

# **Economic Impact of the Healthcare Industry** **Springfield, Illinois Metropolitan Area**

Prepared for the  
**Greater Springfield Chamber of Commerce**

Prepared by  
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***The Economic Impact of the Healthcare Industry on the Springfield, Illinois Metropolitan Area*** was prepared by Brian Harger of the Center for Governmental Studies at Northern Illinois University under agreement with the Greater Springfield Chamber of Commerce. Questions and inquiries regarding the contents of this report can be directed to Brian Harger (815) 753-0934. For more information on the Center for Governmental Studies, please visit our website at [www.cgsniu.org](http://www.cgsniu.org).

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## Introduction

The Greater Springfield Chamber of Commerce commissioned this report to analyze economic impact of the healthcare industry in Springfield, Illinois Metropolitan Statistical Area <sup>1</sup>. The Springfield, Illinois Metropolitan Statistical Area (MSA) consists of Menard and Sangamon counties in Illinois. The healthcare industry has attracted considerable attention in recent years as a principle area of focus for local, state and national economic development efforts because of its job-generating capacity, directly tied to the explosive growth in demand for healthcare services.

Springfield has become a regional healthcare services center with a considerable network of programs and facilities for healthcare delivery, research, and training for doctors and other medical staff. This industry concentration has propelled the Springfield economy forward by attracting substantial human and financial resources from which patients, researchers, the educational system and the community all derive significant benefits. However, healthcare institutions are often viewed as simply providers of services – since patient care is their most visible contribution. Less apparent are the important connections and contributions that these institutions make within the broader regional economy.

Springfield has one of the largest concentrations of healthcare facilities and personnel in the Midwest, relative to its size, with 17,000 employees and \$828 million in employee compensation. In 2007, the healthcare industry produced \$1.68 billion dollars in output (the value of an industry's business activities including sales), \$1.11 billion in value-added in terms of employee compensation, rent, interest, taxes, and profits paid or earned, and contributed more than \$31 million in taxes revenues to local governments. The annual compensation for healthcare workers in Springfield average \$48,706 including fringe benefits, significantly higher than the \$42,133 average for all area workers.

One in eight jobs in the Springfield area is directly tied to the healthcare industry. When economic multiplier effects are factored in, the total jobs generation attributable to the healthcare industry is 24,769 workers with \$1.1 billion in wages, salaries and benefits, and output valued at \$2.49 billion.

Following the economic impact analysis is a presentation and discussion of projected employment growth of the healthcare industry in the Springfield area in comparison with national trends. The comparison also includes a group of Midwest metropolitan areas with characteristics similar to Springfield in terms of the size and scope of the healthcare sector.

<sup>1</sup> The Springfield, Illinois Metropolitan Statistical Area (MSA) consists of Menard and Sangamon counties in Illinois.

## Methodology

The impact analysis was completed using the ImplanPro input/output model developed by Minnesota Implan Group. The model is unique in that the I/O coefficients are based on county specific patterns and include both industry specific direct and indirect impacts. Direct impacts are those that result from annual operations such as employee compensation, output/sales, and taxes. Indirect impacts are the secondary effects on the area. For example, as a result of the health care industry's operations, the area economy will experience increased economic activity. This in turn leads to changes in employment, compensation, and output in other industry sectors. The analysis does not include any economic impacts on surrounding counties related to the company's operation.

Analyses were performed for the five Implan industry sectors that represent various healthcare business activities.

- Offices of physicians, dentists, and other health practitioners.
- Home healthcare services.
- Medical and diagnostic laboratories, outpatient and other ambulatory care services.
- Hospitals and medical schools.
- Nursing and residential care facilities.

In addition, a separate analysis was conducted that examined these five sectors as a group. The impact figures generated for this overall healthcare industry summary represents the averaging of all five industry sectors. This accounts for the differences in the impact data between the industry summary and those of the individual industry sectors.

The Implan model's default information on employment, compensation and operating expenditures was used for all of the healthcare sectors with the exception of the hospitals and medical schools sector. Information on employment, compensation and operating expenditures was obtained from the two hospitals, as well as the SIU School of Medicine to compute the economic impact for this sector<sup>2</sup>.

Analyses were run for 2002 and 2007 to evaluate the changes in the healthcare industry's impact on the Springfield economy over time. It should be noted that because a revision to Implan's industry classification system, there are some continuity issues in comparing the impact results between year to year. Although the effects of this revision were deemed to be negligible in relation to the healthcare-related sectors and the aggregate impact data, some discrepancies were found in the indirect impacts on other industries. Therefore the comparisons of the indirect impacts on employment, output, value-added, and employee compensation were excluded.

<sup>2</sup> The employment, compensation and output data for the hospital industry/medical school sector included both Springfield hospitals, as well as the SIU School of Medicine. This was done primarily to address confidentiality concerns on the part of the participants.

## Analysis of the Healthcare Industry Group

As shown in Table 1, health care providers in the Springfield area directly employed 17,003 workers in 2007. This represents an increase in total employment of 4.6% from 2002. The purchases made by these firms and their employees generated an additional 7,766 jobs, so that the total job generation attributable to the health care sector is 24,769. This equates to an employment multiplier of 1.46. For every 100 jobs created by companies in this industry, 46 additional jobs will be created in other sectors of the Springfield economy.

**Table 1**  
**Springfield, Illinois MSA**  
**Healthcare Industry Impacts**

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
Employment	15,058	17,003	8,615	7,766	23,673	24,769
Output (\$millions)	\$1,397	\$1,680	\$737	\$810	\$2,134	\$2,490
Value-Added (\$million)	\$904	\$1,106	\$459	\$477	\$1,364	\$1,583
Employee Compensation (\$million)	\$688	\$828	\$233	\$260	\$921	\$1,088

Table 2 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the Springfield area by healthcare providers and their employees in terms of job creation.

**Table 2**  
**Springfield, Illinois MSA**  
**Healthcare Industry Indirect Jobs Impacts**

Industry	2007
Food services and drinking places	797
Administrative support services	691
Professional - scientific and technical services	611
Ambulatory health care	552
Wholesale trade	346
Hospitals/medical schools	322
Non-store retailers	268
General merchandise stores	236
Real estate	234
Nursing and residential care	216
Insurance carriers and related	213
Food and beverage stores	210

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, the Springfield area's healthcare providers generated \$2.49 billion in direct and indirect economic activity (\$1.68 billion in direct and \$810.0 million in indirect output). This represents an increase of 16.7% from 2002. Table 3 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of the healthcare industry in terms of output or sales.

**Table 3**  
**Springfield, Illinois MSA**  
**Healthcare Industry Indirect Output Impacts**

Industry	2007
Real estate	\$114,556,230
Ambulatory health care	\$68,450,854
Professional - scientific and technical services	\$67,187,666
Wholesale Trade	\$57,011,724
Insurance carriers and related	\$48,844,856
Food services and drinking places	\$40,724,468
Admin support services	\$33,968,890
Hospitals/medical schools	\$31,059,502
Monetary authorities	\$26,875,697
Management of companies	\$24,884,665
Government and unclassified	\$22,187,575
Telecommunications	\$17,525,500
Motor vehicle & parts dealers	\$13,836,925
Utilities	\$13,782,332
Repair & maintenance	\$12,067,824
Religious, grant-making and similar organizations	\$11,289,208
General merchandise stores	\$11,288,355
Food and beverage stores	\$11,120,721

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, the healthcare industry experienced an increase in the value added (wealth) of the Springfield area economy by over \$219 million, \$202 million from the operations directly and more than \$15 million from indirect impacts on other industries in the region. This represented 16.1% of the total value-added (wealth) of the Springfield MSA. Some of the industries that benefited indirectly from this increase are shown in Table 4.

**Table 4**  
**Springfield, Illinois MSA**  
**Healthcare Industry Indirect Value-Added (Wealth) Impacts**

Industry	2007
Real estate	\$81,435,376
Ambulatory health care	\$45,431,263
Professional - scientific and technical services	\$40,716,955
Wholesale trade	\$36,790,715
Administrative support services	\$21,809,857
Monetary authorities	\$20,232,108
Hospitals/medical schools	\$19,481,024
Food services and drinking places	\$18,770,954
Insurance carriers and related	\$16,558,594
Government and unclassified establishments	\$14,484,640
Management of companies	\$13,285,498
Telecommunications	\$9,179,882
Utilities	\$9,176,982
Motor vehicle and parts dealers	\$8,954,503
General merchandise stores	\$7,562,672
Food and beverage stores	\$7,498,740
Repair and maintenance	\$6,667,043

Similarly, employee compensation (wages and benefits) paid in 2007 by healthcare providers totaling \$828 million generated an additional \$260 million throughout the Springfield economy. The total employee compensation impact of \$1.088 billion represents an increase of \$167 million or 18.2% from 2002. This means that for every million dollars of employee compensation paid by healthcare providers, other businesses in the Springfield area will pay an additional \$313,000 in employee compensation.

The indirect employee compensation impacts were greatest in the following industries:

**Table 5**  
**Springfield, Illinois MSA**  
**Healthcare Industry Indirect Employee Compensation Impacts**

Industry	2007
Professional - scientific and technical services	\$25,959,550
Ambulatory health care	\$25,477,600
Wholesale trade	\$21,461,452
Administrative support services	\$19,203,074
Hospitals/medical schools	\$18,490,717
Government and unclassified establishments	\$13,286,121
Food services and drinking places	\$13,074,879
Management of companies	\$10,703,873
Insurance carriers and related	\$10,203,921

The average annual employee compensation for the healthcare sector is estimated to be \$48,706 including fringe benefits, significantly higher than the annual average of \$42,133 for the Springfield MSA.

The Springfield healthcare sector is also a significant source of revenue to local governments. In 2007, healthcare providers generated an estimated \$99.2 million in state and local taxes (\$68 million in state taxes and \$31.2 in local taxes). This represents a 12.9% increase from 2002.

Local tax generation included \$6.3 million in sales tax revenue and \$24.9 million in property tax revenue.

### **Offices of physicians, dentists, and other health practitioners**

According to the Bureau of Labor Statistics, the offices of physicians, dentists, and other health practitioners make up about 37% of all health care establishments. Physicians and surgeons practice privately or in groups of practitioners who have the same or different specialties. Many physicians and surgeons prefer to join group practices because they afford backup coverage, reduce overhead expenses, and facilitate consultation with peers. Physicians and surgeons are increasingly working as salaried employees of group medical practices, clinics, or integrated health systems.

The offices of dentists comprise 20% of the establishments in this sector. Most of these employ only a few workers, who provide preventative, cosmetic, or emergency care. Some offices specialize in a single field of dentistry such as orthodontics or periodontics.

