

Workforce Demands In the Health Care Industry

Workforce Solutions

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**Workforce Solutions is an affiliate of the Gulf Coast Workforce Board, which manages a regional workforce system that helps employers solve their workforce problems and residents build careers so both can compete in the global economy. The workforce system serves the City of Houston and the surrounding 13 Texas Gulf Coast counties including: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton.*

This report is intended to provide an overview from a workforce stance on the state of the health care industry, its subsectors, and the challenges the Gulf Coast Region faces now and in the future to serve the industry.

An Overview of Health Care

While the center of attention when discussing the Gulf Coast Region's economy is often focused on the oil and gas industry, the health care industry remains one of the region's most powerful economic forces. The healthcare industry is currently undergoing a major transition period with the implementation of the Affordable Care Act, an aging population, and advances in technology.

The region is home of the Texas Medical Center, the world's largest medical complex that boasts some impressive figures:

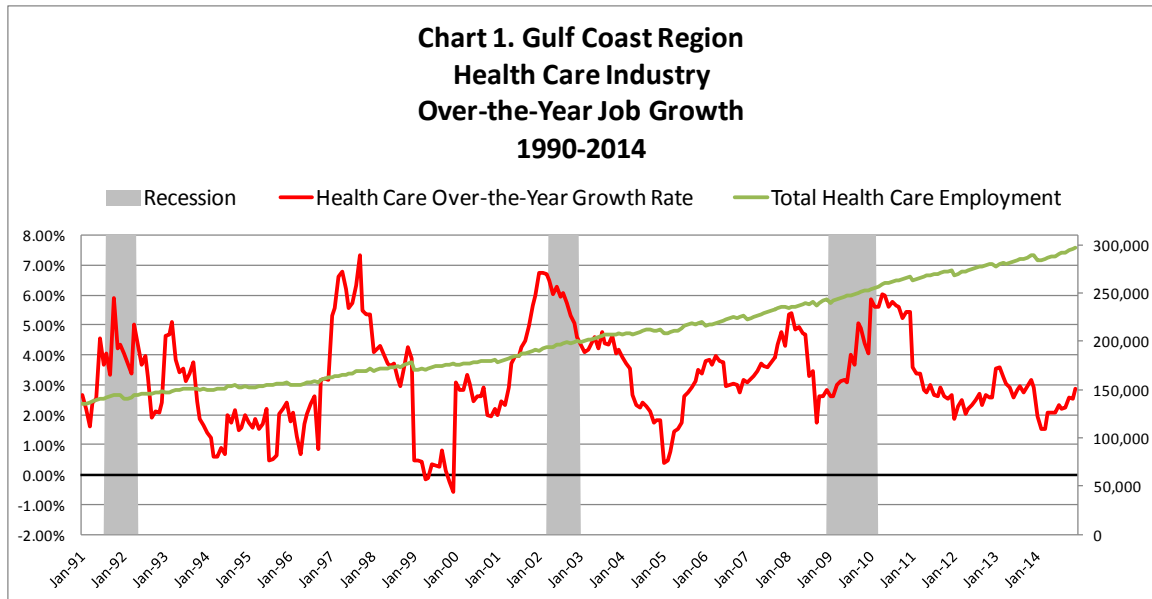
- More than 7.2 million visits per year from all over the world
- One baby delivered about every 20 minutes
- 7,000 patient beds
- 106,000 employees

With a population of more than six million that is growing at a pace that more than doubles the nation's, the health care industry is a great source of jobs and will continue to be in the future. Increasing demand is not only driving growth at the Texas Medical Center but also in the suburbs as providers reach out to population demand for more convenient access to hospitals, health clinics, urgent care centers, and specialized medical facilities.

The health care industry provides an extensive range of career opportunities. Growth is projected for numerous occupations throughout the industry, from nursing assistants to medical physicians. Many of these positions offer good wages and have varying education and training requirements ranging anywhere from short term on-the-job training to post-secondary degrees and professional licenses.

Economic Cycles and Health Care Employment

While many industries have a tendency to rise and fall during economic cycles, the **Health Care Industry** continued to prosper throughout historical recessions including the most recent which ended June 2009. This can be seen in Chart 1. The only time in recent history when over-the-year job growth turned negative was a brief period in late 1999.



Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

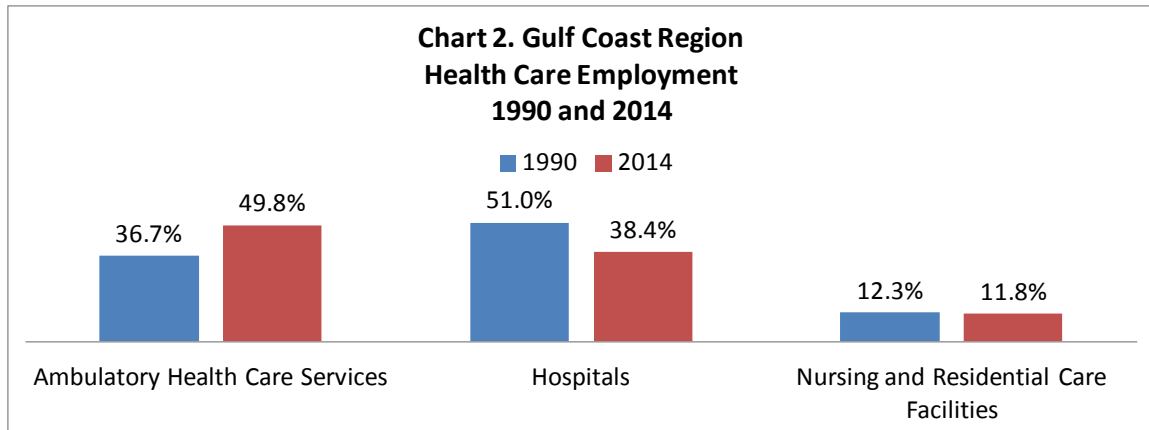
Components of the Health Care Industry

There are three subsectors of the Health Care Industry: **Ambulatory Health Care Services, Hospitals, and Nursing and Residential Care Facilities.**

