

America's Health Care Economy

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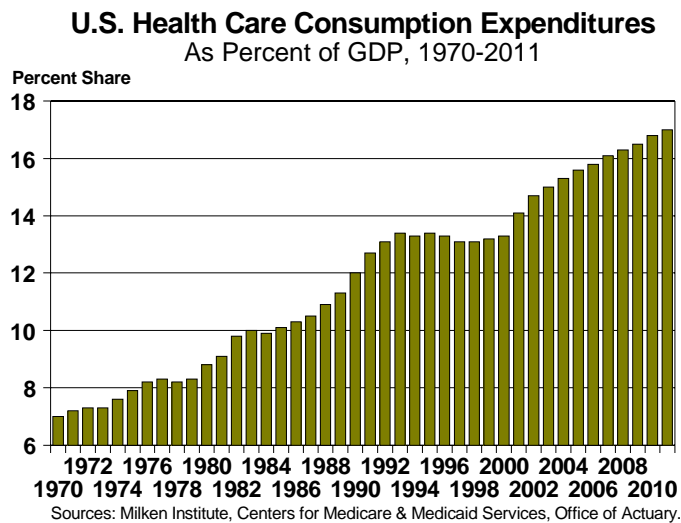


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Introduction

The United States is generally regarded as an international leader in pharmaceuticals, biotechnology, medical devices and a provider of specialized health-care services. Look no further than choices of the rich and the famous from around the world — whether they are Saudi princes or European jet-setters — when seeking care or cures for their ailments, they typically pick a top U.S. medical facility. Depending upon the disease or condition, they might find their way to Boston, the nation's leading health-care region; Rochester, Minn., home to the world-renowned Mayo Clinic; or, for the latest self-esteem-enhancing procedure in plastic surgery, Los Angeles. Beyond global leadership, other factors stimulating demand and opportunities in health care are population growth, due in part to dramatic advances in medical science, the aging of the baby boomer generation, and increased wealth.

The health-care sector is one of the fastest growing sectors of the U.S. economy. Health-care consumption doubled from 7 percent of U.S. GDP in 1970 to more than 14 percent in 2002. By 2011, health-care consumption expenditures in the U.S. are projected to reach 17 percent of GDP, according to the Centers for Medicare & Medicaid Services.



Despite the growing importance of this sector, there has been remarkably little quantification of the economic geography of health care in the United States. What regions are the leading health-care centers? What states and cities have the most to gain from this sector's growth? Which economies are most dependent on the health care industry?

This report creates a Health Pole Index that describes the local concentration of health care in a particular region and the level of importance a metropolitan area's health care industry concentration has in the context of the nation as a whole. Additionally, we

measure the level of reliance of each state's economy on the health care industry, and its impact on the corresponding census regions.

Understanding these relationships is important for economic development officials, health-care decision makers and public policy leaders, as nurturing expansion of the health care industry is increasingly vital to global, national and regional economic prosperity.

The Industry

The health care industry ranges from health services, such as health practitioners and hospitals, drugs and pharmaceuticals, medical instruments and supplies, medical service and health insurance, to research and testing services where much of the burgeoning biotechnology sector is recorded.

Health Care - Industry Components

Includes the Following SIC Categories:

SIC	Industry
283	Drugs
384	Medical Instruments & Supplies
632	Medical Service & Health Insurance
801	Offices & Clinics of Medical Doctors
802	Offices & Clinics of Dentists
803	Offices of Osteopathic Physicians
804	Offices of Other Health Care Practitioners
805	Nursing & Personal Care Facilities
806	Hospitals
807	Medical & Dental Labs
808	Home Health Care Services
809	Health & Allied Services
873	Research & Testing Services

Pharmaceutical and biotechnology companies have, through their discoveries, improved the quality of human life and extended the lifespan of many individuals. Scientific discovery, innovation and commercialization in the medical devices industry have greatly benefited the human race. Medical devices allow less expensive and more accurate tests for a wide array of diseases. In the foreseeable future, we can expect to see a range of innovative means of improved drug delivery, ranging from ultrasound and electricity to micro-machined implants. Wristwatches may be available for diabetics to monitor blood sugar levels and constantly deliver the appropriate dosage of insulin.

The anticipated high returns on investment in health care may enhance longevity and quality of life for future generations. Senior citizens, who will account for 30 percent of the population in 10 years, represent 15 percent of the population and purchase one-third

of all prescription medications dispensed in the United States. Even more dramatic demographic aging patterns will occur in Japan and Western Europe. On a global basis, the over-65 population is expected to expand from 600 million in 2000 to over one billion by 2020, according to the World Health Organization.

The major biotechnology, pharmaceuticals, medical device and health-care service-provider firms and organizations recognize the potential financial returns that these changing demographics imply and are making significant investments in research and development. Biotechnology and biomedicine may mean to the first half of the 21st century what electronics and computers meant to the latter half of the 20th century. We are likely to see a fusing of the information and biotechnology/biomedical industries into a powerful technological and global economic force. Hospitals and clinics are the primary sources of clinical trials and much innovation. However, there is an important race underway – the one to determine where the dominant health care centers will be located.

Health-care service providers, such as hospitals, are more service and less technology oriented. While hospitals may be technologically intensive, human beings constitute their chief input and better human health constitutes their chief output. Hospitals succeed based on how well they service an individual's health needs, not on how well they process technology. Drug companies, research and testing services and medical devices firms are technology-intensive in the research phase and combine their inputs to produce a unique form of knowledge-based compounds and products.

Metropolitan Area Health Poles

The Milken Institute has created this Health Pole Index to depict the health care industry concentration in a given geographic location and the level of importance a metropolitan area's (MSA) health care industry concentration has in the context of the nation as a whole. The Health Pole concept can be thought of as a measure of the spatial density and diversity of health-care sectors in a metropolitan economy and placed in a national perspective.

The Health Pole rankings are based on combining an MSA's health care industry location quotient (the concentration of health care in an economy) with its share of national health care employment. MSAs then are ranked according to their composite scoring. The metro area with the highest composite score for a given health care industry is assigned a benchmark score of 100. All subsequent ranking metropolitan areas have scores that indicate their placement relative to the benchmark.

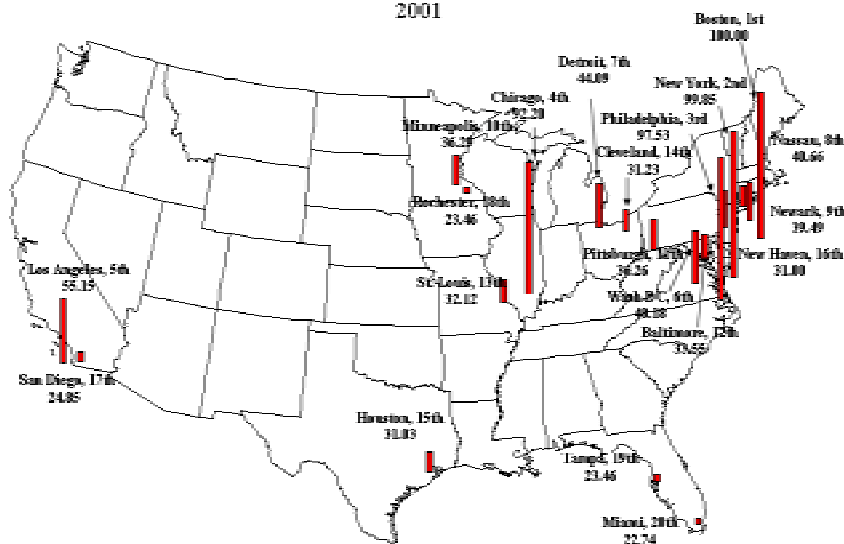
The principles behind this method for determining and comparing the "gravitational pull" of technology-driven metro areas were introduced in 1999 with the Milken Institute's nationwide mapping of "Tech Poles," the first index of its kind. The tech-pole concept is detailed in the study *America's High-Tech Economy: Growth, Development and Risks for*

*Metropolitan Areas.*¹ Tech-pole scores capture the spatial intensity of a variety of technology-driven sectors. The health pole index (and the individual industry health pole scores available in the Appendix) referred to in this article relates specifically to areas of concentration of the health care industry. The Health Pole Index reflects the combined scores for all 13 health care industry components.

As the map below indicates, the New England region has the distinction of having the top-ranked health pole in the United States, that being Boston whose MSA includes parts of both Massachusetts and New Hampshire that abut the city. Boston earned first place by ranking among the top 10 in most health care sectors. Boston is a center of biotechnology and medical device research and commercialization. Genzyme and Biogen serve as its biotech anchor firms. Among the many health care clusters that dot that metro's landscape is one of the most outstanding concentrations of resources and expertise comprised of hospitals and affiliated institutions. Boston boasts three top-rated medical schools at Boston University, Tufts and Harvard. Massachusetts General Hospital is the sixth-largest employer in Boston with 11,600 workers.

Milken Institute Health Pole Index

2001



¹ Ross DeVol, *America's High-Tech Economy: Growth, Development, and Risks for Metropolitan Areas* (The Milken Institute, 1999): see especially pages 4-6.

Top Twenty Metropolitan Areas by Health Pole

Total Health Care Employment, 2001

Rank	Metropolitan Area	Health Pole	Rank	Metropolitan Area	Health Pole
1	Boston MA-NH	100.00	11	Pittsburgh PA	36.26
2	New York NY	99.85	12	Baltimore MD	33.55
3	Philadelphia PA-NJ	97.53	13	St. Louis MO-IL	32.12
4	Chicago IL	92.20	14	Cleveland-Lorain-Elyria OH	31.23
5	Los Angeles-Long Beach CA	55.15	15	Houston TX	31.03
6	Washington DC-MD-VA-WV	48.18	16	New Haven-Meriden CT	31.00
7	Detroit MI	44.09	17	San Diego CA	24.85
8	Nassau-Suffolk NY	40.66	18	Rochester MN	23.46
9	Newark NJ	39.49	19	Tampa-St. Petersburg-Clearwater FL	23.46
10	Minneapolis-St.Paul MN-WI	36.29	20	Miami FL	22.74

Sources: Milken Institute, Economy.com.

