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Healthcare jobs and the Great Recession

The Great Recession of December 2007 to June 2009, during which the unemployment rate reached 10.0 percent, had a devastating effect on the American economy. How did the healthcare portion of the economy respond to this downturn? Did employment in healthcare mirror that of the overall economy, or was healthcare recession proof? Using data on employment and wages provided by the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages, this article looks at employment trends for the nation, the healthcare component of the labor market, and the largest healthcare industry groups within that component during 2001–14 and 2007–10. The article finds that the Great Recession had little negative effect on job growth in healthcare compared with its effect on the national economy. For the most part, this was true regardless of occupational setting or geographic location.

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The Great Recession, which began in December 2007 and ended in June 2009, had a devastating effect on employment and wages in the United States.[1] At its peak, the unemployment rate rose to a high of 10.0 percent (in October 2009) and reflected job losses across multiple industries. This downturn represented one of the longest and deepest recessions experienced in the nation since the end of World War II.

In assessing the overall economic and financial impact of the Great Recession, we found that 40 percent of American households had experienced some sort of distress, as measured by unemployment, negative home equity, arrears in mortgage payments, home foreclosures, or substantial losses in retirement savings.[2]

In contrast, healthcare appears to have been a bright spot in the American labor market economy, as it was during previous recessions.[3] A U.S. Bureau of Labor Statistics (BLS) analysis indicated that healthcare employment continued to grow during the Great Recession, albeit at a slower pace than during the 1990–91 and 2001

recessions.[4] From a historical perspective, healthcare appears to have been resistant to, if not immune from, the usual job losses associated with previous recessions.[5]

While there has been extensive research demonstrating the relationship between increased economic activity and increased employment in the healthcare arena, less attention has been directed at how the healthcare job market responded to the Great Recession and how this response compared with trends in overall employment from 2001 through 2014. The analysis in this article provides answers to these questions.

Research issues

This article examines whether healthcare jobs were immune from the negative effects of the Great Recession. It attempts to answer the following three questions and uses two timeframes (2001–14 and, to focus on the downturn, 2007–10) to do so:[6]

1. What general trends in employment and in average wages occurred in both the national economy and the combined healthcare industries during these two periods?
2. Did certain healthcare industries experience similar trends in employment and wages during the same timeframes?
3. Did geographic location have an influence on the national and industry results?

The answers to these three questions should provide additional industry insights into how the healthcare labor market responded to the Great Recession.[7]

Data

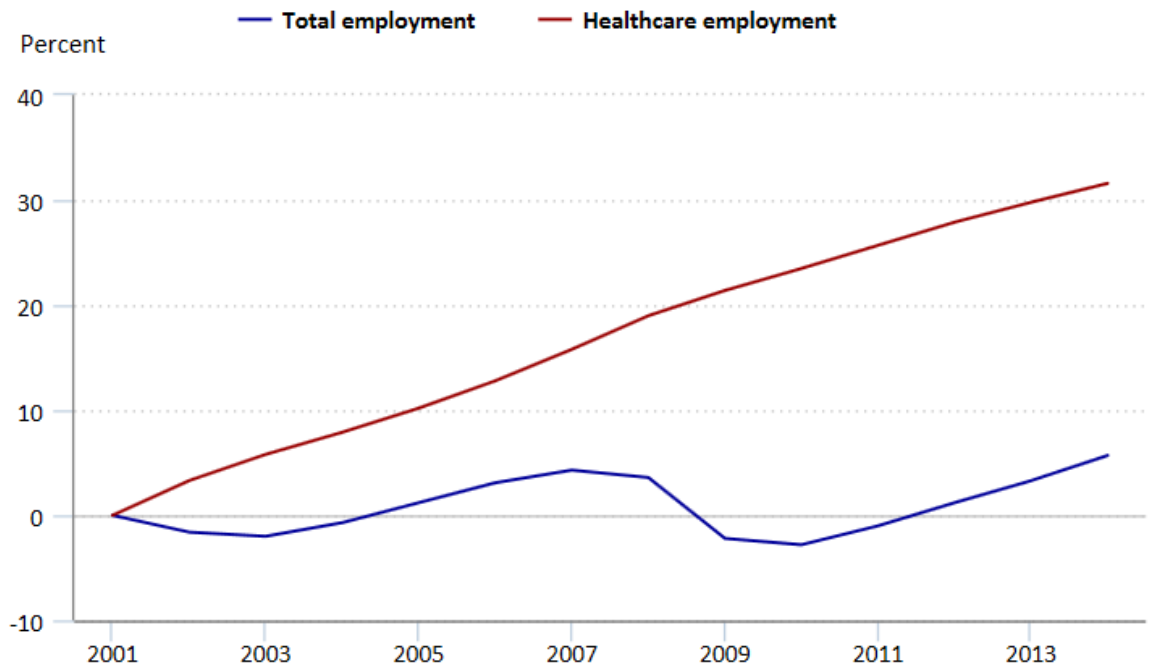
Data for this study are drawn from the BLS Quarterly Census of Employment and Wages (QCEW) program. The QCEW publishes quarterly wages and a quarterly count of employment (reported by employers) covering more than 95 percent of all U.S. payroll jobs. This database is used to analyze employment and wages in the national economy as well as in healthcare. The data refer to the first three subsectors of the healthcare and social assistance sector as defined by the North American Industry Classification System (NAICS). Because the sector consists of ambulatory healthcare services (NAICS 621), hospitals (NAICS 622), nursing and residential care facilities (NAICS 623), and social assistance (NAICS 624), we do not use the term “healthcare sector” in this article. Our discussion of healthcare jobs refers to NAICS 621, 622, and 623. All data in the QCEW refer to employment and wages in the private sector and exclude government employment and wages.[8]

To provide additional insights, we analyze five major metropolitan counties that include major U.S. cities (shown in parentheses): Los Angeles County, CA (Los Angeles), New York County, NY (part of New York City), Cook County, IL (Chicago), Harris County, TX (Houston), and Maricopa County, AZ (Phoenix). Also, the healthcare data are partitioned, both nationally and regionally, into specific employment areas: general medical and surgical hospitals; offices of physicians, except mental health; skilled nursing care facilities; and home healthcare services.

Healthcare employment

Throughout the nation, healthcare employment increased by 31.6 percent, or 3.5 million jobs, during the period 2001 through 2014. By contrast, total nonfarm employment grew by 5.7 percent, or 6.3 million jobs, during this same period. Thus, during this 13-year timeframe, 56.1 percent of all national job growth occurred in healthcare. (See figure 1 and table 1.)

