

## STATISTICAL BRIEF #37

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### Pediatric Hospital Stays for Cancer, 2005

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#### Introduction

While childhood cancers may originate from environmental factors, many cases are caused by unpredictable genetic errors, making prevention difficult.<sup>1</sup> Yet due to advances in medicine and treatment, the cancer survival rate in children has drastically improved over time. The National Cancer Institute reports that over the past 30 years, childhood cancer survival has increased from 30 percent to 80 percent.<sup>2</sup> As more children are living with cancer, the need for ongoing medical care for their conditions is evident. While pediatric cancer care increasingly is administered on an outpatient basis,<sup>3</sup> a significant amount of care still requires hospitalization. In 2005, pediatric hospitalizations principally for cancer care accounted for nearly 100,000 hospital stays.

This Statistical Brief presents data from the Healthcare Cost and Utilization Project (HCUP) on hospital stays for cancer care in individuals under 18 years of age in 2005. Characteristics of these stays are compared with all pediatric hospitalizations and adult cancer stays. The two most common pediatric cancer conditions that required hospitalization—leukemias and brain tumors<sup>4</sup>—are described in more detail. Additionally, variations in utilization are illustrated by age and expected payer. Trends in the number and cost of pediatric stays for cancer care from 2000 to 2005 are also discussed. All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

#### Findings

In 2005, children and adolescents under 18 years of age accounted for 18.0 percent (7.0 million) of the 39.2 million total hospital stays in the U.S. Childhood cancers were principally responsible for 99,500 (or 3.5 percent) of pediatric stays and just over 5 percent of all cancer stays. The number of pediatric cancer

<sup>1</sup>Kupfer GM (2006). *Childhood Cancer, Epidemiology*. Medicine from WebMD. <http://www.emedicine.com/ped/topic2585.htm>

<sup>2</sup>*Young People with Cancer: A Handbook for Parents* (2001). National Institutes of Health, National Cancer Institute. Bethesda, MD.

<sup>3</sup>National Cancer Institute (2004). *Plans & Priorities for Cancer Research*. <http://plan2004.cancer.gov/public/survivor.htm>

<sup>4</sup>The term “brain tumors” refers to all cancers of the brain and nervous system. In addition to brain cancer, this includes cancers of the cerebral meninges, spinal cord, spinal meninges, and other unspecified parts of the nervous system.

#### Highlights

- In 2005, cancers were principally responsible for nearly 100,000 hospital stays (totaling \$1.7 billion) for children and adolescents. An additional 75,400 pediatric stays involved a secondary diagnosis of cancer.
- Between 2000 and 2005, the number of pediatric stays principally for cancer increased over 80 percent, from 54,400 to 99,500 stays while adult cancer stays remained stable at about 1.8 million hospitalizations.
- From 2000 to 2005, total hospital costs for pediatric cancer stays more than doubled from \$785 million to \$1.7 billion.
- Compared with the average stay among children and adolescents, those for cancer care were more than twice as expensive (\$17,500 compared with \$8,500 per stay) and about two days longer than the typical stay (6.4 versus 4.5 days). Pediatric cancer stays were also more expensive (\$17,500 versus \$12,100), but not any longer than adult cancer stays.
- The two most common pediatric cancers that required hospitalization in 2005 were leukemias and brain tumors accounting for over a third of all pediatric cancer stays (16,200 stays), excluding stays that were principally for maintenance chemotherapy and radiation.
- Compared with the typical pediatric stay, hospitalizations for cancer care were more frequent in older children. Children under age 1 represented 28.2 percent of all pediatric stays, but only 8.2 percent of cancer stays.
- Private insurance was billed for the largest portion of hospital stays that were principally for pediatric cancer care (58.8 percent), and Medicaid for about another third of these stays.

hospitalizations increased by over 80 percent (from 54,400 to 99,500 stays) between 2000 and 2005, far outpacing the growth of all hospital stays for children and adolescents, which grew at about 25 percent. The average per day costs for pediatric cancer stays also increased substantially from 2000 to 2005, by over 20 percent (from \$14,400 to \$17,500)<sup>5</sup>—with total aggregate costs more than doubling from \$785 million to \$1.7 billion. Adult cancer stays remained stable at about 1.8 million hospitalizations each year, but mean costs increased by over 15 percent (from \$10,500 to \$12,100 per stay), and total costs grew by nearly 14 percent (from \$19.6 billion to \$22.3 billion).

