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Healthcare Employment in Ohio

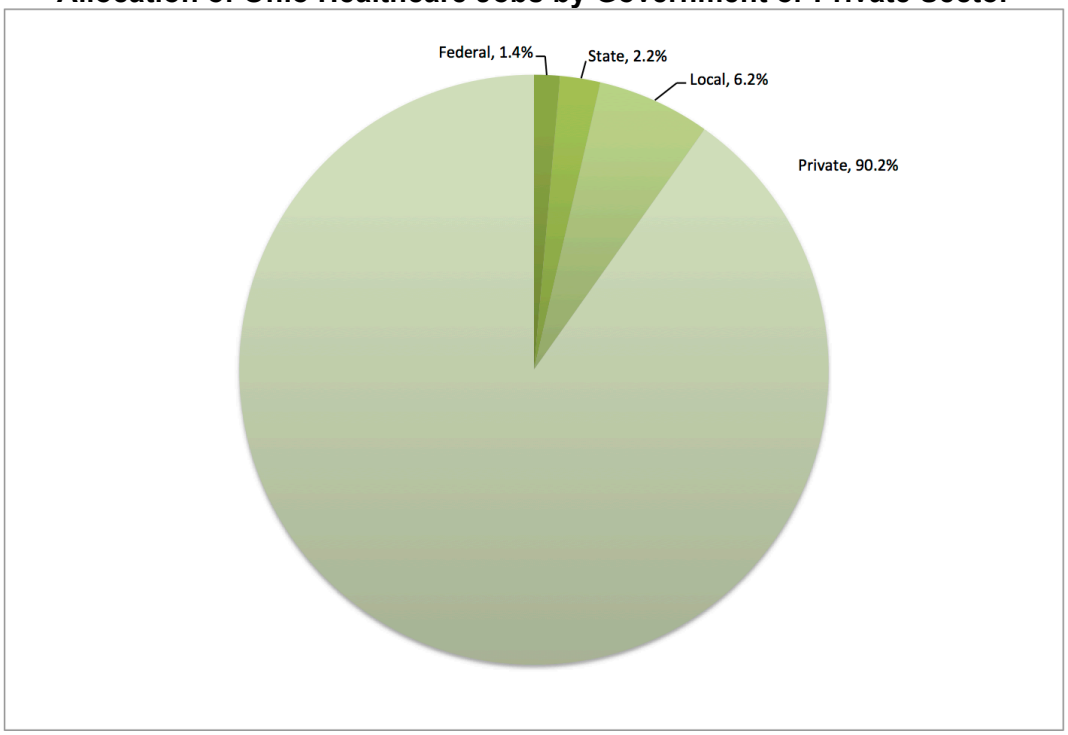
Healthcare accounted for more than 816,000 jobs throughout Ohio in 2011 – 16.4 percent of total statewide employment – and generated $38.6 billion in output. But this is a sector whose impact goes far beyond the numbers. By keeping Ohioans healthy, hospitals and healthcare providers enhance residents' 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. One of the most important attributes usually examined by companies considering expansion or relocation to a new community is the cost and availability of high-quality healthcare.

This article will discuss the current composition of healthcare employment in Ohio and its growth over the past decade. It will also explore the growth of healthcare employment at the regional level. There is an important public health reason for doing this: concerns have been raised that the increasing sophistication of healthcare is leading to the centralizing of treatment at large metropolitan hospitals and clinics and away from smaller community facilities. If this is true, quality healthcare may be less available in smaller communities. However, the analysis discussed below does not provide evidence that this trend is occurring in Ohio.