Figure 1. Percent change in employment, private industry, 2001–14 annual averages



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Table 1. Private industry employment, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
Total United States						
2001	109,304,802	11,118,844	1,872,377	3,790,580	1,539,554	635,348
2002	107,577,281	11,482,083	1,940,147	3,881,448	1,567,825	675,660
2003	107,065,553	11,761,194	1,964,069	3,964,761	1,566,775	723,604
2004	108,490,066	11,994,435	2,009,660	4,006,455	1,573,256	770,673
2005	110,611,016	12,247,774	2,049,554	4,054,590	1,570,772	818,867
2006	112,718,858	12,536,713	2,102,235	4,115,486	1,575,603	867,351
2007	114,012,221	12,875,889	2,160,695	4,195,600	1,595,593	915,024
2008	113,188,643	13,228,745	2,209,350	4,294,587	1,616,656	957,911
2009	106,947,104	13,494,501	2,235,673	4,339,758	1,641,479	1,027,612

See footnotes at end of table.

Table 1. Private industry employment, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
2010	106,201,232	13,728,075	2,272,233	4,335,639	1,654,706	1,082,731
2011	108,184,795	13,972,516	2,300,225	4,363,863	1,667,523	1,140,402
2012	110,645,869	14,220,690	2,342,075	4,409,965	1,658,761	1,186,670
2013	112,958,334	14,430,444	2,381,270	4,437,590	1,650,979	1,223,952
2014	115,568,686	14,630,002	2,416,054	4,434,972	1,649,686	1,256,831
2001–14 percent change	5.7	31.6	29.0	17.0	7.2	97.8
2001–14 numeric change	6,263,884	3,511,158	543,677	644,392	110,132	621,483
2007–10 percent change	-6.9	6.6	5.2	3.3	3.7	18.3
2007–10 numeric change	-7,810,989	852,186	111,538	140,039	59,113	167,707
Los Angeles County						
2001	3,520,097	295,946	58,028	97,187	30,690	11,381
2002	3,466,341	308,976	61,327	101,171	31,107	11,685
2003	3,439,181	315,812	63,297	99,198	32,057	13,514
2004	3,473,064	321,251	64,966	100,862	32,682	14,242
2005	3,511,503	318,065	64,335	100,068	31,367	15,953
2006	3,590,993	325,773	64,541	102,220	33,286	16,820
2007	3,619,392	331,527	67,773	100,384	34,811	17,539
2008	3,578,500	338,111	69,390	101,129	35,643	19,165
2009	3,348,340	343,803	69,106	105,663	36,196	19,962
2010	3,293,535	351,334	73,083	102,836	37,753	20,710
2011	3,340,009	358,549	74,194	104,283	38,804	21,568
2012	3,445,299	367,533	77,874	103,658	39,426	22,496
2013	3,547,411	372,644	77,564	103,441	40,625	23,889
2014	3,622,732	382,121	78,289	105,625	43,960	23,749
2001–14 percent change	2.9	29.1	34.9	8.7	43.2	108.7
2001–14 numeric change	102,635	86,175	20,261	8,438	13,270	12,368
2007–10 percent change	-9.0	6.0	7.8	2.4	8.5	18.1
2007–10 numeric change	-325,857	19,807	5,310	2,452	2,942	3,171
New York County						
2001	1,888,281	135,748	15,494	63,047	8,131	13,446
2002	1,790,723	138,494	15,663	62,688	8,515	14,688
2003	1,765,050	140,423	16,091	61,059	7,924	16,337
2004	1,768,463	144,732	18,208	62,984	7,781	18,288
2005	1,802,468	145,004	17,418	61,928	7,364	20,192
2006	1,850,035	147,081	17,919	61,282	7,151	21,968
2007	1,911,403	150,567	18,469	61,873	7,166	23,102
2008	1,926,951	148,189	18,950	61,564	7,187	21,796

See footnotes at end of table.

Table 1. Private industry employment, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
2009	1,827,553	149,884	19,460	62,916	7,065	21,388
2010	1,835,104	151,915	20,033	62,659	6,922	22,030
2011	1,893,321	153,245	20,496	61,692	6,758	23,019
2012	1,947,749	154,780	20,814	62,062	6,547	24,110
2013	1,994,256	163,952	22,149	64,030	6,211	29,711
2014	2,061,244	168,359	23,790	65,411	6,020	30,946
2001–14 percent change	9.2	24.0	53.5	3.7	-26.0	130.2
2001–14 numeric change	172,963	32,611	8,296	2,364	-2,111	17,500
2007–10 percent change	-4.0	0.9	8.5	1.3	-3.4	-4.6
2007–10 numeric change	-76,299	1,348	1,564	786	-244	-1,072
Cook County						
2001	2,314,809	230,989	27,232	112,334	26,958	11,298
2002	2,239,211	235,773	28,347	113,511	27,476	11,726
2003	2,195,838	236,516	28,692	113,572	26,716	12,109
2004	2,183,864	239,108	29,093	112,634	26,243	13,438
2005	2,194,615	242,438	29,320	112,716	26,308	14,174
2006	2,223,044	245,383	30,163	113,113	26,517	15,568
2007	2,221,761	249,472	30,715	113,984	27,729	16,214
2008	2,193,587	252,126	29,893	114,833	28,045	17,610
2009	2,068,942	256,294	29,750	114,737	28,855	19,648
2010	2,041,915	255,551	31,362	107,749	29,419	22,362
2011	2,080,034	260,431	31,799	107,897	29,897	24,645
2012	2,111,071	263,063	32,356	108,208	29,881	25,660
2013	2,132,995	264,441	33,705	104,891	29,745	27,066
2014	2,177,247	267,730	33,793	105,504	29,083	29,243
2001–14 percent change	-5.9	15.9	24.1	-6.1	7.9	158.8
2001–14 numeric change	-137,562	36,741	6,561	-6,830	2,125	17,945
2007–10 percent change	-8.1	2.4	2.1	-5.5	6.1	37.9
2007–10 numeric change	-179,846	6,079	647	-6,235	1,690	6,148
Harris County						
2001	1,634,615	130,239	25,343	44,467	6,550	17,112
2002	1,614,890	137,720	26,041	48,170	6,655	18,214
2003	1,585,946	143,531	26,672	50,335	6,964	20,212
2004	1,593,429	146,684	26,751	50,599	7,447	22,178
2005	1,622,965	150,813	27,640	52,043	8,006	23,383
2006	1,691,194	156,471	28,594	53,060	8,375	25,262
2007	1,767,447	165,406	31,177	56,230	8,363	27,507

See footnotes at end of table.