Pediatric hospital stays where cancer was not the principal reason for admission but was listed as a secondary diagnosis also exhibited large increases over this time period—over 60 percent from 47,000 stays to 75,400 stays. This suggests that as survivorship increases more children are living with cancer and being hospitalized for other conditions.

#### *General characteristics of pediatric hospital stays for cancer*

Table 1 presents utilization and cost information for the treatment of pediatric cancer in U.S. community hospitals compared with all hospital stays for children and adolescents (excluding newborns). Relative to all pediatric hospitalizations, stays for cancer care were more than twice as expensive (\$17,500 compared with \$8,500 per stay) and about two days longer than the typical stay (6.4 versus 4.5 days). The high cost of cancer treatment was not solely due to longer hospital stays, but was also a result of more intensive treatment during each stay. The mean cost per day for pediatric cancer patients was nearly \$1,000 more than the average per day hospital costs among all children and adolescents (\$2,700 versus \$1,900 per day).

Compared with adult cancer stays (table 2), pediatric cancer stays were, on average, more expensive (\$17,500 versus \$12,100) even though adult cancer patients averaged about the same amount of time, slightly over 6 days, in the hospital. The average cost per day of each child cancer stay was \$700 more expensive than adult cancer stays, indicating more intensive treatment. The aggregate costs of inpatient cancer treatment for children and adolescents totaled \$1.7 billion in 2005 compared with \$22.3 billion for adult cancer care.

In terms of demographic characteristics, pediatric cancer patients were about 2 years older than the typical pediatric patient (8.4 versus 6.4 years old), and the likelihood of hospitalization did not vary significantly by gender. These stays originated in the emergency department far less frequently than all pediatric stays (8.8 versus 43.5 percent), but were just as likely to result in death at the hospital. In-hospital mortality for pediatric patients was rare, at less than 1 percent. The in-hospital death rate in adult cancer stays was comparable at 1 percent, but a larger portion of adults were admitted from the emergency department (22.0 percent).

#### *Characteristics of two common pediatric cancers: leukemias and brain tumors*

Table 3 provides detailed information about inpatient cancer care for the top 10 most common pediatric cancer conditions that required hospitalization. Among children and adolescents, the most common cancer stays were for leukemias and brain tumors. Collectively, leukemias and brain tumors accounted for about 16,200 stays, or over a third of all pediatric cancer stays (excluding stays that were principally for maintenance chemotherapy and radiation). The increasing volume of pediatric leukemia and brain tumor stays drove the aforementioned increase in total pediatric cancer stays from 2000 to 2005 with 76.2 percent and 83.4 percent increases, respectively (from 5,700 to 10,100 leukemia stays and 3,300 to 6,100 brain tumor stays) (figure 1). The increase in the average costs of leukemia and brain tumor stays was similar to that of all cancer stays (about 20 percent).

Leukemia, by far, was the most expensive pediatric cancer to treat (mean cost of \$47,000 per stay) and had the longest average length of stay (16.1 days). Treatment costs for brain tumors were also high at \$28,300 per stay, and patients remained in the hospital, on average, for 9.0 days. The total aggregate costs for treatment of these two cancers was over \$653 million in 2005, accounting for 38.3 percent of the total costs for pediatric cancer care and 2.7 percent of the total costs for all hospital stays for children and adolescents.