Composition and Growth of Healthcare Employment in Ohio

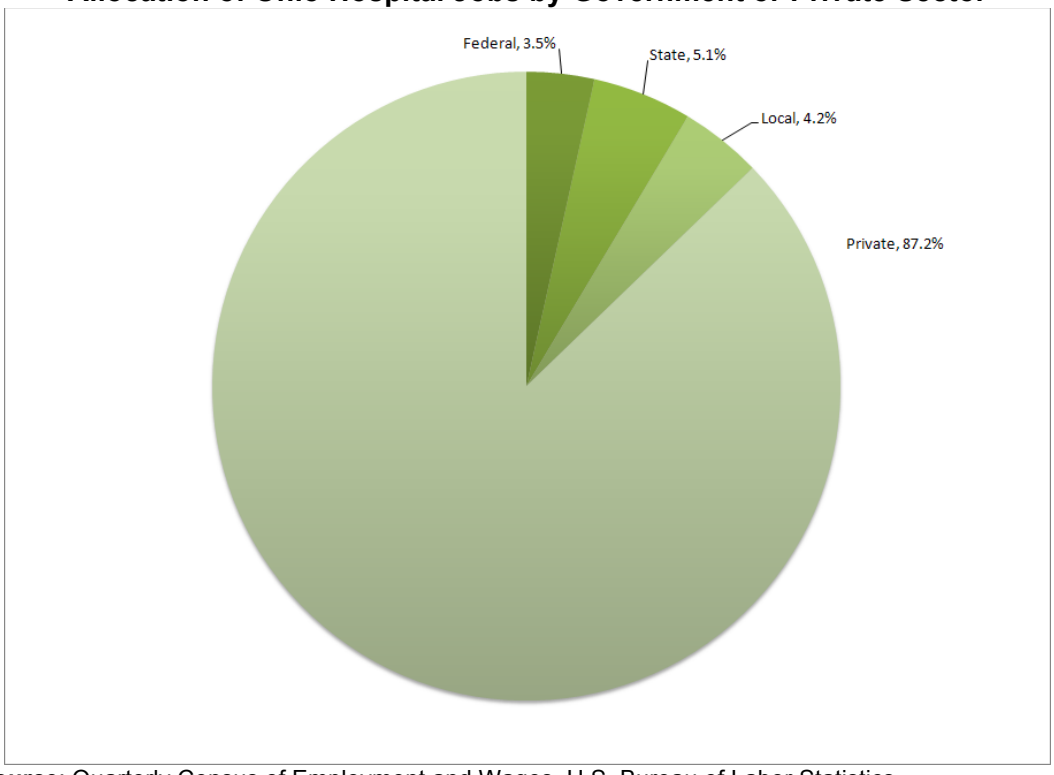
Government is a participant in healthcare delivery through government-owned hospitals and clinics. However, as Exhibit 1 on page 2 shows, privately-owned health providers account for more than 90 percent of all Ohio healthcare jobs, with local governments providing the majority of jobs in the public sector. (This allocation is almost identical at the national level.) The distribution of hospital jobs is slightly different from that in the overall sector, as shown in Exhibit 2. The share of private jobs is marginally less, and federal and state governments provide a larger share of the public-sector jobs.

Exhibit 1
Allocation of Ohio Healthcare Jobs by Government or Private Sector



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

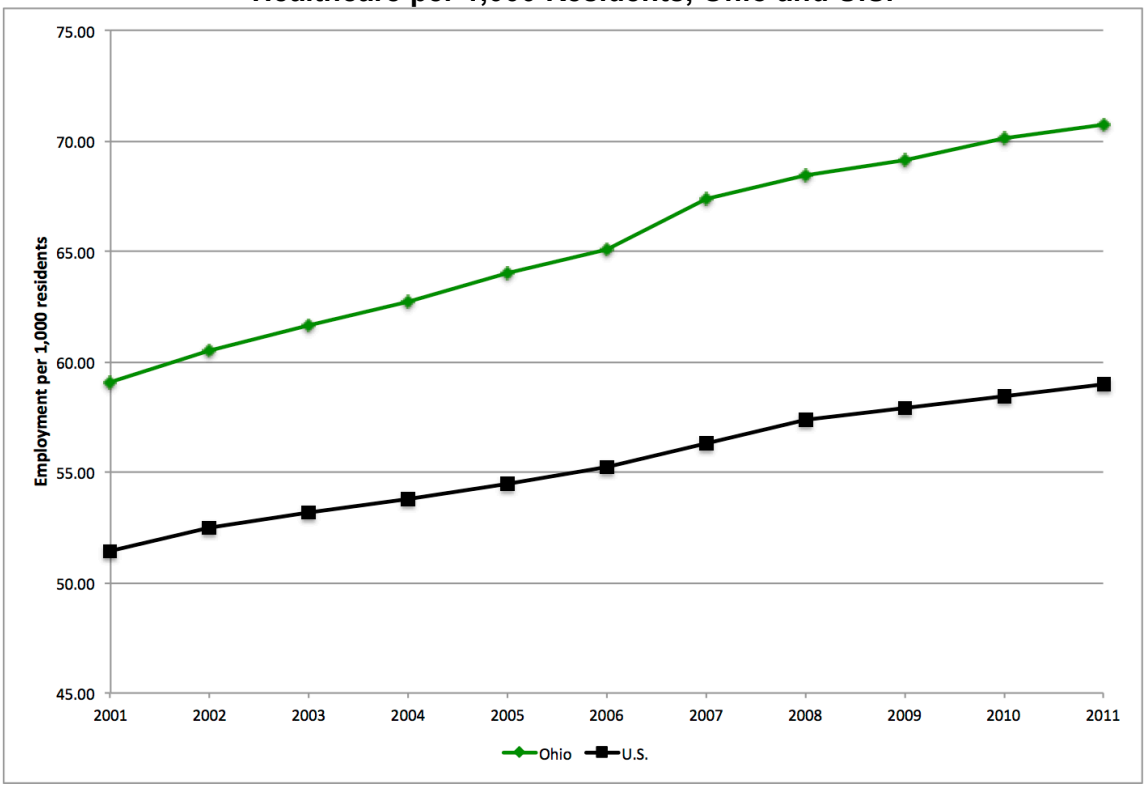
Exhibit 2
Allocation of Ohio Hospital Jobs by Government or Private Sector