Table 1. Private industry employment, by healthcare industry group, selected counties, 2001–14 annual averages

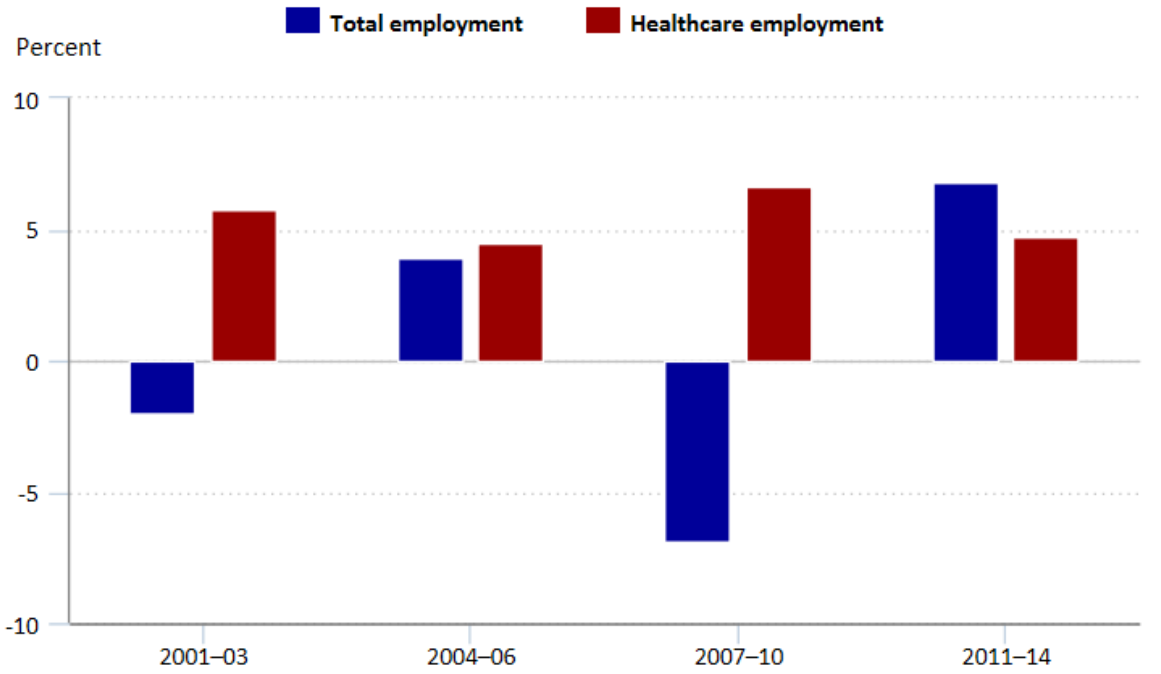
Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
2008	1,806,581	170,863	33,156	57,062	8,710	28,543
2009	1,744,098	177,217	34,443	57,728	8,944	30,896
2010	1,724,278	183,999	35,851	58,098	9,223	33,882
2011	1,779,692	189,214	36,486	59,190	9,442	35,968
2012	1,860,385	194,689	37,359	60,275	9,267	38,334
2013	1,926,146	198,675	38,155	61,275	9,727	38,003
2014	1,996,541	202,405	38,678	61,896	10,062	38,386
2001–14 percent change	22.1	55.4	52.6	39.2	53.6	124.3
2001–14 numeric change	361,926	72,166	13,335	17,429	3,512	21,274
2007–10 percent change	-2.4	11.2	15.0	3.3	10.3	23.2
2007–10 numeric change	-43,169	18,593	4,674	1,868	860	6,375
Maricopa County						
2001	1,364,025	105,317	22,281	31,887	6,104	5,426
2002	1,346,383	109,581	22,547	32,618	5,838	5,866
2003	1,364,645	117,718	23,775	33,360	5,910	7,383
2004	1,416,609	123,827	24,692	35,983	6,150	8,964
2005	1,512,378	131,052	26,497	36,908	5,904	10,231
2006	1,597,948	139,276	28,498	39,207	5,679	10,896
2007	1,610,936	146,974	30,784	40,961	5,897	11,451
2008	1,553,029	156,284	32,093	44,052	6,782	12,838
2009	1,416,321	159,645	32,912	43,925	6,473	13,499
2010	1,393,720	167,796	32,965	48,697	7,668	13,179
2011	1,426,687	174,377	34,839	49,315	7,565	14,407
2012	1,467,055	179,516	34,073	49,970	7,691	15,383
2013	1,513,653	183,621	35,560	49,683	7,878	13,836
2014	1,553,319	188,431	36,648	50,703	8,440	14,062
2001–14 percent change	13.9	78.9	64.5	59.0	38.3	159.2
2001–14 numeric change	189,294	83,114	14,367	18,816	2,336	8,636
2007–10 percent change	-13.5	14.2	7.1	18.9	30.0	15.1
2007–10 numeric change	-217,216	20,822	2,181	7,736	1,771	1,728

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

Job growth in the national economy, however, was anything but steady. Total nonfarm employment decreased by 2.2 million jobs (2.0 percent) from 2001 through 2003, increased by 4.2 million jobs (3.9 percent) from 2004

through 2006, decreased by 7.8 million jobs (6.9 percent) from 2007 through 2010, and increased by 7.4 million jobs (6.8 percent) from 2011 through 2014. (See figure 2.)

Figure 2. Percent change in employment, private industry, annual averages for selected years



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

In contrast to the uneven national job picture, job growth in the healthcare industries was steady, averaging more than 270,000 new jobs each year over the 13-year period. This steady increase in healthcare employment, coupled with the marked fluctuation in national employment, points out the importance of the healthcare industries to the national economy. In 2001, healthcare jobs represented 10.2 percent of the national job base. By 2014, the share had increased to 12.7 percent, or 1 out of every 8 jobs in the nation. During the Great Recession, healthcare employment expanded, increasing by 852,000 jobs, or 6.6 percent.

Healthcare wages

Concentrating on employment presents only a partial picture. We must also consider the impact of the recession on overall wages. During the 2001–14 period, average wages in both the healthcare industries and the national economy increased.

In 2001, the average healthcare worker had a yearly wage of $35,220. By 2014, this wage had increased by 45.6 percent, to $51,276. In the overall economy, yearly wages increased by 41.9 percent during the same period, from $36,157 to $51,296. We note that in 2001, the average wage in the nation was $937 higher than the average

healthcare wage. By 2014, the gap had narrowed: annual wages in healthcare were only $20 less than the average national wage. (See table 2.)