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<sup>5</sup>2000 cost figures are adjusted for inflation based on the Bureau of Labor Statistics Consumer Price Index All Urban Consumers (CPI-U).

Among adults, leukemias were the 16th most common cancer condition requiring hospitalization and brain tumors were the 18th (data not shown). Adult hospitalizations for these two conditions were much less expensive and shorter compared with child stays for the same conditions: \$31,000 per leukemia hospitalization, with a mean length of stay of 14.4 days, and \$16,700 per brain tumor hospitalization, with a mean length of stay of 7.3 days. While leukemias and brain tumors required the most hospital stays in children, hospitalizations for cancers of the uterus, lung, breast, and colon were much more common in adults.

#### *Pediatric cancer stays, by age*

Pediatric cancer patients were, on average, older than the typical pediatric patient. Cancer stays for children were most prevalent in the 1 to 4 year age group (representing 26.3 percent of stays) and the 10 to 14 age group (representing 24.5 percent of stays) (figure 2). This is in contrast to the typical non-newborn pediatric hospital stay for which the youngest children—under 1 year of age—accounted for the largest percentage of hospital stays (28.2 percent). This youngest age group accounted for only 8.2 percent of cancer stays.

Pediatric leukemia and brain tumor patients were, on average, about 8 years of age, which was comparable with the mean age of all pediatric cancer patients and over a year older than the average pediatric patient (6.4 years).

#### *Pediatric cancer stays, by payer*

Private insurance was billed for the largest portion of inpatient pediatric cancer care: 58.8 percent of stays in 2005 (figure 3). Medicaid was billed for about a third of pediatric cancer stays. A small percentage of hospitalizations (3.1 percent) were uninsured and the remaining stays (5.6 percent) were billed to “other” insurance types, such as TRICARE and Title V. Pediatric leukemia and brain tumor hospitalizations showed a similar pattern—private insurers were billed for about 60 percent and Medicaid for about 30 percent of cancer stays (data not shown). This is in contrast to billing practices for all pediatric hospital stays for which Medicaid and private insurance shared an equal responsibility of pediatric stays, with each insurer being billed for just over 45 percent of all child and adolescent hospitalizations in 2005.

For adult cancer stays, Medicare and private insurance were each billed for over 40 percent of stays (data not shown). However, government insurers played a more significant role in adult cancer stays, with an additional 8.3 percent of stays being billed to Medicaid. In total, about half of all adult cancer stays were billed to government payers, while only a third of child cancer stays were billed to the government.

## **Data Source**

The estimates in this Statistical Brief are based upon data from the HCUP 2005 Nationwide Inpatient Sample (NIS). Historical data were drawn from the 2000 NIS.

Supplemental source includes data from the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index All Urban Consumers (CPI-U), U.S. city average. <http://www.bls.gov/cpi/home.htm>

## **Definitions**

#### *Types of hospitals included in HCUP*

HCUP is based on data from community hospitals, defined as short-term, non-Federal, general and other hospitals, excluding hospital units of other institutions (e.g., prisons). HCUP data include OB-GYN, ENT, orthopedic, cancer, pediatric, public, and academic medical hospitals. They exclude long-term care, rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals, but these types of discharges are included if they are from community hospitals.

#### *Unit of analysis*

The unit of analysis is the hospital discharge (i.e., the hospital stay), not a person or patient. This means that a person who is admitted to the hospital multiple times in one year will be counted each time as a separate “discharge” from the hospital.

### *Costs and charges*

Total hospital charges were converted to costs using HCUP cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS).<sup>6</sup> Costs will tend to reflect the actual costs of production, while charges represent what the hospital billed for the case. For each hospital, a hospital-wide cost-to-charge ratio is used because detailed charges are not available across all HCUP States. Hospital charges reflect the amount the hospital charged for the entire hospital stay and does not include professional (physician) fees.