There are aspects of Boston's top score, however, that temper the metro's bragging rights. Boston just edges out the New York metro area. The score of second-place New York ranks only 0.15 percent behind that of Boston, a placement that makes it statistically tied with New England's principal center for health care. New York was 1st in hospitals and in the top 10 in several other categories. New York has some of the top teaching hospitals in the country and is a leader in clinical trials. The New York Presbyterian Healthcare Network is the top employer in the metro area with 30,000 workers. Other leading employers include the North Shore-Long Island Jewish Health System and Saint Vincent Catholic Medical Centers.

Boston's Health Pole Rankings

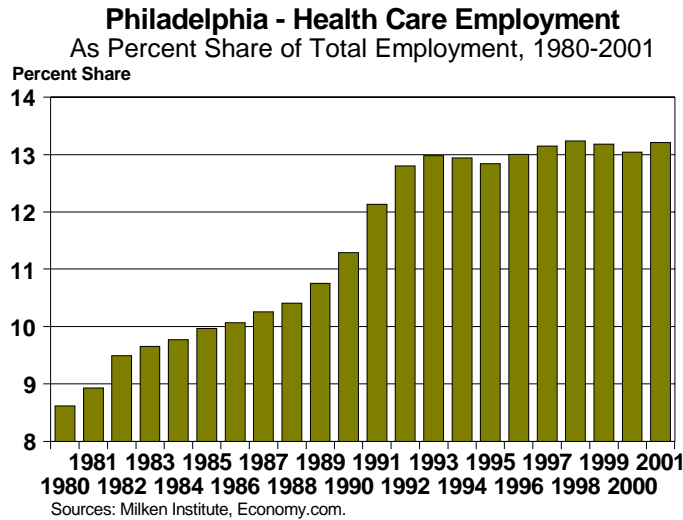
By Health Care Industry, 2001

Rank	Health Care Industry	Index
12	Drugs	6.03
18	Medical Instruments & Supplies	11.87
11	Medical Service & Health Insurance	8.26
3	Offices & Clinics of Medical Doctors	46.18
5	Offices & Clinics of Dentists	48.78
100	Offices of Osteopathic Physicians	0.09
7	Offices of Other Health Care Practitioners	58.65
1	Nursing & Personal Care Facilities	100.00
5	Hospitals	53.57
10	Medical & Dental Labs	13.62
7	Home Health Care Services	25.53
7	Health & Allied Services	29.51
6	Research & Testing Services	34.53
1	<i>Total Health Care</i>	100.00

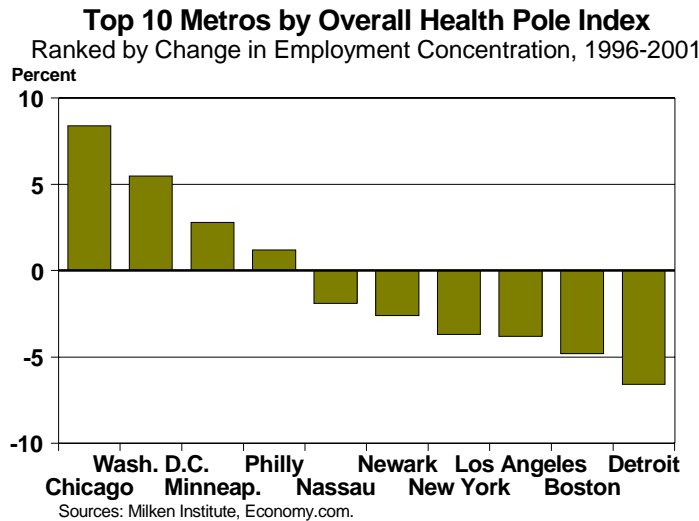
Sources: Milken Institute, Economy.com.

The Philadelphia metro places a strong third in the Health Pole Index at 97.53 with lofty placements in drugs, medical services and health insurance, and hospitals. Merck & Company employs 11,000 and Wyeth Pharmaceuticals and Research has 6,300 staff in the metro area. A remarkable seven of the top 10 employers in the Philadelphia area are in health care-related firms. Jefferson Health Systems employ over 20,000 in the region,

making it the second largest employer after the University of Pennsylvania (whose medical school is a path-breaker in gene-based therapies).

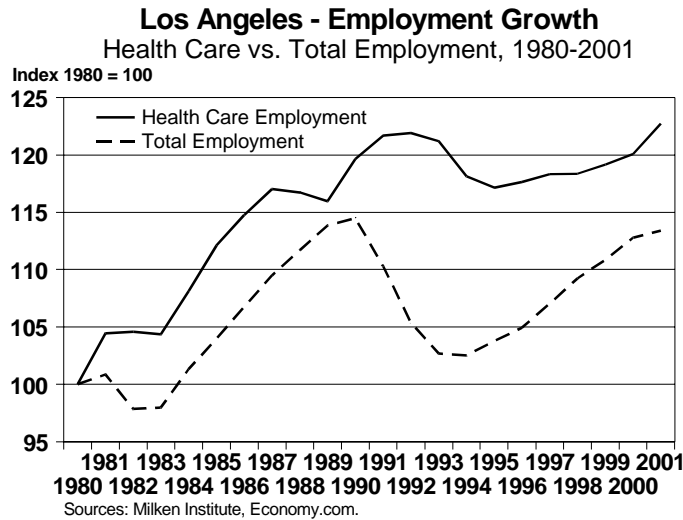


Chicago was 4th overall, 1st in medical services and health insurance and 3rd in hospitals. Chicago's Health Pole score was 92.20. Hospitals employ over 150,000 people in Chicago, making it the top employer in that metro area. Advocate Health Care Systems is the second largest employer in the region. Allstate Corp., headquartered in Northbrook, is a major player in health care insurance.



Los Angeles' Health Pole Index score of 55.15 made it 5th with strength in offices and clinics of medical doctors and dentists, and medical laboratories. Cedars-Sinai Medical Center is the anchor in office and clinics of medical doctors with 8,600 on staff. The research that led to the first commercially successful biotechnology therapy was

performed at The City of Hope medical research facilities (though it was commercialized by Genentech in San Francisco). That region also is home to some of the world's most preeminent plastic surgeons. Kaiser Permanente is the largest employer in the Los Angeles metro.

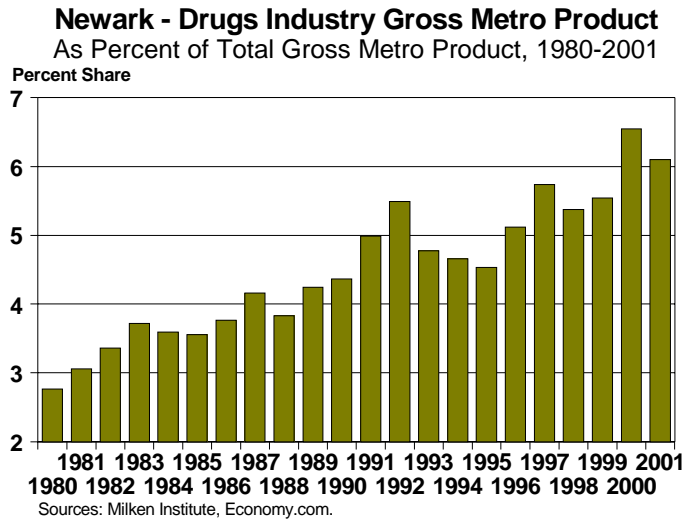


The Washington, D.C. metro area ranked 6th overall. It is home to the National Institutes of Health (15,400 employees) and many other key health care research and advocacy groups. The human genome code was mapped in that region. Its burgeoning biotechnology firms are proliferating, helping rank Washington, D.C. 1st in the nation in research and testing services. Washington, D.C. also is among the national leaders in medical service and health insurance, offices and clinics of medical doctors and other health practitioners. Inova Health Systems is the fourth largest employer in the metro area with 28,700 employees.

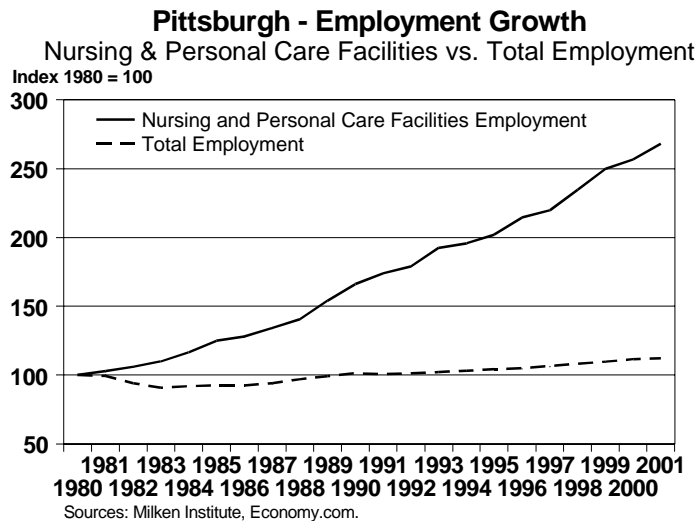
Detroit is best known as the nation's auto capital, but it is a major player in health-care services, ranking 7th in our Health Pole Index. Detroit owes its prominent position to hospitals and osteopathic physicians. The Detroit Medical Center is well-regarded and is the fifth-largest employer in the region. William Beaumont Hospital is close behind in employment at 10,700.