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

Healthcare employment in Ohio has grown steadily over the past ten years, adding 143,700 jobs (21.4 percent) between 2001 and 2011 – while total Ohio employment declined 8.6 percent. Healthcare employment grew somewhat more rapidly at the national level – 25.3 percent. However, employment relative to population tells a very different story. As Figure 3 reveals, total healthcare employment (public and private) per 1,000 residents is far higher than average in Ohio and has grown at a faster rate than it has elsewhere.

Exhibit 3
Healthcare per 1,000 Residents, Ohio and U.S.



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

Data availability poses a problem for further analysis of the healthcare sector: public-sector employment in healthcare is partially or completely unavailable for subsectors, especially at the county level. Consequently, the remainder of this analysis is based solely on private-sector healthcare employment – which again is more than 90 percent of the total. While this causes some distortion because of the omission of major public-sector health systems, such as The Ohio State University Medical Center in Columbus, overall private-sector patterns are likely similar to those including the public sector.

The healthcare sector consists of health care practitioners' offices and clinics; medical laboratories; home healthcare services; hospitals; nursing and residential care facilities; and social assistance. Social assistance includes individual and family services such as 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. Exhibit 4 provides a variety of measures of the growth and concentration of these subsectors for private employers at the state level. These include employment of the subsector in total and as a

percentage of sector employment, state and national growth over the past decade, and the relative concentration of the subsector. Relative concentration is the percentage of total Ohio employment in the subsector divided by the total U.S. percentage in that subsector. Thus, a relative concentration greater than 1.00 indicates a sector with a larger-than-average share of total regional employment. Although healthcare employment in Ohio grew at a slower-than-average rate, employment in home healthcare services, social assistance, and especially medical laboratories grew more rapidly in Ohio than elsewhere. Private-sector healthcare employment is 16.3 percent greater than would be expected in an economy Ohio's size, while home healthcare, hospital, and residential care facility employment were each one-third or more higher than would be expected.

Exhibit 4
Composition and Growth of Ohio Private-Sector Healthcare

	Total employment	Pct. of total healthcare	Growth, 2001-2011		Relative concentration
			Ohio	U.S.	
Healthcare	**736,088**	**100.0%**	**21.4%**	**27.2%**	**1.163**
Medical offices	177,875	24.2%	14.3%	30.5%	0.855
Medical labs	7,485	1.0%	52.9%	37.2%	0.724
Home healthcare	57,086	7.8%	89.8%	79.5%	1.333
Hospitals	235,405	32.0%	16.0%	16.7%	1.358
Res care facilities	169,624	23.0%	13.0%	19.0%	1.350
Social assistance	88,613	12.0%	41.8%	36.2%	0.846

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

The growth of medical laboratories is a particularly welcome development. These facilities are suppliers of services to the remainder of the sector. The low relative concentration implies that Ohio healthcare providers are likely sending a higher-than-average proportion of their medical samples to labs outside Ohio. As a result, dollars flow from healthcare providers out of Ohio, reducing the healthcare providers' total impact on the state's gross domestic product, earnings, and employment. This is occurring to a lesser extent than it was a decade ago: relative concentration in 2001 was 0.62. But further growth will allow greater magnification of the impact of the direct providers, and may attract more dollars from providers outside the state.

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. Moreover, in the case of healthcare, other forces may be at work that would be revealed by a regional analysis. There is no doubt that healthcare delivery is becoming more complex and the necessary equipment far more expensive as patients demand access to top-quality care. This investment may be feasible only for a large hospital in a major city with patient volumes sufficient to cover the cost. Further, the author has conducted several economic impact studies of Columbus hospitals that showed increasing numbers of patients coming from outside Central Ohio. The same may be occurring in the major urban hospitals elsewhere in the state. The question is whether patients are being attracted to these hospitals in sufficient volumes to undermine the patient base of the hospitals in smaller communities. If these community hospitals were to downsize or close, emergency care would be less convenient, possibly endangering lives. This has broader economic implications as well: one or more hospitals rank as major employers in virtually every county in the state. If these hospitals

are struggling, it impacts the community's economy and employment just as if any large employer were to face financial difficulty.