Cost-to-charge ratios for 2005 will not be available until later this year. For the purposes of this Statistical Brief, the 2005 ratios were estimated by multiplying the 2004 ratio for each hospital by 0.96, which represents the average annual change exhibited in the cost-to-charge ratios over the past few years. Cost estimates for 2000 are reflected in 2005 dollars based on the Bureau of Labor Statistics Consumer Price Index All Urban Consumers (CPI-U) U.S. city average. All costs are reported to the nearest hundreds.

### *Payer*

Payer is the expected payer for the hospital stay. To make coding uniform across all HCUP data sources, payer combines detailed categories into more general groups:

- Medicaid includes fee-for-service and managed care Medicaid patients. Patients covered by the State Children's Health Insurance Program (SCHIP) may be included here. Because most state data do not identify SCHIP patients specifically, it is not possible to present this information separately.
- Private insurance includes Blue Cross, commercial carriers, and private HMOs and PPOs.
- Other includes Worker's Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs. Note: For this brief, when discussing pediatric stays Medicare is included in the "other" category due to the small number of children covered by the Medicare program. For adult stays, Medicare is reported as a separate category.
- Uninsured includes an insurance status of "self-pay" and "no charge."

When more than one payer is listed for a hospital discharge, the first-listed payer is used.

### *Diagnoses, ICD-9-CM, and Clinical Classifications Software (CCS)*

The principal diagnosis is that condition established after study to be chiefly responsible for the patient's admission to the hospital. Secondary diagnoses are concomitant conditions that coexist at the time of admission or that develop during the stay. All-listed diagnoses include the principal diagnosis plus these additional secondary conditions.

ICD-9-CM is the International Classification of Diseases, Ninth Revision, Clinical Modification, which assigns numeric codes to diagnoses. There are about 12,000 ICD-9-CM diagnosis codes.

CCS categorizes ICD-9-CM diagnoses into 260 clinically meaningful categories.<sup>7</sup> This "clinical grouper" makes it easier to quickly understand patterns of diagnoses and procedures.

For this report, pediatric cancer stays were defined as the following CCS diagnosis categories (italicized diagnoses are discussed in more depth in this brief):

- 11: Cancer of head and neck
- 12: Cancer of esophagus
- 13: Cancer of stomach
- 14: Cancer of colon
- 15: Cancer of rectum and anus
- 16: Cancer of liver and bile duct in liver
- 17: Cancer of pancreas
- 18: Cancer of other gastrointestinal organs and lining of abdominal cavity (peritoneum)
- 19: Cancer of bronchial tubes and lung
- 20: Other respiratory and chest cancers (intrathoracic)
- 21: Cancer of bone
- 22: Skin melanoma

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<sup>6</sup>HCUP Cost-to-Charge Ratio Files (CCR). Healthcare Cost and Utilization Project (HCUP). 2001–2003. U.S. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/db/state/costtocharge.jsp](http://www.hcup-us.ahrq.gov/db/state/costtocharge.jsp)

<sup>7</sup>HCUP CCS. Healthcare Cost and Utilization Project (HCUP). August 2006. U.S. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp](http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp)

- 23: Skin cancer other than melanoma
- 24: Breast cancer
- 25: Cancer of uterus
- 26: Cancer of cervix
- 27: Cancer of ovary
- 28: Other female genital cancer
- 29: Prostate cancer
- 30: Cancer of testicle
- 31: Other male genital cancer
- 32: Bladder cancer
- 33: Kidney cancer
- 34: Other urinary cancer
- 35: *Brain cancer and other nervous system cancer*
- 36: Thyroid cancer
- 37: Hodgkin's disease
- 38: Non-Hodgkin's lymphoma
- 39: *Cancer of blood (leukemia)*
- 40: Multiple myeloma
- 41: Other and unspecified cancer
- 42: Metastasis (spread of cancer or secondary cancer)
- 43: Cancer without specification of site
- 44: Tumors of unspecified nature or uncertain behavior
- 45: Chemotherapy and radiation therapy
- 46: Benign tumor of the uterus
- 47: Other and unspecified benign tumor

#### *Admission source*

Admission source indicates where the patient was located prior to admission to the hospital. Emergency admission indicates the patient was admitted to the hospital through the emergency department.

