

# ON THE MONEY

A Hannah News Service Publication

Vol. 131, No. 47

By Bill LaFayette, PhD, owner, Regionomics® LLC

December 9, 2016

## Healthcare and Social Assistance in Ohio

This article explores the composition and growth of healthcare and social assistance employment in Ohio and its regions – a subject last explored in the February 8, 2013, edition of *On the Money* (Vol. 130, No. 3).

Healthcare accounted for more than 857,000 jobs throughout Ohio in 2011 – 16.3 percent of total statewide employment, up from 12.4 percent in 2001. The sector generated \$51.3 billion in output in 2015, a 30 percent increase from 2001. But, as discussed in the 2013 article, this is a sector whose impact is much broader than simply its contribution to Ohio's employment and output. By keeping Ohioans healthy, hospitals and healthcare providers enhance residents' quality of life. Because healthier workers are more productive, Ohio's businesses can generate more and higher quality output, which makes them more competitive in national and global markets. For this reason, a strong healthcare system can also lead to more effective economic development.

A compelling argument for a focus on healthcare is that Ohioans are generally less healthy than people in other states. The 2015 annual *America's Health Rankings* report from the United Family Foundation found that Ohio ranks in the bottom third of states in most of the wide variety of healthy behaviors and outcomes measured in the study.<sup>1</sup> A new study from the Henry J. Kaiser Family Foundation found that Ohio leads the nation in deaths from synthetic opioids and heroin.<sup>2</sup> With has 3.5 percent of the total U.S. population, Ohio suffers approximately 11 percent of all U.S. heroin and opioid deaths.

### Composition and Growth of Healthcare Employment in Ohio

Government is a participant in healthcare delivery through government-owned hospitals, clinics, and social assistance agencies. The ability to analyze the role of the public sector in healthcare is limited by the fact that state government healthcare employment is almost completely suppressed, and available statistics report private-sector and public-sector employment but not the sum of the two. Our limited knowledge regarding total healthcare employment is summarized in Table 1. State government employment is available only for the total sector and hospitals, leaving 4,208 state healthcare and social assistance jobs distributed among other industries. No sector-level state government employment data are available at the county level. Because of this data limitation, the remainder of this article will consider private-sector

---

<sup>1</sup> [http://assets.americashealthrankings.org/app/uploads/2015ahr\\_annual-v1.pdf](http://assets.americashealthrankings.org/app/uploads/2015ahr_annual-v1.pdf)

<sup>2</sup> <http://kff.org/other/state-indicator/opioid-overdose-deaths-by-type-of-opioid/?currentTimeframe=0>

employment only. Because the private sector accounts for more than 90 percent of all healthcare employment, it is not a serious limitation.

**Table 1**  
**Healthcare and Social Assistance Employment by Public or Private Status, 2015,**  
**and Net Change, 2001-2015**

Ownership	Employment 2015	Percent of total		Net change, 2001-2015	
		Ohio	U.S.	Ohio	U.S.
<b>Healthcare and social assistance</b>					
Federal government	12,033	1.4%	1.9%	63.5%	58.7%
State government	19,900	2.3%	3.1%	28.5%	0.9%
Local government	46,267	5.4%	4.5%	6.1%	9.3%
Private	778,907	90.9%	90.6%	28.5%	41.7%
Total	857,107	100.0%	100.0%	27.4%	38.4%
<b>Hospitals</b>					
Federal government	9,476	3.4%	5.4%	28.8%	44.2%
State government	15,692	5.6%	5.6%	52.5%	4.8%
Local government	10,298	3.6%	10.5%	-38.9%	6.7%
Private	246,855	87.4%	78.5%	21.6%	20.4%
Total	282,321	100.0%	100.0%	18.9%	18.8%