Table 2. Private industry wages, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
Total United States						
2001	$36,157	$35,220	$59,452	$36,016	$21,888	$20,081
2002	36,539	36,554	60,906	37,949	22,784	20,801
2003	37,508	37,774	61,968	40,076	23,511	21,362
2004	39,134	39,510	64,636	42,368	24,382	22,406
2005	40,505	40,824	66,727	44,080	25,066	23,148
2006	42,414	42,488	68,624	46,299	26,302	24,317
2007	44,362	44,054	70,987	48,277	27,366	25,387
2008	45,371	45,723	73,453	50,566	28,281	26,345
2009	45,155	46,899	75,855	52,460	28,661	27,041
2010	46,455	47,503	76,666	53,059	28,931	27,384
2011	47,815	48,378	78,413	54,431	29,404	27,453
2012	49,200	49,447	80,797	55,767	29,647	27,579
2013	49,701	50,056	81,421	56,955	30,062	28,039
2014	51,296	51,276	83,527	58,746	30,808	28,404
2001–14 percent change	41.9	45.6	40.5	63.1	40.8	41.4
2001–14 numeric change	$15,139	$16,056	$24,075	$22,730	$8,920	$8,323
2007–10 percent change	4.7	7.8	8.0	9.9	5.7	7.9
2007–10 numeric change	$2,093	$3,449	$5,679	$4,782	$1,565	$1,997
Los Angeles County						
2001	$40,246	$38,670	$55,618	$41,978	$22,205	$25,734
2002	40,964	40,946	57,691	46,147	23,248	28,131
2003	42,075	41,678	59,096	47,014	24,041	28,517
2004	44,237	43,669	60,275	50,937	24,913	28,901
2005	45,656	45,862	64,175	53,721	25,544	29,307
2006	47,729	48,203	67,573	57,679	27,126	29,208
2007	49,464	49,079	68,054	58,638	28,132	30,859
2008	50,456	50,816	69,841	62,323	28,977	30,382
2009	50,216	52,592	73,700	64,478	29,221	30,576
2010	52,027	53,069	73,437	65,680	29,725	29,440
2011	53,364	54,521	76,147	67,919	30,922	29,170
2012	54,422	55,496	76,959	69,370	31,569	30,563
2013	53,719	55,497	76,380	70,838	31,816	29,742
2014	55,311	56,287	79,221	71,314	33,028	31,241

See footnotes at end of table.

Table 2. Private industry wages, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
2001–14 percent change	37.4	45.6	42.4	69.9	48.7	21.4
2001–14 numeric change	$15,065	$17,617	$23,603	$29,336	$10,823	$5,507
2007–10 percent change	5.2	8.1	7.9	12.0	5.7	-4.6
2007–10 numeric change	$2,563	$3,991	$5,383	$7,042	$1,593	$-1,419
New York County						
2001	$81,828	$47,808	$70,721	$51,305	$36,255	$25,145
2002	79,017	49,467	73,103	54,705	36,570	24,206
2003	79,699	52,603	74,105	59,554	39,271	25,570
2004	87,112	53,644	76,017	59,310	41,802	26,672
2005	92,291	55,077	78,698	61,615	44,544	26,723
2006	101,360	56,715	81,896	64,001	44,313	25,776
2007	112,116	58,945	84,837	67,091	45,300	26,167
2008	112,084	62,265	87,279	70,974	47,316	26,577
2009	100,715	63,825	88,861	72,991	47,521	25,223
2010	108,634	66,195	89,642	78,359	47,502	25,193
2011	111,460	68,123	90,909	82,613	48,061	24,631
2012	111,769	69,554	91,070	84,990	45,688	25,292
2013	111,243	70,334	95,238	87,142	49,807	24,508
2014	118,399	71,298	93,715	86,792	48,734	25,952
2001–14 percent change	44.7	49.1	32.5	69.2	34.4	3.2
2001–14 numeric change	$36,571	$23,490	$22,994	$35,487	$12,479	$807
2007–10 percent change	-3.1	12.3	5.7	16.8	4.9	-3.7
2007–10 numeric change	$-3,482	$7,250	$4,805	$11,268	$2,202	$-974
Cook County						
2001	$44,165	$37,764	$68,319	$38,765	$21,774	$18,588
2002	44,488	38,898	69,000	40,138	22,540	21,220
2003	45,408	40,141	69,259	41,926	23,064	21,805
2004	47,652	41,659	71,032	44,010	23,710	23,485
2005	49,501	43,304	74,823	45,979	24,495	25,223
2006	51,762	44,971	76,326	48,173	25,813	26,796
2007	54,283	46,613	77,208	50,456	27,791	27,923

See footnotes at end of table.

Table 2. Private industry wages, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
2008	55,409	47,870	79,833	52,284	28,723	28,219
2009	54,223	48,909	81,975	54,496	28,086	29,233
2010	55,185	49,279	80,496	55,421	29,350	29,864
2011	56,300	49,838	80,454	57,077	29,405	29,149
2012	57,777	50,502	81,954	58,304	29,653	28,133
2013	57,766	50,791	81,560	59,589	30,214	26,523
2014	59,931	52,245	82,916	63,015	31,093	24,888
2001–14 percent change	35.7	38.3	21.4	62.6	42.8	33.9
2001–14 numeric change	$15,766	$14,481	$14,597	$24,250	$9,319	$6,300
2007–10 percent change	1.7	5.7	4.3	9.8	5.6	7.0
2007–10 numeric change	$902	$2,666	$3,288	$4,965	$1,559	$1,941
Harris County						
2001	$44,782	$38,930	$64,599	$39,577	$24,089	$13,779
2002	44,499	40,201	66,888	41,025	24,142	14,256
2003	45,010	40,802	67,961	42,147	24,409	14,193
2004	47,444	42,247	69,356	45,352	25,764	14,885
2005	50,327	42,822	71,273	45,856	24,937	15,763
2006	53,591	44,434	73,410	48,474	26,160	15,908
2007	57,402	46,174	75,420	50,331	28,254	16,452
2008	59,475	47,652	76,376	53,160	29,201	15,865
2009	58,609	48,495	78,081	54,668	30,098	16,521
2010	60,473	48,490	78,117	55,400	30,344	17,114
2011	63,501	49,627	80,380	57,366	30,686	17,401
2012	66,486	51,287	84,959	59,690	30,447	17,816
2013	66,935	52,093	83,774	61,614	31,217	17,768
2014	69,755	53,767	87,294	63,797	31,620	18,214
2001–14 percent change	55.8	38.1	35.1	61.2	31.3	32.2
2001–14 numeric change	$24,973	$14,837	$22,695	$24,220	$7,531	$4,435
2007–10 percent change	5.3	5.0	3.6	10.1	7.4	4.0
2007–10 numeric change	$3,071	$2,317	$2,697	$5,069	$2,090	$662

See footnotes at end of table.