Nassau-Suffolk is another New York State entrant in the top 10 at 8th place. Nassau's top overall industry category is physician offices at 27,600. Not surprisingly, its top employer is a health-care services firm (North Shore-Long Island Jewish Health System).

Newark, NJ can attribute its overall rank as 9th as a Health Pole to its number one position as a pharmaceutical center. As a pharmaceutical center, it is nearly four-times more significant than 2nd ranked Kalamazoo. Merck & Company, Schering-Plough Corporation and Pfizer are among the top employers. Newark's largest employment category is general medical and surgical hospitals.

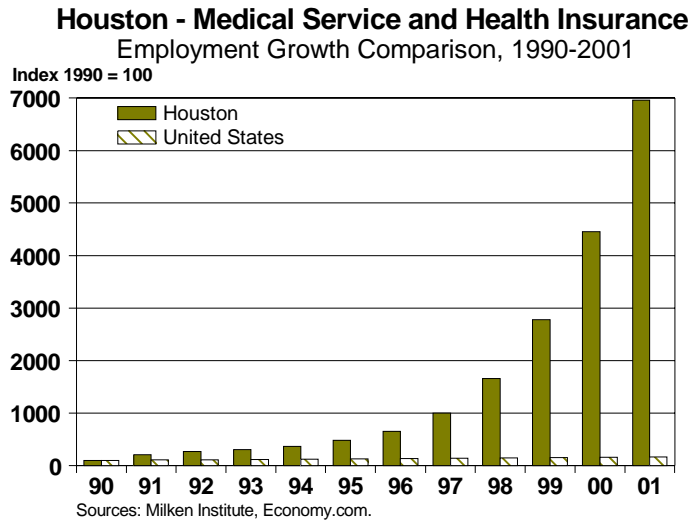


Rounding out the top ten is Minneapolis-St. Paul. This metro has a strong position in doctors' offices and clinics, and medical service and health insurance. Allina Health Systems is the third-largest employer in the region.



Pittsburgh ranks 11th on the Health Pole Index. The Pittsburgh metro area ranks 6th as a center of hospital employment. General medical and surgical hospitals are the metro's top overall employer. The University of Pittsburgh Health System employs 31,000 workers making it the region's biggest employer. West Penn Allegheny is Pittsburgh's second-largest employer. Anchored by Johns Hopkins, Baltimore is an important center for hospitals. Johns Hopkins also is the linchpin for Baltimore's growing position as a biomedical research center. Baltimore ranks 12th in our Health Pole Index. Three of Baltimore's top 10 employers are in the medical and health systems field.

St. Louis' 13th Health Pole rank is attributable to hospitals, and nursing and personal care facilities. Hospitals are the second biggest employer in the St. Louis metro area with BJC Health System being the largest firm. Cleveland's world-renowned Cleveland Clinic employs 23,400 (the metro's largest employer) and serves as the anchor for the region's health care industry. Cleveland's second largest firm is University Hospitals Health Systems. Overall, hospitals are the top employer in Cleveland, which ranked 14th.

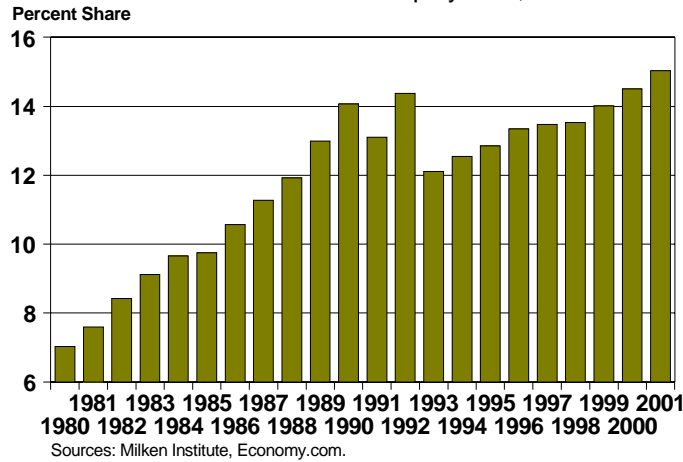


Next, at 15th is Houston with one of the leading cancer-research institutes in the world at the University of Texas, M.D. Anderson Cancer Center. The Baylor College of Medicine is a leading employer as well. The concentration of home health care services is another reason for Houston's position. New Haven-Meriden, CT was 16th with strength in medical instruments and drugs. Bayer Corporation is a leading employer. No less than 11 of its top 20 employers are in the health care industry.

San Diego's ranking as 17th as a Health Pole is based upon its position as a leading center in biotechnology research. Based upon our measuring system, San Diego is second in biotech concentration after Washington. San Diego is home to Scripps Research Institute and several biotechnology firms such as Nanogen and Ligand.

Rochester, MN, home to the Mayo Clinic, ranks 18th as a Health Pole. The Mayo Clinic employs 23,400 people in Rochester, accounting for an astounding 26.9 percent of the metro's total employment. No metro in the country is more dependent upon health care employment than Rochester.

Rochester, MN - Offices & Clinics of Medical Doctors
 As Percent Share of Total Employment, 1980-2001



Tampa's retiree population places that metro among the national leaders in health and personal care services and 19th overall as a Health Pole. Tampa General Hospital and All Children's Hospital are major employers in the region. Ranking 20th, Miami has a high concentration of physicians' offices. Additionally, Jackson Memorial Hospital is Miami's leading employer.

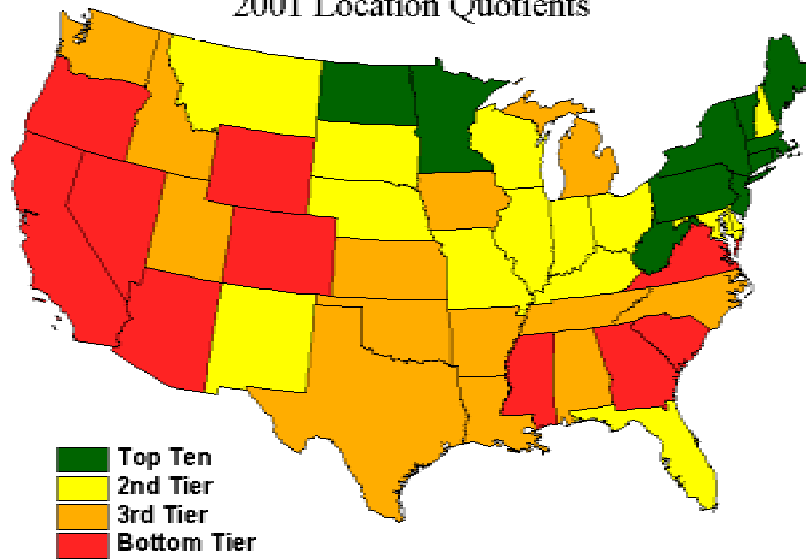
A particularly striking finding was that only three metros in the Western U.S. – Los Angeles, Houston and San Diego – make the top 20. Equally noteworthy were the high rankings of the major health care centers of the Northeast corridor from Boston down to Washington, D.C., with not less than six among the top 10 in the nation.

The States

Pennsylvania has the highest concentration of health care employment at 31 percent above the national average. The health care workforce in Pennsylvania is 683,000, which accounted for 11.9 percent of the state's total labor force in 2001. Pennsylvania's strengths are in the drug sector, medical devices, and the hospital sector. The state scored in the top 10 in all but four health care categories out of a possible 13.

Healthcare Concentration

2001 Location Quotients



On the basis of employment concentration, Rhode Island ties Massachusetts for second place among all states as it is 29 percent more dependent than the nation as a whole on health care activities. All six New England states have above-average concentration of health care employment and more impressively, five are in the top 10. Rhode Island ranks among the top 10 states in health and allied services employment concentration, nursing and personal care facilities, hospitals, home health care services, and in both osteopathic physicians and medical and dental labs.

Massachusetts is the leading health care employer in New England with over 390,000 jobs in 2001. Massachusetts' top employment concentration rankings among all states are in medical instruments and supplies (4th), home health care services (5th), research and testing services including biotechnology research (6th), hospitals (7th) and the drug sector (9th).

New Jersey is 4th in health care employment concentration, nearly matching Rhode Island and Massachusetts. New Jersey owes its lofty overall position to strength in the technology-based side of health care: pharmaceuticals, biotechnology and medical devices. New Jersey has the highest concentration of drug sector employment in the nation at nearly 5 times the national average.

Connecticut has impressive employment concentration rankings in many health care sectors as well. In the aggregate, Connecticut's concentration of health care employment is 26 percent above the national average, placing it 5th. Connecticut ranks 3rd in both medical instruments and supplies, and nursing and personal care facilities; 4th in both drugs and home health care services, and 5th in both medical service and health insurance, and other health care practitioners.