**Source:** Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics

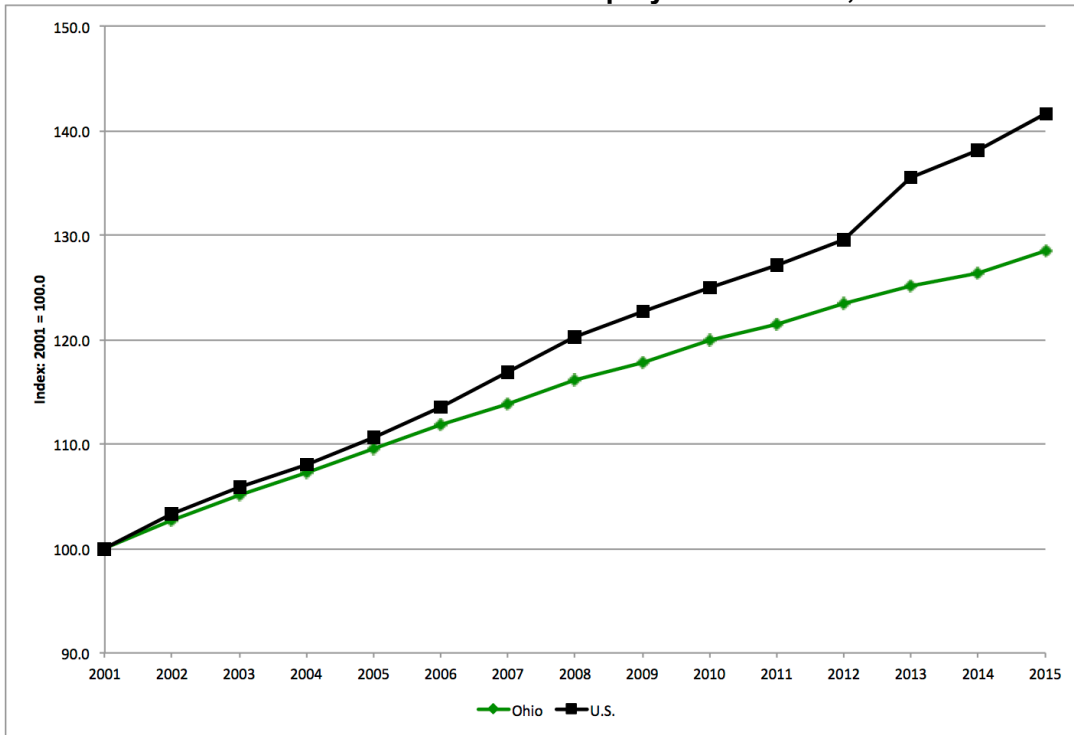
These articles typically analyze employment changes from 2010, the year that employment started growing after the recession. But that is not appropriate in this case because healthcare employment never declined during the recession. Consequently, this employment analysis begins in 2001, the earliest year for which employment using the current industry classification is available from the Quarterly Census of Employment and Wages. The recession-resistant nature of healthcare employment is not unusual: a different (but less reliable) employment series indicates that year-over-year healthcare employment has increased in Ohio since at least 1958.

As Figure 1 on the next page shows, employment grew at a somewhat slower rate at the state level than nationally – 28.5 percent in Ohio and 41.7 percent in the U.S. The likely reason is that many healthcare establishments serve a local market. While the top Ohio hospitals draw patients from across the country and from other nations, medical offices and clinics rarely draw from beyond their own community. As has been discussed in previous issues of *On the Money*, Ohio’s population has grown very slowly, and has suffered a net decline outside of central Ohio.<sup>3</sup> Thus, the market for these establishments is not growing, so the only way the establishments can grow is to take patients from other local providers.

One positive effect of the growth of Ohio healthcare employment is that the number of healthcare workers per person has been steadily increasing. This growth is charted in Figure 2. There are 73.8 healthcare and social assistance workers per 1,000 Ohio residents, up from 59.1 in 2001 and 17 percent greater than the 63.1 national average.

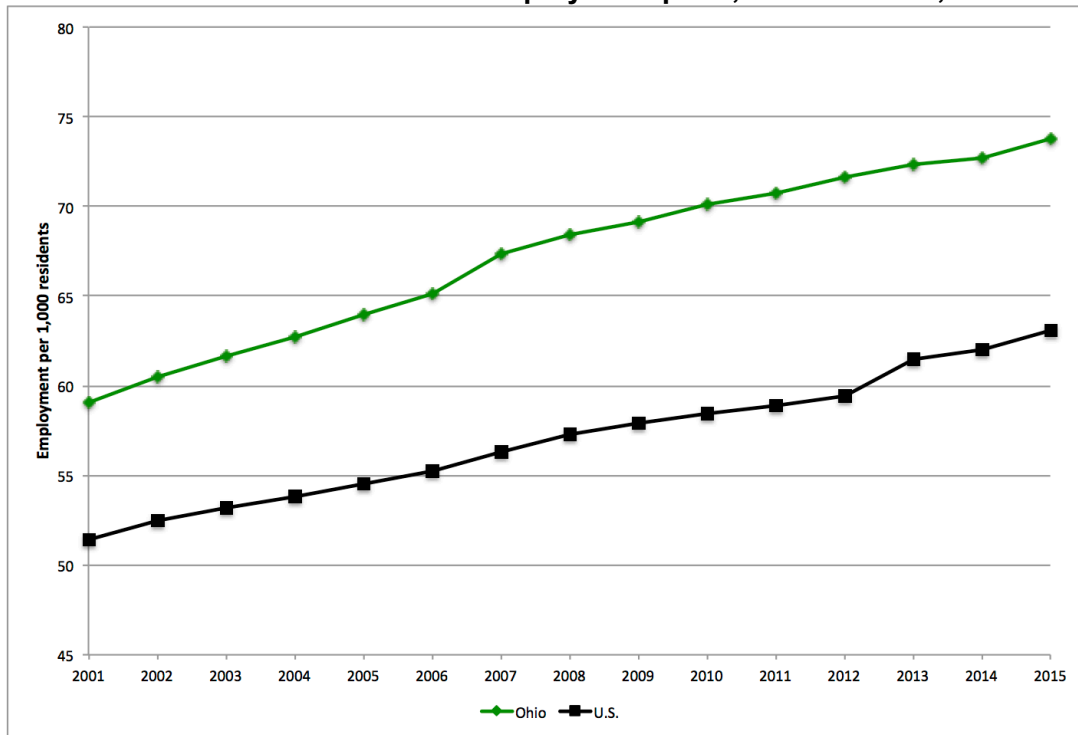
<sup>3</sup> Ohio’s population change was most recently discussed in the June 10, 2016, issue (Vol. 131, No. 35).

