# TRENDWATCH

### Beyond Health Care: The Economic Contribution of Hospitals

In 2006, America's hospitals treated 118 million people in their emergency departments, provided care for 600 million outpatients, performed 27 million surgeries, and delivered 4 million babies. Every year, hospitals provide vital health care services like these to millions of people in thousands of communities. However, the importance of hospitals to their communities extends far beyond health care.

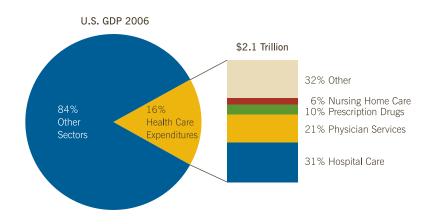
Hospital care is the largest component of the health sector, which itself is a growing segment of the U.S. economy. In 2006, this sector represented about 16 percent of the Gross Domestic Product (GDP) – a measure of economic output – or approximately \$2.1 trillion.<sup>2</sup> Hospitals accounted for \$648 billion of that total.<sup>3</sup> The health sector is an economic mainstay providing stability and growth, even during times of recession.<sup>4</sup>

In 2006, community hospitals employed more than 5 million people and spent about \$286 billion on goods and services in addition to employee wages. Nationally, each hospital job supports almost two additional jobs and every dollar spent by a hospital supports more than \$2 of additional business activity. With these "ripple effects" included, hospitals support nearly \$1.9 trillion of economic activity.

A strong health care network, in which hospitals play a key role, also adds to the attractiveness of a community as a place to settle, locate a business or retire.

#### Health care and hospitals are major contributors to the economy...

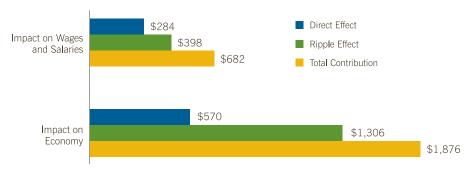
Chart 1: National Health Expenditures as a Percentage of Gross Domestic Product and Breakdown of National Expenditures on Health, 2006



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released January 7, 2008.

## ...supporting other businesses and jobs in communities across the U.S.

Chart 2: Impact of Community Hospitals on U.S. Economy (in billions), 2006



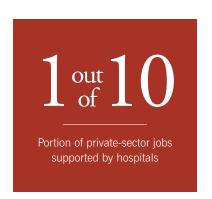
Source: Avalere Health, using BEA RIMS-II (1997/2005) multipliers applied to 2006 American Hospital Association Annual Survey data.



#### Hospitals Are Among the Largest Employers in Many Communities

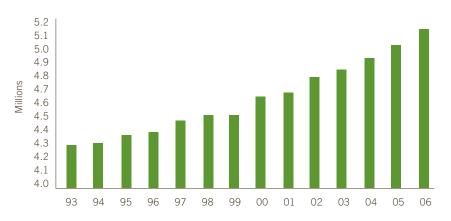
More than half of hospital expenses are salaries, wages and benefits. In 2006, U.S. hospitals paid about \$284 billion in employee compensation. Hospitals rank second as a source of private-sector jobs, behind only full-service restaurants.

Hospitals regularly rank among the top 10 employers in large urban areas such as Boston, New York and Detroit. The hospitals in the Chicago metropolitan area directly employ more than 140,000 full-time employees. In Minnesota, the Mayo Clinic is the state's largest private employer, with a staff of more than 30,000 in Rochester and several thousand more in the regional health system. Regionally, hospitals can account for more than 4 percent of employment.



#### Nationwide, hospitals employ over 5 million people...

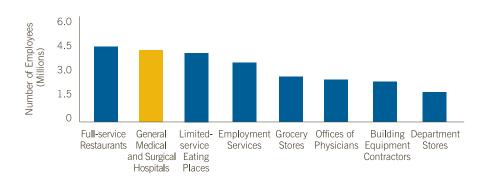
Chart 3: Number of Full-time and Part-time Hospital Employees, 1993-2006



Source: Avalere Health analysis of 2006 American Hospital Association Annual Survey data for community hospitals.