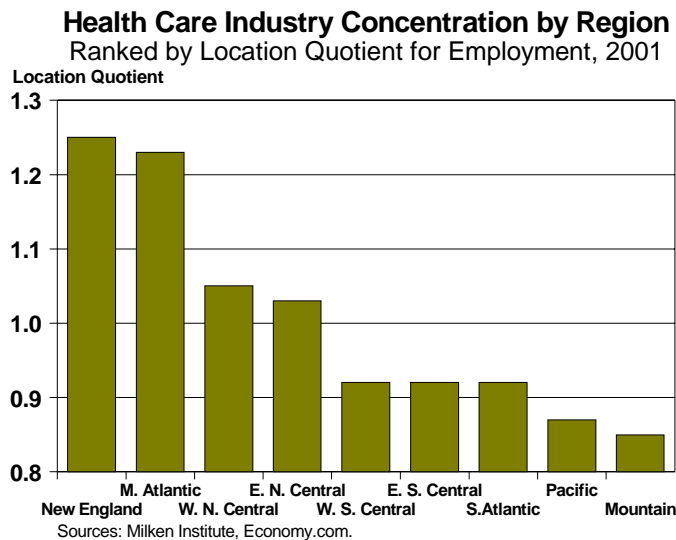
North Dakota is 6th in health care industry employment concentration mainly due to its top ranking in hospitals, and nursing and personal care facilities. Being a large rural state, its delivery of health care services must be distributed around the state, which limits its ability to capture economies of scale.

Maine ranks 4th in medical service and health insurance, 6th in nursing and personal care and among the top 10 in five other health care service categories, placing the state 7th overall.

West Virginia ranks 8th in health care employment concentration principally due to its 2nd place rank in the hospitals category. Vermont's concentration of health care employment is 16 percent above the national average that ranks it 9th overall. Vermont ranks 1st in health and allied services and 6th in home health care services. New York is 10th overall in concentration of health care employment with 900,000 workers, but 1st in absolute employment.

Census Regions

New England and the Middle Atlantic states are the only regions in the U.S. to have a substantially higher than average proportion of health care industries contributing to their gross regional product. GRP is the total economic value of goods and services produced in a region. Based on 2001 figures, the health care industry directly comprises 7.5 percent of New England's GRP, an industry concentration almost 10 percent higher than the nation as a whole. This is even more impressive when you consider that health care services are largely consumed locally, with only specialized expertise exported as patients seek the highest quality medical care. These figures, of course, understate the ultimate contribution to New England as its effects ripple throughout the rest of the regional economy.



New England is even more closely linked to the health care sector on the basis of employment. In 2001, more than 800,000 New England residents held jobs in the health care sector. This not only makes health care one of the leading employers in New England, but it means the region has the highest concentration of health care employment in the nation. More than 11 percent of New England's workforce is directly engaged in health care fields. As displayed in the accompanying table, New England's health care employment is 25 percent higher than the national average. If the concentration of health care employment in a region matched the nation as a whole, its location quotient would be 1.0. A location quotient of 1.25, as is the case for health care employment in New England, means that the concentration of health care employment in New England is 25 percent higher than for the nation as a whole.

The Middle Atlantic is a close second to New England on concentration of health care employment, approximately 23 percent above the national average. On the basis of GRP, the Middle Atlantic region is the most dependent upon the health care sector and employs nearly 2.1 million individuals. The Middle Atlantic States contain several of the leading health care clusters in the world. The West North Central (the plains states) and the East North Central (Great Lakes states) are the only other census regions with a reliance on health care employment that is above the national average, though just barely.

Appendix

Drug Industry

Drugs Top Twenty Metropolitan Areas by Health Pole, 2001			Drugs Top States Ranked by Employment Concentration, 2001				
Rank	Metropolitan Area	Health Pole	Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Newark NJ	100.00	1	New Jersey	4.96	1.2	48.3
2	Kalamazoo-Battle Creek MI	25.96	2	Delaware	4.63	1.1	4.7
3	Philadelphia PA-NJ	23.55	3	Indiana	2.58	0.6	18.3
4	Middlesex-Somerset-Hunterdon NJ	23.25	4	Connecticut	2.39	0.6	9.7
5	Indianapolis IN	22.54	5	Pennsylvania	2.03	0.5	28.0
6	Greenville NC	18.85	6	North Carolina	1.61	0.4	15.3
7	Wilmington-Newark DE-MD	13.75	7	Utah	1.50	0.4	3.9
8	Chicago IL	10.79	8	Illinois	1.49	0.4	21.6
9	Rocky Mount NC	10.32	9	Massachusetts	1.24	0.3	10.0
10	New London-Norwich CT-RI	9.29	10	Michigan	1.23	0.3	13.7
11	Nassau-Suffolk NY	6.58					
12	Boston MA-NH	6.03					
13	New Haven-Meridan CT	5.60					
14	Lafayette IN	5.53					
15	Grand Rapids-Spatanburg-Anderson	5.07					
16	Ventura CA	4.81					
17	Boulder-Longmon CO	4.62					
18	Lancaster PA	4.31					
19	San Jose CA	3.48					
20	New York NY	3.02					
21	San Francisco CA	2.66					
22	Oakland CA	2.37					
23	Los Angeles- Long Beach CA	2.20					
24	Johnson City-Kinsport-Bristol TN	1.94					
25	Raleigh-Durham-Chapel Hill NC	1.89					

Drugs Ranked by Employment Concentration, 2001				
Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	Middle Atlantic	2.43	0.55	101.2
2	New England	1.33	0.30	21.2
3	East North Central	1.21	0.27	60.0
4	Pacific	1.01	0.23	45.9
5	South Atlantic	0.63	0.14	35.5
6	West North Central	0.60	0.14	13.4
7	Mountain	0.47	0.11	9.2
8	East South Central	0.37	0.08	6.3
9	West South Central	0.23	0.05	7.3

Sources: Milken Institute, Economy.com.

Sources: Economy.com, Milken Institute.

Drugs Employment Growth, Ranked by 1996-2001 Growth						
Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Vermont	2650.0	0.0	2650.0	316.7	36.4
2	Kentucky	1199.3	-2.8	1236.2	157.4	18.7
3	New Hampshire	1561.8	76.5	841.7	104.2	11.0
4	Washington	926.2	166.4	285.2	78.2	8.6
5	Utah	246.2	-28.3	382.6	75.4	7.0
6	Alabama	175.8	-8.1	200.0	58.3	6.4
7	Oregon	244.1	-14.1	300.7	57.4	14.7
8	West Virginia	334.7	63.8	165.4	54.5	7.6
9	Delaware	498.9	91.2	213.2	51.6	9.4
10	California	120.0	26.8	73.4	50.9	4.5
	<i>United States</i>	59.0	20.9	31.5	22.9	2.6

Sources: Economy.com, Milken Institute.

Research & Testing Services

Research & Testing Services

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Washington DC-MD-VA-WV	100.00
2	San Diego CA	80.23
3	Richland-Kennewick-Pasco WA	72.78
4	San Jose CA	71.85
5	Albuquerque NM	36.71
6	Boston MA-NH	34.53
7	Chicago IL	22.99
8	Seattle-Bellevue-Everett WA	18.96
9	Nassau-Suffolk NY	18.06
10	Fort Walton Beach FL	17.98
11	Trenton NJ	17.90
12	San Francisco CA	17.34
13	New York NY	17.26
14	Knoxville TN	16.85
15	Middlesex-Somerset-Hunterdon NJ	16.50
16	Raleigh-Durham-Chapel Hill NC	14.56
17	Albany-Schenectady-Troy NY	10.96
18	Boulder-Longmont CO	10.65
19	Johnstown PA	10.49
20	Philadelphia PA-NJ	10.24
21	Wilmington NC	9.78
22	Baltimore MD	9.59
23	San Antonio TX	8.97
24	Monomuth-Ocean NJ	7.30
25	Oakland CA	7.02

Sources: Milken Institute, Economy.com.

Research & Testing Services

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Wash., D.C.	5.28	2.7	17.5
2	Idaho	3.64	1.9	10.8
3	New Mexico	2.81	1.4	10.9
4	Maryland	2.04	1.0	25.7
5	New Jersey	2.04	1.0	41.7
6	Massachusetts	1.86	0.9	31.6
7	Washington	1.60	0.8	22.3
8	New York	1.30	0.7	57.3
9	Colorado	1.28	0.7	14.6
10	California	1.27	0.6	96.0

Sources: Economy.com, Milken Institute.

Research and Testing Services

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	East North Central	0.69	0.32	70.0
2	East South Central	0.55	0.25	19.3
3	Middle Atlantic	1.47	0.68	125.8
4	Mountain	1.46	0.68	58.5
5	New England	1.35	0.63	44.2
6	Pacific	1.35	0.62	125.5
7	South Atlantic	0.96	0.45	110.7
8	West North Central	0.40	0.18	18.2
9	West South Central	0.66	0.30	43.2

Sources: Economy.com, Milken Institute.

Research & Testing Services

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Oklahoma	182.9	54.5	83.1	59.4	12.6
2	Wyoming	402.4	64.3	205.8	57.1	15.6
3	Delaware	412.9	206.0	67.6	53.9	8.0
4	Vermont	435.6	90.3	181.5	50.4	8.2
5	Arizona	450.0	147.7	122.1	44.1	7.2
6	Maine	545.8	218.9	102.5	43.3	7.2
7	Montana	110.2	21.6	72.9	36.8	9.9
8	New Jersey	51.3	44.7	4.6	32.7	4.0
9	Colorado	80.9	21.1	49.3	31.2	4.6
10	Georgia	265.9	140.5	52.2	30.5	7.9
	<i>United States</i>	74.9	48.7	17.6	17.7	4.4

Sources: Economy.com, Milken Institute.

