### **Muscatine County**





# Iowa Hospital Association Economic Impact of the Health Care Sector

#### **Main Objective**

Derive the direct economic impact and total economic impact of the five health sectors and the total health sector for the state of Iowa and each county.

#### **Direct Economic Activities**

Employment and income (sum of payroll and employee benefits expense) are the important direct economic activities created from the health sector. The health sector is divided into the following five components:

- Hospitals
- Offices of Physicians, Dentists, & Other Health Practitioners
- Nursing Home & Residential Care
- Other Medical and Health Services (includes home health care, county health departments, hospice, durable medical equipment suppliers, other ambulatory health care services, dental laboratories, etc.
- Pharmacies (Includes all pharmacy personnel)

#### **Income and Employment Multipliers**

The health sector and the employees in the health sector purchase a large amount of goods and services from local businesses. These impacts are referred to as secondary impacts or benefits to the economy. In economics, this measure is called the multiplier effect. In the report provided, two multipliers are utilized. The "employment multiplier" is the ratio between direct employment and the direct, indirect, and induced employment.

For example, an employment multiplier of 2.0 indicates that if one job is created by an industry, one additional job is created in other sectors due to business (indirect) and household (induced) spending.

The "income multiplier" is the ratio between direct income and the direct, indirect, and induced income. For example, an income multiplier of 1.54 indicates that for each dollar created in that sector, 0.54 additional dollars are created throughout the area due to business (indirect) and household (induced) spending.

#### **Data Notes**

The economic impact results presented in this table including multipliers were obtained from the IMPLAN software, which can analyze county level data using an economic input-output model. It was developed by the U.S. Forest Service and is a model that allows for development of county multipliers.

However, to break this information down to a hospital specific level, certain information required for running the model (e.g., total employment, payroll and benefits of employees, retail sales and pharmacy information) had to be manually entered into the system. This data was collected from the AHA Annual Survey, the Iowa Department of Revenue and Finance, the U.S. Census Bureau and the Bureau of Economic Analysis.





#### **Muscatine County**

| (1)                                              | (2)               | (3)        | (4)          | (5)                         | (6)        | (7)                  | (8)                 | (9)                |
|--------------------------------------------------|-------------------|------------|--------------|-----------------------------|------------|----------------------|---------------------|--------------------|
| Health Sector                                    | <u>Employment</u> |            |              | Payroll & Proprietor Income |            |                      | Retail              | 6.0%               |
| Components                                       | Nos.              | Multiplier | Impact       | Income                      | Multiplier | Impact               | Sales               | Sales Tax          |
| Hospitals                                        |                   |            |              |                             |            |                      |                     |                    |
| UnityPoint Health-Trinity Muscatine              | 352               | 1.58385    | 558          | \$18,314,000                | 1.36550    | \$25,007,775         | \$5,842,253         | \$350,535          |
| HOSPITALS SUBTOTAL                               | 352               | 1.58385    | 558          | \$18,314,000                | 1.36550    | \$25,007,775         | \$5,842,253         | \$350,535          |
| Offices of physicians                            | 148               | 1.48246    | 220          | \$13,456,512                | 1.21219    | \$16,311,805         | \$3,810,722         | \$228,643          |
| Offices of dentists                              | 117               | 1.31038    | 154          | \$7,405,705                 | 1.19689    | \$8,863,779          | \$2,070,733         | \$124,244          |
| Offices of other health practitioners            | 207               | 1.30671    | 271          | \$13,550,410                | 1.17774    | \$15,958,844         | \$3,728,264         | \$223,696          |
| OFFICES SUBTOTAL                                 | 473               | 1.36364    | 645          | \$34,412,627                | 1.19533    | \$41,134,428         | \$9,609,719         | \$576,583          |
| Nursing Home & Community Care facilities         | 554               | 1.29056    | 715          | \$20,155,845                | 1.29047    | \$26,010,416         | \$6,076,487         | \$364,589          |
| Mental health, substance abuse, other facilities | 40                | 1.21234    | 49           | \$1,321,323                 | 1.24450    | \$1,644,386          | \$384,157           | \$23,049           |
| NURSING HOMES AND OTHERS SUBTOTAL                | 594               | 1.28620    | 764          | \$21,477,168                | 1.28764    | \$27,654,802         | \$6,460,644         | \$387,638          |
| Pharmacies                                       | 157               | 1.26332    | 198          | \$4,996,000                 | 1.29832    | \$6,486,384          | \$1,515,332         | \$90,920           |
| Other Medical & Health Services                  |                   |            |              |                             |            |                      |                     |                    |
| Medical and diagnostic laboratories              | 0                 | 1.37710    | 0            | \$20,454                    | 1.23997    | \$25,362             | \$5,925             | \$356              |
| Outpatient care centers                          | 26                | 1.43472    | 38           | \$1,484,667                 | 1.27058    | \$1,886,386          | \$440,693           | \$26,442           |
| Other ambulatory health care services            | 8                 | 1.30119    | 11           | \$429,443                   | 1.24373    | \$534,111            | \$124,778           | \$7,487            |
| Dental laboratories                              | 0                 | 0.00000    | 0            | \$0                         | 0.00000    | \$0                  | \$0                 | \$0                |
| Home health care services                        | 79                | 1.18240    | 93           | \$2,921,011                 | 1.18586    | \$3,463,897          | \$809,227           | \$48,554           |
| OTHER MED/HLTH SVCS SUBTOTAL                     | 114               | 1.24561    | 142          | \$4,855,575                 | 1.21711    | \$5,909,756          | \$1,380,623         | \$82,839           |
| TOTALS                                           | <u>1,690</u>      |            | <u>2,307</u> | <u>\$84,055,370</u>         |            | <u>\$106,193,145</u> | <u>\$24,808,571</u> | <u>\$1,488,515</u> |