#### ...making them the second-largest employer in the private sector..

Chart 4: Hospital Employment versus Employment in Other Industries, 2007\*



Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Survey, customized tables. Data released 2008. http://www.bls.gov/ces.

\*2007 annual projections based on data as of November 2007.

#### Impact of Rural Hospitals

In rural areas, hospitals are often either the largest or the second-largest employer, behind the school system.<sup>8</sup> In these communities, which often struggle to attract and retain college graduates, rural hospitals provide a source of high-tech jobs for young people who might otherwise leave communities heavily dependent upon agriculture. Rural

hospitals also provide an anchor for other health care jobs, such as physicians and pharmacists that, in the absence of the hospital, may not be available. Total direct and indirect employment generated by health care is often 10 to 20 percent of a rural community's employment.

## ...accounting for more than four percent of employment in most regions.

Chart 5: Percent of Total Regional Employment\* by Hospitals, 2006



Source: Avalere Health analysis of American Hospital Association 2006 Annual Survey data and 2006 total non-farm employment data from the Bureau of Labor Statistics.

#### ( ) from the field

"In most rural communities, the local hospital is the largest employer and the biggest contributor to the local economy. When a hospital closes, it hits Main Street just as hard as it does the local medical community. Few cities and towns in rural Oklahoma can survive that kind of blow." 10

Governor Brad Henry, Oklahoma (D)

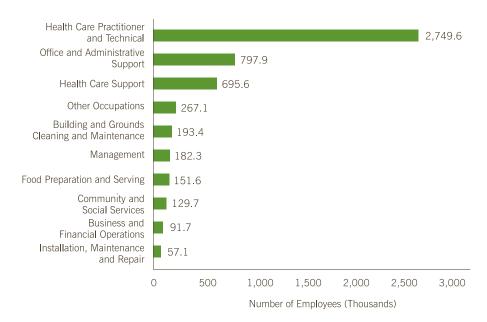
#### Hospitals Offer High-quality Jobs and Consistent Job Growth

Hospitals are a large, established source of employment, providing jobs for a wide range of skill levels. Hospitals employ highly skilled doctors, nurses and therapists, as well as low-skilled workers in environmental and food services. Earnings of hospital workers, on average, are higher than those of workers in service-providing industries as a whole. Hospitals also furnish benefits, such as health insurance. These benefits are often lacking in other jobs available to lower-skilled workers, such as retail or other service jobs.

Hospitals offer a stable source of employment growth, even in times of economic stress. Hospitals had a 2.1 percent increase in employment in 2007, despite reported shortages in job classes such as nursing and pharmacy, while all non-farm employers experienced only a 1.6 percent increase.<sup>11</sup>

## Hospitals support a range of positions for workers with varying skill levels.

Chart 6: Hospital Employment by Occupation Type, 2006



Source: Department of Labor, Bureau of Labor Statistics, 2006 National Industry-specific Occupational Employment and Wage. Data released May 2007. http://www.bls.gov/oes/current/naics3\_622000.htm.

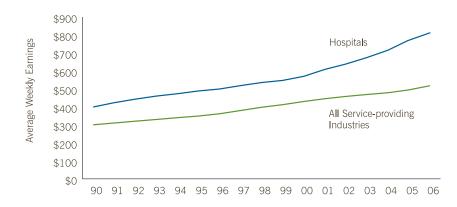
<sup>\*</sup>Does not include farm employment.

Additionally, in 2007, the health care sector overall added approximately 367,000 jobs, comprising 45 percent of all private-sector jobs added over the year.<sup>12</sup>

Facing a shortage of skilled workers, hospitals are investing in workforce development and retention activities – another way hospitals contribute to the economic base of communities. Some hospitals offer tuition reimbursement programs, partner with local colleges to provide training programs for employees to update or develop their skills, or implement mentoring programs for less experienced staff.

#### Hospital jobs provide higher pay than other service sector jobs.

Chart 7: Average Weekly Earnings of Workers, Hospitals\* versus All Service-providing Industries, 1990-2006



Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics (CES) Survey, customized tables. Data released 2008. http://www.bls.gov/ces.