- **Ambulatory Health Care Services** includes physicians, dentists, outpatient care centers, imaging and diagnostic facilities, and home health care services
- **Hospitals** includes general medical and surgical hospitals, psychiatric and substance abuse hospitals, and other (specialty) hospitals
- **Nursing and Residential Care Facilities** provide residential care combined with either nursing, supervisory, or other types of care as required by the residents

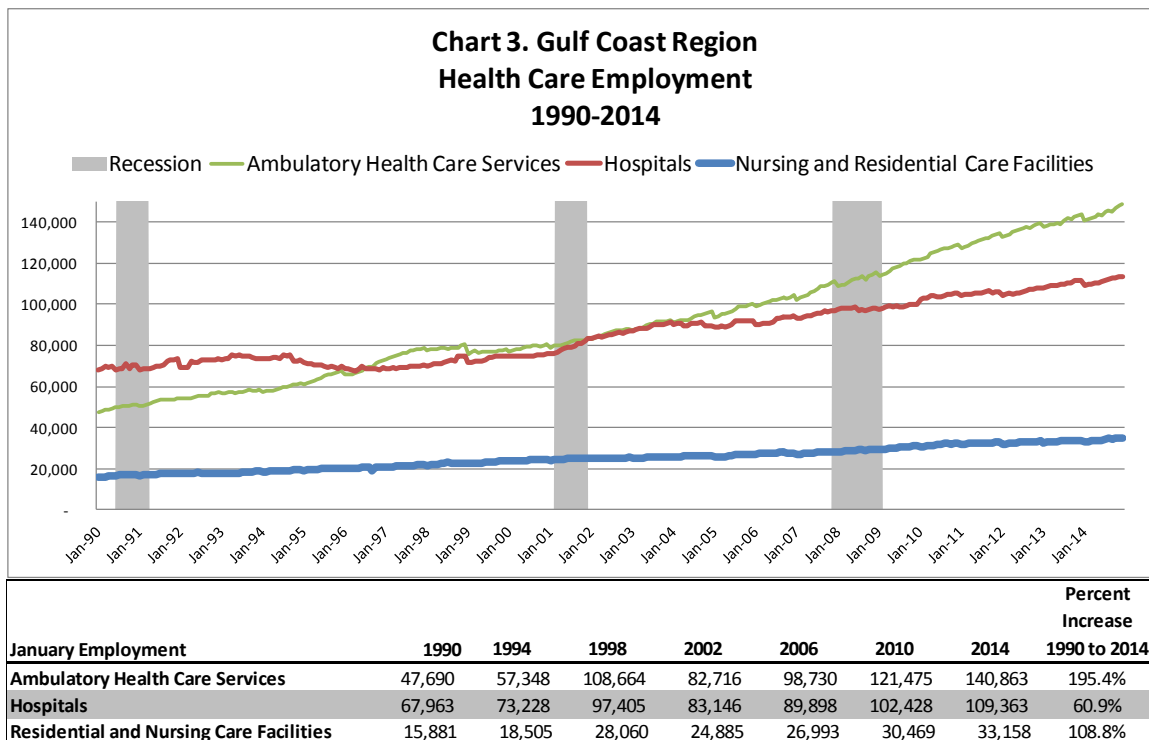
A Change in the Delivery of Services

Times are changing and no longer are the days where the majority of surgeries and many medical and diagnostic procedures require a visit to the hospital. Chart 2 shows the percentage of health care jobs by subsector in 1990 and 2014. The share of health care employment in **Hospitals** has fallen from 51.0% in 1990 to 38.4% in 2014 while the share of Ambulatory Health Care Services increased from 36.7% to 49.8%.