The balance of this sector is made up of the business operations of chiropractors, optometrists, podiatrists, occupational and physical therapists, psychologists, audiologists, speech-language pathologists, dietitians, and other health practitioners. Demand for the services of this segment is related to the ability of patients to pay, either directly or through health insurance. Hospitals and nursing facilities may also contract out for these services. This segment also includes the offices of practitioners of alternative medicine, such as acupuncturists, homeopaths, hypnotherapists, and naturopaths<sup>3</sup>.

As shown in Table 6, the offices of physicians, dentists, and other health practitioners in the Springfield area directly employed 6,317 workers in 2007. This represents an increase in total employment of 56.4% from 2002. The purchases made by these firms and their employees generated an additional 3,718 jobs, so that the total job generation attributable to the health care sector is 10,035. This equates to an employment multiplier of 1.59. For every 100 jobs created by companies in this industry, 59 additional jobs will be created in other sectors of the Springfield economy.

**Table 6**  
**Springfield, Illinois MSA**  
**Offices of Physicians, Dentists, and Other Health Practitioners Industry Impacts\***

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
<b>Employment</b>	4,040	6,317	3,246	3,718	7,286	10,035
<b>Output (\$millions)</b>	\$559	\$774	\$275	\$382	\$834	\$1,156
<b>Value-Added (\$million)</b>	\$455	\$535	\$173	\$224	\$628	\$759
<b>Employee Compensation (\$million)</b>	\$343	\$273	\$124	\$88	\$466	\$361

\* Excludes the SIU School of Medicine.

Table 7 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the Springfield area by these healthcare providers and their employees in terms of job creation.

<sup>3</sup> Data for the SIU School of Medicine are not included in this sector. See instead the "hospitals and medical schools".

**Table 7**  
**Springfield, Illinois MSA**  
**Offices of Physicians, Dentists, and Other Health Practitioners: Indirect Jobs Impacts**

<b>Industry</b>	<b>2007</b>
Food services and drinking places	408
Administrative support services	307
Professional - scientific and technical services	273
Wholesale trade	168
Hospitals/medical schools	155
Non-store retailers	131
General merchandise stores	115
Insurance carriers and related	110
Nursing and residential care	106
Food and beverage stores	103

\* Excludes the SIU School of Medicine.

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, the Springfield area's physicians, dentists, and other health practitioners generated \$1.16 billion in direct and indirect economic activity (\$774.4 million in direct and \$381.7 million in indirect output). This represents an increase of 38.6% from 2002. Table 8 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of this industry in terms of output or sales.

**Table 8**  
**Springfield, Illinois MSA**  
**Offices of Physicians, Dentists, and Other Health Practitioners: Indirect Output Impacts**

<b>Industry</b>	<b>2007</b>
Real estate	\$50,650,976
Professional - scientific and tech services	\$31,375,726
Wholesale trade	\$27,752,248
Insurance carriers and related	\$25,130,802
Food services and drinking places	\$20,832,596
Administrative support services	\$15,775,482
Hospitals/medical schools	\$14,939,164
Monetary authorities	\$14,593,086
Government and unclassified establishments	\$9,913,719
Telecommunications	\$8,745,229
Management of companies	\$7,166,215
Motor vehicle and parts dealers	\$6,762,943

\* Excludes the SIU School of Medicine.

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, the business operations of physicians, dentists, and other health practitioners shows an increase in the value added (wealth) of the Springfield area economy by over \$759.1 million, \$534.7 million from the operations directly and more than \$224.4 million from indirect impacts on other industries in the region. Some of the industries that benefited indirectly from this increase in wealth are shown in Table 9.

**Table 9**  
**Springfield, Illinois MSA**  
**Offices of Physicians, Dentists, and Other Health Practitioners: Indirect Value-Added (Wealth) Impacts**

Industry	2007
Real estate	\$35,368,164
Professional - scientific and technical services	\$19,522,900
Wholesale trade	\$17,909,036
Monetary authorities	\$10,985,720
Administrative support services	\$10,014,116
Food services and drinking places	\$9,602,278
Hospitals/medical schools	\$9,370,086
Insurance carriers and related	\$8,525,519
Telecommunications	\$4,580,764
Motor vehicle and parts dealers	\$4,376,608
Management of companies	\$3,825,920

\* Excludes the SIU School of Medicine.

Compensation to employees (wages and benefits) paid in 2007 by these businesses totaled \$342.9 million and generated an additional \$123.6 million throughout the Springfield economy. The total employee compensation impact of \$466.5 million represents an increase of \$105.5 million or 29.2% from 2002. This equates to a compensation multiplier of 1.36. This means that for every million dollars of employee compensation paid by these healthcare providers, other businesses in the Springfield area will pay an additional \$361,000 in employee compensation.

The indirect employee compensation impacts were greatest in the following industries:

**Table 10**  
**Springfield, Illinois MSA**  
**Offices of Physicians, Dentists, and Other Health Practitioners**  
**Indirect Employee Compensation Impacts**

Industry	2007
Professional - scientific and technical services	\$12,339,515
Wholesale trade	\$10,447,036
Hospitals/medical schools	\$8,893,764
Administrative support services	\$8,703,815
Food services and drinking places	\$6,688,452
Government and unclassified establishments	\$5,951,252
Insurance carriers and related	\$5,258,940
Monetary authorities	\$4,715,695
Religious, grant-making and similar organizations	\$3,755,923
Miscellaneous manufacturing	\$3,179,768
Motor vehicle and parts dealers	\$3,161,729
Management of companies	\$3,082,471
General merchandise stores	\$2,467,342
Food and beverage stores	\$2,439,221

\* Excludes the SIU School of Medicine.

The average annual employee compensation for this sector is estimated to be approximately \$54,276 including fringe benefits, which is substantially higher than the \$42,133 annual average for the Springfield MSA.

The Springfield healthcare sector is also a significant source of revenue to local governments. In 2007, healthcare providers generated an estimated \$46.4 million in state and local taxes (\$68 million in state taxes and \$11.9 in local taxes). The local taxes generated included \$331,000 in sales tax revenue and \$11.6 million in property tax revenue.

### Home healthcare services

Increasingly, skilled nursing or medical care is being provided in the home, under a physician's supervision. Home health care services are provided mainly to the elderly. The development of in-home medical technologies, substantial cost savings, and patients' preference for care in the home have helped change this once-small segment of the industry into one of the fastest growing parts of the economy. Between 2002 and 2007, employment in home health care services grew by 23.8%, on a national basis. The Springfield area's experience is less reflective of the national trends, which suggests an opportunity for new development and expansion efforts in this sector.

As shown in Table 11, health care providers in the Springfield area directly employed 527 workers in 2007. This represents an increase in total employment of 3.9% from 2002. The purchases made by these firms and their employees generated an additional 139 jobs, so that the total job generation attributable to the health care sector is 666. This equates to an employment multiplier of 1.26. For every 100 jobs created by companies in this industry, 269 additional jobs will be created in other sectors of the Springfield economy.

**Table 11**  
**Springfield, Illinois MSA**  
**Home Healthcare Services: Industry Impacts**

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
Employment	507	527	172	139	679	666
Output (\$millions)	\$24.9	\$30.0	\$13.9	\$13.8	\$38.9	\$43.9
Value-Added (\$million)	\$16.0	\$22.2	\$8.8	\$8.2	\$24.8	\$30.4
Employee Compensation (\$million)	\$12.1	\$14.5	\$4.6	\$4.5	\$16.7	\$19.0

Table 12 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the Springfield area by home healthcare providers and their employees in terms of job creation.

**Table 12**  
**Springfield, Illinois MSA**  
**Home Healthcare Services: Indirect Jobs Impacts**

Industry	2007
Administrative support services	19
Food services and drinking places	14
Professional - scientific and technical services	8
Wholesale trade	6
Hospitals/medical schools	6
Non-store retailers	5
General merchandise stores	4
Nursing and residential care	4
Food and beverage stores	4
Social assistance	4

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, the Springfield area's home health care providers generated \$43.8 million in direct and indirect economic activity (\$30.0 million in direct and \$13.8 million in indirect output). This represents an increase of about \$5 million or 12.8% from 2002.

Table 13 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of the home healthcare sector in terms of output or sales.

**Table 13**  
**Springfield, Illinois MSA**  
**Home Healthcare Services: Indirect Output Impacts**

Industry	2007
Real estate	\$1,985,701
Wholesale trade	\$1,014,516
Professional - scientific and technical services	\$948,841
Administrative support services	\$851,668
Food services and drinking places	\$689,582
Insurance carriers and related	\$679,541
Hospitals/medical schools	\$564,060
Monetary authorities	\$535,323
Management of companies	\$499,567
Telecommunications	\$357,069
Rental and leasing services	\$326,961
Government and unclassified establishments	\$315,355
Motor vehicle and parts dealers	\$260,237
General merchandise stores	\$212,935
Food and beverage stores	\$209,826

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, the home healthcare sector generated an increase in the value added (wealth) of the Springfield area economy by over \$30.4 million, \$22.2 million from the operations directly and more than \$8.2 million from indirect impacts on other industries in the region. Some of the industries that benefited indirectly from this increase in wealth are shown in Table 14.

**Table 14**  
**Springfield, Illinois MSA**  
**Home Healthcare Services: Indirect Value-Added (Wealth) Impacts**

<b>Industry</b>	<b>2007</b>
Real estate	\$1,388,547
Wholesale trade	\$654,686
Professional - scientific and technical services	\$591,751
Administrative support services	\$567,112
Monetary authorities	\$402,993
Hospitals/medical schools	\$353,788
Food services and drinking places	\$317,846
Management of companies	\$266,710
Insurance carriers and related	\$230,073
Government and unclassified establishments	\$200,575
Telecommunications	\$187,033
Motor vehicle and parts dealers	\$168,411

Compensation to employees (wages and benefits) paid in 2007 by the home healthcare sector totaled \$14.5 million and generated an additional \$4.5 million throughout the Springfield economy. The total employee compensation impact of \$19.0 million represents an increase of \$2.27 million or 13.6% from 2002. This equates to a compensation multiplier of 1.31 – i.e. for every million dollars of employee compensation paid by home healthcare providers in 2007, other businesses in the Springfield area paid an additional \$311,000 in employee compensation.

