



## STATISTICAL BRIEF

April 2010

### Hospital Stays among Patients with Diabetes, 2008

In 2008, about 554,000 hospital stays occurred among patients with diabetes (i.e., diabetes was the principal reason for hospitalization or was a coexisting condition), accounting for 19 percent of the 2.9 million total hospital stays in Texas. Patients with diabetes as a principal diagnosis accounted for 41,145 discharges, or 1.4 percent of all hospital stays. The total charges for hospital stays with any mention of diabetes as either a principal or coexisting condition were \$23.6 billion, nearly 27 percent of aggregate charges for overall stays (\$89 billion).

#### Comparison of diabetes and non-diabetes related hospital stays, 2008

Table 1 shows that, on average, patients hospitalized with diabetes were 24.2 years older than patients without diabetes (63.0 years versus 38.8 years). While the share of all discharges for principal diagnosis of diabetes was essentially equal for males and females (50 to 50 percent), males were about 20 percent less than females among patients with diabetes, and were about 40 percent less among individuals with no mention of diabetes. The mean length of stay for hospitalizations among patients with diabetes as a principal diagnosis was 6.1 days, which was slightly shorter than stays with diabetes but one day longer than non-diabetes stays. Compared with non-diabetes stays, hospitalizations for diabetes were, on average, about \$1,500 more expensive (\$42,646 per stay versus \$27,649 per stay). Moreover, hospital admissions relating to diabetes were more likely to originate in the emergency department (68.5 percent for diabetes as a principal diagnosis and 57.7 percent as any diagnosis) than all non-diabetes admissions (35.5 percent). The percentage of stays covered by Medicare was lower when diabetes was the principal reason for admission (40.3 percent), as compared with all diabetes stays (59.0 percent). It is also worth noting that the percentage of uninsured hospitalizations was over two times higher for hospital stays principally for treating diabetes than for all stays among patients with diabetes (17.5 percent versus 8.0 percent).

**Table 1. Hospital stays of patients with diabetes compared to all non-diabetes hospital stays, 2008**

	Principal diagnosis of diabetes	All-listed diagnosis of diabetes*	All non-diabetes hospital stays
Total number of discharges	41,145	554,121	2,364,432
Mean age	51.4	63.0	38.8
Ratio of male to female	1.01	0.81	0.59
Mean length of stay (in days)	6.1	6.4	5.1
Mean charge per stay	\$32,459	\$42,646	\$27,649
Aggregate charges (in millions)	\$1,336	\$23,631	\$65,374
Percentage admitted through the emergency department	68.5%	57.7%	35.5%
Percentage by payer:			
Medicare	40.3%	59.0%	26.6%
Medicaid	12.5%	7.7%	24.2%
Private insurance	25.8%	22.6%	35.7%
Uninsured	17.5%	8.0%	10.4%

\* All-listed diabetes includes hospital stays with diabetes listed as the principal diagnosis or as a secondary diagnosis.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2008.

### **Top 10 reasons for diabetic related hospital stays**

Table 2 illustrates that diabetes was the most common principal reason for hospital admission among patients with diabetes (7.4 percent). However, about one out every 7 hospital stays for patients with diabetes was principally for the treatment of four circulatory disorders: congestive heart failure, coronary atherosclerosis, acute myocardial infarction (heart attack), and acute cerebrovascular disease (stroke). These four circulatory disorders accounted for 45.3 percent, 41.0 percent, 38.3 percent, and 36.8 percent of hospital stays with diabetes as a coexisting condition, respectively. Other common reasons for hospitalization among patients with diabetes included rehabilitation care, pneumonia, septicemia, complication of device, skin and subcutaneous tissue infections – their rates varied from one-third to one-fourth of hospital stays with diabetes as a coexisting condition.