Medical Services & Health Insurance

Medical Services & Health Insurance

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Chicago IL	100.00
2	Philadelphia PA-NJ	56.58
3	Harrisburg-Lebanon-Carlisle PA	55.56
4	Houston TX	49.82
5	Washington DC-MD-VA-WV	44.52
6	Minneapolis-St. Paul MN-WI	37.44
7	Omaha NE-IA	34.23
8	Jacksonville FL	28.09
9	Columbia SC	27.14
10	Orange County CA	26.41
11	Madison WI	26.30
12	Newark NJ	25.52
13	Chattanooga TN-GA	21.51
14	Richmond-Petersburg VA	17.64
15	Albany-Schenectady-Troy NY	14.91
16	Florence SC	13.36
17	New Haven-Meriden CT	12.80
18	Boston MA-NH	11.87
19	San Antonio TX	11.47
20	Birmingham AL	11.26
21	Topeka KA	4.78
22	Baltimore MD	4.57
23	Nashville TN	3.98
24	Charleston VA	3.96
25	Fargo-Moorhead ND-MN	3.86

Sources: Milken Institute, Economy.com.

Medical Service & Health Insurance

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Nebraska	3.38	1.0	9.2
2	North Dakota	2.95	0.9	2.9
3	Minnesota	2.63	0.8	21.0
4	Maine	2.01	0.6	3.7
5	Connecticut	1.91	0.6	9.6
6	Delaware	1.88	0.6	2.3
7	South Carolina	1.81	0.5	9.9
8	Pennsylvania	1.76	0.5	29.9
9	New Hampshire	1.72	0.5	3.2
10	Wisconsin	1.65	0.5	14.0

Sources: Economy.com, Milken Institute.

Medical Service and Health Insurance

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	West North Central	1.58	0.49	48.1
2	New England	1.32	0.40	28.5
3	Middle Atlantic	1.16	0.36	65.8
4	South Atlantic	1.04	0.32	79.4
5	Mountain	0.99	0.31	26.4
6	East North Central	0.97	0.30	65.3
7	East South Central	0.96	0.29	22.4
8	Pacific	0.69	0.21	42.8
9	West South Central	0.67	0.20	29.0

Sources: Economy.com, Milken Institute.

Medical Services & Health Insurance

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Georgia	461.8	51.3	271.4	60.8	9.0
2	North Dakota	347.6	53.2	192.3	58.8	5.6
3	Minnesota	673.1	127.8	239.3	51.4	9.6
4	Connecticut	441.7	112.1	155.4	50.7	8.5
5	Nevada	846.5	136.4	300.3	48.2	8.0
6	North Carolina	273.3	20.9	208.7	45.7	5.8
7	Arizona	877.5	275.7	160.2	45.2	5.9
8	Florida	620.9	178.4	159.0	44.5	3.0
9	Vermont	693.3	334.7	82.5	43.0	4.5
10	New Hampshire	229.6	27.3	159.0	42.7	7.8
	<i>United States</i>	170.0	70.2	58.6	21.5	2.9

Sources: Economy.com, Milken Institute.

Medical Instruments & Supplies

Medical Instruments & Supplies

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Lynchburg VA	100.00
2	Salt Lake City-Ogden UT	24.34
3	Minneapolis-St. Paul MN-WI	21.60
4	San Jose CA	17.06
5	Glen Falls NY	15.00
6	Dallas TX	14.13
7	Bergen-Passaic NJ	12.37
8	Orange County CA	9.71
9	Miami FL	8.68
10	New Haven-Meriden CT	8.34
11	Boston MA-NH	8.26
12	Denver CO	7.77
13	Milwaukee-Waukesha WI	7.58
14	Reading PA	5.30
15	Daytona Beach FL	4.74
16	Portland-Vancouver OR-WA	4.40
17	Flagstaff AZ-UT	4.40
18	Middlesex-Somerset-Hunterdon NJ	4.33
19	Sarasota-Bradenton FL	4.29
20	Philadelphia PA-NJ	4.02
21	Los Angeles CA	3.99
22	Chicago IL	3.95
23	Brazoria TX	3.59
24	Seattle-Bellevue-Everett WA	3.49
25	San Diego CA	3.29

Sources: Milken Institute, Economy.com.

Medical Instruments & Supplies

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Utah	3.74	0.8	8.8
2	Minnesota	3.65	0.8	21.3
3	Connecticut	2.30	0.5	8.4
4	Massachusetts	1.85	0.4	20.8*
5	New Jersey	1.78	0.4	15.6
6	Indiana	1.75	0.4	11.2
7	Nebraska	1.69	0.4	3.4
8	California	1.58	0.3	51.0
9	Colorado	1.41	0.3	6.9
10	Pennsylvania	1.28	0.3	15.9

Sources: Economy.com, Milken Institute.

Medical Instruments and Supplies

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	New England	1.66	0.36	25.1
2	West North Central	1.49	0.32	31.8
3	Pacific	1.42	0.31	61.3
4	Middle Atlantic	1.15	0.25	45.5
5	Mountain	1.07	0.23	19.9
6	East North Central	0.90	0.19	42.4
7	South Atlantic	0.61	0.13	32.7
8	West South Central	0.58	0.12	17.7
9	East South Central	0.54	0.12	8.8

Sources: Economy.com, Milken Institute.

Medical Instruments & Supplies

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Iowa	845.1	151.4	275.9	121.0	5.7
2	Vermont	335.3	148.1	75.5	59.9	13.3
3	Wyoming	850.0	50.0	533.3	46.2	0.0
4	Virginia	310.3	114.7	91.1	25.5	-3.0
5	Oregon	72.8	2.1	69.2	24.9	8.8
6	West Virginia	367.6	118.9	113.6	24.8	1.7
7	California	89.9	50.7	26.0	24.5	4.5
8	Pennsylvania	34.8	0.7	33.8	21.3	3.3
9	Arizona	232.9	62.6	104.7	18.6	3.6
10	Minnesota	180.0	64.7	70.0	17.6	2.9
	<i>United States</i>	<i>71.0</i>	<i>47.5</i>	<i>15.9</i>	<i>6.7</i>	<i>1.0</i>

Sources: Economy.com, Milken Institute.

Offices & Clinics of Doctors

Offices & Clinics of Medical Doctors

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Rochester MN	100.00
2	Los Angeles-Long Beach CA	55.49
3	Boston MA-NH	46.18
4	Middlesex-Somerset-Hunterdon NJ	43.81
5	New York NY	41.08
6	Washington DC-MD-VA-WV	31.09
7	Minneapolis-St. Paul MN-WI	27.46
8	Nassau-Suffolk NY	25.49
9	San Diego CA	23.19
10	Chicago IL	21.99
11	Orange County CA	21.63
12	Miami FL	19.32
13	Oakland CA	18.04
14	Jacksonville FL	17.73
15	Philadelphia PA-NJ	17.67
16	Atlanta GA	16.98
17	Seattle-Bellevue-Everett WA	15.70
18	Tampa-St. Petersburg-Clearwater FL	14.91
19	Detroit MI	14.43
20	Orlando FL	13.65
21	Houston TX	13.38
22	New Haven-Bridgeport-Stamford-Danbury CT	13.33
23	Portland-Vancouver OR-WA	12.31
24	Fresno CA	12.25
25	Riverside-San Bernadino CA	11.67

Sources: Milken Institute, Economy.com.

Offices & Clinics of Doctors

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Minnesota	1.42	2.1	57.7
2	Hawaii	1.41	2.1	11.9
3	New Mexico	1.25	1.9	14.4
4	Florida	1.22	1.8	133.2
5	Oregon	1.21	1.8	29.6
6	Wisconsin	1.15	1.7	49.6
7	Washington	1.15	1.7	47.7
8	South Dakota	1.14	1.7	6.6
9	New Hampshire	1.11	1.7	10.5
10	California	1.06	1.6	234.4

Sources: Economy.com, Milken Institute.

Offices & Clinics of Medical Doctors

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	Pacific	1.16	1.70	331.8
2	New England	1.07	1.50	107.5
3	West North Central	1.05	1.50	148.8
4	South Atlantic	1.04	1.50	369.1
5	Middle Atlantic	0.99	1.40	261.2
6	East South Central	0.98	1.40	106.6
7	Mountain	0.94	1.30	116.3
8	East North Central	0.94	1.30	295.4
9	West South Central	0.79	1.10	159.0

Sources: Economy.com, Milken Institute.

Offices & Clinics of Medical Doctors

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Nevada	413.2	150.3	105.1	41.1	6.3
2	Alaska	225.1	72.7	88.2	34.8	6.5
3	Maine	229.2	111.9	55.4	28.9	2.9
4	New Mexico	199.4	57.6	89.9	28.7	5.9
5	New Hampshire	250.2	133.2	50.2	26.7	5.2
6	Wyoming	64.6	13.1	45.5	25.6	4.6
7	South Dakota	178.7	64.0	70.0	25.5	3.3
8	Idaho	160.7	54.9	68.3	24.9	5.5
9	Wisconsin	145.1	62.4	50.9	24.3	5.0
10	Nebraska	114.8	47.6	45.5	24.2	3.4
	<i>United States</i>	140.8	66.8	44.3	19.3	3.7

Sources: Economy.com, Milken Institute.

Offices & Clinics of Dentists

Offices & Clinics of Dentists

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Los Angeles-Long Beach CA	100.00
2	Chicago IL	73.93
3	Detroit MI	56.10
4	Seattle-Bellevue-Everett WA	51.17
5	Boston MA-NH	48.78
6	Oakland CA	48.25
7	Orange County CA	44.01
8	Philadelphia PA-NJ	43.83
9	Sacramento CA	38.16
10	New York NY	37.54
11	Washington DC-MD-VA-WV	35.79
12	San Diego CA	35.31
13	Portland-Vancouver OR-WA	33.05
14	Nassau-Suffolk NY	31.85
15	San Jose CA	29.34
16	San Francisco CA	26.53
17	Riverside-San Bernardino CA	25.56
18	Newark NJ	23.42
19	Houston TX	23.28
20	Bergen-Passaic NJ	22.92
21	Phoenix-Mesa AZ	22.50
22	Denver CO	19.28
23	Monmouth-Ocean NJ	18.13
24	Minneapolis-St. Paul MN-WI	17.78
25	Dallas TX	17.32

Sources: Milken Institute, Economy.com.

