



STATISTICAL BRIEF

December 2010

Hospitalizations in the Elderly Population, 2009

In 2009, elderly patients age 65 and older comprised a large proportion of hospitalizations in Texas. While the elderly accounted for about 10 percent of the population, they comprised 28.5 percent of all hospital stays (839,926 hospitalizations) and over 40 percent of the aggregate hospital charges (\$47,638 million).

Table 1 shows the characteristics of hospitalizations among the elderly compared to the non-elderly. The mean length of stay for patients 65 and older was 1.7 days longer and mean hospital charge per stay (or per day) was \$23,000 (or \$1,700) higher than non-elderly hospital stays. Compared to non-elderly patients, a large proportion of hospitalizations among the elderly were admitted through the emergency department (53.4 percent versus 34.9 percent). The in-hospital death rate for elderly patients was more than four times higher than non-elderly patients (3.9 percent versus 0.9 percent).

Figure 1 illustrates the major reasons for hospital admissions among the elderly, organized by body system. The most common reason for hospitalization was related to circulatory disorders, accounting for 21.6 percent of all hospital stays for individuals age 65 and older. Respiratory disorders were the next most common category of conditions, comprising 14.0 percent of all hospitalizations in the elderly. Musculoskeletal and digestive disorders constituted 12.4 percent and 9.6 percent, respectively, of all hospital stays among the elderly. Patients with nervous system disorders accounted for 7.4 percent of all hospitalizations within this population. Three other categories each resulted in 5 to 7 percent of all hospital stays in the elderly: kidney, rehabilitation, and infectious diseases.

Table 2 displays the 15 most frequent conditions causing admission to the hospital for individuals age 65 and older. These 15 conditions accounted for nearly half of all hospital stays among the elderly. The single most common condition was rehabilitation care, fitting of prostheses, and adjustment of devices, resulting in 47,584 hospital stays, or 5.7 percent of all hospitalizations among the elderly. Congestive heart failure was the next most common condition for admission to the hospital, with 43,466 hospital stays or 5.2 percent of all elderly hospitalizations. Pneumonia, septicemia, and osteoarthritis conditions were followed with 4.4 percent, 4.2 percent, and 3.6 percent, respectively, of all elderly hospital stays, respectively. Five

of the top 15 conditions were related to the heart – congestive heart failure, irregular heart beat, coronary atherosclerosis, stroke, and heart attack – which together accounted for more than 16 percent of all hospitalizations among the elderly.

Table 3 illustrates the most common procedures performed during hospitalizations among the elderly. Blood transfusion was the most common procedure for elderly patients. There were 129,798 blood transfusions performed on hospitalized elderly patients, comprising more than half of all blood transfusions performed in the hospital. Over 15 percent of elderly patients in the hospital received blood transfusions. Vascular catheterization was the next most common procedure which was received by 73,482 elderly patients, resulting in about 40 percent of all hospital stays with this procedure performed. Three of the most common procedures performed on elderly patients were related to the heart: diagnostic cardiac catheterization, diagnostic ultrasound of heart, and percutaneous transluminal coronary angioplasty (PTCA), each accounted for 46 to 49 percent of all hospitalizations with the procedure involved.

Table 1. Characteristics of hospitalizations among non-elderly and elderly populations, 2009

	Younger than 65 years	65 years and older
Percentage of Texas population	90%	10%
Number of hospital stays (percent)	2,107,229 (71.5%)	839,926 (28.5%)
Mean length of stay (in days)	4.8	6.5
Mean charge per stay	\$33,687	\$56,717
Mean charge per day	\$7,038	\$8,735
Aggregate charges (in millions)	\$70,986	\$47,638
Percentage admitted through the emergency department	34.9%	53.4%
Percentage died in hospital	0.9%	3.9%

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2009.