The indirect employee compensation impacts were greatest in the following industries:

**Table 15**  
**Springfield, Illinois MSA**  
**Home Healthcare Services: Indirect Employee Compensation Impacts**

<b>Industry</b>	<b>2007</b>
Administrative support services	\$512,344
Wholesale trade	\$381,904
Ambulatory health care	\$372,714
Professional - scientific and technical services	\$369,481
Hospitals/medical schools	\$335,803
Food services and drinking places	\$221,395
Management of companies	\$214,883
Government and unclassified establishments	\$185,258
Monetary authorities	\$172,987
Insurance carriers and related	\$141,524

The average annual employee compensation for this sector is estimated to be approximately \$27,485 including fringe benefits, which is substantially lower than the \$42,133 annual average for the Springfield MSA.

The Springfield home healthcare sector is also a significant source of revenue to local governments. In 2007, home healthcare providers generated an estimated \$1.74 million in state and local taxes (\$1.24 million in state taxes and \$503,000 in local taxes). The local taxes generated included \$101,000 in sales tax revenue and \$402,000 in property tax revenue.

### **Medical and diagnostic laboratories and outpatient and other ambulatory care services**

This sector is made up of medical and diagnostic laboratories that provide analytic or diagnostic services to the medical profession or directly to patients following a physician's prescription. Workers may analyze blood, take x-rays and computerized tomography scans, or perform other clinical tests. It also includes a wide range of other ambulatory or out-patient care services such as kidney dialysis centers, outpatient mental health and substance abuse centers, health maintenance organization medical centers, freestanding ambulatory surgical and emergency centers, ambulance and helicopter transport services, blood and organ banks, pacemaker monitoring services and smoking cessation programs.

Between 2002 and 2007, employment in this sector grew by nearly double the national rate (53.4% locally versus 24.1% for the U.S.). As shown in Table 16, Medical and diagnostic laboratories and outpatient and other ambulatory care service providers in the Springfield area directly employed 913 workers in 2007. This represents an increase in total employment of 53.4% from 2002. The purchases made by these firms and their employees generated an additional 534 jobs, so that the total job generation attributable to the health care sector is 1,447. This equates to an employment multiplier of 1.58. For every 100 jobs created by companies in this industry, 58 additional jobs will be created in other sectors of the Springfield economy.

**Table 16**  
**Springfield, Illinois MSA**  
**Medical and diagnostic laboratories and outpatient and other ambulatory care services**  
**Industry Impacts**

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
Employment	595	913	503	534	1,098	1,447
Output (\$millions)	\$77.4	\$128.5	\$43.4	\$55.9	\$12.8	\$184.4
Value-Added (\$million)	\$35.6	\$80.2	\$26.6	\$33.1	\$62.1	\$113.2
Employee Compensation (\$million)	\$22.2	\$35.3	\$13.9	\$18.4	\$36.2	\$53.7

Table 17 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the Springfield area by medical and diagnostic laboratories and outpatient and other ambulatory care services and their employees in terms of job creation.

**Table 17**  
**Springfield, Illinois MSA**  
**Medical and diagnostic laboratories and outpatient and other ambulatory care services**  
**Indirect Jobs Impacts**

Industry	2007
Administrative support services	71
Food services and drinking places	54
Professional - scientific and technical services	46
Wholesale Trade	21
Hospitals/medical schools	19
Non-store retailers	15
Insurance carriers and related	14
Real estate	13
General merchandise stores	13
Management of companies	13
Nursing and residential care	12
Food and beverage stores	12

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, these service providers generated \$184.4 million in direct and indirect economic activity (\$128.5 million in direct and \$55.9 million in indirect output). This represents an increase of about \$63.6 million or 65.9% from 2002 (substantially higher than the national increase of 42.8%).

Table 18 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of this industry in terms of output or sales.

**Table 18**  
**Springfield, Illinois MSA**  
**Medical and diagnostic laboratories and outpatient and other ambulatory care services**  
**Indirect Output Impacts**

<b>Industry</b>	<b>2007</b>
Real estate	\$6,434,845
Professional - scientific and technical services	\$5,449,120
Administrative support services	\$3,397,637
Wholesale trade	\$3,382,532
Insurance carriers and related	\$3,240,571
Food services and drinking places	\$2,740,465
Management of companies	\$2,472,496
Hospitals/medical schools	\$1,855,762
Monetary authorities	\$1,751,057
Government and unclassified establishments	\$1,476,258
Telecommunications	\$1,315,341
Repair and maintenance	\$1,053,625
Rental and leasing services	\$1,044,811

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, the sector generated an increase in the value added (wealth) for the Springfield area economy of over \$113.2 million, \$80.2 million from the operations directly and more than \$30.1 million from indirect impacts on other industries in the region. This represents an increase of 125.4% or 51 million for the Springfield economy between 2002 and 2007.

Some of the industries that benefited indirectly from this increase in wealth are shown in Table 19.

**Table 19**  
**Springfield, Illinois MSA**  
**Medical and diagnostic laboratories and outpatient and other ambulatory care services**  
**Indirect Value-Added (Wealth) Impacts**

Industry	2007
Real estate	\$4,579,692
Professional - scientific and technical services	\$3,395,715
Administration support services	\$2,217,245
Wholesale trade	\$2,182,810
Management of companies	\$1,320,024
Monetary authorities	\$1,318,201
Food services and drinking places	\$1,263,151
Hospitals/medical schools	\$1,163,964
Insurance carriers and related	\$1,102,880
Government and unclassified establishments	\$992,781
Telecommunications	\$688,978
Repair and maintenance	\$585,208
Utilities	\$533,253
Motor vehicles and parts dealers	\$502,602

Compensation to employees (wages and benefits) paid in 2007 by the businesses in this sector totaled \$35.3 million and generated an additional \$18.4 million throughout the Springfield economy. The total employee compensation impact of \$53.7 million represents an increase of \$17.5 million or 48.4% from 2002. This equates to an employee compensation multiplier of 1.52 - i.e. for every million dollars of employee compensation paid by medical and diagnostic laboratories and outpatient and other ambulatory care service providers in 2007, an estimated additional \$522,000 in employee compensation was generated by other businesses in the Springfield area.

The indirect employee compensation impacts were greatest in the following industries:

**Table 20**  
**Springfield, Illinois MSA**  
**Medical and diagnostic laboratories and outpatient and other ambulatory care services**  
**Indirect Employee Compensation Impacts**

Industry	2007
Professional - scientific and tech services	\$2,124,908
Administrative support services	\$1,973,734
Wholesale trade	\$1,273,318
Hospitals/medical schools	\$1,104,795
Management of companies	\$1,063,518
Government and unclassified establishments	\$913,744
Food services and drinking places	\$879,846
Insurance carriers and related	\$683,354
Monetary authorities	\$565,847
Religious, grant-making and similar organizations	\$418,837
Repair and maintenance	\$392,125
Motor vehicles and parts dealers	\$363,087
General merchandise stores	\$282,673
Food and beverage stores	\$279,394

The average annual employee compensation for this sector is estimated to be approximately \$38,644 including fringe benefits; 8.3% below the \$42,133 annual average for the Springfield MSA.

The Springfield medical and diagnostic laboratories and outpatient and other ambulatory care services sector is also a significant source of revenue to local governments. In 2007, home healthcare providers generated an estimated \$6.83 million in state and local taxes (\$4.89 million in state taxes and \$1.94 million in local taxes). The local taxes generated included \$392,664 in sales tax revenue and \$1.55 million in property tax revenue.

### **Hospitals and Medical Schools**

Hospitals provide complete medical care, ranging from diagnostic services, to surgery, to continuous nursing care. Some hospitals specialize in treatment of the mentally ill, cancer patients, or children. Hospital-based care may be on an inpatient (overnight) or outpatient basis. The mix of workers needed varies, depending on the size, geographic location, goals, philosophy, funding, organization, and management style of the institution. As hospitals work to improve efficiency, care continues to shift from an inpatient to outpatient basis whenever possible. Many hospitals have expanded into long-term and home health care services, providing a wide range of care for the communities they serve.

It should be noted that, the employment, compensation and output data used to determine the impacts for this industry sector was obtained directly from the employers, rather than using the Implan program's estimates. It included data for both Springfield hospitals, as well as the SIU School of Medicine. Although the SIU School of Medicine is medical education institution, it is also a significant regional provider of patient care through its surgeon/physician practice and clinics. The SIU School of Medicine's information was included in this sector's calculations as a way of addressing confidentiality concerns on the part of these institutions.

Employment growth in the hospitals and medical schools sector between 2002 and 2007 contrasted sharply when comparing local (8.0% decrease) versus national trends (11.3% increase). As Table 21 shows, Springfield area hospitals and medical schools directly employed 7,030 workers in 2007. The purchases made by these firms and their employees generated an additional 3,096 jobs, so that the total job generation attributable to the health care sector is 10,126. This equates to an employment multiplier of 1.44. For every 100 new jobs created by companies in this industry, 44 additional jobs will be created in other sectors of the local economy.

**Table 21**  
**Springfield, Illinois MSA**  
**Hospitals and Medical Schools: Industry Impacts**

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
Employment	7,644	7,030	4,074	3,096	11,718	10,126
Output (\$millions)	\$640.5	\$678.6	\$354.9	\$329.4	\$995.4	\$1,007.9
Value-Added (\$million)	\$338.6	\$425.6	\$220.3	\$193.9	\$558.9	\$619.5
Employee Compensation (\$million)	\$330.7	\$404.0	\$111.2	\$103.9	\$441.9	\$507.8

Table 22 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the by Springfield area hospitals and medical schools and their employees in terms of job creation.

**Table 22**  
**Springfield, Illinois MSA**  
**Hospitals and Medical Schools: Indirect Jobs Impacts**

<b>Industry</b>	<b>2007</b>
Food services and drinking places	288
Professional - scientific and technical services	262
Administrative support services	261
Ambulatory health care	225
Wholesale Trade	139
Real estate	127
Non-store retailers	108
General merchandise stores	95
Nursing and residential care	86
Food and beverage stores	85
Social assistance	82

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, these healthcare providers generated \$1.007 billion in direct and indirect economic activity (\$678.6 million in direct and \$329.4 million in indirect output). This represents an increase of about \$12.5 million or 1.3% from 2002.

Table 23 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of the hospitals and medical schools sector in terms of output or sales.

**Table 23**  
**Springfield, Illinois MSA**  
**Hospitals and Medical Schools: Indirect Output Impacts**

<b>Industry</b>	<b>2007</b>
Real estate	\$6,434,845
Professional - scientific and technical services	\$5,449,120
Administrative support services	\$3,397,637
Wholesale trade	\$3,382,532
Insurance carriers and related	\$3,240,571
Food services and drinking places	\$2,740,465
Management of companies	\$2,472,496
Hospitals/medical schools	\$1,855,762
Monetary authorities	\$1,751,057
Government and unclassified establishments	\$1,476,258
Telecommunications	\$1,315,341
Repair and maintenance	\$1,053,625
Rental and leasing services	\$1,044,811

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, the sector generated an increase in the value added (wealth) for the Springfield area economy of over \$619.5 million, \$425.6 million from the operations directly and more than \$193.9 million from indirect impacts on other industries in the region. This represents an increase of 10.9% or \$60.6 million for the Springfield economy between 2002 and 2007.