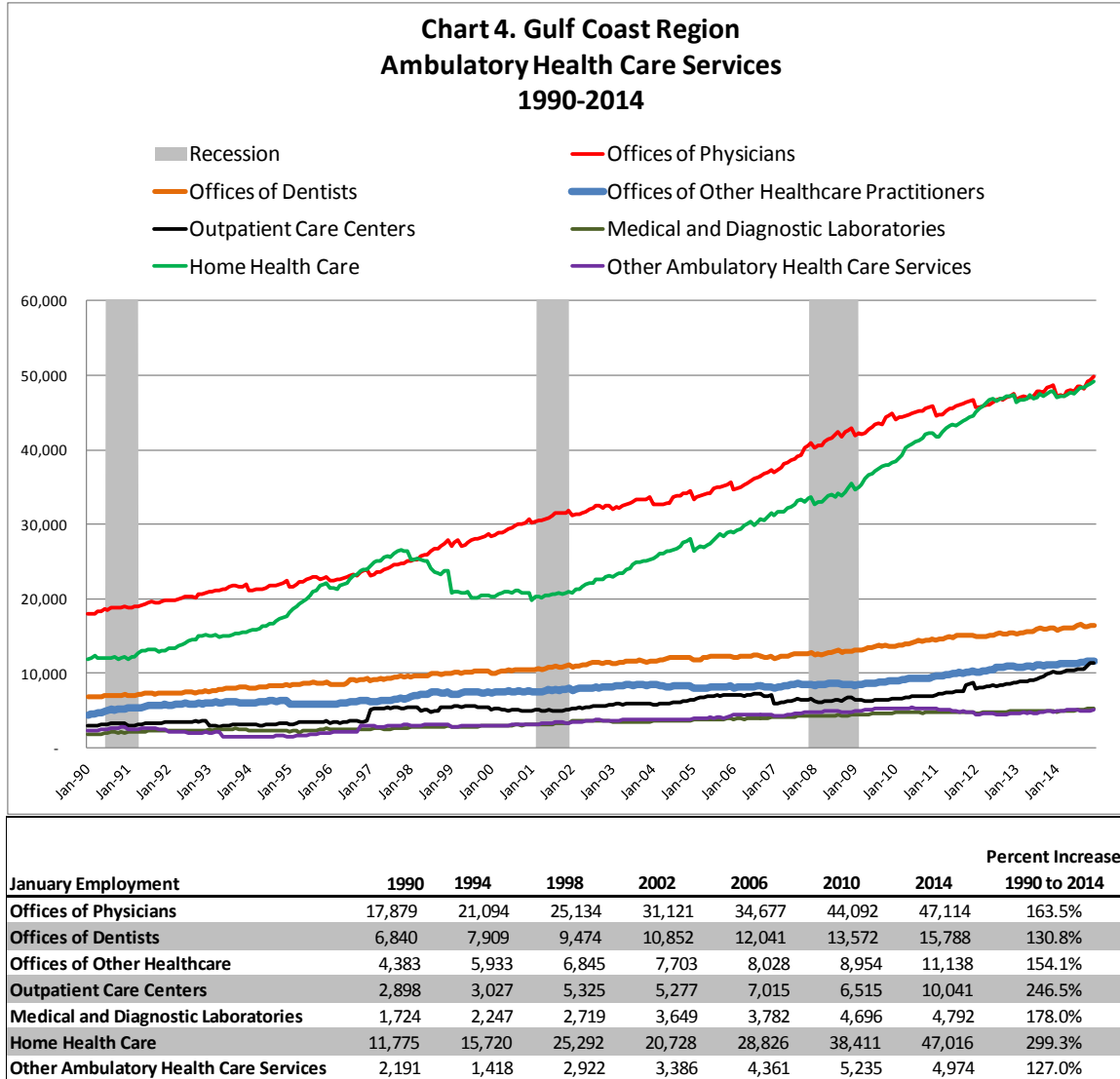
Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

While all three subsectors of the health care industry continue to grow, **Ambulatory Health Care Services** has replaced **Hospitals** as the number one job producer in the region, see Chart 3.



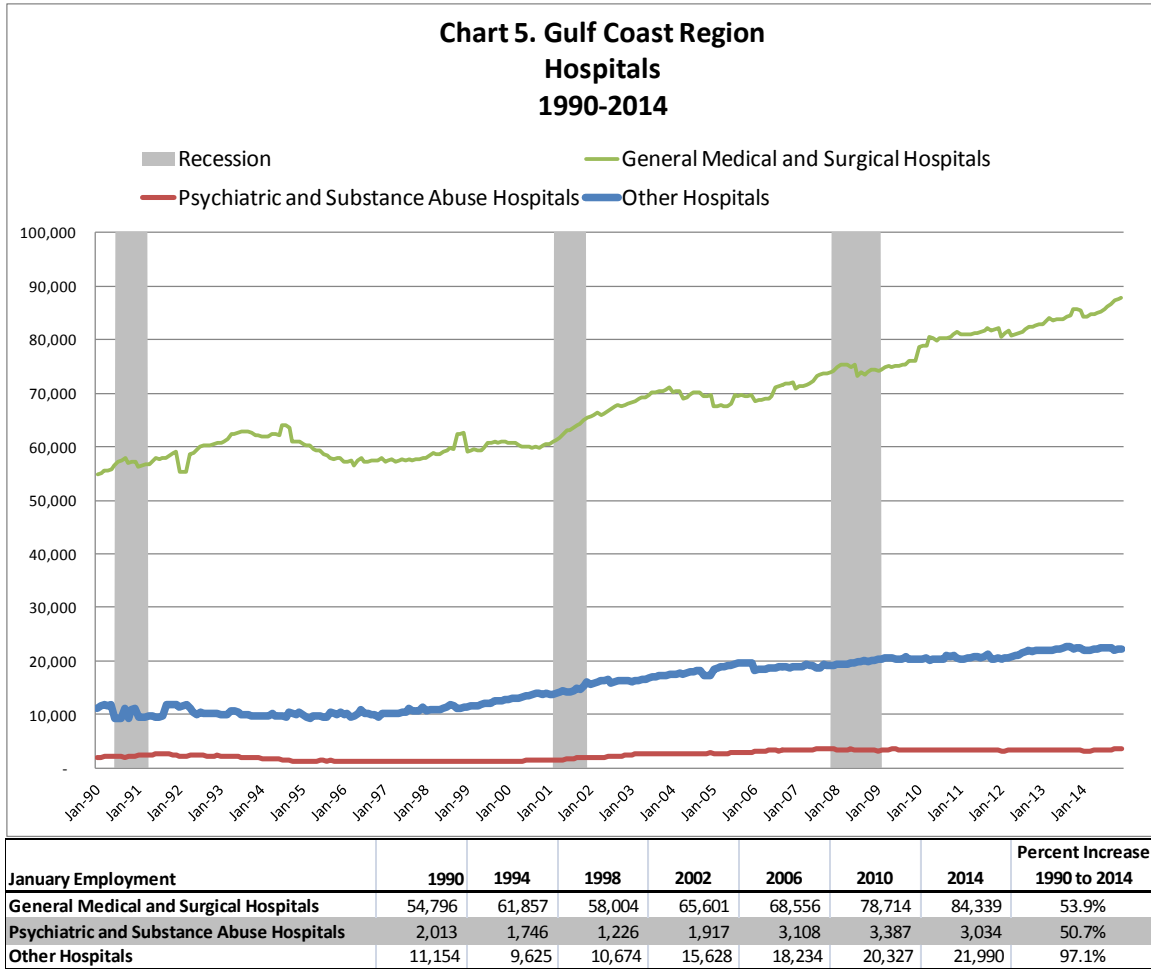
Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

Roughly one-third of the employment in **Ambulatory Health Care Services** is found in **Home Health Care**, the fastest growing detailed industry which added more than 35,000 jobs from 1990 to 2014, see Chart 4. As the average life expectancy increases, consumers are looking for care that allows them to stay in their homes. Another one-third of the employment is found in **Offices of Physicians**, which added more than 29,000 jobs from 1990 to 2014. **Outpatient Care Centers** was the second fastest growing detailed industry from 1990 to 2014. Growth at outpatient care centers is also related to increased life expectancies as well as population growth as more and more people seek treatment for chronic conditions.