**Figure 1**  
**Healthcare and Social Assistance Employment Growth, 2001-2015**



Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

**Figure 2**  
**Healthcare and Social Assistance Employment per 1,000 Residents, 2001-2015**



Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics; Population Estimates Program, U.S. Census Bureau.

We turn now to an examination of healthcare sector employment growth at the industry level. Healthcare and social assistance includes health care practitioners' offices and clinics, medical laboratories, home healthcare services, hospitals, nursing homes, and other residential care facilities. The social assistance subsector includes individual and family services such as child day care; non-medical home care; social activities and support; food, housing, and relief services; and vocational rehabilitation. While many of these services may not be healthcare in a strict sense, they still promote personal well-being and may be adjuncts to healthcare services.

Table 2 provides a variety of measures of the growth and concentration of these industries for private employers at the state level. The industry classification is nested, with more-indented industries a more specific subset of the less-indented industry above. The first column reports employment of the industry in total and as a percentage of sector employment, state and national growth over the past decade, and the location quotient of the subsector. Location quotient is the percentage of Ohio employment in a given industry divided by the total U.S. percentage in that industry. Thus, a location quotient greater than 1.00 indicates a sector with a larger-than-average share of total Ohio employment. Ohio and U.S. employment growth since 2001 is given in the two final columns.

**Table 2**  
**Total Employment, Growth, and Concentration of Healthcare Industries**

Industry	Employment 2015	Location quotient	Change, 2001-2015	
			Ohio	U.S.
<b>Total payroll employment</b>	<b>5,258,288</b>	<b>1.000</b>	<b>-3.2%</b>	<b>7.6%</b>
<b>Healthcare and social assistance</b>	<b>778,907</b>	<b>1.125</b>	<b>28.5%</b>	<b>41.7%</b>
Healthcare	676,948	1.201	24.5%	34.4%
Ambulatory healthcare services	261,574	1.014	37.3%	53.7%
Offices of physicians	87,900	0.924	12.5%	32.1%
Offices of dentists	31,635	0.930	14.7%	28.1%
Offices of other health practitioners	31,639	1.032	53.6%	78.3%
Outpatient care centers	28,987	1.033	40.8%	86.3%
Medical and diagnostic laboratories	7,286	0.746	48.8%	53.4%
Home healthcare services	62,334	1.257	107.2%	107.1%
Ambulance services	7,498	1.184	38.9%	65.3%
All other ambulatory healthcare services	4,295	0.981	29.5%	51.0%
Hospitals	246,855	1.358	21.6%	20.4%
General medical and surgical hospitals	239,446	1.414	19.4%	18.5%
Psychiatric and substance abuse hospitals	2,300	0.553	58.1%	28.9%
Other specialty hospitals	5,110	0.617	429.0%	67.3%
Nursing and residential care facilities	168,519	1.362	12.3%	23.5%
Nursing care facilities, skilled nursing	97,821	1.578	-4.0%	6.8%
Residential mental health facilities	30,078	1.314	49.4%	32.8%
Continuing care, assisted living facilities	36,029	1.102	61.5%	74.0%
Other residential care facilities	4,590	0.748	-19.9%	0.1%
Social assistance	101,960	0.790	63.2%	85.2%
Individual and family services	53,957	0.678	136.8%	192.7%
Emergency and other relief services	5,965	1.013	12.7%	26.2%
Vocational rehabilitation services	10,107	0.814	7.1%	8.5%
Child day care services	31,931	1.028	27.9%	18.0%

**Source:** Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics

The 1.125 location quotient for total private-sector healthcare and social assistance implies employment 12.5 percent greater than would be expected in an economy Ohio's size.