#### Hospitals provide a consistent source of jobs.

Chart 8: Percent Change in Employment, Seasonally-adjusted: Hospitals versus All Industries (Total Non-farm), 2005-2007



Source: Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/bls/employment.htm. \*2007 Qtr 4 data are preliminary.

from the field

"Creating greater opportunities in the allied health professions will not only improve patient care, it will spur job growth and help boost our economy. Training people to fill these openings could create more than 40,000 jobs." <sup>13</sup>

Senator Maria Cantwell (D-WA)

<sup>\*</sup>Includes physicians employed by hospitals.

#### Hospital Expenditures and Tax Payments Stimulate Economies

The economic contribution of hospitals extends beyond the people they directly employ, the goods and services they purchase and the taxes they pay.

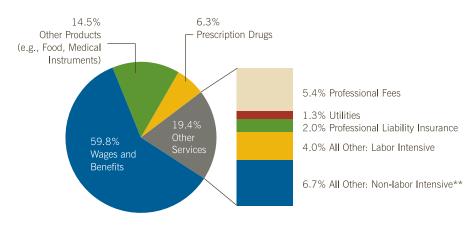
Hospitals also support other businesses through so-called "ripple effects" that are generated in three ways:

- Hospitals purchase goods and services, such as drugs, information technology, food, bed linens and "bricks and mortar" from other businesses in their communities. Those purchases create revenue for local businesses and jobs and income for their employees. The construction phase of the Ann & Robert H. Lurie Children's Hospital of Chicago will generate approximately \$1.5 billion in economic activity between 2008 and 2012 when the hospital opens. 14
- Hospitals provide income for employees.
   Hospital employees purchase goods and services, such as cars, household appliances and groceries. These purchases generate income and create jobs for other businesses in the community.
- Wages and salaries paid by hospitals are subject to federal, state and local taxes (e.g., payroll taxes, sales taxes). In South Bend, Indiana, employees of Memorial Hospital and Health System paid more than \$5 million in state and local income taxes, in addition to more than \$50 million in federal income taxes. 15

These ripple effects result in jobs and income for other businesses. In 2006, with ripple effects included, hospitals supported a total of 13.9 million jobs and \$1.9 trillion of economic activity.

#### Hospitals purchase a variety of goods and services...

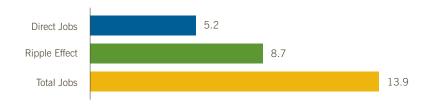
Chart 9: Percent of Hospital Costs\* by Type of Expense, 2nd Quarter 2007



Source: American Hospital Association analysis of Centers for Medicare & Medicaid Services data, using base year 2002 weights. \*Does not include capital. \*\*Includes postage and telephone expenses.

#### ...generating jobs throughout the economy...

Chart 10: Impact of Community Hospitals on U.S. Jobs (in millions), 2006



Source: Avalere Health, using BEA RIMS-II (1997/2005) multipliers applied to 2006 American Hospital Association Annual Survey data.

#### ...and supporting other industries.

Chart 11: Hospital Impact on Sectors of the U.S. Economy (in billions), 2006

INDUSTRY EC	ECONOMIC IMPACT		
Health care and social assistance	\$659.5		
Manufacturing	281.1		
Real estate and rental and leasing	177.7		
Finance and insurance	119.9		
Professional, scientific and technical se	ervices 78.0		
Retail trade	76.7		
Wholesale trade	61.4		
Information	61.4		
Transportation and warehousing	58.4		
Administrative and waste management	services 58.1		

INDUSTRY	ECONOMIC IMPACT
Accommodation and food services	48.2
Other services	47.1
Management of companies and ent	terprises 37.7
Utilities	33.4
Agriculture, forestry, fishing and hu	inting 27.6
Educational services	15.1
Arts, entertainment and recreation	13.4
Mining	11.9
Construction	9.3
TOTAL	\$1,875.8

Source: Avalere Health, using BEA RIMS-II (1997/2005) multipliers applied to 2006 American Hospital Association Annual Survey data.

#### Hospitals Support their Communities in Many Additional Ways

In addition to providing traditional health care services and supporting their local economies, hospitals offer an array of special programs and activities to help meet communities' broader health and social needs.