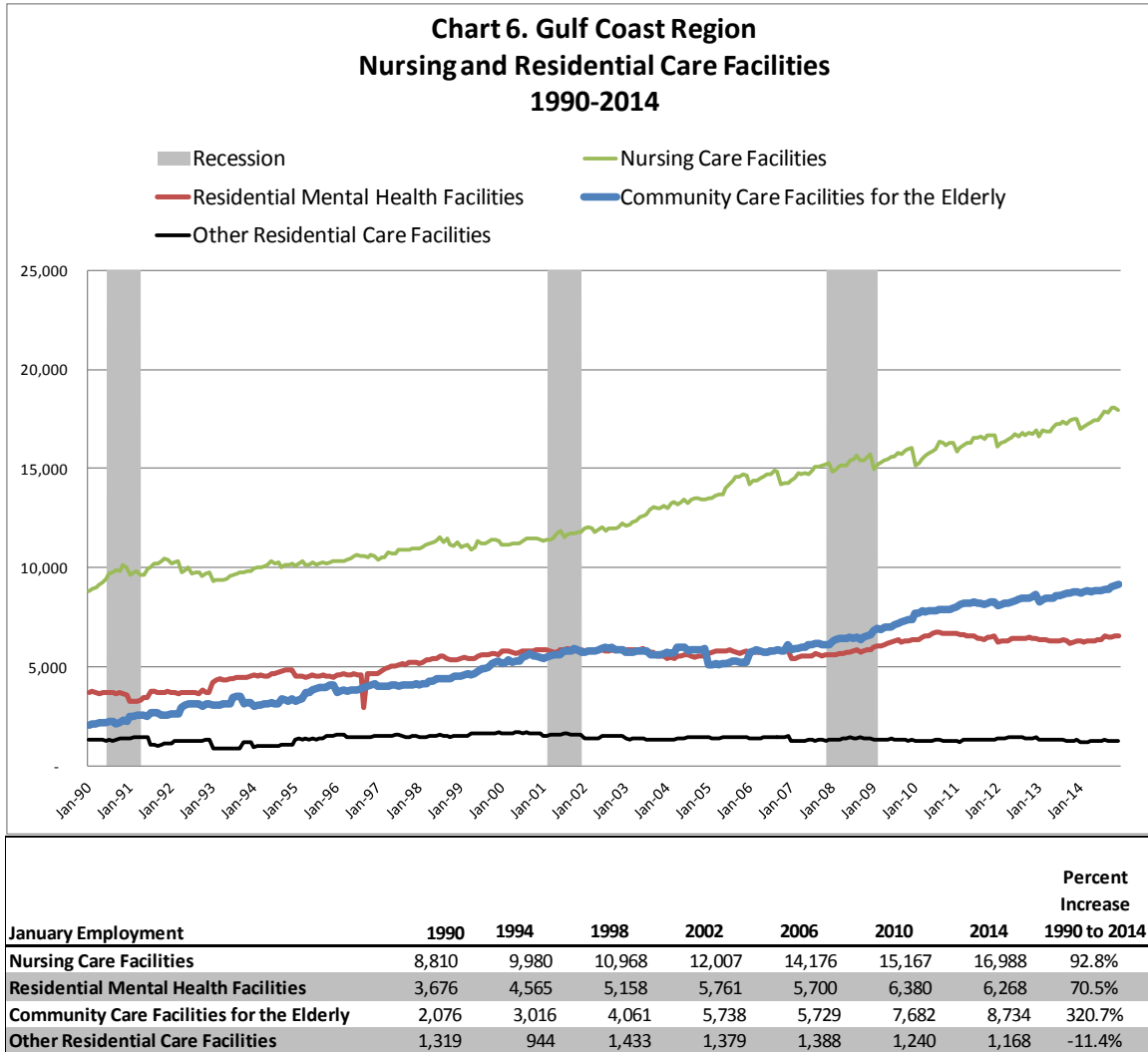
Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

Hospitals account for the second largest number of jobs in healthcare. The industry has added jobs at a steady but much slower pace than Ambulatory Health Care Services. The majority of employment in Hospitals is found in **General Medical and Surgical Hospitals** where payrolls increased by nearly 30,000 from 1990 to 2014, see Chart 5. **Other Hospitals** was the fastest growing detailed industry with payrolls rising some 97 percent from 1990 to 2014. Hospitals providing long-term care for the chronically ill, rehabilitation, and restorative services to physically-challenged or disabled people are included in this industry.



Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

Representing the smallest portion of jobs in the health care industry in 2014, about 12 percent, **Nursing and Residential Care Facilities** added jobs at the second fastest pace from 1990 to 2014. More than half of the employment was in **Nursing Care Facilities** where businesses providing extended care in-patient nursing and rehabilitative services are found, see Chart 6. **Community Care Facilities for the Elderly** added jobs at a pace that triples any other detailed industry sectors in Nursing and Residential Care Facilities from 1990 to 2014.



