



STATISTICAL BRIEF

September 2009

Obese Patients in Texas Hospitals, 2007

In 2007, there were nearly 164 thousand hospital stays during which obesity was noted, accounting for 7.4 percent of all hospital stays (excluding births and maternal cases).

Differences among age, gender, and race among obese related hospitalizations

Table 1 compares those patients with a principal diagnosis of obesity to those with obesity as a secondary diagnosis and includes the non-obese patients as a comparison. There were 8,713 hospital stays principally for obesity and 155,218 hospital stays with obesity as a secondary diagnosis. Among those with obesity as a principal diagnosis, nearly all (99.6 percent) had a diagnosis of morbid obesity, which is defined as 125 percent or more over ideal body weight or BMI (body mass index) greater than 39. Among those with a secondary diagnosis of obesity, only about 40 percent had a diagnosis of morbid obesity.

Among those principally hospitalized for obesity, most patients (52.0 percent) were 18-44 years old, followed by the 45-64 years old patients (42.8 percent). This contrasts with an older age distribution for those with obesity as a secondary diagnosis: 45.6 percent were 45-64 years old, followed by 29.8 percent with ages 65 and above.

Females were more likely to be hospitalized with obesity than males. Females had four times the number of hospital stays as males among individuals with a principal diagnosis of obesity and nearly twice among individuals with a secondary diagnosis of obesity. However, females were only about 20 percent more than males among individuals with no mention of obesity.

Race/ethnicity distributions of hospital stays were similar among these three cases: obesity as a principal diagnosis, obesity as a secondary diagnosis, and no mention of obesity. This indicates that patients hospitalized for obesity were not related to their race/ethnicity classification.

The mean length of a hospital stay for which obesity was a principal diagnosis was 2.1 days with the mean charge as \$43,650. For patients for whom obesity was a secondary diagnosis, the mean length of stay was much longer (6.0 days) but the mean charge was lower (\$38,687) than for patients with obesity as a principal diagnosis.

Table 1. Differences in hospital stays related to obesity, 2007*

	Obesity as a principal diagnosis	Obesity as a secondary diagnosis	No mention of obesity
Number of hospital stays (percent)	8,713 (0.4%)	155,218 (7.0%)	2,047,013 (92.6%)
Age distribution			
17 and younger	0.4%	1.8%	14.8%
18-44	52.0%	22.7%	18.6%
45-64	42.8%	45.6%	27.7%
65 and older	4.8%	29.8%	38.9%
Gender distribution			
Male	19.5%	33.7%	42.3%
Female	80.2%	62.0%	50.2%
Unknown	0.2%	4.3%	7.5%
Race/ethnicity distribution			
Hispanic	15.6%	22.7%	23.6%
White, non-Hispanic	59.4%	56.3%	57.4%
Black, non-Hispanic	15.6%	16.7%	13.0%
Asian, non-Hispanic	0.2%	0.3%	1.1%
Other	9.4%	4.0%	4.8%
Mean length of stay (days)			
	2.1	6.0	6.3
Mean charges per stay			
	\$43,650	\$38,687	\$34,547

* Births and maternal cases are excluded.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2007.

Top diagnoses for hospitalizations with a secondary diagnosis of obesity

Table 2 lists principal diagnoses for those hospital stays where obesity was a secondary diagnosis, or a coexisting condition. These 20 conditions accounted for nearly 60 percent of all hospital stays with obesity as a secondary diagnosis. The top two conditions were related to the heart: congestive heart failure and coronary atherosclerosis, each accounted for 4.8 percent of all patients with obesity. These were 60 percent and 70 percent higher than among the non-obese hospitalizations, respectively. Seventeen conditions were seen at higher rates for the obese hospitalizations than for the non-obese hospitalizations.

Two infections appeared in the top 10 conditions: skin infections and pneumonia. Skin infections were twice as likely to be seen among obese inpatients, but pneumonia was less frequently recorded for obese hospital stays. Three other respiratory conditions were relatively frequent among obese patients: respiratory failure, asthma, and chronic obstructive pulmonary disease (COPD). Osteoarthritis and back pain were also top 10 conditions for patients with obesity as a secondary diagnosis. Osteoarthritis was more than twice as likely among obese inpatients compared with non-obese inpatients, but back pain was only slightly more common. Biliary tract disease and diabetes were also top 10 conditions; both were more common among obese patients.

Table 2. Principal diagnosis for hospital stays with a secondary diagnosis of obesity, 2007*

Rank	Principal diagnosis	Number of stays with obesity as a secondary diagnosis	Percent of stays with this principal diagnosis among stays with	
			obesity as a secondary diagnosis	no mention of obesity
1	Congestive heart failure, nonhypertensive	7,427	4.8%	3.0%
2	Coronary atherosclerosis and other heart disease	7,381	4.8%	2.8%
3	Skin and subcutaneous tissue infections	6,750	4.3%	2.1%
4	Osteoarthritis	6,613	4.3%	1.9%
5	Nonspecific chest pain	6,089	3.9%	1.7%
6	Rehabilitation care, fitting of prostheses, and adjustment of devices	5,968	3.8%	2.7%
7	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	5,009	3.2%	4.0%
8	Biliary tract disease	4,259	2.7%	1.5%
9	Spondylosis, intervertebral disc disorders, other back problems	3,873	2.5%	2.0%
10	Diabetes mellitus with complications	3,798	2.4%	1.7%
11	Mood disorders	3,775	2.4%	4.1%
12	Respiratory failure, insufficiency, arrest (adult)	3,701	2.4%	1.2%
13	Acute myocardial infarction (heart attack)	3,700	2.4%	1.7%
14	Cardiac dysrhythmias	3,608	2.3%	1.9%
15	Complication of device, implant or graft	3,564	2.3%	2.1%
16	Asthma	3,554	2.3%	1.2%
17	Chronic obstructive pulmonary disease and bronchiectasis	3,443	2.2%	1.6%
18	Complications of surgical procedures or medical care	3,240	2.1%	1.5%
19	Septicemia (except in labor)	2,776	1.8%	2.3%
20	Hypertension with complications and secondary hypertension	2,315	1.5%	0.9%
Total for the top 20 conditions		90,843	58.5%	41.9%

* Births and maternal cases are excluded.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2007.

Most common procedures among obesity diagnoses

Table 3 lists the most common procedures for which obesity was either a principal or secondary diagnosis. For hospital stays with obesity as a principal diagnosis, over 90 percent of stays involved other OR upper GI therapeutic procedures. No other procedure was as common (about 10 percent for each).

Among hospital stays during which obesity was noted as a secondary diagnosis, none of the procedures was frequently received. The two most common procedures were blood transfusion and other vascular catheterization, each was received by about 9 percent of stays.

Table 3. Most common all-listed procedures for patients with obesity diagnoses, 2007*

Obesity as a principal diagnosis			Obesity as a secondary diagnosis		
All-listed procedures	Number of stays	Percent	All-listed procedures	Number of stays	Percent
Other OR upper GI therapeutic procedures	7,882	90.5%	Blood transfusion	14,611	9.4%
Other hernia repair	1,064	12.2%	Other vascular catheterization, not heart	14,165	9.1%
Upper gastrointestinal endoscopy, biopsy	977	11.2%	Diagnostic cardiac catheterization, coronary arteriography	12,377	8.0%
Other therapeutic procedures	881	10.1%	Respiratory intubation and mechanical ventilation	8,165	5.3%
Excisio, lysis peritoneal adhesions	839	9.6%	Other therapeutic procedures	7,647	4.9%

* Births and maternal cases are excluded.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2007.