Hospitals offer services that aid in disease prevention, promote health awareness, contribute to advances in medicine and address other societal needs. Examples of the types of community programs hospitals offer include:

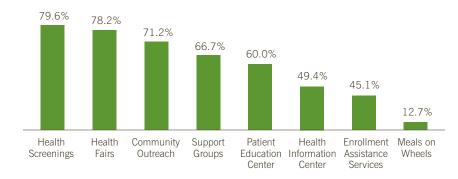
- Health programs such as educational outreach, health screenings and support groups;
- Subsidized health services (e.g., free clinics, vaccinations);
- Programs to address the social needs of communities (e.g., Meals on Wheels, various shelters);
- Health professions training programs for physicians, nurses and technical staff;
- Continuing education for health professionals; and
- Clinical research.

Hospital charity care programs provide care for free or on a sliding scale for patients with limited financial means. Hospitals have specific criteria to identify patients eligible for this care. In 2006, hospitals provided more than \$31 billion in uncompensated care – a mixture of charity care and other care for which payment was expected but not received.

Hospitals also offer services to needy patients through Medicaid, a federal-state

#### Hospitals offer an array of community services...

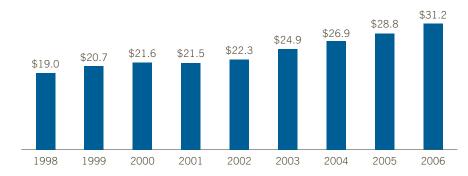
Chart 12: Percent of Community Hospitals Offering Selected Community Outreach Services, 2006



Source: Health Forum. (2008). AHA Hospital Statistics.

## ...and provide charity care and other care for which no payment is received.

Chart 13: Total Uncompensated Care Costs (in billions), 1998-2006



Source: Avalere Health analysis of 2006 American Hospital Association Annual Survey data for community hospitals.

program that does not fully reimburse community hospitals for the services provided to these patients. In 2006, Medicaid payments fell short of the actual costs of care by \$11.3 billion, a number that includes disproportionate share payments intended to subsidize the costs of caring for other low-income populations.

from the field

"These hospitals not only sustain and contribute to the region's economic viability through local spending, job creation and research, they also have a huge community and social impact by partnering with local agencies to address unmet social and health care needs and providing care to those in need regardless of their coverage or means." <sup>16</sup>

James Mandell, Conference of Boston Teaching Hospitals Chair and President and CEO of Children's Hospital Boston

#### Hospitals support up to 11 percent of state employment.

Chart 14: Impact of Community Hospitals on U.S. Economy; All States, DC and Total U.S., 2006