Some of the industries that benefited indirectly from this increase in wealth are shown in Table 24.

**Table 24**  
**Springfield, Illinois MSA**  
**Hospitals and Medical Schools: Indirect Value-Added (Wealth) Impacts**

Industry	2007
Real estate	\$37,174,091
Ambulatory health care	\$18,536,699
Professional - scientific and technical services	\$15,599,923
Wholesale trade	\$14,748,408
Administrative support services	\$8,002,636
Management of companies	\$7,374,594
Food services and drinking places	\$6,774,023
Monetary authorities	\$6,745,475
Government and unclassified establishments	\$6,363,803
Insurance carriers & related	\$5,947,452
Utilities	\$4,398,802
Motor vehicles and parts dealers	\$3,619,811
Telecommunications	\$3,393,084
Repair and maintenance	\$3,124,122
General merchandise stores	\$3,052,105

Compensation to hospital and medical school employees (wages and benefits) paid in 2007 totaled \$404 million. This generated additional employee compensation impacts of \$103.9 million in other business sectors. The total employee compensation impact of \$507.8 million represents an increase of \$65.9 million or 14.9% from 2002. This equates to an employee compensation multiplier of 1.26 – i.e. for every million dollars of employee compensation paid by area hospitals in 2007, an estimated additional \$257,000 in employee compensation was generated by other businesses in the Springfield area.

The indirect employee compensation impacts were greatest in the following industries:

**Table 25**  
**Springfield, Illinois MSA**  
**Hospitals and Medical Schools: Indirect Employee Compensation Impacts**

Industry	2007
Ambulatory health care	\$10,355,166
Professional - scientific and technical services	\$10,103,301
Wholesale trade	\$8,603,319
Administrative support services	\$7,124,560
Management of companies	\$5,941,570
Government and unclassified establishments	\$5,723,773
Food services and drinking places	\$4,718,435
Insurance carriers and related	\$3,657,495
Monetary authorities	\$2,895,541
Motor vehicles and parts dealers	\$2,615,007
Religious, grant-making and similar organizations	\$2,471,944
Real estate	\$2,130,639
Repair and maintenance	\$2,103,076
General merchandise stores	\$2,034,620

The average annual employee compensation for this sector is estimated to be approximately \$57,463 including fringe benefits; substantially higher than the annual average of \$42,133 for the Springfield MSA.

The Springfield hospitals and medical schools sector is also a significant source of revenue to local governments. In 2007, area hospitals and medical schools generated an estimated \$39.3 million in state and local taxes (\$26.8 million in state taxes and \$12.5 million in local taxes). The local taxes generated included \$2.5 million in sales tax revenue and \$9.9 million in property tax revenue.

### **Nursing and residential care facilities**

Nursing care facilities provide inpatient nursing, rehabilitation, and health-related personal care to those who need continuous nursing care, but do not require hospital services. Nursing aides provide the vast majority of direct care. Other facilities, such as convalescent homes, help patients who need less assistance. Residential care facilities provide around-the-clock social and personal

care to children, the elderly, and others who have limited ability to care for themselves. Workers care for residents of assisted-living facilities, alcohol and drug rehabilitation centers, group homes, and halfway houses. Nursing and medical care, however, are not the main functions of establishments providing residential care, as they are in nursing care facilities.

Between 2002 and 2007, employment in the nursing and residential care facilities decreased by 2.5% in the Springfield area. This was in contrast to a 7.9% increase nationally in the same period. As illustrated in Table 26, the Springfield area care facilities directly employed 2,216 workers in 2007. The purchases made by these firms and their employees generated an additional 279 jobs, so that the total job generation attributable to this sector was 2,495. This equates to an employment multiplier of 1.13. For every 100 jobs created by companies in this industry, 13 additional jobs will be created in other sectors of the local economy.

**Table 26**  
**Springfield, Illinois MSA**  
**Nursing and Residential Care Facilities: Industry Impacts**

Operations (Annually)	Direct		Indirect		Total	
	2002	2007	2002	2007	2002	2007
Employment	2,272	2,216	620	279	2,892	2,495
Output (\$millions)	\$94.8	\$68.9	\$49.9	\$29.1	\$144.7	\$98.0
Value-Added (\$million)	\$59.3	\$43.4	\$30.9	\$17.1	\$90.2	\$60.5
Employee Compensation (\$million)	\$49.3	\$31.2	\$15.4	\$9.3	\$64.8	\$40.9

Table 27 shows the types of businesses that experienced the highest indirect impacts from the purchases made in the by Springfield area nursing and residential care facilities and their employees in terms of job creation.

**Table 27**  
**Springfield, Illinois MSA**  
**Nursing and Residential Care Facilities: Indirect Jobs Impacts**

<b>Industry</b>	<b>2007</b>
Food services and drinking places	35
Administrative support services	32
Professional - scientific and technical services	23
Ambulatory health care	13
Wholesale trade	12
Hospitals/medical schools	10
Real estate	10
Insurance carriers and related	10
Non-store retailers	9
General merchandise stores	8

Output represents the value of an industry's business activities including sales and is used as a measure of overall industry productivity. In 2007, these healthcare providers generated \$98 million in direct and indirect economic activity (\$68.9 million in direct and \$29.1 million in indirect output). This represents a decrease of about \$46.6 million or 32.2% from 2002.

Table 28 illustrates the kinds of business operations in the Springfield area that benefited the most from the presence of nursing and residential care facilities in terms of output or sales.

**Table 28**  
**Springfield, Illinois MSA**  
**Nursing and Residential Care Facilities: Indirect Output Impacts**

<b>Industry</b>	<b>2007</b>
Real estate	\$51,426,719
Professional - scientific and technical services	\$27,961,270
Insurance carriers and related	\$26,823,921
Wholesale trade	\$22,854,467
Food services and drinking places	\$17,569,560
Administrative support services	\$14,696,562
Ambulatory health care	\$13,813,129
Monetary authorities	\$12,355,424
Hospitals/medical schools	\$9,572,265
Management of companies	\$8,960,477
Government and unclassified establishments	\$6,638,690
Utilities	\$6,506,612
Telecommunications	\$6,477,806

Value Added is a measure of wealth created by business in terms of total of employee compensation, rent, interest, taxes, and profit paid or earned, and is an important indicator of the industry's productivity and regional sector strength. In 2007, this sector experienced a decrease in the value added (wealth) for the Springfield area economy of over \$60.5 million, \$43.4 million from the operations directly and more than \$17.1 million from indirect impacts on other industries in the region.

Some of the industries that benefited indirectly from this increase in wealth are shown in Table 29.

**Table 29**  
**Springfield, Illinois MSA**  
**Nursing and Residential Care Facilities: Indirect Value-Added (Wealth) Impacts**

Industry	2007
Real estate	\$2,924,882
Professional - scientific and technical services	\$1,606,665
Wholesale trade	\$1,295,775
Ambulatory health care	\$1,031,858
Admin support services	\$1,008,747
Food services and drinking places	\$813,655
Monetary authorities	\$779,719
Insurance carriers and related	\$752,671
Hospitals/medical schools	\$595,654
Government and unclassified establishments	\$580,193
Utilities	\$562,733
Management of companies	\$498,251
Telecommunications	\$330,024
Motor vehicles and parts dealers	\$287,071
General merchandise stores	\$242,653
Food and beverage stores	\$240,619

Compensation to nursing and residential care employees (wages and benefits) paid in 2007 totaled \$31.6 million. This generated additional employee compensation impacts of \$9.3 million in other business sectors. The total employee compensation impact of \$40.9 million represents a decrease of \$23.9 million or 36.9% from 2002.

The employee compensation multiplier for 2007 was 1.26, meaning that for every million dollars of employee compensation paid by nursing and residential care facilities in the Springfield area, an estimated additional \$260,000 in employee compensation was generated by other businesses.

The indirect employee compensation impacts were greatest in the following industries:

**Table 30**  
**Springfield, Illinois MSA**  
**Nursing and Residential Care Facilities: Indirect Employee Compensation Impacts**

Industry	2007
Professional - scientific and technical services	\$1,022,344
Admin support services	\$888,621
Wholesale trade	\$755,876
Ambulatory health care	\$626,569
Food services and drinking places	\$566,750
Hospitals/medical schools	\$565,375
Government and unclassified establishments	\$512,096
Insurance carriers and related	\$462,607
Management of companies	\$401,431
Monetary authorities	\$334,700
Religious, grant-making and similar organizations	\$237,143
Motor vehicles and parts dealers	\$207,385
Real estate	\$163,110
General merchandise stores	\$161,760
Food & beverage stores	\$159,909

The average annual employee compensation for this sector is estimated to be approximately \$14,248 including fringe benefits; substantially lower than the annual average of \$42,133 for the Springfield MSA.

The Springfield nursing and residential care sector is also a source of revenue to local governments. In 2007, area nursing and residential care facilities generated an estimated \$4.9 million in state and local taxes (\$3.1 million in state taxes and \$1.8 million in local taxes). The local taxes generated included \$372,000 in sales tax revenue and \$1.5 million in property tax revenue.

## **Healthcare Industry Employment Projections**

Employment in healthcare is expected to continue to grow for several reasons. The number of people in older age groups, with much greater than average health care needs, will grow faster than the total population between 2006 and 2016; as a result, the demand for health care will increase. Employment in home health care and nursing and residential care should increase rapidly as life expectancies rise, and as aging children are less able to care for their parents and rely more on long-term care facilities. Advances in medical technology will continue to improve the survival rate of severely ill and injured patients, who will then need extensive therapy and care. New technologies will make it possible to identify and treat conditions that were previously not treatable. Medical group practices and integrated health systems will become larger and more complex, increasing the need for office and administrative support workers. Industry growth also will occur as a result of the shift from inpatient to less expensive outpatient and home health care because of improvements in diagnostic tests and surgical procedures, along with patients' desires to be treated at home.

Nationwide as well as locally, healthcare is expected to be a primary source of overall employment growth, generating three million new wage and salary jobs between 2006 and 2016. Seven of the twenty fastest growing occupations are healthcare related. Projected rates of employment growth for the various segments of the industry range from 13% in hospitals, the largest and slowest growing industry segment, to 55% in the much smaller home health care services. The source of this growth is the gradual aging of the population coupled with advances in medical technologies increasing life expectancies.