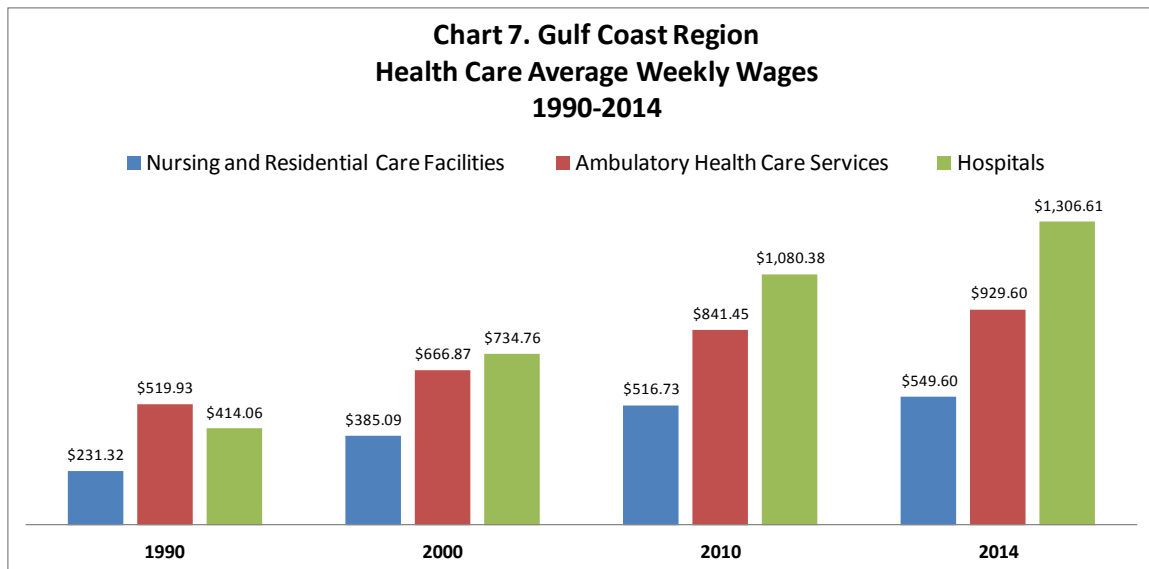
Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

Wages

Hospitals have the largest concentration of high skilled workers thus offering the highest average pay of \$1,306.61 per week in 2014. Average wages at hospitals also increased at the highest pace since 1990, up 216 percent.

Ambulatory Health Services paid the average worker \$929.60 per week in 2014. Average weekly wages in ambulatory health services increased at a much slower pace than hospitals since 1990, up 78.8 percent.

Average weekly wages in **Nursing and Residential Care Facilities** were much lower, \$549.60 in 2014. This industry sector has a high concentration of occupations that help patients perform many basic daily tasks thus requiring lower entry requirements resulting in a much lower average weekly wage.



Source: Texas Workforce Commission LMCI Dept. - Quarterly Census of Employment and Wages.

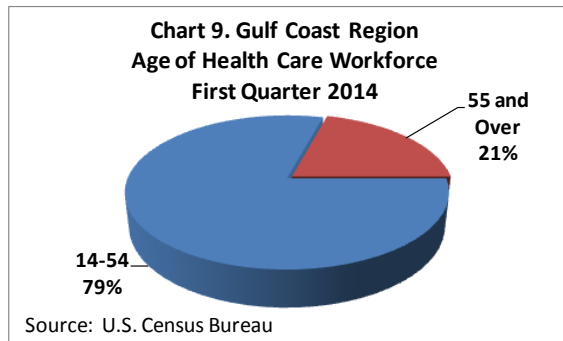
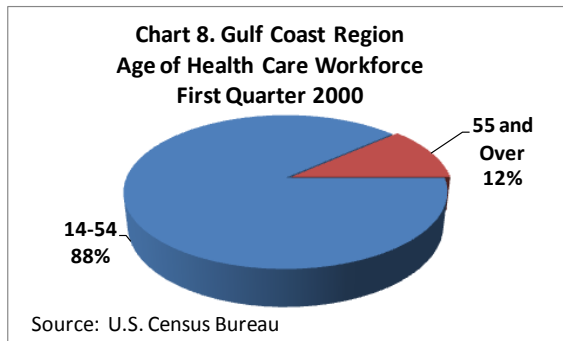
Challenges

An Aging Workforce

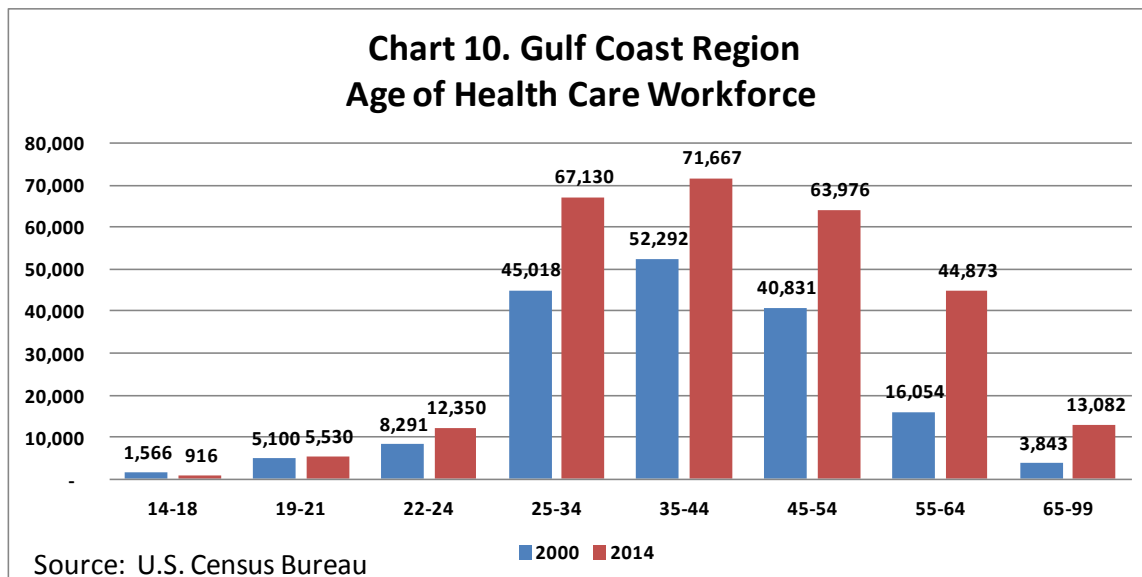
A large factor which has contributed to recent workforce shortages is an aging population. The percentage of the population that is 55 and over has risen by 6 percent since 2000 and is expected to rise another 2 percent by 2018 to 23.4 percent.