Table 2. Most frequent conditions causing hospitalizations among the elderly, 2009

Rank	Principal diagnosis	Number of hospitalizations in the elderly	Percentage of all hospitalizations in the elderly
1	Rehabilitation care, fitting of prostheses, and adjustment of devices	47,584	5.7%
2	Congestive heart failure, nonhypertensive	43,466	5.2%
3	Pneumonia	37,054	4.4%
4	Septicemia	34,869	4.2%
5	Osteoarthritis	30,535	3.6%
6	Cardiac dysrhythmias (irregular heart beat)	28,329	3.4%
7	Chronic obstructive pulmonary disease and bronchiectasis	27,239	3.2%
8	Urinary tract infections	24,645	2.9%
9	Coronary atherosclerosis	23,908	2.8%
10	Acute cerebrovascular disease (stroke)	22,414	2.7%
11	Acute myocardial infarction (heart attack)	19,794	2.4%
12	Complication of device, implant or graft	19,001	2.3%
13	Fracture of neck of femur (hip)	17,452	2.1%
14	Fluid and electrolyte disorders	16,679	2.0%
15	Respiratory failure, insufficiency, arrest (adult)	15,593	1.9%
Total admissions for the top 15 conditions		408,562	48.6%

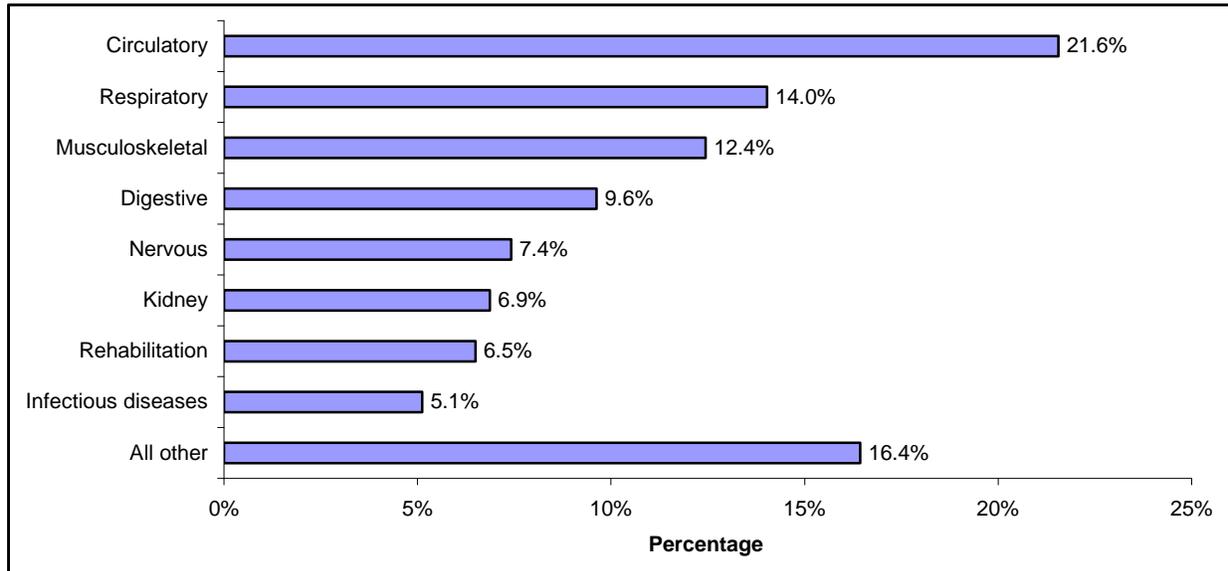
Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2009.

Table 3. Most frequent procedures performed during hospitalizations among the elderly, 2009

Rank	All-listed procedures	Number of elderly admissions with procedure	Percentage of procedures performed in the elderly
1	Blood transfusion	129,798	51.7%
2	Other vascular catheterization, not heart	73,482	40.7%
3	Respiratory intubation and mechanical ventilation	44,196	39.5%
4	Diagnostic cardiac catheterization, coronary arteriography	42,141	46.4%
5	Other OR procedures on vessels other than head and neck	41,665	50.6%
6	Upper gastrointestinal endoscopy, biopsy	37,489	45.9%
7	Other therapeutic procedures	35,866	27.2%
8	Hemodialysis	30,713	39.4%
9	Other non-OR therapeutic cardiovascular procedures	26,175	44.6%
10	Arthroplasty knee	24,647	57.2%
11	Physical therapy exercises, manipulation, and other procedures	21,585	61.1%
12	Diagnostic ultrasound of heart (echocardiogram)	18,739	48.7%
13	Percutaneous transluminal coronary angioplasty (PTCA)	18,205	47.1%
14	Colonoscopy and biopsy	17,051	48.7%
15	Other physical therapy and rehabilitation	16,440	59.9%

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2009.

Figure 1. Percentage of major reasons for hospitalizations among the elderly, 2009*



* Based on APR-MDC.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2009.