Offices & Clinics of Dentists

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Alaska	1.74	0.9	2.7
2	Washington	1.55	0.8	22.5
3	Oregon	1.49	0.8	12.9
4	Idaho	1.35	0.3	4.2
5	California	1.34	0.7	105.2
6	Hawaii	1.28	0.7	3.8
7	Michigan	1.23	0.7	30.0
8	Utah	1.21	0.6	6.9
9	New Hampshire	1.14	0.6	3.8
10	New Jersey	1.09	0.6	23.3

Sources: Economy.com, Milken Institute.

Offices & Clinics of Dentists

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	Pacific	1.45	0.70	147.0
2	Mountain	1.05	0.50	45.6
3	New England	1.02	0.50	36.4
4	East North Central	1.02	0.50	112.5
5	Middle Atlantic	1.00	0.50	92.3
6	West North Central	0.90	0.50	44.9
7	South Atlantic	0.85	0.40	106.3
8	East South Central	0.80	0.40	30.5
9	West South Central	0.73	0.40	52.2

Sources: Economy.com, Milken Institute.

Offices & Clinics of Dentists

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Alaska	380.6	140.1	100.2	44.5	7.5
2	Washington	127.3	57.8	44.0	28.5	4.3
3	Idaho	155.9	43.7	78.2	26.4	6.5
4	Maine	174.9	81.9	51.1	25.7	3.0
5	Nevada	188.5	80.1	60.2	25.3	4.1
6	Oregon	122.2	49.7	48.4	22.2	5.5
7	Arizona	177.1	71.7	61.4	21.8	4.4
8	Nebraska	89.1	39.7	35.3	18.3	3.0
9	Utah	195.3	86.1	58.7	18.1	4.4
10	New Hampshire	168.7	95.5	37.4	17.8	4.6
	<i>United States</i>	119.0	63.6	33.9	15.0	2.3

Sources: Economy.com, Milken Institute.

Offices of Osteopathic Physicians

Offices of Osteopathic Physicians

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Fort Pierce-Port St. Lucie FL	100.00
2	Philadelphia PA-NJ	43.59
3	Merced CA	21.87
4	Detroit MI	19.58
5	Montgomery AL	11.62
6	Reading PA	9.99
7	Elkhart-Goshen IN	6.82
8	Sharon PA	6.52
9	Allentown-Bethlehem-Easton PA	6.12
10	York PA	5.48
11	Atlantic-Cape May NJ	4.37
12	Columbus OH	3.97
13	Grand Rapids-Muskegon-Holland MI	3.75
14	Canton-Massillon OH	3.60
15	Harrisburg-Lebanon-Carlisle PA	3.54
16	Grand Junction CO	3.44
17	Akron OH	3.40
18	Dallas TX	3.10
19	Sarasota-Bradenton	3.07
20	Jackson MI	3.02
21	Phoenix-Mesa AZ	3.02
22	Tallahassee FL	3.01
23	Youngstown-Warren OH	2.99
24	Wilmington-Newark DE-MD	2.71
25	Newburgh NY-PA	2.54

Sources: Milken Institute, Economy.com.

Offices of Osteopathic Physicians

Top States Ranked by Employment Concentration, 2001

Rank State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1 Delaware	3.50	0.2	0.6
2 Pennsylvania	3.41	0.1	8.5
3 Michigan	3.00	0.1	6.0
4 Montana	2.20	0.1	0.0
5 West Virginia	2.12	0.1	0.7
6 Ohio	1.97	0.1	4.8
7 New Jersey	1.93	0.1	3.4
8 Arizona	1.87	0.1	1.9
9 Rhode Island	1.84	0.1	0.4
10 Maine	1.78	0.1	0.5

Sources: Economy.com, Milken Institute.

Offices of Osteopathic Physicians

Ranked by Employment Concentration, 2001

Rank Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1 Middle Atlantic	1.87	0.08	13.9
2 East North Central	1.52	0.06	13.5
3 Mountain	1.18	0.05	4.1
4 West North Central	1.04	0.04	4.2
5 West South Central	0.91	4.00	5.2
6 South Atlantic	0.69	0.03	6.9
7 East South Central	0.46	0.02	1.4
8 New England	0.42	0.02	1.2
9 Pacific	0.39	0.02	3.2

Sources: Economy.com, Milken Institute.

Offices of Osteopathic Physicians

Employment Growth, Ranked by 1996-2001 Growth

Rank State	Percent (%) Growth by Time Period				
	1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1 Alabama	9271.4	485.7	1500.0	299.5	29.1
2 North Carolina	3125.0	300.0	706.3	141.5	21.7
3 Nevada	631.7	39.0	426.3	97.2	16.0
4 Arkansas	3566.7	816.7	300.0	87.2	13.2
5 Delaware	753.7	138.8	257.5	72.8	12.4
6 Illinois	687.5	51.5	419.9	71.6	15.0
7 Virginia	391.5	59.3	208.5	58.9	10.7
8 New York	426.3	49.4	252.3	50.2	11.5
9 Vermont	352.4	71.4	163.9	46.4	6.3
10 South Dakota	NA	NA	154.5	42.9	7.1
<i>United States</i>	215.5	84.7	70.9	20.8	4.5

Sources: Economy.com, Milken Institute.

Offices of Other Health Care Practitioners

Offices of Other Health Care Practitioners

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank Metropolitan Area	Health Pole
1 Nashville TX	100.00
2 Philadelphia PA-NJ	93.09
3 Houston TX	68.43
4 Racine WI	65.88
5 Los Angeles-Long Beach CA	65.27
6 Washington DC-MD-VA-WV	60.71
7 Boston MA-NH	58.65
8 Nassau-Suffolk NY	49.66
9 Myrtle Beach SC	41.49
10 Chicago IL	40.45
11 Orange County CA	38.26
12 Baltimore MD	35.86
13 Greensboro-Winston-Salem-High Point NC	35.47
14 West Palm Beach-Boca Raton FL	34.94
15 Fort Lauderdale FL	32.48
16 Phoenix-Mesa AZ	30.71
17 Monmouth-Ocean NJ	30.62
18 St. Louis MO-IL	30.35
19 Minneapolis-St. Paul MN-WI	29.89
20 Detroit MI	29.80
21 Dallas TX	27.07
22 Tampa-St. Petersburg-Clearwater FL	26.35
23 New York NY	24.93
24 Raleigh-Durham-Chapel Hill NC	24.51
25 New Haven-Bridgeport-Samford-Danbury CT	23.55

Sources: Milken Institute, Economy.com.

Offices of Other Health Care Practitioners

Top States Ranked by Employment Concentration, 2001

Rank State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1 Wyoming	1.88	0.6	1.6
2 South Carolina	1.77	0.6	11.2
3 Maryland	1.48	0.5	12.6
4 Florida	1.46	0.5	36.4
5 Connecticut	1.39	0.5	8.1
6 New Mexico	1.39	0.5	3.6
7 Tennessee	1.34	0.5	12.5
8 Pennsylvania	1.30	0.4	25.5
9 Iowa	1.30	0.4	6.6
10 Nebraska	1.28	0.4	4.0

Sources: Economy.com, Milken Institute.

Offices of Other Health Practitioners

Ranked by Employment Concentration, 2001

Rank Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1 South Atlantic	1.13	0.43	107.8
2 West North Central	1.08	0.41	41.1
3 Mountain	1.03	0.39	34.1
4 East South Central	1.02	0.39	29.7
5 New England	1.01	0.39	27.3
6 Pacific	1.00	0.38	77.1
7 Middle Atlantic	0.96	0.37	67.7
8 East North Central	0.91	0.35	76.7
9 West South Central	0.88	0.34	47.8

Sources: Economy.com, Milken Institute.

Offices of Other Health Care Practitioners

Employment Growth, Ranked by 1996-2001 Growth

Rank State	Percent (%) Growth by Time Period				
	1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1 South Carolina	1111.3	221.0	277.3	72.3	13.6
2 Wyoming	550.7	85.8	250.1	48.1	12.4
3 Kentucky	677.4	200.5	158.8	45.0	10.3
4 North Carolina	827.1	224.4	185.8	43.6	8.3
5 Alabama	603.0	188.0	144.1	42.3	6.4
6 Maryland	1070.6	405.5	131.6	37.8	7.0
7 Virginia	593.2	208.2	124.9	35.2	6.7
8 Iowa	308.7	95.1	109.5	34.8	5.5
9 New Mexico	475.7	173.8	110.2	29.4	5.6
10 Mississippi	388.3	113.6	128.5	28.6	6.4
<i>United States</i>	356.0	186.7	59.0	9.1	3.5

Sources: Economy.com, Milken Institute.

Nursing & Personal Care Facilities

Nursing & Personal Care Facilities

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Boston MA-NH	100.00
2	Philadelphia PA-NJ	68.24
3	New York NY	56.42
4	Los Angeles-Long Beach CA	50.05
5	Chicago IL	49.54
6	Cleveland-Lorain-Elyria OH	44.55
7	New Haven-Meriden CT	39.56
8	Hartford CT	35.17
9	Pittsburgh PA	34.16
10	St. Louis MO-IL	31.50
11	Minneapolis-St. Paul MN-WI	28.18
12	Monmouth-Ocean NJ	27.97
13	Milwaukee-Waukesha WI	23.83
14	Providence-Fall River-Warwick RI-MA	23.60
15	Albany-Schenectady-Troy NY	23.39
16	Nassau-Suffolk NY	21.64
17	Baltimore MD	20.16
18	Youngstown-Warren OH	19.68
19	Cincinnati OH-KY-IN	19.52
20	Detroit MI	18.94
21	Lancaster PA	18.52
22	Scranton-Wilkes-Barre-Hazleton PA	17.99
23	Washington DC-MD-VA-WV	17.44
24	Utica-Rome NY	17.32
25	Canton-Massillon OH	17.00

Sources: Milken Institute, Economy.com.