The aging population will drive employment increases in nursing and residential care facilities, including hospice care and nursing and convalescent facilities. This trend may well be eclipsed by Federal budget constraints, a continued shift toward less costly home health care and assisted living, and a healthier elderly population. The increasing desire on the part of the elderly to maintain an independent lifestyle, community care and residential care facilities (those that offer assisted living options) are expected to grow rapidly. The robust growth projected for ambulatory and home health care services are also being driven by the same factors.

Employment growth in hospitals will be the slowest within the healthcare industry. However, given their overall size, they will continue to account for a large share of healthcare employment and an important catalyst for growth in other industry sectors. Although facing cost pressures and increased utilization of outpatient clinics and other alternative care options, hospitals are still projected to be a significant source of job growth. Increasingly, hospitals are providing services on an out patient or ambulatory basis limiting unnecessary or low priority services and stressing more preventative care. Such trends are fueling job growth in clinics and other facilities that provide medical surgical or dental services outside the traditional hospital setting.

These outpatient services and specialty clinics (such as ambulatory surgical centers, dialysis clinics, and community health centers) will continue to expand in response to the demand; with inpatient admissions moderating and the number of patients being treated on an outpatient basis surging. The cost and convenience advantages of outpatient treatment benefit patient and insurers alike. The growth of these procedures is the cumulative outcome of new treatment technologies, increased managed care penetration and capital investment by outpatient care providers.

Healthcare employment for the Springfield MSA is forecast to grow at a slower rate compared with that of the nation. According to data derived from the Illinois Department of Employment Security, healthcare services will grow by 1.3% annually between 2006 and 2016 (Table 31). An estimated 2,100 new jobs – or about 210 jobs per year – are projected for the area healthcare industry.

**Table 31**  
**Springfield, IL MSA and the Nation**  
**Employment in Healthcare by Industry Segment and Projected Change (2006-2016)**

	Number of Jobs (in Thousands)		Average Annual Growth (%)
	2006	2016	
<b>Springfield, IL MSA</b>			
Healthcare Services and Social Services	16.8	18.9	1.3
Offices of physicians and other health practitioners	6.2	7.3	1.7
Home health care services	0.5	0.6	2.6
Medical and diagnostic labs and outpatient and other ambulatory care services	0.9	1.1	2.6
Hospitals	7.0	7.2	0.4
Nursing and Residential Care Facilities	2.2	2.5	1.6
<b>United States</b>			
Healthcare Services and Social Services	13,621.0	16,577.0	2.2
Offices of physicians and other health practitioners	2,725.0	3,450.0	2.7
Home health care services	867.0	1,347.0	5.5
Medical and diagnostic labs and outpatient and other ambulatory care services	907.0	1,129.0	2.5
Hospitals	5,438.0	6,145.0	1.3
Nursing and Residential Care Facilities	2,901.0	2,925.0	2.4

Data Source: U.S. Bureau of Labor Statistics, Illinois Department of Employment Security, 2008.

A comparison of the Springfield area with other Midwestern metropolitan areas that have similar characteristics in terms of healthcare facilities, education and training programs and share of total employment also highlights the slower growth trend (Table 32).

**Table 32**  
**Springfield, IL MSA and Regional Competitors**  
**Employment in Healthcare by Industry Segment and Projected Change (2006-2016)**

Healthcare Services and Social Services	Number of Jobs (in Thousands)		Average Annual Growth (%)
	2006	2016	
Columbus, OH	92.5	112.3	2.1
Indianapolis, IN	108.6	133.9	2.3
Madison, WI	n/a	n/a	n/a
Peoria, IL	29.3	35.6	2.0
Rochester, MN *	52.6	66.8	2.7
Rockford, IL	20.1	24.3	2.0
<b>Springfield, IL</b>	<b>16.8</b>	<b>18.9</b>	<b>1.3</b>
Springfield, MO *	30.9	40.0	2.9

\* The data reported are for a larger labor market region that includes the subject metropolitan area.

Data Sources: Illinois Department of Employment Security, Labor Market Information Unit, 2007. Indiana Workforce Development Agency, 2008. Ohio Department of Job and Family Services, Bureau of Labor Market Information, February 2006. Missouri Economic Research and Information Center, Missouri Department of Economic Development, 2008. Wisconsin Department of Workforce Development, 2008.

The projected employment growth for the healthcare industry in the Springfield MSA will be somewhat impacted by the conflicting effects of demographic changes. Although Springfield's population continues to age, the rate of growth, particularly of those 65 years of age and older, is slowing. With the overall growth in residential population expected to be modest, the local healthcare sector will face the imperative of marketing its services further beyond the metropolitan area for patients.

Cost containment, particularly facing hospitals, will increase as evidenced by the continued emphasis on providing services on an outpatient, ambulatory basis, limiting unnecessary or low priority procedures, and stressing preventative measures that serve to reduce the future cost of undiagnosed or untreatable health problems. No industry is under more pressure than the healthcare industry to contain costs; and no segment than hospitals. One of the most efficient ways to reduce costs is to increase productivity through the adoption of labor-saving processes, procedures and technologies. The potential result of this is a net reduction in the number of workers needed or at least a slowing in the rate of employment growth.

## Healthcare Occupational Employment Projections

Nationwide, total employment of home health aides (including the self-employed) is projected to increase by 49%, medical assistants by 35%, and physical therapist assistants by 32%, between 2006 and 2016. Although the job growth in the Springfield area healthcare industry is projected to be less dramatic than the nation as a whole, it is expected to out perform most other occupational categories, as well as produce a substantial proportion of higher paid and higher skilled employment opportunities.

The five occupations in shown in Table 33 account for most of the projected job growth in the Springfield area healthcare sector. It is important to note the last two columns in Table 33 represent not only the number of new jobs created, but also replacement needs - i.e. job openings resulting from employee turnover. For example, it is projected that there will be 104 job openings in the Springfield area per year between 2006 and 2016 for registered nurses. Approximately 60% of these openings will result from the replacement of existing workers, while balance will be newly created positions. Replacement needs are also expected to drive future demand for healthcare workers. This is a national trend that reflects both changes in the ways healthcare is provided, as well as demographic shifts in the market. With the median age of workers in many healthcare occupations increasing, particularly those with higher skill and education requirements, the proportion of job openings resulting from replacement needs is expected to remain high for the next several decades as the 'baby boom' generation moves into retirement.

Conversely, many of the lesser skilled healthcare positions, such as home health aides and medical assistants, will see more growth resulting from new job creation although replacement needs will still be significant because of the relatively higher rate of turnover in these positions.

**Table 33**  
**Springfield, IL MSA**  
**Fastest Growing Healthcare Occupations (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Registered Nurses	2,900	3,355	455	16.18	104	1.51
Nursing Aides, Orderlies/Attendants	1,398	1,545	147	10.73	33	1.03
Home Health Aides	490	601	111	23.85	17	2.15
Licensed Practical Nurses	588	614	26	4.45	16	0.44
Medical Assistants	317	417	100	33.62	15	2.94

\* The average number of openings includes both new positions and replacements.

Note: Data for other healthcare occupations can be found in Appendix 'B' at the end of this report.

Data Source: Illinois Department of Employment Security, Labor Market Information Unit, 2008.

The growth rates for many of the fastest growing healthcare occupations in the Springfield area are equivalent to, or slightly lower than its regional competitors (Table 34). However, this difference could be attributable to Springfield's somewhat smaller healthcare employment base in comparison to these other communities. A more extensive set of tables for a selected group of high growth/high demand occupations can be found in Appendix 'B' at the end of this report.

**Table 34**  
**Fastest Growing Healthcare Occupations: Registered Nurses**  
**Springfield, IL MSA and Regional Competitors (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Columbus, OH	16,760	19,910	3,150	19.53	653	1.95
Indianapolis, IN	18,626	23,976	5,350	28.70	843	2.87
Madison, WI**	7,590	9,490	1,900	25.03	320	2.26
Peoria, IL	4,376	5,446	1,070	24.44	198	2.21
Rochester, MN	7,730	9,691	1,961	10.73	350	2.67
Rockford, IL	3,024	3,821	797	26.37	143	2.37
Springfield, IL	2,900	3,355	455	16.18	104	1.51
Springfield, MO**	n/a	n/a	n/a	n/a	n/a	n/a

\* The average number of openings includes both new positions and replacements.

\*\* The figures cited for this metropolitan area includes data for a larger labor market area that includes the named MSA.

Note: Data for other healthcare occupations can be found in Appendix 'B' at the end of this report.

Data Sources: Illinois Department of Employment Security, Labor Market Information Unit, 2007. Indiana Workforce Development Agency, 2008. Ohio Department of Job and Family Services, Bureau of Labor Market Information, February 2006. Missouri Economic Research and Information Center, Missouri Department of Economic Development, 2008. Wisconsin Department of Workforce Development, 2008.

## Healthcare Industry Earnings

Earnings in individual health care occupations vary as widely as the duties, level of education and training, and amount of responsibility required by the occupation. An examination of wage rates in the high growth/high demand occupations revealed that the Springfield area is fairly competitive in relation to national averages, as well as to most of the other metropolitan areas in the region that were a part of this study. Table 35 shows how well Springfield area wages compare to national averages.

**Table 35**  
**Median Hourly Wages for Selected Healthcare Occupations**  
**Springfield, IL MSA (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Home Health Aides	230	\$10.15	5.2
Physical Therapist Assistants	80	\$19.28	-10.1
Medical Assistants	320	\$13.78	4.3
Nursing Aides, Orderlies, and Attendants	1,270	\$10.72	-3.9
Physician Assistants	40	\$34.27	-10.1
Registered Nurses	2,531	\$27.70	-4.2

Data Source: U.S. Bureau of Labor Statistics, 2008.

Although the median hourly wages in the Springfield area are slightly below the national median for most of the high growth/high demand occupations, this appears to be part of a regional trend as Table 36 illustrates. It should be noted that cost of living differences between Springfield and its regional competitors are not factored into these wage comparisons. In general, these data suggest that employers in the Springfield area need to need aware of comparative wages for healthcare occupations, particularly when recruiting outside the region for qualified workers.

**Table 36**  
**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Registered Nurses**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	17,440	\$26.72	-8.0
Indianapolis, IN	18,530	\$28.52	-1.2
Madison, WI	7,020	\$29.36	1.7
Peoria, IL	5,420	\$23.23	-24.2
Rochester, MN	3,310	\$27.95	-3.2
Rockford, IL	2,640	\$26.85	-7.4
<b>Springfield, IL</b>	<b>2,531</b>	<b>\$27.70</b>	<b>-4.2</b>
Springfield, MO	4,520	\$24.65	-17.0
National	2,468,340	\$30.04	

Data Source: U.S. Bureau of Labor Statistics, 2008.