#### *Discharge status*

Discharge status indicates the disposition of the patient at discharge from the hospital, and includes the following six categories: routine (to home), transfer to another short-term hospital, other transfers (including skilled nursing facility, intermediate care, and another type of facility such as a nursing home), home health care, against medical advice (AMA), or died in the hospital.

### **About the NIS**

The HCUP Nationwide Inpatient Sample (NIS) is a nationwide database of hospital inpatient stays. The NIS is nationally representative of all community hospitals (i.e., short-term, non-Federal, non-rehabilitation hospitals). The NIS is a sample of hospitals and includes all patients from each hospital, regardless of payer. It is drawn from a sampling frame that contains hospitals comprising about 90 percent of all discharges in the United States. The vast size of the NIS allows the study of topics at both the national and regional levels for specific subgroups of patients. In addition, NIS data are standardized across years to facilitate ease of use.

### **About HCUP**

HCUP is a family of powerful health care databases, software tools, and products for advancing research. Sponsored by the Agency for Healthcare Research and Quality (AHRQ), HCUP includes the largest all-payer encounter-level collection of longitudinal health care data (inpatient, ambulatory surgery, and emergency department) in the United States, beginning in 1988. HCUP is a Federal-State-Industry Partnership that brings together the data collection efforts of many organizations—such as State data organizations, hospital associations, private data organizations, and the Federal government—to create a national information resource.

For more information about HCUP, visit <http://www.hcup-us.ahrq.gov/>.

HCUP would not be possible without the contributions of the following data collection Partners from across the United States:

**Arizona** Department of Health Services  
**Arkansas** Department of Health & Human Services  
**California** Office of Statewide Health Planning & Development  
**Colorado** Health & Hospital Association  
**Connecticut** Integrated Health Information (Chime, Inc.)  
**Florida** Agency for Health Care Administration  
**Georgia** GHA: An Association of Hospitals & Health Systems  
**Hawaii** Health Information Corporation  
**Illinois** Health Care Cost Containment Council and Department of Public Health  
**Indiana** Hospital & Health Association  
**Iowa** Hospital Association  
**Kansas** Hospital Association  
**Kentucky** Cabinet for Health and Family Services  
**Maryland** Health Services Cost Review Commission  
**Massachusetts** Division of Health Care Finance and Policy  
**Michigan** Health & Hospital Association  
**Minnesota** Hospital Association  
**Missouri** Hospital Industry Data Institute  
**Nebraska** Hospital Association  
**Nevada** Division of Health Care Financing and Policy, Department of Human Resources  
**New Hampshire** Department of Health & Human Services  
**New Jersey** Department of Health & Senior Services  
**New York** State Department of Health  
**North Carolina** Department of Health and Human Services  
**Ohio** Hospital Association  
**Oklahoma** Health Care Information Center for Health Statistics  
**Oregon** Association of Hospitals and Health Systems  
**Rhode Island** Department of Health  
**South Carolina** State Budget & Control Board  
**South Dakota** Association of Healthcare Organizations  
**Tennessee** Hospital Association  
**Texas** Department of State Health Services  
**Utah** Department of Health  
**Vermont** Association of Hospitals and Health Systems  
**Virginia** Health Information  
**Washington** State Department of Health  
**West Virginia** Health Care Authority  
**Wisconsin** Department of Health & Family Services

For additional HCUP statistics, visit HCUPnet, our interactive query system at [www.hcup.ahrq.gov](http://www.hcup.ahrq.gov).

### For More Information

For a detailed description of HCUP and more information on the design of the NIS and methods to calculate estimates, please refer to the following publications:

Steiner, C., Elixhauser, A., Schnaier, J. The Healthcare Cost and Utilization Project: An Overview. *Effective Clinical Practice* 5(3):143–51, 2002.