Nursing & Personal Care Facilities

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	North Dakota	2.07	2.9	9.6
2	Iowa	1.80	2.5	37.2
3	Connecticut	1.69	2.4	39.6
4	Rhode Island	1.65	2.3	11.0
5	South Dakota	1.64	2.3	8.7
6	Maine	1.58	2.2	13.5
7	Nebraska	1.54	2.1	19.7
8	Pennsylvania	1.48	2.1	117.8
9	Ohio	1.47	2.1	114.4
10	Massachusetts	1.35	1.9	63.0

Sources: Economy.com, Milken Institute.

Nursing and Personal Care Facilities

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	New England	1.47	1.99	140.2
2	West North Central	1.45	1.96	194.4
3	Middle Atlantic	1.25	1.68	309.9
4	East North Central	1.15	1.56	342.0
5	East South Central	0.93	1.26	95.8
6	West South Central	0.88	1.19	168.2
7	South Atlantic	0.81	1.10	271.9
8	Mountain	0.69	0.94	80.8
9	Pacific	0.69	0.93	187.5

Sources: Economy.com, Milken Institute.

Nursing & Personal Health Care Facilities

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	South Carolina	151.6	56.4	60.9	33.6	5.6
2	Wash., D.C.	399.7	166.7	87.4	21.1	3.5
3	Alaska	515.7	349.6	37.0	20.9	2.9
4	New Mexico	302.0	137.5	69.3	16.5	3.7
5	Arizona	284.1	155.0	50.6	16.1	3.2
6	New Hampshire	108.1	34.7	54.5	15.9	5.4
7	Pennsylvania	122.7	54.1	44.5	15.3	3.3
8	New York	99.8	45.7	37.2	13.5	2.4
9	Nebraska	78.7	33.5	33.9	12.7	2.4
10	Illinois	108.5	54.7	34.8	12.1	1.5
	<i>United States</i>	80.8	42.0	27.3	6.7	2.5

Sources: Economy.com, Milken Institute.

Hospitals

Hospitals

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	New York NY	100.00
2	Philadelphia PA-NJ	81.59
3	Chicago IL	76.76
4	Detroit MI	55.82
5	Boston MA-NH	53.57
6	Pittsburgh PA	40.42
7	St. Louis MO-IL	35.45
8	Baltimore MD	33.65
9	Cleveland-Lorain-Elyria OH	30.27
10	Los Angeles-Long Beach CA	26.78
11	Nassau-Suffolk NY	24.17
12	Miami FL	23.19
13	Atlanta GA	22.32
14	Houston TX	19.99
15	Newark NJ	19.72
16	Tampa-St. Petersburg-Clearwater FL	18.20
17	Milwaukee-Waukesha WI	18.05
18	Indianapolis IN	17.56
19	Rochester MN	17.45
20	Minneapolis-St. Paul MN-WI	16.65
21	Washington DC-MD-VA-WV	14.22
22	Little Rock-North Little Rock AR	13.82
23	Phoenix-Mesa AZ	12.71
24	Providence-Warwick-Pawtucket RI	12.57
25	Cincinnati OH-KY-IN	12.29

Sources: Milken Institute, Economy.com.

Hospital Industry

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	North Dakota	1.64	5.1	16.9
2	West Virginia	1.57	4.8	35.7
3	Montana	1.47	4.5	18.0
4	Pennsylvania	1.46	4.5	257.8
5	South Dakota	1.45	4.5	17.1
6	Rhode Island	1.38	4.3	20.5
7	Massachusetts	1.32	4.1	136.3
8	Maine	1.28	3.9	24.1
9	Michigan	1.25	3.9	178.5
10	New Jersey	1.24	3.8	154.1

Sources: Economy.com, Milken Institute.

Hospitals

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	Middle Atlantic	1.31	4.00	735.7
2	New England	1.20	3.65	257.4
3	East North Central	1.18	3.58	787.6
4	West North Central	1.05	3.20	317.4
5	East South Central	0.96	2.93	222.8
6	South Atlantic	0.94	2.87	710.8
7	West South Central	0.91	2.76	391.0
8	Mountain	0.73	2.21	190.7
9	Pacific	0.69	2.10	421.3

Sources: Economy.com, Milken Institute.

Hospitals

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Minnesota	47.4	7.8	36.7	38.0	5.0
2	North Carolina	111.3	54.1	37.1	30.7	4.9
3	Nevada	178.8	80.3	54.7	26.8	5.6
4	South Carolina	123.0	58.4	40.8	26.7	6.6
5	Georgia	309.1	126.5	80.6	26.0	6.5
6	Idaho	87.3	27.6	46.8	21.9	6.4
7	Alaska	124.1	83.2	22.4	19.5	4.3
8	Indiana	57.4	28.3	22.7	16.1	4.3
9	Nebraska	33.8	13.5	17.9	15.7	3.5
10	South Dakota	76.7	34.7	31.2	15.3	2.9
	<i>United States</i>	45.1	29.0	12.4	7.5	2.7

Sources: Economy.com, Milken Institute.

Medical & Dental Labs

Medical & Dental Laboratories

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metroplitan Area	Health Pole
1	Raleigh-Durham-Chapel Hill NC	100.00
2	Austin-San Marcos TX	63.25
3	Bergen-Passaic NJ	55.38
4	Los Angeles-Long Beach CA	28.60
5	Naples FL	23.15
6	Kansas City MO-KS	18.15
7	Milwaukee-Waukesha WI	14.97
8	San Francisco CA	14.67
9	Fort Lauderdale FL	13.76
10	Boston MA-NH	13.62
11	Philadelphia PA-NJ	11.53
12	Portland-Vancouver OR-WA	10.69
13	Tampa-St. Petersburg-Clearwater FL	10.20
14	Washington DC-MD-VA-WV	9.98
15	Detroit MI	9.41
16	Nashville TX	9.30
17	Atlanta GA	9.28
18	Las Vegas NV-AZ	8.79
19	Nassau-Suffolk NY	8.75
20	Honolulu HI	8.26
21	Pittsburg PA	7.84
22	Dubuque IA	7.69
23	Orange County CA	7.38
24	Memphis TN-AR-MS	7.09
25	Indianapolis IN	6.86

Sources: Milken Institute, Economy.com.

Medical & Dental Labs

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Kansas	2.01	0.3	4.6
2	Hawaii	1.92	0.3	1.8
3	New Jersey	1.81	0.3	12.2
4	Nevada	1.66	0.3	2.9
5	Utah	1.32	0.2	2.4
6	Florida	1.24	0.2	14.9
7	Alabama	1.21	0.2	3.9
8	Tennessee	1.20	0.2	5.4
9	Rhode Island	1.19	0.2	1.0
10	Maryland	1.16	0.2	4.8

Sources: Economy.com, Milken Institute.

Medical and Dental Laboratories

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	Middle Atlantic	1.19	0.20	36.1
2	Pacific	1.12	0.18	37.1
3	East South Central	1.10	0.18	13.8
4	Mountain	1.06	0.17	15.1
5	South Atlantic	1.00	0.16	40.8
6	West North Central	0.96	0.16	15.6
7	New England	0.94	0.15	10.9
8	East North Central	0.85	0.14	30.7
9	West South Central	0.79	0.13	18.4

Sources: Economy.com, Milken Institute.

Medical & Dental Laboratories

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Kansas	304.9	40.6	187.9	57.3	11.1
2	Nevada	480.7	147.8	134.3	53.1	9.6
3	South Carolina	236.5	44.2	133.3	49.2	11.3
4	Hawaii	284.0	99.5	92.4	35.6	6.1
5	Utah	314.2	120.7	87.7	32.0	7.3
6	Maine	229.4	104.5	61.1	31.0	5.1
7	Nebraska	102.5	35.8	49.1	30.0	5.5
8	Alaska	227.8	127.8	43.9	29.7	5.5
9	Arkansas	187.1	56.7	83.2	26.8	5.1
10	Colorado	123.3	32.8	68.2	26.5	7.6
	<i>United States</i>	134.8	85.4	26.6	14.0	5.2

Sources: Economy.com, Milken Institute.

Home Health Care Services

Home Health Care Services

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	McAllen-Edinburg-Mission TX	100.00
2	New York NY	42.39
3	San Antonio TX	31.58
4	Brownsville-Harlingen-San Benito TX	31.05
5	Dayton-Springfield OH	30.82
6	Sherman-Denison TX	25.80
7	Boston MA-NH	25.53
8	Dallas TX	17.91
9	New Orleans LA	17.67
10	New Haven-Meriden CT	17.64
11	Forth Worth-Arlington TX	16.94
12	Amarillo TX	16.71
13	Beaumont-Port Arthur TX	16.53
14	Houston TX	16.23
15	Baton Rouge LA	14.18
16	Cleveland-Lorain-Elyria OH	14.14
17	Cincinnati OH-KY-IN	13.26
18	Kansas City MO-KS	12.67
19	Oklahoma City OK	12.45
20	Corpus Christi TX	11.70
21	Tulsa OK	10.22
22	Mobile AL	9.80
23	Pittsburgh PA	8.94
24	Newark NJ	8.71
25	Barnstable-Yarmouth MA	8.48

Sources: Milken Institute, Economy.com.