Population by Age								
	2000 Census		2010 CENSUS		2014 ESTIMATE		2018 FORECAST	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	4,854,389	100.00%	6,087,133	100.00%	6,499,962	100.00%	7,064,464	100.00%
Age 55+	739,122	15.2%	1,156,059	19.0%	1,378,021	21.2%	1,650,040	23.4%

The age of the health care workforce is increasing rapidly with the number approaching retirement age compounding the severity of workforce shortages in the region over the recent expansion period. The percentage of workers ages 55 and over in the health care industry nearly doubled from 12 percent in 2000 to 21 percent in 2014, see Chart 8 and 9.



Nearly 58,000 individuals with expertise in the industry are approaching retirement age, see Chart 10.



Technological Advances

Technological advances are affecting the delivery of health care and prompting changes in the skills required for many health occupations.

- New technologies and medical treatments are becoming more complex with many healthcare workers taking on new roles and new responsibilities
- Advances in health informatics are changing the skills requirements of many healthcare workers and fostering specializations in the industry helping to improve the quality and safety of patient care

The Affordable Care Act

The Affordable Care Act (ACA) is expected to create more demand for healthcare services and change the way services are delivered. The need for primary care workers such as nurses, medical doctors, and nurse practitioners are expected to increase.

Educational Capacity

A lack of training capacity continues to be a problem with long waiting lists for many programs. Expansion of local educational opportunities has been difficult due to funding, faculty, classroom, laboratory and clinical space.

The Future of Health Care

The health care industry has been a stable career choice for decades. This is in part due to the fact that people need health services regardless of the state of the economy. Add in the rapidly growing population and the result is a much higher than average pace of growth than most industries.

In 2012, there were more than 268,000 jobs in the health care industry according to estimates produced by the Texas Workforce Commission, see Table 1. It is projected to add more jobs, nearly 88,000, than any other major industry between 2012 and 2022.

Ambulatory Health Care Services are expected to increase payrolls by 37.4 percent from 2012 to 2022 and will account for the largest number of jobs in healthcare representing about 52 percent of total healthcare employment in 2022. Employers in this industry include offices of physicians, dentists, and other health practitioners.

Hospitals are expected to increase payrolls by 28.7 percent from 2012 to 2022 and will account for about 37 percent of total healthcare employment in 2022.

Nursing & Residential Care Facilities are expected to increase payrolls by 25.7 percent from 2012 to 2022 and will account for about 11 percent of total healthcare employment in 2022.

Table 1. Gulf Coast Region Projections

Industry Code	Industry Title	Annual Average Employment		Number Change	Percent Change
		2012	2022		
Total Health Care		268,150	355,990	87,840	32.8%
621	Ambulatory Health Care Services	135,230	185,800	50,570	37.4%
6211	Offices of Physicians	46,410	63,310	16,900	36.4%
6212	Offices of Dentists	15,130	19,110	3,980	26.3%
6213	Offices of Other Health Practitioners	10,560	13,770	3,210	30.4%
6214	Outpatient Care Centers	7,860	13,140	5,280	67.2%
6215	Medical & Diagnostic Laboratories	4,760	6,750	1,990	41.8%
6216	Home Health Care Services	46,520	64,440	17,920	38.5%
6219	Other Ambulatory Health Care Services	3,990	5,280	1,290	32.3%
622	Hospitals, Public & Private	102,260	131,650	29,390	28.7%
6221	General Medical & Surgical Hospitals, Public & Private	77,730	99,700	21,970	28.3%
623	Nursing & Residential Care Facilities	30,660	38,540	7,880	25.7%
6231	Nursing Care Facilities, Skilled Nursing	16,660	21,730	5,070	30.4%
6232	Residential Mental Facilities	4,240	4,940	700	16.5%
6233	Continuing Care & Assisted Living Facilities	8,360	10,230	1,870	22.4%
6239	Other Residential Care Facilities	1,410	1,640	230	16.3%

Source: Texas Workforce Commission LMCI Dept.

Occupational Demand in the Health Care Industry

Table 2 represents the top 20 health care related occupations in the health care industry and their estimated growth across **all** industries from 2012 to 2022.