Table 2. Private industry wages, by healthcare industry group, selected counties, 2001–14 annual averages

Period	All industries	Total healthcare	Offices of physicians, except mental health	General medical and surgical hospitals	Skilled nursing care facilities	Home healthcare services
Maricopa County						
2001	$35,569	$39,689	$61,045	$36,245	$24,135	$26,231
2002	35,998	41,625	63,797	39,945	24,705	26,898
2003	36,934	43,124	65,535	44,238	25,845	27,072
2004	38,728	45,065	70,158	45,647	27,032	26,940
2005	40,202	46,563	72,836	47,336	28,648	27,398
2006	42,107	49,278	74,424	51,661	31,214	28,517
2007	43,573	51,506	75,763	56,365	32,480	30,037
2008	44,289	53,203	79,394	59,444	32,236	29,819
2009	44,582	54,031	81,024	62,260	32,837	28,987
2010	45,290	53,037	83,269	56,807	33,673	27,796
2011	46,715	53,308	82,571	57,771	34,233	28,455
2012	47,968	53,584	85,246	58,436	33,460	29,549
2013	48,095	54,314	85,998	58,688	34,523	31,374
2014	49,187	55,001	87,463	59,623	35,155	30,831
2001–14 percent change	38.3	38.6	43.3	64.5	45.7	17.5
2001–14 numeric change	$13,618	$15,312	$26,418	$23,378	$11,020	$4,600
2007–10 percent change	3.9	3.0	9.9	0.8	3.7	-7.5
2007–10 numeric change	$1,717	$1,531	$7,506	$442	$1,193	$-2,241

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

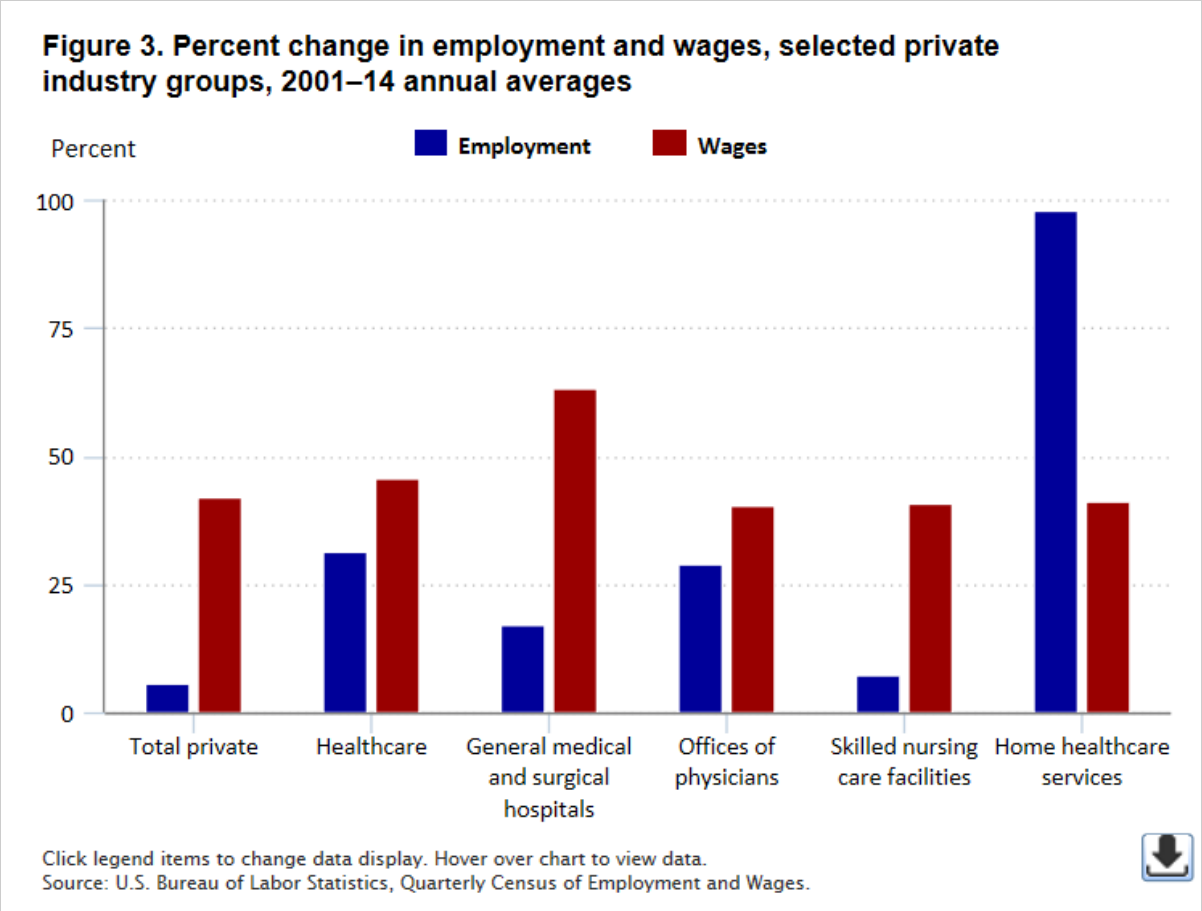
Despite the recession, average wages rose in both the national economy and healthcare. For healthcare jobs, the average annual wage increased by 7.8 percent from 2007 to 2010, rising from $44,054 to $47,503. For the nation as a whole, the increase during the same period was 4.7 percent, as average wages rose from $44,362 to $46,455.

Healthcare industries

Examining the employment and wage trends of the largest industry groups within healthcare can provide a more detailed look at the effect of the recession on healthcare jobs.

There are 30 industries within healthcare. According to 2001 data, three specific industry groups—general medical and surgical hospitals (which accounted for 34.1 percent of total healthcare employment in 2001); offices of physicians, except mental health (16.8 percent); and skilled nursing care facilities (13.8 percent)—were the largest and made up the bulk of healthcare employment. In aggregate, they account for about 2 of every 3 healthcare jobs in the nation. We will now take a look at the 2001–14 employment and wages within these three industry

groups and will focus specifically on the 2007–10 period to see how these industries were affected by the recession. (See figure 3.)



General medical and surgical hospitals

Employment in general medical and surgical hospitals increased by 644,000, rising from 3.8 million to 4.4 million, from 2001 to 2014. This was a 17.0-percent rise over the 13-year period, compared with the 31.6-percent increase for total healthcare industries. The increase in hospital employment represented almost 1 out of 5 additional jobs in healthcare during the period.

During the recessionary years of 2007 to 2010, employment in general medical and surgical hospitals rose by 3.3 percent, or 140,000, to 4.3 million. In contrast, overall employment in healthcare rose 6.6 percent during the same period. Job increases in general medical and surgical hospitals accounted for 16.4 percent of all healthcare job increases during the recession.

Although employment increases in the general medical and surgical hospitals industry group lagged behind the increases noted for the overall healthcare industries, an analysis of the growth in wages reveals an entirely different picture. While average wages for healthcare jobs increased, as noted previously, by 45.6 percent during the 2001–14 period, wages for the general medical and surgical hospital component rose by 63.1 percent (from $36,016 to $58,746).

In 2001, the average general medical and surgical hospital wage was $796 higher than the average healthcare wage. By 2014, this differential had grown to $7,470. In effect, although total healthcare industries and hospitals had 2001 wages which were similar, the 2014 average hospital wage ($58,746) was 14.6 percent higher than the average healthcare wage ($51,276).

Focusing on the 2007–10 period shows 9.9-percent growth in wages for the hospital component (from $48,277 to $53,059). This compares with an increase, as previously noted, of 7.8 percent for the average healthcare wage during the same period.