STATE	Number of Hospital Jobs (FT and PT)		Effect of Hospital Jobs on Total Jobs in State Economy	Percent of Total (Non-farm) Employment Supported by Hospital Employment	Hospital Payroll and Benefits (\$ millions)	Multiplier** for Earnings	Effect of Hospital Payroll and Benefits on Total Labor Income (\$ millions)	Hospital Expenditures* (\$ millions)	Multiplier** for Output	Effect of Hospital Expenditures on Total Output in State Economy (\$ millions)
Alabama	83,823	1.9673	164,905	8.32%	\$3,716	1.7256	\$6,412	\$7,895	2.1553	\$17,016
Alaska	10,972	1.8833	20,664	6.56%	\$752	1.5404	\$1,158	\$1,440	1.8578	\$2,674
Arizona	77,772	2.0659	160,669	6.08%	\$4,390	1.7575	\$7,715	\$9,498	2.1687	\$20,598
Arkansas	48,496	1.9083	92,545	7.71%	\$2,183	1.6570	\$3,617	\$4,571	2.0430	\$9,339
California	470,001	2.2396	1,052,614	6.98%	\$29,524	1.9783	\$58,407	\$57,500	2.5385	\$145,964
Colorado	62,374	2.2153	138,177	6.06%	\$3,702	1.9505	\$7,221	\$7,914	2.4787	\$19,617
Connecticut	63,860	1.8816	120,159	7.15%	\$3,927	1.7173	\$6,745	\$7,117	2.1326	\$15,178
Delaware	18,315	1.8634	34,128	7.82%	\$1,049	1.6184	\$1,698	\$1,894	1.9732	\$3,737
District of Columbia	25,590	1.5373	39,340	5.72%	\$1,607	1.3705	\$2,202	\$3,048	1.3911	\$4,239
Florida	266,870	2.0257	540,599	6.75%	\$14,762	1.8039	\$26,629	\$31,322	2.2321	\$69,913
Georgia	136,728	2.1334	291,696	7.14%	\$7,015	1.9374	\$13,590	\$14,325	2.4788	\$35,508
Hawaii	16,973	2.0943	35,547	5.76%	\$1,062	1.7063	\$1,811	\$2,003	2.0856	\$4,177
Idaho	21,626	2.0268	43,832	6.85%	\$1,056	1.6801	\$1,774	\$2,254	2.0409	\$4,600
Illinois	237,782	2.1803	518,436	8.74%	\$12,498	2.0037	\$25,043	\$24,244	2.6046	\$63,147
Indiana	124,713	2.0080	250,424	8.42%	\$6,396	1.7551	\$11,226	\$13,262	2.2268	\$29,533
lowa	68,791	1.9108	131,446	8.75%	\$3,057	1.6650	\$5,090	\$5,983	2.0554	\$12,297
Kansas	49,275	1.9324	95,219	7.03%	\$2,408	1.6914	\$4,073	\$4,847	2.1363	\$10,356
Kentucky	78,692	1.9542	153,780	8.33%	\$3,834	1.7150	\$6,576	\$8,594	2.1431	\$18,418
Louisiana	82,640	2.0044	165,644	8.92%	\$3,812	1.7314	\$6,600	\$7,692	2.1075	\$16,212
Maine	32,779	2.0346	66,692	10.85%	\$1,627	1.6824	\$2,737	\$3,171	2.0564	\$6,520
Maryland	88,333	2.0238	178,768	6.91%	\$4,841	1.7899	\$8,666	\$10,120	2.2321	\$22,588
Massachusetts	157,105	2.0248	318,106	9.81%	\$9,150	1.8252	\$16,700	\$18,516	2.2851	\$42,311
Michigan	200,723	2.0031	402,068	9.26%	\$10,920	1.7785	\$19,421	\$21,187	2.2095	\$46,813
Minnesota	107,704	2.1564	232,253	8.41%	\$5,982	1.8575	\$11,112	\$11,335	2.3496	\$26,632
Mississippi	54,986	1.8829	103,533	9.06%	\$2,630	1.6302	\$4,287	\$5,238	2.0105	\$10,531
Missouri	127,691	2.0651	263,695	9.51%	\$6,170	1.8165	\$11,208	\$13,886	2.2909	\$31,812
Montana	20,140	1.9512	39,297	9.06%	\$969	1.6224	\$1,573	\$1,892	1.9664	\$3,720
Nebraska	40,989	1.9455	79,744	8.42%	\$1,975	1.7060	\$3,369	\$4,182	2.1064	\$8,809
Nevada	21,822	1.9102	41,684	3.25%	\$1,540	1.6205	\$2,496	\$3,080	1.9644	\$6,050
New Hampshire	27,306	1.9646	53,645	8.39%	\$1,633	1.7711	\$2,893	\$3,072	2.1229	\$6,523
New Jersey	141,201	2.1060	297,369	7.30%	\$8,705	1.8925	\$16,474	\$15,837	2.4329	\$38,530
New Mexico	26,878	2.0523	55,162	6.62%	\$1,407	1.6443	\$2,314	\$2,674	1.9675	\$5,262
New York	394,238	1.8775	740,182	8.59%	\$26,469	1.7057	\$45,148	\$47,152	2.1628	\$101,980
North Carolina	157,787	2.1212	334,698	8.32%	\$8,202	1.8418	\$15,106	\$16,751	2.3413	\$39,220
North Dakota	19,673	1.8537	36,468	10.33%	\$891	1.5887	\$1,415	\$1,636	1.9036	\$3,115
Ohio	252,032	2.1076	531,183	9.76%	\$13,464	1.8467	\$24,864	\$26,789	2.3444	\$62,805
Oklahoma	55,081	2.0895	115,092	7.42%	\$2,647	1.7750	\$4,698	\$5,816	2.2163	\$12,889
Oregon	56,629	2.1556	122,069	7.17%	\$3,332	1.7595	\$5,862	\$6,382	2.1885	\$13,968
Pennsylvania	275,396	2.1247	585,134	10.17%	\$13,862	1.9268	\$26,709	\$29,144	2.4728	\$72,068
Rhode Island	20,851	1.9458	40,572	8.22%	\$1,368	1.6873	\$2,309	\$2,419	2.0523	\$4,964
South Carolina	69,364	2.0776	144,111	7.57%	\$3,499	1.7698	\$6,192	\$7,936	2.2559	\$17,903
South Dakota	20,268	1.8479	37,453	9.39%	\$910	1.5841	\$1,441	\$1,838	1.9154	\$3,520
Tennessee	115,507	2.1489	248,213	8.92%	\$5,625	1.8571	\$10,447	\$11,824	2.3916	\$28,278
Texas	316,156	2.2890	723,681	7.20%	\$17,311	1.9720	\$34,138	\$36,937	2.5737	\$95,065
Utah	38,350	2.2220	85,214	7.08%	\$1,720	1.9095	\$3,285	\$3,880	2.4462	\$9,491
Vermont	12,741	1.9283	24,568	7.99%	\$805	1.5950	\$1,284	\$1,383	1.8848	\$2,606
Virginia	105,134	1.9195	201,805	5.42%	\$5,628	1.7630	\$9,922	\$12,620	2.2526	\$28,428
Washington	92,217	2.1432	197,639	6.91%	\$5,667	1.8034	\$10,219	\$10,819	2.2743	\$24,605
West Virginia	40,791	1.8325	74,750	9.89%	\$1,938	1.5628	\$3,029	\$3,946	1.8436	\$7,274
Wisconsin	108,140	2.0058	216,907	7.58%	\$5,591	1.7551	\$9,813	\$11,969	2.1855	\$26,159
Wyoming	8,838	1.7345	15,330	5.54%	\$445	1.4657	\$652	\$839	1.7279	\$1,450
U.S.	5,152,143	2.7003	13,912,332	10.24%	\$283,674	2.4050	\$682,235	\$569,672	3.2927	\$1,875,760