*Design of the HCUP Nationwide Inpatient Sample, 2004*. Online. August 8, 2006. U.S. Agency for Healthcare Research and Quality. [http://www.hcup-us.ahrq.gov/db/nation/nis/reports/NIS\\_2004\\_Design\\_Report.pdf](http://www.hcup-us.ahrq.gov/db/nation/nis/reports/NIS_2004_Design_Report.pdf)

Houchens, R., Elixhauser, A. *Final Report on Calculating Nationwide Inpatient Sample (NIS) Variances, 2001*. HCUP Methods Series Report #2003-2. Online. June 2005 (revised June 6, 2005). U.S. Agency for Healthcare Research and Quality. <http://www.hcup-us.ahrq.gov/reports/CalculatingNISVariances200106092005.pdf>

Houchens R. L., Elixhauser, A. *Using the HCUP Nationwide Inpatient Sample to Estimate Trends*. (Updated for 1988-2004). HCUP Methods Series Report #2006-05 Online. August 18, 2006. U.S. Agency for Healthcare Research and Quality. [http://www.hcup-us.ahrq.gov/reports/2006\\_05\\_NISTrends\\_Report\\_1988-2004.pdf](http://www.hcup-us.ahrq.gov/reports/2006_05_NISTrends_Report_1988-2004.pdf)

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other HCUP data and tools, and to share suggestions on how HCUP products might be enhanced to further meet your needs. Please e-mail us at [hcp@ahrq.gov](mailto:hcp@ahrq.gov) or send a letter to the address below:

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**Table 1. Pediatric cancer hospitalizations compared with all pediatric hospital stays, 2005**

	<b>Pediatric hospital stays for cancer*</b>	<b>All pediatric hospital stays</b>
Number of hospital stays (percentage of all pediatric stays)	99,500 (3.5%)	2,869,000 (100%)
Mean age	8.4 years	6.4 years
Percentage of hospital stays by pediatric age group		
Under 1 year	8.2%	28.2%
1 to 4 years	26.3%	23.7%
5 to 9 years	21.7%	14.7%
10 to 14 years	24.5%	15.2%
15 to 17 years	19.3%	18.2%
Percentage of stays for females	44.8%	48.5%
Percentage admitted through the emergency department	8.8%	43.5%
Percentage died in the hospital	0.9%	0.5%
Mean length of stay, days	6.4 days	4.5 days
Mean hospital cost per stay	\$17,500	\$8,500
Mean hospital cost per day	\$2,700	\$1,900
Total aggregate costs	\$1.7 billion	\$23.5 billion

\*Based on principal diagnosis.

Note: Pediatric stays are defined as hospitalizations for individuals under the age of 18 (excluding newborns).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2005.

**Table 2. Pediatric cancer hospitalizations compared with adult hospital stays, 2005**

	<b>Pediatric hospital stays for cancer*</b>	<b>Adult hospital stays for cancer</b>
Number of hospital stays (percentage of all stays)	99,500 (3.5%)†	1,840,400 (6.7%)‡
Percentage of stays for females	44.8%	60.0%
Percentage admitted through the emergency department	8.8%	22.0%
Percentage died in the hospital	0.9%	1.1%
Mean length of stay, days	6.4 days	6.1 days
Mean hospital cost per stay	\$17,500	\$12,100
Mean hospital cost per day	\$2,700	\$2,000
Total aggregate costs	\$1.7 billion	\$22.3 billion

\*Based on principal diagnosis.

†Percent of all pediatric, non-newborn stays.

‡Percent of all adult, non-pregnancy related stays.

Note: Pediatric stays are defined as hospitalizations for individuals under the age of 18 (excluding newborns).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2005.