## 2021 Economic Impact of the Health Sector

#### **State of Iowa**

| (1)                                              | (2)               | (3)        | (4)            | (5)                         | (6)        | (7)                     | (8)                    | (9)           |
|--------------------------------------------------|-------------------|------------|----------------|-----------------------------|------------|-------------------------|------------------------|---------------|
| Health Sector                                    | <u>Employment</u> |            |                | Payroll & Proprietor Income |            |                         | Retail                 | 6.0%          |
| Components                                       | Nos.              | Multiplier | Impact         | Income                      | Multiplier | Impact                  | Sales                  | Sales Tax     |
| State of Iowa Hospitals                          | 76,169            | 1.88812    | 143,816        | \$5,345,474,716             | 1.61691    | \$8,643,144,321         | \$2,113,407,604        | \$126,804,456 |
| HOSPITALS SUBTOTAL                               | 76,169            | 1.88812    | 143,816        | \$5,345,474,716             | 1.61691    | \$8,643,144,321         | \$2,113,407,604        | \$126,804,456 |
| Offices of physicians                            | 29,153            | 1.83901    | 53,612         | \$3,247,527,130             | 1.33182    | \$4,325,114,750         | \$1,057,570,030        | \$63,454,202  |
| Offices of dentists                              | 10,026            | 1.52479    | 15,287         | \$711,849,777               | 1.33141    | \$947,765,875           | \$231,746,172          | \$13,904,770  |
| Offices of other health practitioners            | 10,816            | 1.40539    | 15,201         | \$575,868,301               | 1.33073    | \$766,327,621           | \$187,381,185          | \$11,242,871  |
| OFFICES SUBTOTAL                                 | 49,994            | 1.68220    | 84,100         | \$4,535,245,208             | 1.33162    | \$6,039,208,246         | \$1,476,697,387        | \$88,601,843  |
| Nursing Home & Community Care facilities         | 43,770            | 1.43531    | 62,824         | \$1,656,230,157             | 1.47186    | \$2,437,738,041         | \$596,071,744          | \$35,764,305  |
| Mental health, substance abuse, other facilities | 12,795            | 1.34223    | 17,173         | \$479,719,115               | 1.38926    | \$666,452,692           | \$162,959,929          | \$9,777,596   |
| NURSING HOMES AND OTHERS SUBTOTAL                | 56,565            | 1.41425    | 79,997         | \$2,135,949,272             | 1.45331    | \$3,104,190,733         | \$759,031,673          | \$45,541,901  |
| Pharmacies                                       | 5,660             | 1.40245    | 7,938          | \$204,514,000               | 1.44559    | \$295,644,126           | \$72,290,421           | \$4,337,425   |
| Other Medical & Health Services                  |                   |            |                |                             |            |                         |                        |               |
| Medical and diagnostic laboratories              | 1,091             | 1.63987    | 1,790          | \$85,832,794                | 1.37805    | \$118,281,583           | \$28,922,020           | \$1,735,321   |
| Outpatient care centers                          | 5,996             | 1.67993    | 10,072         | \$387,470,924               | 1.42711    | \$552,962,134           | \$135,209,402          | \$8,112,564   |
| Other ambulatory health care services            | 3,674             | 1.50018    | 5,512          | \$216,784,630               | 1.38579    | \$300,417,323           | \$73,457,556           | \$4,407,453   |
| Dental laboratories                              | 469               | 1.65512    | 777            | \$42,203,621                | 1.33396    | \$56,297,832            | \$13,765,854           | \$825,951     |
| Home health care services                        | 7,833             | 1.33951    | 10,493         | \$406,578,110               | 1.28160    | \$521,069,846           | \$127,411,152          | \$7,644,669   |
| OTHER MED/HLTH SVCS SUBTOTAL                     | 19,064            | 1.50252    | 28,644         | \$1,138,870,079             | 1.36015    | \$1,549,028,718         | \$378,765,984          | \$22,725,958  |
| TOTALS                                           | <u>207,452</u>    |            | <u>344,495</u> | \$13,360,053,275            |            | <u>\$19,631,216,144</u> | <u>\$4,800,193,069</u> | \$288,011,583 |







