

**The Economic Impact of the Local Health Care System on
the Cumberland Valley Area Development District Economy:
An Executive Summary**

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Health care represents an important part of rural economies. In an era when rural economies are struggling to keep pace with their urban counterparts, the health care sector (which includes hospitals, nursing homes, medical personnel and other resources) represents a bright spot in the economic landscape. The health care sector plays four major roles in rural economic development. First, a local health care system keeps health care dollars within a local economy. Second, it attracts external dollars into a community from outside a local area. Third, a local health care system can retain existing businesses as well as attract new industries into a community. Finally, a local health care system can support and promote a healthy and productive workforce within a community.

The Cumberland Valley ADD health care system is an important component of the local economy. This report highlights its significance by illustrating the linkages the health care sector shares with other local industries. For example, when a community encounters an increase in local revenues due to the health care system, or when more of the health care workforce is employed locally, this feeds through the rest of the local economy. Thus, more health care supplies may be purchased through local vendors, and employees are more likely to spend their earnings in the local economy.

The Health care system expenditures as well as the health care employees' expenditures exert a significant impact on the Cumberland Valley ADD of eastern Kentucky. This Area Development District includes Rockcastle, Jackson, Laurel, Clay Whitley, Knox, Bell and Harlan Counties. Overall, the results indicate that in 2000, the economic activities generated by the health care system in Cumberland Valley ADD created 12,873.2 local jobs, \$792,256,786 in local revenues and \$404,193,875 in labor income. Table 1 provides a summary of the findings.

**Table 1: Economic Impact of the Local Health Care System On Kentucky's
Cumberland Valley Area Development District: Rockcastle, Jackson, Laurel, Clay,
Whitley, Knox Bell & Harlan Counties**

Multiplier Type	Direct Impact	Indirect Impact	Induced Impact	Multiplier	Total Impact
Output (Sales)	\$544,742,464	\$78,927,772	\$168,586,576	1.31	\$792,256,786
Labor Income	\$309,458,944	\$33,774,751	\$ 60,960,160	1.31	\$404,193,875
Employment	8,845.3 Jobs	1,306.4 Jobs	2,721.5 Jobs	1.45	12,873.2 Jobs

Source: changes that reflect the use of Implan: 2000

The output (sales) multiplier represents the amount of local sales or revenue generated in the local economy due to the impact of the Cumberland Valley ADD health care system (see Table 1). This revenue represents sales from vendors to the health care providers. The \$544,742,464 in Table 1 represents the direct sales from the health care system to suppliers and is the direct multiplier effect. Health care vendors are supplied by other vendors, thus creating more employment and income opportunities. Subsequently, the indirect impact of \$78,927,772 represents the health care vendors' spending within the region. Finally, the \$168,586,576 generated from the induced impact is associated with health care employees' purchases of goods and services locally. Based on the output (sales) multiplier, the Cumberland Valley ADD health care sector had a total economic impact of \$792,256,786.

The employment multiplier demonstrates the relationship between the health care system expenditures and employment creation in the local community. For the Cumberland Valley ADD health care sector, the employment multiplier is 1.45 shown in Table 1. This employment multiplier shows that the health care sector directly creates 8,845.3 jobs, indirectly creates 1,306.4 jobs and health care employee spending creates 2,721.5 jobs. The employment multiplier indicates that for every health care job an additional .45 jobs are created in the local

economy. In total, 12,873.2 jobs in the Cumberland Valley ADD are directly or indirectly tied to the local health care system finances.

Table 1 illustrates the impact of health care on Cumberland Valley ADD's economy, during 2000. The income multiplier indicates the level of regional income that is dependent on the local health care system's payroll. Cumberland Valley ADD health care employee payroll generates approximately a total of \$309,458,944. This \$309,458,944 represents the direct impact on the regional economy. This income translates into more local spending, job creation, and consequently, more income in the community. The indirect impact from the labor income was estimated to be \$33,774,751. The induced impact is \$60,960,160 and the total labor income impact of \$404,193,875 for the region. The income multiplier was 1.31 meaning that for every one dollar of labor income generated in the health care sector, an additional .31 cents of income was generated in the rest of the local economy.

This report can be useful when focusing on rural economic development in the Cumberland Valley Area Development District. A community should identify the current economic and financial roles of local health care providers. Second, potential opportunities for new medical services should be identified in the community or other prospects for local health care services may exist in the local economy. If the local health care system expands, there will be a broad range of corresponding economic effects throughout the community. For example, in the Cumberland Valley Area Development District, every health care job creates an additional .45 jobs in the local economy. Therefore, one hundred new health care jobs would generate 1.45 jobs in the community.

Further research or market demand analysis can determine the feasibility of providing services locally. New opportunities for local health care services will increase the economic impact on Cumberland Valley ADD local economy. Telemedicine, health care networking and other activities should be examined to enhance the economic role of the local health care system.