Employment in general hospitals and nursing and residential care facilities is also well above average. Although most Ohio healthcare industries grew at a slower-than-average rate, employment in home healthcare services equaled the 107 percent national average growth. Hospitals enjoyed faster-than-average growth, especially psychiatric and substance abuse hospitals and other specialty hospitals – which include hospitals that specialize in ailments such as cancer, obstetrics, and physical rehabilitation, and also children’s hospitals. Note that employment in specialized wards of general hospitals is not included here: employment is classified by the primary activity at a specific location.

## **Regional Healthcare Employment**

A constant theme of these articles is the diversity of the Ohio economy, which implies that conditions in a particular area of the state may be quite different from those implied by a statewide analysis. Again, this analysis is somewhat incomplete because it omits the unavailable state government healthcare employment. A further challenge is that private-sector healthcare employment is suppressed in the Quarterly Census of Employment and Wages for most or all years for about 25 counties. The strategy is to compile numbers for these counties at the next higher level of aggregation (education and health services) and use data from the Census Bureau’s County Business Patterns to infer the employment allocation between private-sector education and healthcare. The resulting estimates summed across all counties yielded a total 0.4 percent less than the actual statewide total. The number of suppressed industry employment totals is so great that no analysis is feasible below that for healthcare and social assistance in total.

Local healthcare employment is analyzed using the 13 regions that have been the consistent focus in these articles. These regions include each of the six largest Metropolitan Statistical Areas (MSAs)<sup>4</sup> and seven other areas encompassing smaller MSAs and rural areas. These seven regions are designated on the basis of some level of economic similarity among adjacent counties – primarily based on manufacturing and agriculture. The regions are mapped in Figure 3.

---

<sup>4</sup> The Cincinnati region omits the portions of that MSA in Kentucky and Indiana.

**Figure 3  
Ohio Regions**



Northwest  Toledo MSA  West North Central  Cleveland MSA  Akron MSA   
 Northeast  West  Columbus MSA  East North Central  Dayton MSA   
 Cincinnati MSA  South  Southeast

Table 3 presents employment totals, location quotients, 14-year changes, and employment per 1,000 residents for each of the 13 areas, along with the state total for comparison. The Columbus MSA enjoyed growth far greater than both state and national averages, driven both by the region’s strong population growth and the ability of the region’s hospitals to draw increasing numbers of patients from outside the region. No other region’s employment growth exceeded the national average and relatively few others exceeded the state average.

**Table 3**  
**Healthcare Employment Total, Change, and Relative Concentrations, Ohio Regions**

Region	Employment, 2015	Location quotient	Change, 2001-15	Employment per 1,000
<b>Ohio</b>	<b>778,907</b>	<b>1.125</b>	<b>28.5%</b>	<b>67.07</b>
Northeast	77,688	1.341	12.7%	63.79
Southeast	21,188	1.322	17.1%	58.02
South	25,588	1.402	37.6%	52.87
West	35,242	0.995	18.8%	53.30
Northwest	8,386	0.924	34.5%	45.36
West North Central	28,955	1.068	20.2%	53.44
East North Central	13,342	0.912	30.0%	42.93
Akron MSA	48,651	1.199	37.1%	69.08
Cincinnati MSA*	119,534	1.167	30.1%	72.26
Cleveland MSA	164,560	1.293	26.6%	79.85
Columbus MSA	128,348	1.028	59.4%	63.49
Dayton MSA	59,436	1.293	22.9%	74.21
Toledo MSA	44,687	1.212	12.4%	73.75
Total non-MSA	210,389	1.179	19.6%	55.87
Total MSA	565,216	1.183	32.7%	72.02

\*Ohio counties only.

**Source:** Calculated from Quarterly Census of Employment and Wages, U.S. Bureau of Employment Statistics.

The large MSAs except for Columbus have location quotients well above 1.0, as do the Northeast, Southeast, and South. The relatively low concentration for Columbus is likely due to the omission of the 10,000-plus employees of the OSU Medical Center, who are classified as state employees. The large MSAs in total have many more employees per thousand than the small MSA/rural regions, suggesting that the major cities draw patients who need more specialized care from the non-MSA regions.

The final column of Table 3 reports the ratio of healthcare employment to population in each of the 13 regions. Healthcare employment is more heavily concentrated in the major MSA regions as a group and in each of the MSAs individually, except in the under-reported Columbus MSA. This too suggests that the major cities provide healthcare services both to local residents and those from outside the MSA.

"On The Money" (c) 1995-2013 Hannah News Service Inc., 21 West Broad Street, Suite 1000,  
 Columbus, Ohio 43215.

All Rights Reserved. Phone Number (614) 227-5820