**Table 3. Top 10 most common pediatric cancer hospitalizations, 2005‡**

<b>Principal diagnosis</b>	<b>Total number of stays</b>	<b>Mean length of stay (in days)</b>	<b>Mean cost (in dollars)</b>	<b>Aggregate cost (in dollars)</b>	<b>Mean age</b>	<b>Percentage of stays for females</b>	<b>Percentage of stays admitted from the ED</b>	<b>Percentage died in the hospital</b>
Maintenance chemotherapy, radiotherapy	52,800	4.0	\$8,700	\$459.0 million	8.6	44.3%	0.8%	*
Leukemias	10,100	16.1	\$47,000	\$474.8 million	7.6	42.7%	25.4%	3.0%
Cancer of brain and nervous system	6,100	9.0	\$28,300	\$178.9 million	8.0	46.1%	22.3%	2.9%
Neoplasms of unspecified nature or uncertain behavior	3,800	7.6	\$24,000	\$90.4 million	9.1	47.8%	17.9%	*
Cancer of bone and connective tissue	3,200	7.4	\$22,000	\$70.8 million	10.1	50.1%	9.8%	*
Cancer, other primary	3,000	11.6	\$33,900	\$102.6 million	4.2	47.7%	10.3%	*
Secondary malignancies	2,200	7.2	\$21,100	\$45.6 million	9.7	44.9%	13.6%	*
Non-Hodgkin's lymphoma	1,700	13.1	\$37,700	\$64.2 million	10.6	34.7%	22.1%	*
Cancer of kidney and renal pelvis	1,400	8.3	\$22,100	\$31.6 million	4.2	51.3%	21.0%	*
Hodgkin's disease	900	7.7	\$22,900	\$20.5 million	13.8	48.6%	16.5%	*

‡Based on principal diagnosis for children under the age of 18 (excluding newborns).

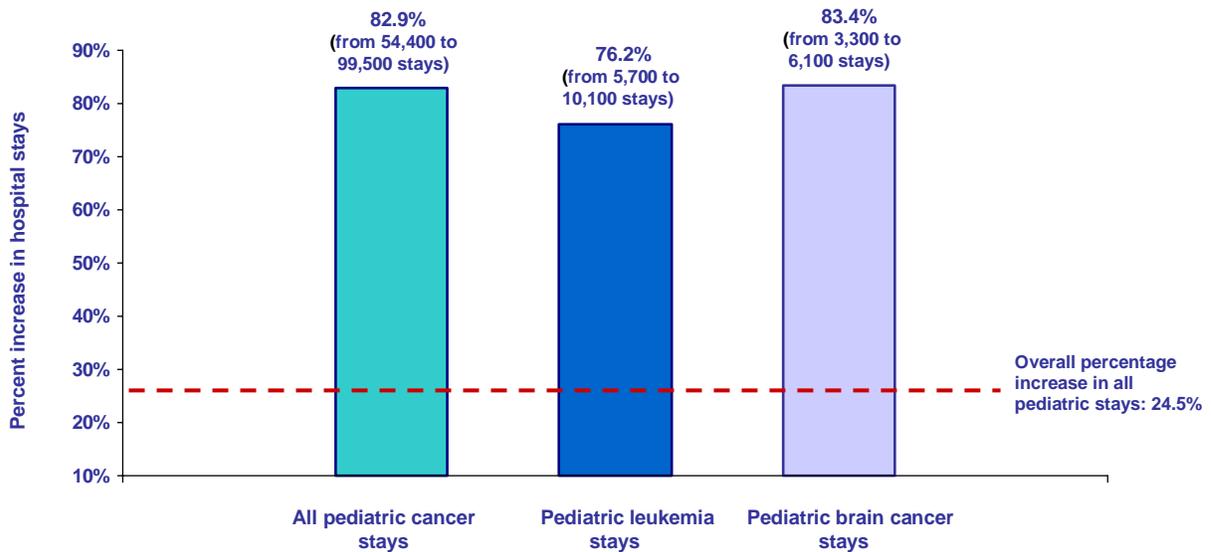
\*Too few cases to report with statistical reliability.