**Table 2. Gulf Coast Region
Top 20 Health Occupations**

OCC. CODE	OCCUPATIONAL TITLE	2012	2022	10 Year Number Change	10 Year Pct Chg	Total Annual Demand	2014 Avg Hrly Wage
29-1141	Registered Nurse	45,160	58,710	13,550	30.0%	2,230	\$ 36.19
39-9021	Personal Care Aides	40,090	55,770	15,680	39.1%	1,855	\$ 8.52
43-6013	Medical Secretaries	18,950	26,880	7,930	41.8%	1,025	\$ 15.48
31-1014	Nursing Assistants	18,210	23,670	5,460	30.0%	890	\$ 12.17
31-9092	Medical Assistants	12,210	16,330	4,120	33.7%	645	\$ 14.06
29-2061	Licensed Practical & Licensed Vocational Nurses	15,100	19,400	4,300	28.5%	800	\$ 23.30
31-1011	Home Health Aides	9,480	13,160	3,680	38.8%	550	\$ 9.79
31-9091	Dental Assistants	5,600	6,930	1,330	23.8%	250	\$ 16.64
29-1069	Physicians & Surgeons, All Other	4,360	5,760	1,400	32.1%	250	\$ 96.91
11-9111	Medical & Health Services Managers	4,540	5,910	1,370	30.2%	245	\$ 52.19
29-2021	Dental Hygienists	3,020	3,980	960	31.8%	170	\$ 35.33
29-2034	Radiologic Technologies	3,250	4,290	1,040	32.0%	150	\$ 26.46
29-2071	Medical Records & Health Information Technicians	3,970	5,190	1,220	30.7%	225	\$ 19.44
29-2041	Emergency Medical Technicians	3,550	4,570	1,020	28.7%	195	\$ 16.85
29-2011	Medical & Clinical Laboratory Technologists	3,230	4,060	830	25.7%	170	\$ 28.75
29-2012	Medical & Clinical Laboratory Technicians	2,700	3,810	1,110	41.1%	180	\$ 19.11
29-2055	Surgical Technologists	2,190	3,070	880	40.2%	110	\$ 22.09
29-1126	Respiratory Therapists	2,610	3,400	790	30.3%	120	\$ 27.80
29-1123	Physical Therapists	2,780	3,690	910	32.7%	160	\$ 43.30
31-9097	Phlebotomists	1,930	2,570	640	33.2%	100	\$ 15.25

Source: Texas Workforce Commission LMCI Dept.

Eight of the top 20 health care occupations are currently on the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations:

- Registered Nurse
- Licensed Practical & Licensed Vocational Nurses
- Radiologic Technologists and Technicians
- Medical Records & Health Information Technicians
- Medical & Clinical Laboratory Technologists
- Respiratory Therapists
- Physical Therapists
- Physicians & Surgeons, All Other

Occupational Demand for Ambulatory Health Care Services (NAICS 621)

Table 3 represents the top 20 occupations in the ambulatory health care services subsector and their projected employment levels in 2012 and 2022. Total demand for each occupation is actually higher since replacement demand data by industry is unavailable.

**Table 3. Gulf Coast Region
Top 20 Occupations - Ambulatory Health Care Services**

OCC. CODE	OCCUPATIONAL TITLE	2012	2022	10 Year Number Change	10 Year Pct Chg	2014 Avg Hrly Wage
39-9021	Personal Care Aides	25,440	36,220	10,780	42.4%	\$ 19.66
43-6013	Medical Secretaries	12,540	18,160	5,620	44.8%	\$ 15.48
31-9092	Medical Assistants	8,900	12,160	3,260	36.6%	\$ 14.06
29-1141	Registered Nurses	7,770	10,570	2,800	36.0%	\$ 36.19
31-1011	Home Health Aides	6,490	9,240	2,750	42.4%	\$ 9.79
29-2061	Licensed Practical & Licensed Vocational Nurses	5,550	7,180	1,630	29.4%	\$ 23.30
31-9091	Dental Assistants	5,250	6,500	1,250	23.8%	\$ 16.54
43-3021	Billing & Posting Clerks	2,750	3,780	1,030	37.5%	\$ 18.26
29-1069	Physicians & Surgeons, All Other	2,670	3,710	1,040	39.0%	\$ 96.91
43-9061	Office Clerks, General	3,190	3,700	510	16.0%	\$ 16.41
29-2021	Dental Hygienists	2,700	3,560	860	31.9%	\$ 35.33
43-4171	Receptionists & Information Clerks	2,540	3,490	950	37.4%	\$ 12.93
31-1014	Nursing Assistants	2,250	3,490	1,240	55.1%	\$ 12.17
29-2041	Emergency Medical Technicians & Paramedics	1,790	2,460	670	37.4%	\$ 16.85
29-1021	Dentists, General	1,570	1,940	370	23.6%	\$ 82.59
29-2071	Medical Records & Health Information Technicians	1,200	1,640	440	36.7%	\$ 19.44
43-6011	Executive Secretaries & Executive Administrative Assistants	1,370	1,620	250	18.2%	\$ 27.10
29-2034	Radiologic Technologists	1,100	1,570	470	42.7%	\$ 26.46
29-1171	Nurse Practitioners	980	1,470	490	50.0%	\$ 52.05
29-1062	Family & General Practitioners	1,100	1,410	310	28.2%	\$ 97.46

Source: Texas Workforce Commission LMCI Dept.

Six of the top 20 ambulatory health care services occupations are currently on the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations:

- Registered Nurses
- Licensed Practical & Licensed Vocational Nurses
- Physicians & Surgeons, All Other
- Medical Records & Health Information Technicians
- Radiologic Technologists and Technicians
- Family & General Practitioners

Occupational Demand for Hospitals (NAICS 622)

Table 4 represents the top 20 occupations in the hospitals subsector and their projected employment levels in 2012 and 2022. Total demand for each occupation is actually higher since replacement demand data by industry is unavailable.