Offices of physicians

In terms of employment, the second largest industry group within healthcare is offices of physicians, except mental health. Over the 2001–14 period, employment in this group increased by 29.0 percent, rising from 1.9 million to 2.4 million. This percent increase is similar to the 31.6-percent increase recorded for total healthcare jobs.

During the 2007–10 period, employment continued to increase, rising 5.2 percent, from 2.2 million to 2.3 million. However, although this percent increase in employment surpassed that recorded for the general medical and surgical hospital component, it lagged behind the percent increase in jobs noted for total healthcare during the recessionary timeframe.

As might be expected, wages in offices of physicians, except mental health, were the highest recorded in the entire healthcare arena. The 2001 average wage of $59,452 was 68.8 percent higher than the average healthcare wage. During the 13-year period from 2001 to 2014, average wages in the offices of physicians, except mental health, component increased by 40.5 percent to $83,527, a level that was 62.9 percent higher than the average healthcare wage.

From 2007 through 2010, average wages in offices of physicians, except mental health, rose 8.0 percent (from $70,987 to $76,666), which was similar to the average increase for healthcare jobs overall and higher than the percent increase noted for the hospitals component.

Skilled nursing care facilities

The third component we examined was skilled nursing care facilities. During the period from 2001 through 2014, employment in this component grew by 7.2 percent, from 1.5 million to 1.6 million. This percent increase in employment was notably less than that recorded for the hospitals and physician offices components, as well as that for the overall healthcare segment.

During the 2007–10 recessionary years, employment growth in skilled nursing care facilities was 3.7 percent, or 59,113 jobs.

In 2001, wages in the skilled nursing care facilities component were 37.9 percent less than average wages in the overall healthcare segment and also less than the average wages in both the hospitals and physician offices components. By 2014, the average wage for skilled nursing care facility workers had grown 40.8 percent (from $21,888 to $30,808), but the earnings gap between the wages of these workers and all healthcare workers widened by 2 percent.

During the period from 2007 through 2010, average wages for skilled nursing care facility workers increased by $1,565, from $27,366 to $28,931, or 5.7 percent—the lowest percent increase recorded among the healthcare industries, but still greater than that for average wages in the national economy.

Home healthcare services

Home healthcare services accounted for less than 6 percent (or 635,348) of all healthcare jobs in 2001 and less than 9 percent (or 1.3 million) of all healthcare jobs in 2014. However, home healthcare services experienced explosive growth. During the 13-year period, home healthcare services employment increased by 97.8 percent. Of the total employment growth in overall healthcare from 2001 through 2014, more than 1 out of every 6 jobs was in the home healthcare component.

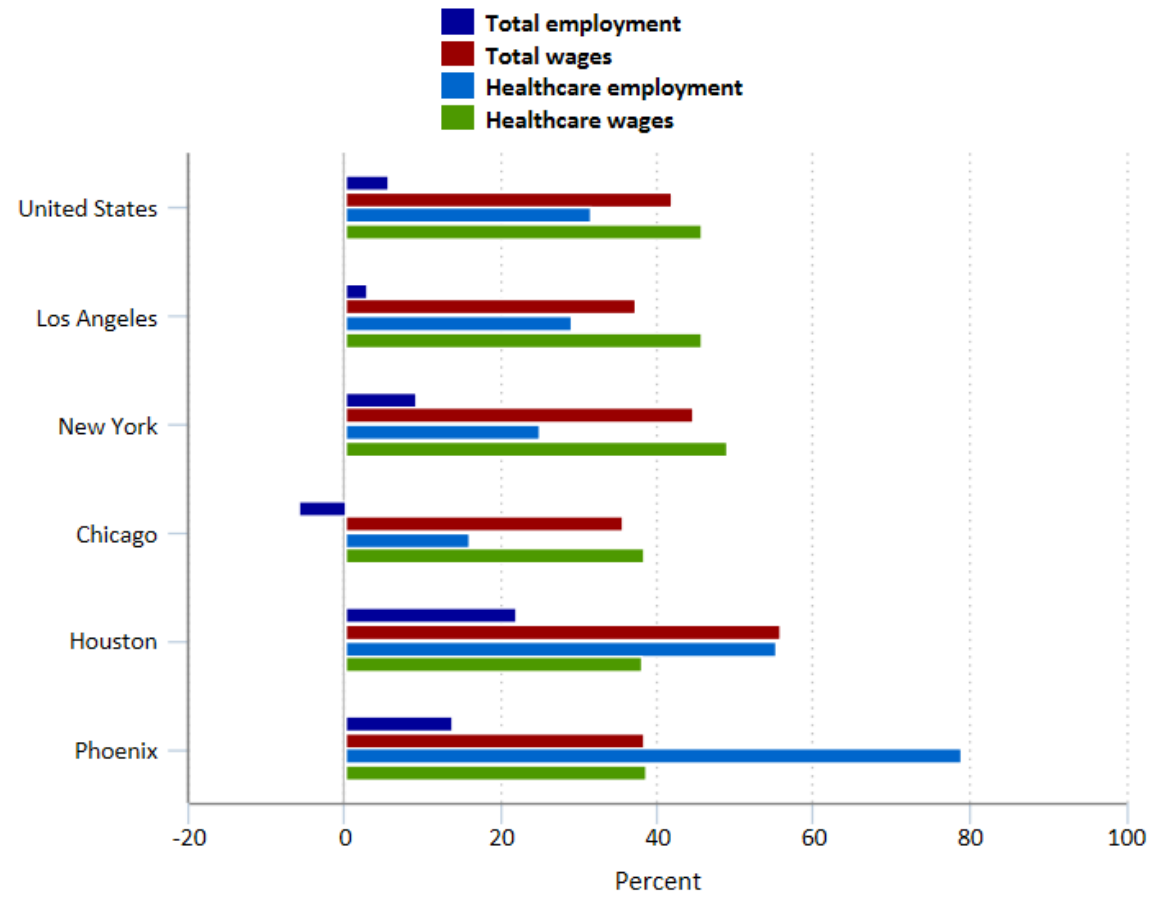
During the 2007–10 period, home healthcare employment increased by 18.3 percent, or 167,707. Given that employment growth in overall healthcare during the same period totaled 852,000, 1 out of every 5 new jobs in healthcare was attributable to home healthcare.

Wages in home healthcare increased by 41.4 percent from 2001 through 2014 and 7.9 percent from 2007 through 2010.

Geographic differences

To present a more complete picture of the effects of the recession on employment and wages in healthcare, we analyzed data for the five largest (in terms of total employment) counties in the country (listed earlier). (See figure 4.)