Note: Miscellaneous cancers that are grouped as "other benign neoplasms" (CCS category 47) are excluded from this table.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2005.



**Figure 1. Percentage increase in volume of pediatric cancer hospital stays compared with all pediatric stays, 2000–2005\***

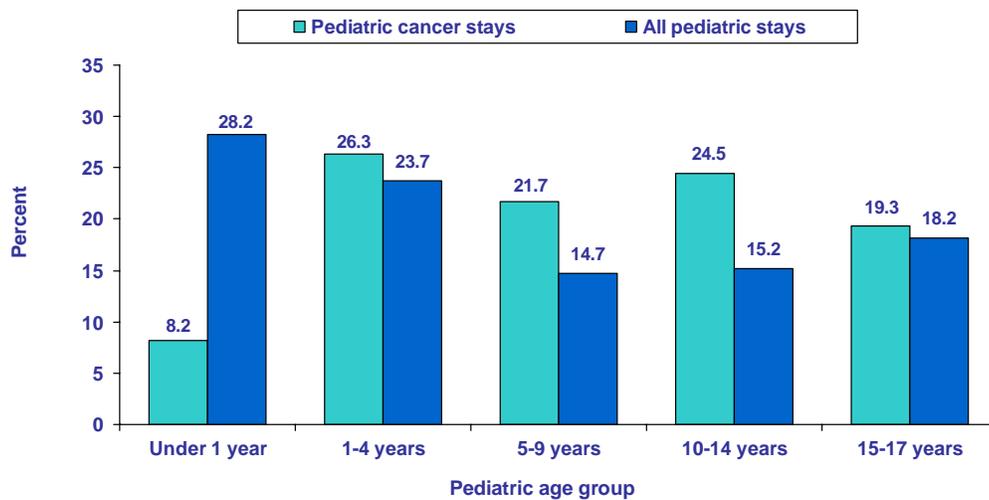


\*Based on principal diagnosis for children and adolescents under the age of 18 (excluding newborns).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2000 and 2005.



**Figure 2. Distribution of pediatric cancer hospital stays compared with all pediatric stays, by age group, 2005\***

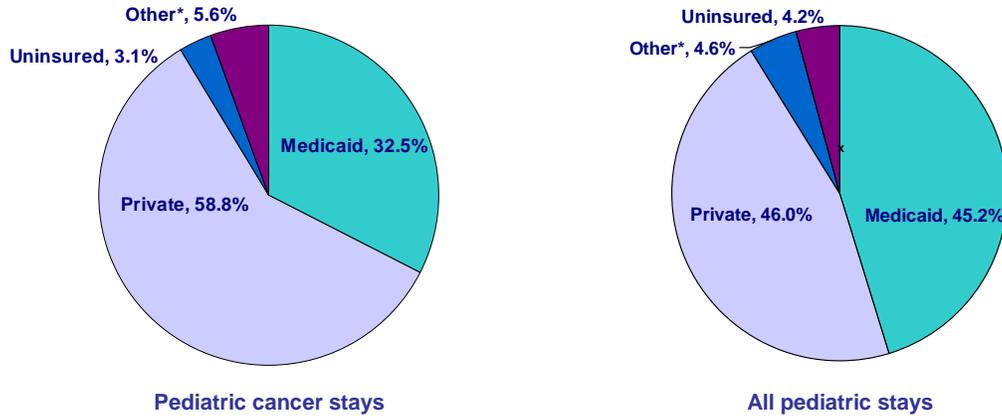


\*Based on principal diagnosis for children and adolescents under the age of 18 (excluding newborns).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2005.



**Figure 3. Percentage of pediatric cancer hospital stays compared with all pediatric stays, by payer, 2005\***



\*Based on principal diagnosis for children and adolescents under the age of 18 (excluding newborns).

\*\*Note: Other includes Medicare, Worker's Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2005.