact of hospitals on county income was $120 million, led by the increased incomes of physicians, dentists and their office staffs of $10 million (12 percent of the total impact) followed by increases in hospital incomes of $9 million (10 percent of the impact).

These indirect and induced impacts represent the "multiplier" effects of health care since they are some multiple of direct impact of health care. Estimates of these multiplier effects indicate that the total impact of health care spending (direct plus indirect plus induced) on the Spokane County economy is significant. The output total impact of spending was $4.4 billion, about 20 percent of total county output, while the total impact on employment was 53,500 equivalent jobs, accounting for 21 percent of county employment, and the total impact on income was $1.8 billion, 22 percent of county income.

Health care is about twice as important in Spokane County as in King County or the state, regardless of economic indicator. The total output impact of the health care sector in King County was 10 percent of total output, 11 percent of county employment, and 10 percent of all income. For the state, 2001 health care impacts were 12 percent of all output, 14 percent of all employment and 13 percent of all income. Since the impact multipliers among the three regions are similar, differences in total impacts reflect the extent to which each regional specializes in the production and delivery of health related goods and services.

When compared to software publishing and aircraft manufacturing, two traditional leading Washington industries, health care dominates in Spokane County, while in King County, it leads in
employment and compares favorably with regard to output and income. Of all industries in Washington State, health care has greatest direct and total impact, measured by output, employment or income.

Health care is also relatively more significant in Spokane County than in comparable counties in the Western United States. In Sacramento County CA, the relative impact of health care was about 40 percent less than in Spokane County, while in Pima County AZ it was about 20 percent less and in both Washoe NV and Ada ID Counties about 35 percent less. These findings carry over to total impacts where impacts were 20 to 40 percent less than they were in Spokane County.

Since the impact multipliers for Spokane County are similar to those found for the other four counties, the reason health care has such a significantly larger impact in Spokane is that the industry is relatively larger. That is, since proportionally more resources are already devoted to health related activities in Spokane County, the sector has a proportionally greater impact on county economic activity than in the other counties.

The economic impact of health care has been studied hundreds of times in a variety of contexts with the consistent finding that the provision of health care has significant economic impacts. Finally, future prospects of the health care sector appear bright. Employment forecasts indicate that the sector will provide more new jobs than any other industry either regionally or in the state. This strong growth also suggests similar output and income growth.

2. Analytical Framework

2.1 Introduction

Composed of various industries that produce and deliver goods and services related to either maintaining or improving human well-being, health care has become an enormous force in the U.S. Its actions touch nearly every person and community in the country. As Table 1 shows, total national

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<th>Per Capita</th>
<th>% GDP</th>
<th>Empl</th>
<th>% Empl Change</th>
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Source: Eilrich, St.Clair, and Doeksen