Source: Avalere Health, using BEA RIMS-II (1997/2005) multipliers for hospital NAICS Code 622, released 2006, applied to American Hospital Association Annual Survey data for 2006. Hospital jobs are total part-time and full-time jobs. Hospital labor income is defined as payroll plus benefits. The percent of total employment supported by direct and indirect hospital employment is based on 2005 Bureau of Labor Statistics data.

<sup>\*</sup>Expenditures are defined as net patient revenue + other operating revenue.

<sup>\*\*</sup>The "multiplier" is the factor by which spending in one sector of the economy affects other sectors. For example, nationally each hospital job results in a total of 2.7 jobs in the economy as a whole because hospital employees use their wages to purchase goods and services which creates income and jobs for other businesses.

#### Summary and Conclusions

Hospitals contribute to the economic viability of local and regional communities by serving as the anchors of local health care networks and stimulating demand for goods and services produced by local businesses. Hospitals continue to provide jobs and job growth during recessions. However, when investors, policymakers and the public think about industries that promote economic stability and growth, most do not think about

hospitals. Indeed, increases in expenditures on manufacturing or technology inspire optimism about the nation's fiscal health, while increases in expenditures on health care are typically viewed with concern. But, the fact remains that hospitals are strong contributors to the U.S. economy.

Hospitals create a steady source of employment even in economic downturns:

 High pay relative to other service sectors;

- Jobs across a wide spectrum of skill levels; and
- Jobs not easily "outsourced" abroad.

  Hospital and hospital employee –
  purchases of goods and services support
  other community businesses. With
  "ripple effects" included, hospitals:
- Support nearly one of 10 jobs in the U.S.; and
- Support more than \$1.9 trillion in economic activity.

#### **ENDNOTES**

- 1 Health Forum. (2008). AHA Hospital Statistics.
- 2 Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. Data released January 2008.
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TrendWatch, produced by the American Hospital Association, highlights important trends in the hospital and health care field. Avalere Health supplies research and analytic support.

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Avalere Health LLC 1350 Connecticut Avenue, NW Suite 900 Washington, DC 20036 202.207.1300 www.avalerehealth.net