**Table 4. Gulf Coast Region
Top 20 Occupations - Hospitals**

OCC. CODE	OCCUPATIONAL TITLE	2012	2022	10 Year Number Change	10 Year Pct Chg	2014 Avg Hrly Wage
29-1141	Registered Nurses	28,820	37,520	8,700	30.2%	\$ 36.19
43-6013	Medical Secretaries	4,570	6,300	1,730	37.9%	\$ 15.48
31-1014	Nursing Assistants	4,800	6,130	1,330	27.7%	\$ 12.17
29-2061	Licensed Practical & Licensed Vocational Nurses	3,450	4,050	600	17.4%	\$ 23.30
29-2011	Medical & Clinical Laboratory Technologists	2,660	3,370	710	26.7%	\$ 28.75
31-9092	Medical Assistants	1,880	2,410	530	28.2%	\$ 14.60
29-2034	Radiologic Technologists	1,790	2,290	500	27.9%	\$ 26.46
29-1126	Respiratory Therapists	1,770	2,270	500	28.2%	\$ 27.80
11-9111	Medical & Health Services Managers	1,610	2,090	480	29.8%	\$ 52.19
29-2055	Surgical Technologists	1,470	2,080	610	41.5%	\$ 22.09
37-2011	Janitors & Cleaners, Ex. Maids & Housekeeping Cleaners	1,620	2,060	440	27.2%	\$ 10.06
29-2071	Medical Records & Health Information Technicians	1,580	2,050	470	29.7%	\$ 19.44
29-1051	Pharmacists	1,380	1,900	520	37.7%	\$ 55.44
29-2052	Pharmacy Technicians	1,380	1,780	400	29.0%	\$ 15.86
31-1013	Psychiatric Aides	1,360	1,620	260	19.1%	\$ 11.83
37-2012	Maids & Housekeeping Cleaners	1,230	1,590	360	29.3%	\$ 9.06
29-1123	Physical Therapists	1,090	1,420	330	30.3%	\$ 43.30
43-3021	Billing & Posting Clerks	1,110	1,420	310	27.9%	\$ 18.26
43-9061	Office Clerks, General	1,020	1,120	100	9.8%	\$ 16.41
43-4051	Customer Service Representatives	840	1,070	230	27.4%	\$ 15.87

Source: Texas Workforce Commission LMCI Dept.

Seven of the top 20 hospital occupations are currently on the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations:

- Registered Nurses
- Licensed Practical & Licensed Vocational Nurses
- Medical & Clinical Laboratory Technologists
- Radiologic Technologists
- Respiratory Therapists
- Medical Records & Health Information Technicians
- Physical Therapists

Occupational Demand for Nursing and Residential Care Facilities (NAICS 623)

Table 5 represents the top 20 occupations in the nursing and residential care facilities subsector and their projected employment levels in 2012 and 2022. Total demand for each occupation is actually higher since replacement demand data by industry is unavailable.

**Table 5. Gulf Coast Region
Top 20 Occupations - Nursing and Residential Care Facilities**

OCC. CODE	OCCUPATIONAL TITLE	2012	2022	10 Year Number Change	10 Year Pct Chg	2014 Avg Hrly Wage
31-1014	Nursing Assistants	7,420	9,110	1,690	22.8%	\$ 12.17
29-2061	Licensed Practical & Licensed Vocational Nurses	3,330	4,710	1,380	41.4%	\$ 23.30
39-9021	Personal Care Aides	3,140	3,800	660	21.0%	\$ 8.52
37-2012	Maids & Housekeeping Cleaners	1,310	1,700	390	29.8%	\$ 9.06
29-1141	Registered Nurses	1,030	1,350	320	31.1%	\$ 36.19
35-2012	Cooks, Institution & Cafeteria	1,010	1,270	260	25.7%	\$ 11.18
31-1011	Home Health Aides	690	890	200	29.0%	\$ 9.79
35-3041	Food Servers, Nonrestaurant	630	850	220	34.9%	\$ 9.52
39-9041	Residential Advisors	550	640	90	16.4%	\$ 11.83
51-6011	Laundry & Dry-Cleaning Workers	440	580	140	31.8%	\$ 9.94
49-9071	Maintenance & Repair Workers, General	410	520	110	26.8%	\$ 17.94
31-9092	Medical Assistants	390	510	120	30.8%	\$ 14.06
39-9032	Recreation Workers	390	510	120	30.8%	\$ 11.78
35-2021	Food Preparation Workers	490	470	-20	-4.1%	\$ 9.82
31-1015	Orderlies	350	460	110	31.4%	\$ 11.31
43-9061	Office Clerks, General	340	390	50	14.7%	\$ 16.41
35-3021	Combined Food Preparation & Serving Workers, Incl. Fast Food	260	350	90	34.6%	\$ 8.79
11-9111	Medical & Health Services Managers	240	310	70	29.2%	\$ 52.19
31-1013	Psychiatric Aides	250	290	40	16.0%	\$ 11.83
29-2071	Medical Records & Health Information Technicians	220	280	60	27.3%	\$ 19.44

Source: Texas Workforce Commission LMCI Dept.

Two of the top 20 nursing and residential care facilities occupations are currently on the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations:

- Registered Nurses
- Licensed Practical & Licensed Vocational Nurses

Notes and Limitations

Health Care Historical Employment

The Current Employment Statistics (CES) program of the Bureau of Labor Statistics produces nonfarm industry employment estimates for the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA) based on a monthly employer's survey. While the data is more current, it is not available at the detail needed to discuss the health care industry.

Payroll data acquired from the Texas Workforce Commission enables a more detailed view of employment for the region. Historical data in this report was compiled from quarterly employment reports submitted by employers subject to the Texas Unemployment Compensation Act.

Projection Limitations

Industry and occupation projections are funded by the Employment and Training Administration, U.S. Department of Labor and updated every two years. The methodology involves four primary steps:

- Identify industry historical trends
- Develop industry employment projections
- Develop occupation staffing patterns for each industry
- Develop occupation employment projections

The projections will foretell the general industry and occupational trends and act as an indicator of relative magnitude and probable direction as opposed to an estimate of absolute values. Additional detail on projection methodology and its limitations can be found at: <http://www.tracer2.com/?PAGEID=67&SUBID=114>