**Table 2. Top 10 most common principal reasons for hospitalization among patients with diabetes, 2008\***

Rank	Principal diagnosis	Number of hospital stays among patients with diabetes (percentage of all diabetes stays)*	Percentage of hospital stays with diabetes as a coexisting condition**
1	Diabetes	41,145 (7.4%)	N/A
2	Congestive heart failure, nonhypertensive	29,494 (5.3%)	45.3%
3	Coronary atherosclerosis and other heart disease	22,598 (4.1%)	41.0%
4	Rehabilitation care, fitting of prostheses, and adjustment of devices	20,752 (3.7%)	33.0%
5	Pneumonia	20,152 (3.6%)	25.4%
6	Septicemia	18,823 (3.4%)	33.8%
7	Complication of device, implant or graft	15,153 (2.7%)	32.6%
8	Acute myocardial infarction (heart attack)	14,934 (2.7%)	38.3%
9	Skin and subcutaneous tissue infections	14,831 (2.7%)	30.2%
10	Acute cerebrovascular disease (stroke)	13,695 (2.5%)	36.8%

\* Based on all-listed diagnoses.

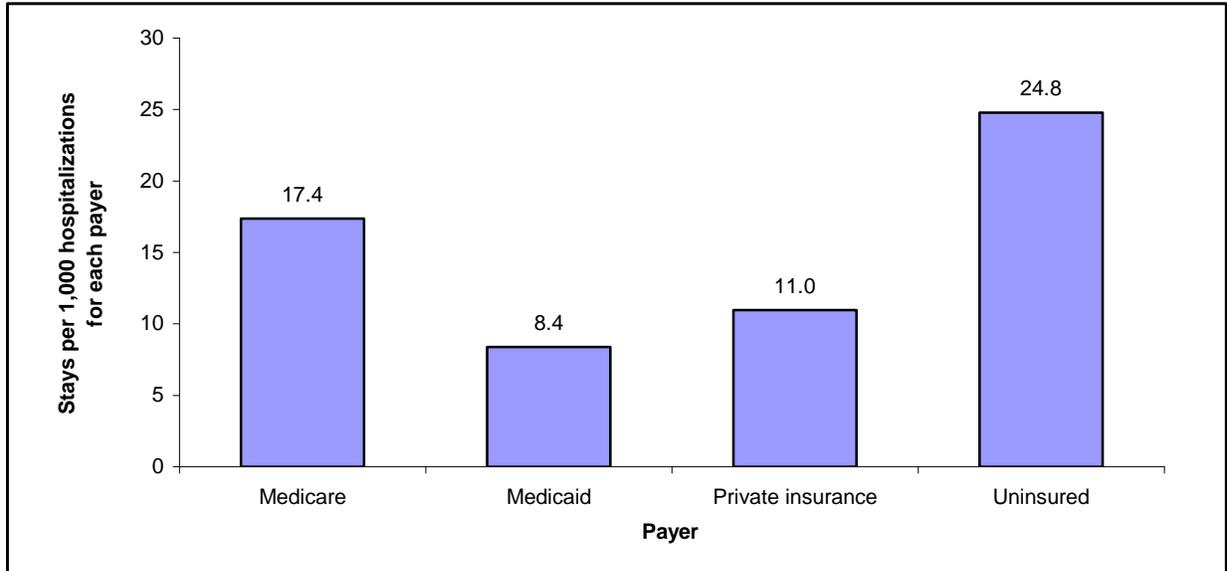
\*\* Based on records with diabetes as a secondary diagnosis.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2008.

## Percentage of diabetic related hospitalization by payer type

Figure 1 shows the number of hospitalizations principally for diabetes per 1,000 stays for each payer. Hospital stays principally for treating diabetes were more likely to be uninsured. There were 24.8 diabetes stays per 1,000 uninsured hospitalizations. On the other hand, diabetes was the principal reason for admission for 17.4 stays per 1,000 Medicare stays, 11.0 stays per 1,000 privately insured hospitalizations, and 8.4 stays per 1,000 Medicaid stays.

**Figure 1. Hospitalizations principally for diabetes by payer, 2008\***



\* Based on principal diagnosis.

Source: Texas Hospital Inpatient Discharge Public Use Data File (PUDF), 2008.