Economic Importance of a Healthcare System for a SUCCESSFUL RURAL COMMUNITY

By Gregory L. Hamilton, Ph.D.
Institute of Economic Advancement
University of Arkansas at Little Rock

Living healthy is essential for success, and maintaining good health all too often depends on having access to healthcare services. A person’s health and their well-being is affected by their access to a healthcare system because health care can:

- Prevent disease and disabilities
- Detect and treat illnesses
- Enhance quality of life
- Reduce the likelihood of premature death
- Increase life expectancy
- Improve the overall physical, social, and mental health status of a community

A robust healthcare system is an essential component for a successful rural community. The availability of a healthcare system (infrastructure) not only affects the health status of the population but also affects a community’s economic growth and development potentials. A healthy community improves economic welfare and creates conditions that foster economic activities. Communities with a poor health status face diminishing economic welfare that changes economic behaviors in undesirable ways.
A strong (viable) healthcare system creates jobs and generates income for the local area. In 2015, Ashley County healthcare system (ambulatory care, hospital, nursing and residential care facilities, and health care retail stores) provided 746 jobs (9%) of the 8,123 county jobs. Between 2001 and 2015, job growth in Ashley County’s healthcare system grew by 28.3%. Overall the number of jobs in Ashley County declined during the same period by 23.5% from 10,613 in 2001 to 8,123 in 2015. Nationally, during this period the number of jobs in a similar healthcare system grew by 32.9% while overall job growth in the nation was 7.6%. Hence, job creation by Ashley County’s healthcare system performed similar to its national counterpart; while overall job growth in Ashley County underperformed national job growth between 2001 and 2015.

In general, health care jobs are higher paying jobs with benefits relative to many other industries. For Ashley County, the average earnings per job (wages, salary, and benefits) in the Ashley County Medical Center was $35,506 in 2001 and $52,917 (excluding physicians) in 2015. This exceeded the county’s overall earnings per job by 1.4% and 17.7% in 2001 and 2015, respectively.

Communities that have a prosperous healthcare system attract business, and they contribute to industrial growth. A site location that has substandard and inconveniently located healthcare services is a less attractive choice for a business location. Businesses seek site locations that provide a productive labor force. When a community invests in a healthcare system to ensure good health care, they contribute to enhancing labor productivity.
Attracting and retaining retirees is an economic development strategy for community development. Retirees bring a significant amount of spending to a community with the constant purchasing power of Social Security, Medicare expenditures, and other types of transfer payments. During 2013, there were 4,177 fee-for-service beneficiaries who made a combined total of $37.4 million in Medicare expenditures residing in Ashley County. This amounted to $8,921 per capita in Medicare expenditures by Ashley County residents, and 244 beneficiaries per 1,000 residents of Ashley County.\(^5\)

For many rural communities a critical access hospital (CAH) is the cornerstone of the community’s healthcare system. Research has found that when a community loses its hospital other health services leave the community and the community loses the jobs and payrolls. A recent research report stated that a typical rural CAH has average employment of 141 full-time equivalent (FTE) and on average generates $6.8 million in income. The CAH direct jobs support 54 secondary jobs in other businesses in local economy and total employment of 195 jobs. The $6.8 million CAH income in turn supports an addition $1.6 million in secondary income for a combined impact of $8.4 million.\(^6\)
Contribution of Ashley County Healthcare System to Local Economy

Table 1 describes the economic contribution of Ashley County healthcare sector to the economy of the county based on 2015 data estimates. The healthcare sector contributed 746 jobs (9% of the county jobs) to the total county’s 8,123 jobs. During 2015, the healthcare sector provided approximately $65.0 million in health care services (3.8% of the county’s total production of output of goods and services). The estimate of the monetary value of the finished goods and services produced in the county (Gross Domestic Product (GDP)) in 2015 by the county’s healthcare system is $34.7 million (4.5% of the county’s GDP). Workers in the Ashley County healthcare sector received $32.5 million in income payments (9.0% of the county’s total).

Table 1: Estimates of Ashley County Healthcare System (2015)

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>JOBS</th>
<th>REVENUES (Value of Services)</th>
<th>INCOME (Wage, Salaries, and Benefits)</th>
<th>GROSS DOMESTIC PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices of Physicians, Dentists, and Other Health Practitioners</td>
<td>131</td>
<td>$12,722,097</td>
<td>$7,137,111</td>
<td>$7,297,708</td>
</tr>
<tr>
<td>Home Health Care Services</td>
<td>5</td>
<td>$272,963</td>
<td>$197,773</td>
<td>$202,668</td>
</tr>
<tr>
<td>Medical and Diagnostic Labs and Outpatient and Other Ambulatory Care Services</td>
<td>25</td>
<td>$3,011,625</td>
<td>$1,561,261</td>
<td>$1,783,513</td>
</tr>
<tr>
<td>Private Hospitals</td>
<td>284</td>
<td>$32,864,755</td>
<td>$14,917,130</td>
<td>$16,437,601</td>
</tr>
<tr>
<td>Nursing and Residential Care Facilities</td>
<td>265</td>
<td>$13,895,576</td>
<td>$7,786,498</td>
<td>$8,911,364</td>
</tr>
<tr>
<td>Health and Personal Care Stores</td>
<td>36</td>
<td>$2,259,168</td>
<td>$907,720</td>
<td>$140,051</td>
</tr>
<tr>
<td>Healthcare System Total</td>
<td>746</td>
<td>$65,026,185</td>
<td>$32,507,493</td>
<td>$34,772,906</td>
</tr>
<tr>
<td>Ashley County Totals</td>
<td>8,123</td>
<td>$1,689,912,510</td>
<td>$360,343,136</td>
<td>$758,252,541</td>
</tr>
</tbody>
</table>