Figure 4. Percent change in private industry employment and wages, by area, 2001–14 annual averages



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Los Angeles

In 2001, there were 3.5 million private sector jobs in Los Angeles County, of which 295,946 (8.4 percent) were in healthcare. By 2014, healthcare employment had risen by 29.1 percent, or 86,175 jobs, and accounted for more than 1 out of every 10 jobs in Los Angeles County. In comparison, overall employment in the county had risen by less than 3 percent, to 3.6 million. Not including the healthcare jobs, overall employment rose by only 0.5 percent, or 16,460 jobs.

During the 2007–10 recessionary period, overall county employment contracted by 325,857 (9.0 percent), from 3.6 million to 3.3 million. By contrast, during the same period, jobs in healthcare increased from 331,527 to 351,334, or 6.0 percent.

In 2001, the county's average wage ($40,246) was 4.1 percent higher than the average healthcare wage ($38,670) and 11.3 percent higher than the average national wage ($36,157). By 2014, however, the county's average healthcare wage had risen to $56,287, which was 1.8 percent higher than the average county wage of $55,311.

During the years 2007 through 2010, overall average county wages increased by 5.2 percent (from $49,464 to $52,027). At the same time, average healthcare wages increased by 8.1 percent (from $49,079 to $53,069). At the start of the recession, the average county wage was roughly the same as the average healthcare wage. But by 2010, the average healthcare wage exceeded the average county wage by 2.0 percent.

New York

In 2001, there were 1.9 million private sector jobs in New York County, of which 7.2 percent (135,748 jobs) were in healthcare. By 2014, overall employment in the county had reached 2.2 million, an increase of 172,963, or 9.2 percent. In healthcare, employment had grown to 168,359 jobs, an increase of 32,611, or 24.0 percent. In 2014, about 1 of every 12 New York County jobs was in healthcare. Interestingly, during this 13-year period, roughly 1 of every 5 new jobs in the county was in healthcare.

During the period from 2007 through 2010, healthcare employment remained relatively static. Of note, healthcare employment actually decreased during 2008, by 1.6 percent (a decline of 2,378 jobs) from the previous year—a pattern markedly different from the national experience. Total employment in New York County during the recessionary period decreased by 4.0 percent (or 76,299).

Largely because of the high wages of New York County's finance industry, the wage pattern reported for New York County differed markedly from that reported for the nation and for the other counties we analyzed.[9] For example, the average New York County wage in 2001 was $81,828, which was 71.2 percent higher than the average healthcare wage of $47,808. By 2014, the New York County wage had increased to $118,399, a rise of 44.7 percent. In healthcare, the average New York County wage had risen to $71,298 by 2014, an overall increase of 49.1 percent and the highest average healthcare wage of all five areas. By 2014, the average New York County wage was 66.1 percent higher than the average New York County healthcare wage. The wage differential between all other average wages and healthcare wages from other regions in this study ranged from less than 1 percent to 15 percent. New York had both the highest overall average wages and the highest healthcare wages in 2014.

During the recessionary period, average wages in New York City decreased by 3.1 percent, from $112,116 to $108,634. By comparison, healthcare wages in New York County grew by 12.3 percent, from $58,945 to $66,195.

Chicago

In 2001, there were 2.3 million private sector jobs in Cook County, of which 10 percent (230,989) were in healthcare. This percentage exceeded that recorded for both Los Angeles and New York. By 2014, employment in the county had decreased by 137,562 jobs, or 5.9 percent, to 2.2 million jobs. During this same period, healthcare employment increased by 15.9 percent (36,741 jobs) and represented 12.4 percent of all county jobs.

During the years 2007 through 2010, the county lost 8.1 percent, or 179,846, of its 2.2 million jobs. Counter to this trend, healthcare employment in Cook County increased by 2.4 percent, or 6,079 jobs. As a result, 12.3 percent of all 2010 employment in Cook County was in healthcare.

In 2001, the average Cook County wage ($44,165) was 16.9 percent higher than the average wage in healthcare ($37,764) and 22.1 percent higher than the average national wage ($36,157). The wage differential changed little over the 13-year period, and by 2014, the average Cook County wage ($59,931) exceeded the average Cook County healthcare wage ($52,245) by 14.7 percent. (This pattern was similar to that found in New York County.)

During the 2001–14 period, Cook County's average wage increased by 35.7 percent, while its average healthcare wage increased by 38.3 percent.

These wage relationships were relatively unaffected by the recession. In 2007, the average county wage ($54,283) exceeded the average county healthcare wage ($46,613) by 16.5 percent. By 2010, the gap had narrowed to a 12.0-percent differential, with the average county wage increasing to $55,185 and the average healthcare wage rising to $49,279. During the recessionary period, the average county wage increased by 1.7 percent, while the average healthcare wage increased by 5.7 percent.

Houston

In 2001, there were 1.6 million private sector jobs in Harris County. Of these jobs, 130,239, or about 1 of every 12, were in healthcare. By 2014, the county had reached an employment level of 2.0 million, reflecting an increase of 22.1 percent, or 361,926. However, healthcare employment in Harris County grew even faster, rising by 55.4 percent (72,166 jobs), to 202,405. By 2014, 1 out of every 5 new county jobs was in healthcare.

During the 2007–10 period, overall county employment decreased by 43,169 (2.4 percent), from 1.77 million to 1.72 million. In contrast, employment in healthcare increased by 11.2 percent (18,593 jobs), to 183,999. By 2010, healthcare constituted 10 percent of Harris County employment.

The average Harris County wage in 2001 was $44,782. By 2014, it had grown to $69,755, an increase of 55.8 percent. In 2001, the average healthcare wage ($38,930) was only 86.9 percent of the average county wage. By 2014, Harris County healthcare wages had increased by 38.1 percent, to $53,767, but were still below average county wage levels.

During the 2007–10 period, the average Harris County wage increased 5.3 percent, from $57,402 to $60,473. Similarly, the average Harris County healthcare wage increased 5.0 percent, from $46,174 to $48,490.

Phoenix

In 2001, Maricopa County had 1.4 million private sector jobs, of which 7.7 percent (105,317) were in healthcare. By 2014, employment had risen to 1.6 million—an increase of 189,294 jobs, or 13.9 percent. This percent increase in job growth was exceeded only by Harris County. By comparison, the increase in Phoenix healthcare jobs during the same period was 78.9 percent, as healthcare employment rose from 105,317 to 188,431. Nearly half of the county increase in employment during the 13-year period was in healthcare. By 2014, 1 out of every 8 Maricopa jobs was in healthcare.

During the 2007–10 period, employment in Maricopa County decreased by 217,216 jobs, or 13.5 percent, from its 2007 level of 1.6 million. In contrast, healthcare jobs increased by 14.2 percent, growing from 146,974 to 167,796 jobs. By 2010, healthcare accounted for 12.0 percent of the county's employment.

In 2001, the average Maricopa County wage was $35,569. By 2014, the average Maricopa County wage increased to $49,187, a rise of 38.3 percent. Similarly, the county's average healthcare wage increased by 38.6 percent (from $39,689 to $53,767). In 2001, the county's average healthcare wage was 11.6 percent higher than the county's average wage. By 2014, this differential was nearly the same, at 11.8 percent.