Again, this analysis is incomplete because it omits the unavailable government healthcare employment. Further, 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 less than 0.5 percent different from the actual statewide total.

The analysis makes use of the regional breakdowns developed and analyzed in earlier issues of *On the Money*: the six major Metropolitan Statistical Areas and the seven regions including smaller MSAs and rural counties. The MSAs are considered both as a group and individually.[1] Exhibit 5 maps these regions.

Exhibit 5
Ohio Regions

[1] The analysis of the Cincinnati MSA omits the portions of that region in Kentucky and Indiana.

Exhibit 6 presents basic growth and relative concentration statistics for each of the areas. The key point here is that both urban and rural regions mostly enjoyed strong growth. The non-MSA relative concentration is comparable to the MSA concentration. This would tend to call into question the idea that MSA healthcare establishments are growing at the expense of those in smaller communities. The low concentration for Columbus is due to the omission of the 10,000-plus employees of the OSU Medical Center.

Exhibit 6
Healthcare Employment Total, Change, and Relative Concentrations, Ohio Regions

	Employment, 2011	Change, 2001-11	Relative concentration
Northeast	76,522	11.0%	1.355
Southeast	21,990	18.8%	1.363
South	25,060	31.0%	1.340
West	33,838	19.0%	1.340
Northwest	8,075	25.8%	0.936
West North Central	27,706	21.0%	1.097
East North Central	12,967	26.3%	0.964
Akron	46,072	29.8%	1.186
Cincinnati*	110,442	20.2%	1.144
Cleveland	156,478	20.4%	1.274
Columbus	110,306	38.6%	0.982
Dayton	56,842	15.9%	1.247
Toledo	46,790	14.3%	1.279
Total non-MSA	206,158	18.1%	1.208
Total MSA	526,930	23.4%	1.164

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

But as the earlier discussion pointed out, the ratio of healthcare employment to population is also a useful statistic. The ten-year trend of employment per thousand is shown in Exhibit 7. The trend is important to capture any shifting of employment from rural areas to the large MSAs. While it is certainly true that the MSAs have higher ratios than the other regions, most regions' ratios show a steady increase over the decade, further calling into question the idea that concentration of healthcare in the major MSAs is growing at the expense of smaller communities.

The exceptions to the steady growth of the employment/population ratio are the Toledo MSA and the adjacent Northwest area. In both cases, the trend has flattened. This may be a function of the recession, or it may be that healthcare employment in the area has reached a short-term growth limit. The employment/population ratio for Toledo is higher than that for all other areas except Cleveland, which is a worldwide center for healthcare. Despite the discussion above, it is important to bear in mind that some healthcare still primarily serves a local customer base – similar to retail. The growth potential of that component of healthcare is essentially limited to population growth, meaning that overexpansion is possible, just as it is in retail.

Exhibit 7
Healthcare Employment Per 1,000 Residents, Ohio Regions

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Northeast	53.88	55.01	56.21	57.76	59.09	59.59	60.18	60.77	61.24	61.16	61.89
Southeast	46.32	49.21	51.80	50.84	51.85	52.22	52.65	53.49	54.65	54.09	54.50
South	37.63	38.78	40.67	42.05	41.54	42.39	43.16	43.72	44.49	45.90	48.00
West	45.16	46.77	48.39	49.63	49.25	51.20	51.36	52.20	52.10	53.28	54.13
Northwest	33.45	35.34	37.24	38.57	39.62	40.10	40.87	43.04	43.94	43.53	43.21
W. N. Central	43.80	44.59	46.12	47.34	48.31	50.06	50.20	50.96	51.48	54.07	54.41
E. N. Central	34.57	36.02	37.10	38.05	39.14	37.93	39.33	39.67	38.70	40.84	42.00
Akron	50.85	52.82	53.52	55.03	57.13	58.74	60.69	62.79	63.62	64.50	65.68
Cincinnati*	58.61	59.21	60.78	62.11	63.45	64.76	66.21	67.57	67.48	67.83	67.79
Cleveland	60.70	63.05	64.11	64.65	66.25	68.08	69.85	71.31	73.09	74.80	75.66
Columbus	48.39	49.94	50.80	52.03	52.39	52.75	53.16	54.07	55.20	57.74	59.35
Dayton	57.90	58.75	60.09	61.04	62.44	62.91	64.18	65.99	66.56	66.92	67.24
Toledo	62.04	64.02	64.04	65.29	69.36	71.00	71.05	71.48	72.04	72.36	71.96
Total non-MSA	45.60	46.99	48.56	49.66	50.32	51.10	51.62	52.35	52.74	53.54	54.37
Total MSA	56.48	58.04	59.04	60.07	61.54	62.70	63.87	65.15	66.03	67.28	67.97

*Ohio counties only.

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