Data Sources: Economic Modeling Specialist, Intl. and The IMPLAN Model of Ashley County. MIG, Inc., Huntersville, North Carolina.
Ashley County Medical Center Economic Impact

Scale of Ashley County Medical Center Activities

Ashley County Medical Center (ACMC) is a licensed 33 bed Critical Assess Hospital located in Crossett, Arkansas. At the hospital the critical care unit has 6 beds, the labor and delivery unit has 6 beds, there are 8 geriatric beds, 13 medical-surgical beds, 2 operating room suits, an endoscopy suite, 6 day surgery suites, and 9 emergency beds. ACMC employs approximately 283 employees including hospital staff and physicians.8

Admissions in 2015 (YTD) included acute admissions of 912 patients totaling 3,000 patient days. Among the significant health care services provided by the hospital, there were 709 inpatient and outpatient surgeries performed, 308 scope procedures, 135 births, a total of 9,391 emergency visits, home health visits totaled 9,762, and there were 126 psych admissions. Voluntary Community Services ranged from blood and food drives, educational programs and classes, health screenings and fairs, and providing community conference facilities.
Table 2 describes ACMC’s economic impact on Ashley County. The magnitude of the healthcare services provided by ACMC, the number of jobs created, employees’ incomes injected into the economy, and extent of local business expenditures measure ACMC’s direct effects (impacts) on the community. ACMC employs 257 full time equivalent (FTE) healthcare workers who provided $32.7 million in healthcare services to the community. The healthcare services delivered by ACMC added $15.8 million to the county’s GDP directly and injected $14.3 million in income (employee compensation and proprieties income) into the community. Healthcare services provided by ACMC also support rounds of local business expenditures as business produce the necessary goods and services to supply the hospital and each other. These interindustry business expenditures are an indirect effect (impact) of ACMC activities. In addition, there are rounds of spending supported by the income earned at the hospital and by the additional income earned by the local workers and businesses that benefit from the interindustry business purchases. These additional economic impacts are the induced effects (impacts) of ACMC activities. Estimates of the indirect and induced economic impacts due to the ACMC activities in Ashley County are also shown in Table 2.

Table 2: Economic Impact of Ashley County Medical Center on Ashley County

<table>
<thead>
<tr>
<th>IMPACT TYPE</th>
<th>JOBS</th>
<th>REVENUES (Value of Services)</th>
<th>GROSS DOMESTIC PRODUCT</th>
<th>INCOME (Wages, Salaries, and Benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>257.0</td>
<td>$32,710,875</td>
<td>$15,830,891</td>
<td>$14,366,539</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>39.5</td>
<td>$4,323,352</td>
<td>$2,543,313</td>
<td>$1,435,393</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>46.8</td>
<td>$5,344,682</td>
<td>$3,185,260</td>
<td>$1,508,836</td>
</tr>
<tr>
<td>Total Effect</td>
<td>343.3</td>
<td>$42,378,909</td>
<td>$21,559,464</td>
<td>$17,310,768</td>
</tr>
</tbody>
</table>

ACMC Total Effects on Ashley County (Per Cent)

| Ashley County | 4% | 3% | 6% | 2% |

Economic Importance of a Healthcare System for a Successful Rural Community
The $32.7 million of healthcare services provided by ACMC supports $4.3 million local business expenditures indirectly. This local business activity added 39.5 jobs to the community, boosted GDP by nearly $2.5 million, and generates $1.4 million in local income. In addition, activities at ACMC induced $5.3 million in additional expenditures for goods and services sustained by the local income derived from the direct and indirect economic activity. This spending supported 46.8 jobs, added $21.6 million to GDP, and $17.3 million to the county’s income. Based on the ACMC direct effect, the total effect of ACMC on economic activity in Ashley County for 2015 is estimated at $42.3 million. The total economic impact of this activity created and supported by ACMC contributed $21.6 million to the county's GDP, sustained 343 jobs, and added $17.3 million to the local income base.

Conclusion

Percentage-wise ACMC makes up approximately 50% of Ashley County healthcare sector in terms of its contribution to healthcare revenues and 38% of the healthcare jobs. Although, ACMC total economic impact on Ashley County is not large in terms of its percentage contribution to the overall economy (1.2% of the county’s GDP), its consequences for the economic development and growth potential of the community are huge. ACMC is the cornerstone of Ashley County’s healthcare system. An adequate healthcare system is a critical indicator for the economic developers and site location specialist when seeking a desirable site location for industrial development and for attaching and developing a retirement communities. A healthy community needs a prosperous healthcare system to enhance the quality of life for residents and improve their life expectancy.


3 Employment data and industry earning data were obtained from the estimates provided by Economic Modeling Systems Intl. (EMSI). http://www.economicmodeling.com/

4 The Robert Jonson Foundation Program at the University of Wisconsin Population Health Institute ranked Ashley County health factors (health behaviors, clinical care, social and economic factors, and the physical environment) 46th out of the 75 counties in Arkansas in their 2015 ranking. Available at: http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2015_AR_0.pdf


7 Data in this table is derived from data available in the 2012 IMPLAN Model for Ashley County and the EMSI data for Ashley County. IMPLAN data and software developed by the MIG, Inc. is a regional specific data set and economic multiplier models used to measure the effects of changing economic events on a local economy (Headquarters: MIG, Inc., Huntersville, North Carolina).

8 http://www.acmconline.org/about-acmc.html

9 The sum of the direct effect, the indirect effect, and the induced effects is the total effect and often referred to as a multiplier effect of the direct effect.