During the recessionary period, average county wages increased by 3.9 percent (from $43,573 to $45,290) while healthcare wages increased more slowly, at 3.0 percent (from $51,506 to $53,037).

Discussion

The data clearly show that the Great Recession had little, if any, negative effect on job growth in healthcare. During the recessionary period, national employment decreased by 6.9 percent, or 7.8 million. By contrast, healthcare employment increased by 6.6 percent, or 850,000 jobs. Given the extent and depth of the economic turndown, we conclude that healthcare employment was resistant to the effects of the recession.

Healthcare wages were also resistant to the economic downturn. For the national economy as a whole, and specifically for healthcare jobs, average wages increased during both timeframes under consideration. During the recession, when the nation shed 7.8 million jobs, the average wage increased by 4.7 percent. In contrast, the average healthcare wage rose by 7.8 percent during the same period. The large job losses recorded in the national economy may have given employers more flexibility and discretion in determining salary levels. Or perhaps the increasing demand for healthcare workers pushed their wages up relative to those of other worker groups.

As noted, healthcare comprises a multitude of employment settings. Three industry designations (general medical and surgical hospitals; offices of physicians, except mental health; and skilled nursing care facilities) account for 65 percent of healthcare jobs.

The largest healthcare industry setting, in terms of both employment and wages, is general medical and surgical hospitals. The recession did not cause a decline in hospital jobs, but this component's rate of job growth—3.3 percent—was less than that for healthcare as a whole. Wages, however, tell a different story. Besides having the highest wages among the healthcare industry groups, general hospitals saw a wage increase of about 10.0 percent during the recession. This increase was notably higher than the wage increase for healthcare as a whole.

The second largest setting for healthcare employment, offices of physicians, also recorded job increases during the recessionary period. In this component, job growth was 5.2 percent, which trailed the increase in jobs in healthcare as whole. During the recessionary period, the wage growth of 8.0 percent for offices of physicians was in line with the increase noted for all healthcare.

The third largest healthcare-group category, skilled nursing care facilities, lagged behind the other two industry groups in terms of job and wage growth. As with the previous components, jobs and wages in skilled nursing care facilities increased during the 2007–10 period. However, these increases—3.7 percent in employment and 5.7 percent in wages—did not keep pace with job growth in overall healthcare or the other two health industry groups.

The national economy is, in reality, the sum of its regional economies. Therefore, gaining an understanding of the effects of the Great Recession requires examining these effects in different areas of the country. We found that while all areas saw increased employment and wages, there was notable geographic variability.

In Los Angeles, New York, and Chicago, the rate of healthcare job growth during the recession trailed the nation's 6.6-percent increase in healthcare employment. In New York City, job increases in healthcare were less than 1.0

percent for the 2007–10 period. In Houston and Phoenix, however, the increase in jobs during the recession reached double digits.

Wage growth exhibited the opposite pattern. Increases in healthcare wages in Los Angeles and New York during the recession exceeded the 7.8-percent increase for the nation. In contrast, average wage growth in Chicago, Houston, and Phoenix failed to keep pace with the national average.

Conclusion

This article demonstrates that during the 2007–10 period, which encompasses the Great Recession, the healthcare jobs component of the American economy was not recession proof but was recession resistant. While job losses defined the national and various regional economies, healthcare continued its role as a jobs engine, which helped to partially offset the severe downturn that characterized the American economy. Will the healthcare industry continue to be a major job producer in the future? BLS industry and occupational long-term projections suggest that the long wave of healthcare employment growth will continue until at least 2026 mainly because of the aging of the U.S. population.[10] In addition to these demographic changes, new medical treatment modalities and breakthrough pharmaceuticals are extending longevity and improving quality of life. Moreover, the expansion of healthcare coverage over the past several years has increased the demand for healthcare professionals.

Although the demographic drivers of demand for healthcare are dominant factors, the supply of healthcare services is also important to the levels and distribution of healthcare employment.

SUGGESTED CITATION

Michael L. Dolfman, Matthew Insco, and Richard J. Holden, "Healthcare jobs and the Great Recession," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, June 2018, https://doi.org/10.21916/mlr.2018.17.

NOTES

1 Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, see http://www.nber.org/cycles/cyclesmain.html.

2 Michael D. Hurd and Susann Rohwedder, “Effects of the financial crisis and Great Recession on American households,” Working Paper 16407 (Cambridge, MA: National Bureau of Economic Research, September 2010), p. 21, http://www.nber.org/papers/w16407.pdf.

3 As far back as 1992, David Hiles wrote in the *Monthly Labor Review* that the healthcare industry “has become a primary source of new jobs during economic downturns.” See David R. H. Hiles, “Health services: the real jobs machine,” *Monthly Labor Review*, November 1992, p. 3, https://www.bls.gov/opub/mlr/1992/11/art1full.pdf.

4 Catherine A. Wood, “Employment in health care: a crutch for the ailing economy during the 2007–09 recession,” *Monthly Labor Review*, April 2011, p. 13, https://www.bls.gov/opub/mlr/2011/04/art2full.pdf.

5 Erin Fraher; Jessica Carpenter, and Sarah Broome, “Health care employment and the current recession,” *North Carolina Medical Journal*, July/August 2009, p. 331, http://classic.ncmedicaljournal.com/wp-content/uploads/NCMJ/Jul-Aug-09/Fraher.pdf.

6 Although the National Bureau of Economic Research dates the Great Recession from December 2007 through June 2009, the period of this analysis simplifies the intrayear problems, such as seasonality and quarterly reporting of the QCEW file, by using annual average figures for 2007 through 2010. While the use of annual averages “adds in” growth in 2007 and 2010 just before and after the

recession, national employment growth began decelerating in 2007 and did not sustain a pattern of accelerating employment growth until later in 2010.

7 The authors' July 2017 *Monthly Labor Review* article, "Nursing and the Great Recession," https://doi.org/10.21916/mlr.2017.18, contains an analysis of nursing occupations during the recent recession.

8 Some state university hospitals, county or city hospitals, tribal hospitals, and state developmental disability or mental health hospitals are reported under state and local government employment. Therefore, this article understates healthcare employment to the extent that public-owned hospitals are excluded from healthcare employment in the U.S. total employment and for the states.

9 Financial activities account for the largest portion of total wages among high-level NAICS supersectors in New York County. The financial activities industry also has the highest average weekly wages and high location quotients for both employment and wages.

10 For industry employment and output projections, see T. Alan Lacey, Mitra Toossi, Kevin S. Dubina, and Andrea B. Gensler, "Projections overview and highlights, 2016–26," *Monthly Labor Review*, October 2017, https://doi.org/10.21916/mlr.2017.29.

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