**Appendix 'A'****Healthcare industry activities within IMPLAN Sectors**

The IMPLAN program is based on an industry sectoring scheme that groups business activities according to their NAICS (North American Industry Classification System) code. The following tables show the business activities included in the IMPLAN healthcare sectors.

<b>IMPLAN Sector 394: Offices of physicians, dentists, and other health practitioners*</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Acupuncturists' (MDs or DOs) offices (e.g., centers, clinics)	621111	621111
Allergists' offices (e.g., centers, clinics)	621111	621111
Anesthesiologists' offices (e.g., centers, clinics)	621111	621111
Cardiologists' offices (e.g., centers, clinics)	621111	621111
Clinical pathologists' offices (e.g., centers, clinics)	621111	621111
Dermatologists' offices (e.g., centers, clinics)	621111	621111
Doctors of osteopathy (DOs, except mental health) offices (e.g., centers, clinics)	621111	621111
DOs' (doctors of osteopathy, except mental health) offices (e.g., centers, clinics)	621111	621111
Family physicians' offices (e.g., centers, clinics)	621111	621111
Forensic pathologists' offices	621111	621111
Gastroenterologists' offices (e.g., centers, clinics)	621111	621111
Gynecologists' offices (e.g., centers, clinics)	621111	621111
Health screening services in physicians' offices	621111	621111
Immunologists' offices (e.g., centers, clinics)	621111	621111
Internists' offices (e.g., centers, clinics)	621111	621111
MDs' (medical doctors, except mental health) offices (e.g., centers, clinics)	621111	621111
Medical doctors' (MDs, except mental health) offices (e.g., centers, clinics)	621111	621111
Neurologists' offices (e.g., centers, clinics)	621111	621111
Neuropathologists' offices (e.g., centers, clinics)	621111	621111
Obstetricians' offices (e.g., centers, clinics)	621111	621111
Offices of Physicians (except Mental Health Specialists)	621111	621111
Oncologists' offices (e.g., centers, clinics)	621111	621111
Ophthalmologists' offices (e.g., centers, clinics)	621111	621111
Orthopedic physicians' offices (e.g., centers, clinics)	621111	621111
Orthopedic surgeons' offices (e.g., centers, clinics)	621111	621111
Osteopathic physicians' (except mental health) offices (e.g., centers, clinics)	621111	621111
Otolaryngologists' offices (e.g., centers, clinics)	621111	621111
Pathologists' (except oral, speech, voice) offices (e.g., centers, clinics)	621111	621111
Pathologists', forensic, offices (e.g., centers, clinics)	621111	621111
Pathologists', neuropathological, offices (e.g., centers, clinics)	621111	621111
Pathologists', surgical, offices (e.g., centers, clinics)	621111	621111

<b>IMPLAN Sector 394: Offices of physicians, dentists, and other health practitioners* (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Pediatricians' (except mental health) offices (e.g., centers, clinics)	621111	621111
Physicians' (except mental health) offices (e.g., centers, clinics)	621111	621111
Plastic surgeons' offices (e.g., centers, clinics)	621111	621111
Proctologists' offices (e.g., centers, clinics)	621111	621111
Pulmonary specialists' offices (e.g., centers, clinics)	621111	621111
Radiologists' offices (e.g., centers, clinics)	621111	621111
Surgeons' (except dental) offices (e.g., centers, clinics)	621111	621111
Surgical pathologists' offices (e.g., centers, clinics)	621111	621111
Urologists' offices (e.g., centers, clinics)	621111	621111
Walk-in physicians' offices (e.g., centers, clinics)	621111	621111
Doctors of osteopathy (DOs), mental health, offices (e.g., centers, clinics)	621112	621112
DOs' (doctors of osteopathy), mental health, offices (e.g., centers, clinics)	621112	621112
MDs' (medical doctors), mental health, offices (e.g., centers, clinics)	621112	621112
Medical doctors' (MDs), mental health, offices (e.g. centers, clinics)	621112	621112
Mental health physicians' offices (e.g., centers, clinics)	621112	621112
Offices of Physicians, Mental Health Specialists	621112	621112
Pediatricians', mental health, offices (e.g., centers, clinics)	621112	621112
Physicians', mental health, offices (e.g., centers, clinics)	621112	621112
Psychiatrists' offices (e.g., centers, clinics)	621112	621112
Psychoanalysts' (MDs or DOs) offices (e.g., centers, clinics)	621112	621112
Psychotherapists' (MDs or DOs) offices (e.g., centers, clinics)	621112	621112
DDSs' (doctors of dental surgery) offices (e.g., centers, clinics)	621210	621210
Dental surgeons' offices (e.g., centers, clinics)	621210	621210
Dentists' offices (e.g., centers, clinics)	621210	621210
DMDs' (doctors of dental medicine) offices (e.g., centers, clinics)	621210	621210
Doctors of dental medicine (DMDs) offices (e.g., centers, clinics)	621210	621210
Doctors of dental surgery (DDSs) offices (e.g., centers, clinics)	621210	621210
Endodontists' offices (e.g., centers, clinics)	621210	621210
Family dentists' offices (e.g., centers, clinics)	621210	621210
Offices of Dentists	621210	621210
Oral and maxillofacial surgeons' offices (e.g., centers, clinics)	621210	621210
Oral pathologists' offices (e.g., centers, clinics)	621210	621210
Orthodontists' offices (e.g., centers, clinics)	621210	621210
Pathologists', oral, offices (e.g., centers, clinics)	621210	621210
Periodontists' offices (e.g., centers, clinics)	621210	621210
Prosthodontists' offices (e.g., centers, clinics)	621210	621210
Surgeons', dental, offices (e.g., centers, clinics)	621210	621210
Chiropractors' offices (e.g., centers, clinics)	621310	621310
DCs' (doctors of chiropractic) offices (e.g., centers, clinics)	621310	621310
Doctors of chiropractic (DCs) offices (e.g., centers, clinics)	621310	621310

<b>IMPLAN Sector 394: Offices of physicians, dentists, and other health practitioners* (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Chiropractors' offices (e.g., centers, clinics)	621310	621310
DCs' (doctors of chiropractic) offices (e.g., centers, clinics)	621310	621310
Doctors of chiropractic (DCs) offices (e.g., centers, clinics)	621310	621310
Offices of Chiropractors	621310	621310
Doctors of optometry (ODs) offices (e.g., centers, clinics)	621320	621320
ODs' (doctors of optometry) offices (e.g., centers, clinics)	621320	621320
Offices of Optometrists	621320	621320
Optometrists' offices (e.g., centers, clinics)	621320	621320
Clinical psychologists' offices (e.g., centers, clinics)	621330	621330
Doctors of psychology offices (e.g., centers, clinics)	621330	621330
Offices of Mental Health Practitioners (except Physicians)	621330	621330
Psychoanalysts' (except MDs or DOs) offices (e.g., centers, clinics)	621330	621330
Psychologists' offices (e.g., centers, clinics), clinical	621330	621330
Psychotherapists' (except MDs or DOs) offices (e.g., centers, clinics)	621330	621330
Social workers' , mental health, offices (e.g., centers, clinics)	621330	621330
Art therapists' offices (e.g., centers, clinics)	621340	621340
Audiologists' offices (e.g., centers, clinics)	621340	621340
Dance therapists' offices (e.g., centers, clinics)	621340	621340
Exercise physiologists' offices (e.g., centers, clinics)	621340	621340
Hearing testing services by offices of audiologists	621340	621340
Industrial therapists' offices (e.g., centers, clinics)	621340	621340
Music therapists' offices (e.g., centers, clinics)	621340	621340
Occupational therapists' offices (e.g., centers, clinics)	621340	621340
Offices of Physical, Occupational and Speech Therapists, and Audiologists	621340	621340
Pathologists', speech or voice, offices (e.g., centers, clinics)	621340	621340
Physical equestrian therapist offices (e.g., centers, clinics)	621340	621340
Physical therapists' offices (e.g., centers, clinics)	621340	621340
Physical therapy offices (e.g., centers, clinics)	621340	621340
Physical-integration practitioners' offices (e.g., centers, clinics)	621340	621340
Physiotherapists' offices (e.g., centers, clinics)	621340	621340
Recreational (e.g., art, dance, music) therapists' offices (e.g., centers, clinics)	621340	621340
Speech clinicians' offices (e.g., centers, clinics)	621340	621340
Speech defect clinics	621340	621340
Speech pathologists' offices (e.g., centers, clinics)	621340	621340
Speech therapists' offices (e.g., centers, clinics)	621340	621340
Sports physical therapists' offices (e.g., centers, clinics)	621340	621340
Voice pathologists' offices (e.g., centers, clinics)	621340	621340
Doctors of podiatry (DPs) offices (e.g., centers, clinics)	621391	621391
DPs' (doctors of podiatry) offices (e.g., centers, clinics)	621391	621391
Foot specialists' (podiatry) offices (e.g., centers, clinics)	621391	621391

<b>IMPLAN Sector 394: Offices of physicians, dentists, and other health practitioners* (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Offices of Podiatrists	621391	621391
Podiatrists' offices (e.g., centers, clinics)	621391	621391
Popopediatricians' offices (e.g., centers, clinics)	621391	621391
Acupuncturists' (except MDs or DOs) offices (e.g., centers, clinics)	621399	621399
Christian Science practitioners' offices (e.g., centers, clinics)	621399	621399
Dental hygienists' offices (e.g., centers, clinics)	621399	621399
Denturists' offices (e.g., centers, clinics)	621399	621399
Dietitians' offices (e.g., centers, clinics)	621399	621399
Herbalists' offices (e.g., centers, clinics)	621399	621399
Home nursing services, private practice	621399	621399
Homeopaths' offices (e.g., centers, clinics)	621399	621399
Hypnotherapists' offices (e.g., centers, clinics)	621399	621399
Inhalation therapists' offices (e.g., centers, clinics)	621399	621399
Licensed practical nurses' (LPNs) offices (e.g., centers, clinics)	621399	621399
LPNs' (licensed practical nurses) offices (e.g., centers, clinics)	621399	621399
Manual-arts therapists' offices (e.g., centers, clinics)	621399	621399
Massage therapists' offices	621399	621399
Midwives' offices (e.g., centers, clinics)	621399	621399
Naturopaths' offices (e.g., centers, clinics)	621399	621399
Nurses', licensed practical or registered, offices (e.g., centers, clinics)	621399	621399
Nutritionists' offices (e.g., centers, clinics)	621399	621399
Offices of All Other Miscellaneous Health Practitioners	621399	621399
Paramedics' offices (e.g., centers, clinics)	621399	621399
Physicians' assistants' offices (e.g., centers, clinics)	621399	621399
Practical nurses' offices (e.g., centers, clinics), licensed	621399	621399
Registered nurses' (RNs) offices (e.g., centers, clinics)	621399	621399
Respiratory therapists' offices (e.g., centers, clinics)	621399	621399
RNs' (registered nurses) offices (e.g., centers, clinics)	621399	621399

\* Data for the SIU School of Medicine are not included in this sector. See instead the "Hospitals/Medical Schools".