Home Health Care Services

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Oklahoma	4.98	2.4	36.2
2	Louisiana	3.47	1.7	32.3
3	Texas	3.43	1.6	157.2
4	Connecticut	2.94	1.4	23.8
5	Massachusetts	2.23	1.1	35.8
6	Vermont	1.90	0.9	2.7
7	Rhode Island	1.90	0.9	4.4
8	West Virginia	1.79	0.9	6.3
9	Maine	1.78	0.9	5.2
10	New York	1.78	0.9	74.0

Sources: Economy.com, Milken Institute.

Home Health Care Services

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	West South Central	2.46	1.62	229.2
2	New England	1.62	1.07	75.3
3	Middle Atlantic	1.11	0.73	134.6
4	East South Central	1.02	0.67	51.4
5	South Atlantic	0.83	0.55	135.4
6	East North Central	0.73	0.48	106.1
7	Mountain	0.69	0.45	39.0
8	West North Central	0.59	0.39	38.6
9	Pacific	0.48	0.32	63.9

Sources: Economy.com, Milken Institute.

Home Health Care Services

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Oklahoma	5445.5	123.0	2386.5	144.8	20.4
2	Alaska	3600.0	44.4	2461.5	94.3	23.1
3	Idaho	874.9	26.6	670.1	67.4	15.5
4	Louisiana	2466.5	135.5	989.8	62.7	13.7
5	California	553.0	97.0	231.5	61.8	9.1
6	Delaware	1240.8	358.4	192.5	61.7	9.1
7	South Carolina	1583.9	200.3	460.7	61.1	12.7
8	West Virginia	38066.7	5720.0	555.8	60.2	10.5
9	Kansas	1245.4	187.1	368.7	58.7	9.4
10	North Carolina	2457.3	360.6	455.2	55.9	11.1
	United States	686.5	169.2	192.1	28.1	5.6

Sources: Economy.com, Milken Institute.

Health & Allied Services

Health & Allied Services

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Fort Lauderdale FL	100.00
2	Riverside-San Bernardino CA	69.45
3	Philadelphia PA-NJ	59.36
4	New York NY	54.00
5	Nashville TX	50.05
6	St. Louis MO-IL	33.60
7	Boston MA-NH	29.51
8	Providence-Fall River-Warwick RI-MA	29.13
9	Anniston AL	27.62
10	Bergen-Passaic NJ	25.95
11	Birmingham AL	22.90
12	Phoenix-Mesa AZ	22.15
13	Corvallis OR	21.24
14	Cumberland MD-WV	20.12
15	Springfield MO	20.05
16	Louisville KY-IN	18.73
17	Washington DC-MD-VA-WV	18.47
18	Baltimore MD	17.60
19	Denver CO	17.13
20	Nassau-Suffolk NY	15.45
21	Tampa-St. Petersburg-Clearwater FL	15.26
22	Yakima WA	13.79
23	Omaha NE-IA	13.54
24	Pittsburg PA	13.42
25	Columbus OH	13.19

Sources: Milken Institute, Economy.com.

Health & Allied Services

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Vermont	6.35	1.7	5.2
2	Rhode Island	3.11	0.9	4.1
3	New Hampshire	2.54	0.7	4.4
4	Alaska	2.02	0.6	1.6
5	Missouri	1.88	0.5	14.1
6	Kentucky	1.82	0.5	9.2
7	West Virginia	1.82	0.5	3.7
8	Arizona	1.60	0.4	10.0
9	Pennsylvania	1.57	0.4	24.6
10	Arkansas	1.55	0.4	4.9

Sources: Economy.com, Milken Institute.

Health and Allied Services

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	New England	1.37	0.37	25.8
2	East South Central	1.37	0.37	27.9
3	Middle Atlantic	1.31	0.35	64.6
4	West North Central	1.15	0.31	30.5
5	Mountain	1.09	0.29	25.2
6	Pacific	0.90	0.24	48.5
7	South Atlantic	0.88	0.24	58.6
8	East North Central	0.88	0.23	51.6
9	West South Central	0.60	0.16	22.9

Sources: Economy.com, Milken Institute.

Health & Allied Services

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-1990	1980-1990	1990-2000	1996-2001	2000-2001
1	Arkansas	1078.9	255.5	231.7	68.0	11.8
2	Nebraska	726.6	212.0	164.9	62.1	9.7
3	Missouri	602.0	128.8	206.8	57.6	12.1
4	Vermont	284.1	1.9	277.0	57.5	11.9
5	North Carolina	1344.4	424.3	175.5	52.1	9.6
6	South Dakota	1100.0	379.4	150.3	48.3	7.3
7	Nevada	989.8	338.8	148.4	46.1	8.3
8	Alaska	157.9	11.0	132.4	39.7	8.7
9	Arizona	431.9	119.0	142.9	38.4	7.9
10	Montana	375.2	143.2	95.4	35.1	4.9
	<i>United States</i>	160.9	73.9	50.0	16.1	3.9

Sources: Economy.com, Milken Institute.

Overall Health Care

Total Health Care

Top Twenty Metropolitan Areas by Health Pole, 2001

Rank	Metropolitan Area	Health Pole
1	Boston MA-NH	100.00
2	New York NY	99.85
3	Philadelphia PA-NJ	97.53
4	Chicago IL	92.20
5	Los Angeles-Long Beach CA	55.15
6	Washington DC-MD-VA-WV	48.18
7	Detroit MI	44.09
8	Nassau-Suffolk NY	40.66
9	Newark NJ	39.49
10	Minneapolis-St. Paul MN-WI	36.29
11	Pittsburgh PA	36.26
12	Baltimore MD	33.55
13	St. Louis MO-IL	32.12
14	Cleveland-Lorain-Elyria OH	31.23
15	Houston TX	31.03
16	New Haven-Meriden CT	31.00
17	San Diego CA	24.85
18	Rochester MN	23.46
19	Tampa-St. Petersburg-Clearwater FL	23.46
20	Miami FL	22.74
21	Wilmington-Newark DE-MD	9.78
22	Baltimore MD	9.59
23	San Antonio TX	8.97
24	Monmouth-Ocean NJ	7.30
25	Oakland CA	7.02

Sources: Milken Institute, Economy.com.

Top Health Care Industry States

Top States Ranked by Employment Concentration, 2001

Rank	State	Location Quotient	% of State Total Emp.	Emp. (Ths.)
1	Pennsylvania	1.31	11.9	682.9
2	Rhode Island	1.29	11.8	56.4
3	Massachusetts	1.29	11.8	393.0
4	New Jersey	1.29	11.7	471.3
5	Connecticut	1.26	11.4	193.1
6	North Dakota	1.26	11.4	38.1
7	Maine	1.20	10.9	66.9
8	West Virginia	1.19	10.9	80.0
9	Vermont	1.16	10.5	31.7
10	New York	1.14	10.4	900.0

Sources: Economy.com, Milken Institute.

Top Health Care Industry Regions

Ranked by Employment Concentration, 2001

Rank	Region	Location Quotient	% of Regional Total Emp.	Emp. (Ths.)
1	New England	1.25	11.4	801.0
2	Middle Atlantic	1.23	11.2	2054.2
3	West North Central	1.05	9.6	946.9
4	East North Central	1.03	9.3	2053.9
5	West South Central	0.92	8.4	1191.1
6	East South Central	0.92	8.4	636.7
7	South Atlantic	0.92	8.3	2065.8
8	Pacific	0.87	7.9	1592.9
9	Mountain	0.85	7.7	664.8

Sources: Economy.com, Milken Institute.

Health Care - All Related Industries

Employment Growth, Ranked by 1996-2001 Growth

Rank	State	Percent (%) Growth by Time Period				
		1980-2000	1980-1990	1990-2000	1996-2001	2000-2001
1	Alaska	188.6	81.5	59.0	29.7	6.4
2	South Carolina	173.9	72.6	58.7	26.8	6.0
3	Nevada	190.5	81.6	60.0	26.1	5.4
4	Idaho	118.8	39.5	56.9	23.4	5.8
5	North Carolina	167.8	70.5	57.1	21.6	3.9
6	Minnesota	95.1	39.2	40.1	18.9	3.0
7	Arizona	200.3	94.4	54.4	18.7	4.0
8	Maine	99.2	45.7	36.7	17.7	2.5
9	Delaware	134.9	71.7	36.8	16.4	4.0
10	Nebraska	65.9	28.0	29.6	16.1	2.5
	<i>United States</i>	90.8	47.8	29.1	10.6	2.8

Sources: Economy.com, Milken Institute.

About the Authors

Ross DeVol is Director of Regional Economics at the Milken Institute. He oversees the Institute's research efforts on the dynamics of comparative regional growth performance, technology and its impact on regional and national economies. He is an expert on the new intangible economy and how regions can prepare themselves to compete in it. He authored the ground-breaking study, *America's High-Tech Economy: Growth, Development, and Risks for Metropolitan Areas*, an examination of how clusters of high-technology industries across the country affect economic growth in those regions. He also created the Best Performing Cities Index, an annual ranking of U.S. metropolitan areas showing where jobs are being created and economies are growing. Prior to joining the Institute, DeVol was senior vice president of Global Insight, Inc. (formerly Wharton Econometric Forecasting), where he supervised their Regional Economic Services group. DeVol supervised the respecification of Global Insight's regional econometric models and played an instrumental role on similar work on its U.S. Macro Model originally developed by Nobel Laureate Lawrence Klein. He was the firm's chief spokesman on international trade. He also served as the head of Global Insight's U.S. Long-Term Macro Service and authored numerous special reports on behalf of the U.S. Macro Group. DeVol earned his M.A. in economics at Ohio University.

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