<b>IMPLAN Sector 395: Home healthcare services</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Home care of elderly, medical	621610	621610
Home health agencies	621610	621610
Home health care agencies	621610	621610
Home nursing services (except private practices)	621610	621610
Hospice care services, in home	621610	621610
Nurse associations, visiting	621610	621610
Nursing agencies, primarily providing home nursing services	621610	621610
Visiting nurse associations	621610	621610

<b>IMPLAN Sector 396: Medical and diagnostic labs and outpatient and other ambulatory care services</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Abortion clinics	621410	621410
Birth control clinics	621410	621410
Childbirth preparation classes	621410	621410
Counseling services, family planning	621410	621410
Family planning centers	621410	621410
Family planning counseling services	621410	621410
Fertility clinics	621410	621410
Pregnancy counseling centers	621410	621410
Reproductive health services centers	621410	621410
Alcoholism treatment centers and clinics (except hospitals), outpatient	621420	621420
Detoxification centers and clinics (except hospitals), outpatient	621420	621420
Drug addiction treatment centers and clinics (except hospitals), outpatient	621420	621420
Mental health centers and clinics (except hospitals), outpatient	621420	621420
Outpatient mental health centers and clinics (except hospitals)	621420	621420
Outpatient treatment centers and clinics (except hospitals) for substance abuse (i.e., alcoholism, drug addiction)	621420	621420
Outpatient treatment centers and clinics for alcoholism	621420	621420
Outpatient treatment centers and clinics for drug addiction	621420	621420
Psychiatric centers and clinics (except hospitals), outpatient	621420	621420
Substance abuse treatment centers and clinics (except hospitals), outpatient	621420	621420
Group hospitalization plans providing health care services	621491	621491
Health maintenance organization (HMO) medical centers and clinics	621491	621491
HMO (health maintenance organization) medical centers and clinics	621491	621491
Dialysis centers and clinics	621492	621492

<b>IMPLAN Sector 396: Medical and diagnostic labs and outpatient and other ambulatory care services (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Hemodialysis centers and clinics	621492	621492
Kidney dialysis centers and clinics	621492	621492
Renal dialysis centers and clinics	621492	621492
Ambulatory surgical centers and clinics, freestanding	621493	621493
Emergency medical centers and clinics, freestanding	621493	621493
Freestanding ambulatory surgical centers and clinics	621493	621493
Freestanding emergency medical centers and clinics	621493	621493
Laser surgery centers, freestanding	621493	621493
Trauma centers (except hospitals), freestanding	621493	621493
Urgent medical care centers and clinics (except hospitals), freestanding	621493	621493
Biofeedback centers and clinics, outpatient	621498	621498
Clinics/centers of health practitioners from more than one industry practicing within the same establishment	621498	621498
Clinics/centers of health practitioners with multi-industry degrees	621498	621498
Community health centers and clinics, outpatient	621498	621498
Infusion therapy centers and clinics, outpatient	621498	621498
Pain therapy centers and clinics, outpatient	621498	621498
Sleep disorder centers and clinics, outpatient	621498	621498
Bacteriological laboratories, diagnostic	621511	621511
Bacteriological laboratories, medical	621511	621511
Biological laboratories, diagnostic	621511	621511
Blood analysis laboratories	621511	621511
Cytology health laboratories	621511	621511
DNA testing laboratories	621511	621511
Forensic laboratories, medical	621511	621511
Genetic testing laboratories	621511	621511
Laboratories, medical (except radiological, X-ray)	621511	621511
Laboratory testing services, medical (except radiological, X-ray)	621511	621511
Medical laboratories (except radiological, X-ray)	621511	621511
Medical pathology laboratories	621511	621511
Mycology health laboratories	621511	621511
Parasitology health laboratories	621511	621511
Pathological analysis laboratories	621511	621511
Pathology laboratories, medical	621511	621511
Testing laboratories, medical	621511	621511
Toxicology health laboratories	621511	621511
Urinalysis laboratories	621511	621511
CAT (computerized axial tomography) scanner centers	621512	621512
Computer tomography (CT-SCAN) centers	621512	621512

<b>IMPLAN Sector 396: Medical and diagnostic labs and outpatient and other ambulatory care services (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
CT-SCAN (computer tomography) centers	621512	621512
Dental X-ray laboratories	621512	621512
Diagnostic imaging centers (medical)	621512	621512
Laboratories, dental X-ray	621512	621512
Laboratories, medical radiological or X-ray	621512	621512
Laboratory testing services, medical radiological or X-ray	621512	621512
Magnetic resonance imaging (MRI) centers	621512	621512
Mammogram (i.e., breast imaging) centers	621512	621512
Medical laboratories, radiological or X-ray	621512	621512
Medical radiological laboratories	621512	621512
Medical X-ray laboratories	621512	621512
Mobile breast imaging centers	621512	621512
Mobile X-ray facilities (medical)	621512	621512
MRI (magnetic resonance imaging) centers	621512	621512
Position emission tomography (PET) scanner centers	621512	621512
Radiological laboratories, medical	621512	621512
Radiological laboratory services, medical	621512	621512
Single photon emission computerized tomography (SPECT) centers	621512	621512
Ultrasound imaging centers	621512	621512
X-ray laboratories, medical or dental	621512	621512
Air ambulance services	621910	621910
Ambulance services, air or ground	621910	621910
Emergency medical transportation services, air or ground	621910	621910
Rescue services, air	621910	621910
Rescue services, medical	621910	621910
Blood banks	621991	621991
Blood donor stations	621991	621991
Eye banks	621991	621991
Organ banks, body	621991	621991
Organ donor centers, body	621991	621991
Placenta banks	621991	621991
Plasmapheresis centers	621991	621991
Sperm banks, human	621991	621991
Blood pressure screening services and facilities	621999	621999
Health screening services (except by offices of health practitioners)	621999	621999
Hearing testing services (except by offices of audiologists)	621999	621999
Pacemaker monitoring services	621999	621999
Physical fitness evaluation services (except by offices of health practitioners)	621999	621999
Smoking cessation programs and clinics	621999	621999

<b>IMPLAN Sector 397: Hospitals/Medical Schools**</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Children's hospitals, general	622110	622110
General medical and surgical hospitals	622110	622110
Hospitals, general medical and surgical	622110	622110
Hospitals, general pediatric	622110	622110
Osteopathic hospitals	622110	622110
Alcoholism rehabilitation hospitals	622210	622210
Children's hospitals, psychiatric or substance abuse	622210	622210
Detoxification hospitals	622210	622210
Drug addiction rehabilitation hospitals	622210	622210
Hospitals for alcoholics	622210	622210
Hospitals, addiction	622210	622210
Hospitals, mental (except mental retardation)	622210	622210
Hospitals, psychiatric (except convalescent)	622210	622210
Hospitals, psychiatric pediatric	622210	622210
Hospitals, substance abuse	622210	622210
Mental (except mental retardation) hospitals	622210	622210
Mental health hospitals	622210	622210
Psychiatric hospitals (except convalescent)	622210	622210
Rehabilitation hospitals, alcoholism and drug addiction	622210	622210
Cancer hospitals	622310	622310
Children's hospitals, specialty (except psychiatric, substance abuse)	622310	622310
Chronic disease hospitals	622310	622310
Extended care hospitals (except mental, substance abuse)	622310	622310
Eye, ear, nose, and throat hospitals	622310	622310
Hospitals, specialty (except psychiatric, substance abuse)	622310	622310
Leprosy hospitals	622310	622310
Maternity hospitals	622310	622310
Neurological hospitals	622310	622310
Obstetrical hospital	622310	622310
Orthopedic hospitals	622310	622310
Physical rehabilitation hospitals	622310	622310
Rehabilitation hospitals (except alcoholism, drug addiction)	622310	622310
Specialty (except Psychiatric and Substance Abuse) Hospitals	622310	622310
Tuberculosis and other respiratory illness hospitals	622310	622310

\*\* The Hospital/Medical School sector includes both Springfield hospitals and the SIU School of Medicine.

<b>IMPLAN Sector 398: Nursing and residential care facilities</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Convalescent homes or convalescent hospitals (except psychiatric)	623110	623110
Group homes for the disabled with nursing care	623110	623110
Homes for the aged with nursing care	623110	623110
Homes for the elderly with nursing care	623110	623110
Hospices, inpatient care	623110	623110
Nursing care facilities	623110	623110
Nursing homes	623110	623110
Rest homes with nursing care	623110	623110
Retirement homes with nursing care	623110	623110
Skilled nursing facilities	623110	623110
Group homes, mental retardation	623210	623210
Homes with or without health care, mental retardation	623210	623210
Hospitals, mental retardation	623210	623210
Residential Mental Retardation Facilities	623210	623210
Alcoholism rehabilitation facilities (except licensed hospitals), residential	623220	623220
Convalescent homes or hospitals for psychiatric patients	623220	623220
Drug addiction rehabilitation facilities (except licensed hospitals), residential	623220	623220
Halfway houses for patients with mental health illnesses	623220	623220
Halfway houses, substance abuse (e.g., alcoholism, drug addiction)	623220	623220
Homes for emotionally disturbed adults or children	623220	623220
Homes, psychiatric convalescent	623220	623220
Hospitals, psychiatric convalescent	623220	623220
Mental health facilities, residential	623220	623220
Mental health halfway houses	623220	623220
Psychiatric convalescent homes or hospitals	623220	623220
Residential group homes for the emotionally disturbed	623220	623220
Substance abuse (i.e., alcoholism, drug addiction) halfway houses	623220	623220
Substance abuse facilities, residential	623220	623220
Assisted-living facilities with on-site nursing facilities	623311	623311
Continuing care retirement communities	623311	623311
Retirement communities, continuing care	623311	623311
Assisted-living facilities without on-site nursing care facilities	623312	623312
Homes for the aged without nursing care	623312	623312
Homes for the elderly without nursing care	623312	623312
Old age homes without nursing care	623312	623312
Old soldiers' homes without nursing care	623312	623312
Rest homes without nursing care	623312	623312
Retirement homes without nursing care	623312	623312
Senior citizens' homes without nursing care	623312	623312

<b>IMPLAN Sector 398: Nursing and residential care facilities (continued)</b>		
<b>Title</b>	<b>2002NAICS</b>	<b>2007NAICS</b>
Boot camps for delinquent youth	623990	623990
Boys' and girls' residential facilities (e.g., homes, ranches, villages)	623990	623990
Camps, boot or disciplinary (except correctional), for delinquent youth	623990	623990
Child group foster homes	623990	623990
Children's villages	623990	623990
Delinquent youth halfway group homes	623990	623990
Disabled group homes without nursing care	623990	623990
Disciplinary camps for delinquent youth	623990	623990
Group foster homes for children	623990	623990
Group homes for the disabled without nursing care	623990	623990
Group homes for the hearing impaired	623990	623990
Group homes for the visually impaired	623990	623990
Halfway group homes for delinquents and ex-offenders	623990	623990
Homes for children with health care incidental	623990	623990
Homes for unwed mothers	623990	623990
Juvenile halfway group homes	623990	623990
Orphanages	623990	623990
Other Residential Care Facilities	623990	623990

Source: Minnesota Implan Group, 2008.

**Appendix 'B'****Supplemental Tables for Occupational Employment and Wages****Projected Growth of Selected Healthcare Occupations (2006-2016)  
Springfield, IL MSA**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Registered Nurses	2,900	3,355	455	15.7	104	1.51
Nursing Aides, Orderlies/Attendants	1,398	1,545	147	10.5	33	1.03
Home Health Aides	490	601	111	22.7	17	2.15
Licensed Practical Nurses	588	614	26	4.4	16	0.44
Medical Assistants	317	417	100	31.5	15	2.94
Medical & Clinical Lab Technologists	248	277	29	11.7	10	1.14
Pharmacists	230	284	54	23.5	9	2.22
Pharmacy Technicians	215	272	57	26.5	9	2.51
Dental Assistants	201	244	43	21.4	9	2.03
Medical & Clinical Lab Technicians	213	235	22	10.3	8	1.01
Emergency Medical Technicians and Paramedics	248	290	42	16.9	7	1.63
Medical Records & Health Information Technicians	233	269	36	15.5	7	1.50
Healthcare Support Workers, All Others	316	328	12	3.8	7	0.38
Respiratory Therapists	121	138	17	14.0	6	1.37
Radiologic Technologists/Technicians	193	220	27	14.0	6	1.36
Physicians and Surgeons, All Other	137	156	19	13.9	4	1.34
Family and General Practitioners	116	132	16	13.8	3	1.34
Surgeons	111	127	16	14.4	3	1.40
Physical Therapists	151	173	22	14.6	3	1.40
Surgical Technologists	111	131	20	18.0	3	1.73
Physical Therapist Aides	130	138	8	6.2	3	0.61
Medical Transcriptionists	99	110	11	11.1	3	1.08
Pharmacy Aides	84	93	9	10.7	3	1.05
Internists, General	61	70	9	14.8	2	1.43
Obstetricians and Gynecologists	45	52	7	15.6	2	1.52
Physician Assistants	40	53	13	32.5	2	2.99
Occupational Therapists	88	103	15	17.0	2	1.62
Cardiovascular Technologists/ Technicians	53	60	7	13.2	2	1.29
Diagnostic Medical Sonographers	47	56	9	19.1	2	1.84

\* The average number of openings includes both new positions and replacements.

Data Source: Illinois Department of Employment Security, Labor Market Information Unit, 2008.

**Fastest Growing Healthcare Occupations: Nursing Aides, Orderlies/Attendants  
Springfield, IL MSA and Regional Competitors (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Columbus, OH	9,224	10,344	1,120	12.44	230	1.24
Indianapolis, IN	7,984	9,518	1,534	19.20	296	1.92
Madison, WI**	5,160	5,780	620	12.02	110	1.14
Peoria, IL	2,801	3,358	557	20.70	91	1.90
Rochester, MN	3,052	3,453	401	13.50	79	1.35
Rockford, IL	1,979	2,411	432	22.81	68	2.08
Springfield, IL	1,398	1,545	147	10.52	33	1.03
Springfield, MO**	4,538	5,826	1,284	29.98	185	2.99

**Fastest Growing Healthcare Occupations: Licensed Practical Nurses  
Springfield, IL MSA and Regional Competitors (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Columbus, OH	5,580	6,120	540	12.00	152	1.20
Indianapolis, IN	5,573	6,456	883	15.80	240	1.58
Madison, WI	1,560	1,710	150	9.62	60	0.92
Peoria, IL	1,042	1,183	141	13.91	36	1.31
Rochester, MN	2,173	2,495	322	15.30	78	1.53
Rockford, IL	777	889	112	14.94	27	1.39
Springfield, IL	588	614	26	4.42	16	0.44
Springfield, MO	1,608	1,898	288	18.58	63	1.86

**Fastest Growing Healthcare Occupations: Home Health Aides  
Springfield, IL MSA and Regional Competitors (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Columbus, OH	6,612	8,922	2,310	37.56	312	3.76
Indianapolis, IN	2,709	3,902	1,193	44.00	144	4.40
Madison, WI	2,570	3,620	1,050	40.86	130	3.49
Peoria, IL	890	1,176	286	34.36	40	3.00
Rochester, MN	2,744	3,835	1,091	43.20	142	4.32
Rockford, IL	574	772	198	37.14	27	3.20
Springfield, IL	490	601	111	22.65	17	2.15
Springfield, MO	906	1,386	475	58.64	58	5.86

**Fastest Growing Healthcare Occupations: Medical Assistants  
Springfield, IL MSA and Regional Competitors (2006-2016)**

Occupational Title	Employment		New Jobs		Annual Average Openings*	Annual Compound Growth (%)
	2006	2016	Number	Percent		
Columbus, OH	3,740	5,540	1,800	53.25	242	5.33
Indianapolis, IN	2,561	3,562	1,001	39.10	132	3.91
Madison, WI**	990	1,360	370	37.37	50	3.23
Peoria, IL	393	566	174	44.18	91	1.90
Rochester, MN	460	631	171	40.10	25	4.01
Rockford, IL	377	507	130	37.11	19	3.20
Springfield, IL	317	417	100	31.55	15	2.94
Springfield, MO**	678	968	291	47.01	41	4.70

\* The average annual openings include both new jobs and replacement.

\*\* The figures cited for this metropolitan area includes data for a larger labor market area that includes the named MSA.

Data Sources: Illinois Department of Employment Security, Labor Market Information Unit, 2007. Indiana Workforce Development Agency, 2008. Ohio Department of Job and Family Services, Bureau of Labor Market Information, February 2006. Missouri Economic Research and Information Center, Missouri Department of Economic Development, 2008. Wisconsin Department of Workforce Development, 2008.

**Median Hourly Wage Rates  
Selected Healthcare Occupations with the Greatest Growth: Nursing Aides, Orderlies, and Attendants  
Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	9,760	\$11.63	4.2
Indianapolis, IN	7,590	\$11.55	3.5
Madison, WI	3,580	\$12.99	14.2
Peoria, IL	2,670	\$10.99	-1.4
Rochester, MN	1,380	\$13.20	15.6
Rockford, IL	1,710	\$10.56	-5.5
<b>Springfield, IL</b>	<b>1,270</b>	<b>\$10.72</b>	<b>-3.9</b>
Springfield, MO	2,890	\$9.42	-18.3
<b>National</b>	<b>1,390,260</b>	<b>\$11.14</b>	

**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Home Health Aides**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	9,650	\$9.98	3.6
Indianapolis, IN	2,670	\$9.85	2.3
Madison, WI	1,670	\$10.52	8.6
Peoria, IL	440	\$9.17	-4.9
Rochester, MN	1,390	\$10.90	11.7
Rockford, IL	880	\$9.54	-0.8
<b>Springfield, IL</b>	<b>230</b>	<b>\$10.15</b>	<b>5.2</b>
Springfield, MO	1,150	\$8.17	-17.7
<b>National</b>	<b>834,580</b>	<b>\$9.62</b>	

**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Physical Therapist Assistants**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	440	\$22.23	4.5
Indianapolis, IN	370	\$24.72	14.2
Madison, WI	100	\$20.71	-2.5
Peoria, IL	n/a	n/a	n/a
Rochester, MN	30	\$20.12	-5.5
Rockford, IL	90	\$21.74	2.4
<b>Springfield, IL</b>	<b>80</b>	<b>\$19.28</b>	<b>-10.1</b>
Springfield, MO	130	\$18.55	-14.4
<b>National</b>	<b>59,120</b>	<b>\$21.22</b>	

**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Medical Assistants**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	3,370	\$12.61	-4.6
Indianapolis, IN	2,600	\$13.77	4.2
Madison, WI	910	\$14.62	9.8
Peoria, IL	380	\$13.39	1.5
Rochester, MN	240	\$18.05	26.9
Rockford, IL	330	\$13.95	5.4
<b>Springfield, IL</b>	<b>320</b>	<b>\$13.78</b>	<b>4.3</b>
Springfield, MO	770	\$10.90	-21.0
<b>National</b>	<b>434,540</b>	<b>\$13.19</b>	

**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Physician Assistants**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	290	\$38.93	3.1
Indianapolis, IN	210	\$35.11	-7.4
Madison, WI	210	\$36.18	-4.3
Peoria, IL	n/a	\$34.78	-8.5
Rochester, MN	100	\$38.90	3.0
Rockford, IL	n/a	\$35.23	-7.1
<b>Springfield, IL</b>	<b>40</b>	<b>\$34.27</b>	<b>-10.1</b>
Springfield, MO	110	\$19.04	-98.1
<b>National</b>	67,160	\$37.72	

**Median Hourly Wage Rates**  
**Selected Healthcare Occupations with the Greatest Growth: Pharmacy Technicians**  
**Springfield, IL MSA and Regional Competitors (2007)**

Occupational Title	Employment (2007)	Hourly median wage	Percent above or below US median
Columbus, OH	2,270	\$12.02	-6.9
Indianapolis, IN	2,170	\$12.99	1.1
Madison, WI	880	\$13.55	5.2
Peoria, IL	750	\$11.92	-7.8
Rochester, MN	380	\$15.97	19.5
Rockford, IL	390	\$10.96	-17.2
<b>Springfield, IL</b>	<b>440</b>	<b>\$10.59</b>	<b>-21.3</b>
Springfield, MO	830	\$10.83	-18.7
<b>National</b>	301,950	\$12.85	

Data Source: U.S. Bureau of Labor Statistics, 2008.