

**Maryland 2002  
Hospital Discharge Data from General Hospitals  
For Maryland Residents with Cancer Diagnoses**

Center for Cancer Surveillance and Control  
Maryland Department of Health and Mental Hygiene  
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## Highlights of the 2002 Maryland hospital discharge data:

- 3.2% of all Maryland hospital discharges in 2002 had a primary diagnosis of cancer. Of the 641,809 Maryland hospital discharges in 2002, 34,144 or 5.3% had cancer listed in any one of the 15 discharge diagnostic categories. Of these 34,144 discharges, 20,431 (3.2% of all discharges) had cancer as the primary diagnostic category.
- 8,712 of 20,431 (42.6%) of hospital discharges for cancer as a primary diagnosis in Maryland have one of the Cigarette Restitution Fund (CRF) targeted cancers as the primary diagnosis, i.e., lung and bronchus, colon and rectum, prostate, female breast, oral, melanoma, and cervical.
- The total hospital charges for Maryland residents in whom the primary diagnosis on discharge was any type of cancer was \$293,520,635. See caveats in Definitions and Notes as to why this is an underestimate of the total cost.
- Among the targeted cancers, total hospital-specific costs (not including physician fees and laboratory fees) in 2002 had a median cost of \$9,008 per hospitalization for all targeted cancers together.
- At the top of the cost list is colon and rectum cancer, having a median total hospital charge of \$12,000; the second highest cost was oral cancer with a median cost of \$11,736, followed by cancer of the lung and bronchus with a median cost of \$11,145.

## Background

The Cigarette Restitution Fund (CRF) in Maryland required that funding be provided to local health departments in Maryland's 23 counties and to Johns Hopkins Medical Institutions and the University of Maryland Medical Group in Baltimore City after the jurisdictions submitted plans for Cancer Prevention, Education, Screening, and Treatment. The CRF law requires that DHMH determine "targeted cancers." The targeted cancers selected were lung, colorectal, female breast, prostate, oral, cervical, and melanoma.

The CRF law also requires that the local screening programs either pay for treatment of clients or link clients to treatment if they are diagnosed with a targeted or non-targeted cancer identified through the screening. Because of this requirement, determining the costs of cancer care is important for CRF planning in Maryland.

Maryland's hospital rates are regulated by the Health Services Cost Review Commission (HSCRC). Among other data, the HSCRC collects data from hospitals in Maryland about each hospital discharge and uses these data to determine the rates allowed for that facility. Because costs of

hospitalization account for a major portion of the cost of cancer treatment, we sought to determine the number of hospitalizations and the cost of those hospitalizations among the residents of Maryland who have been discharged from reporting Maryland hospitals with a diagnosis of cancer.

The analysis presented in this document is designed to help planners at DHMH and the local programs allocate CRF funds among cancer prevention, education, screening, and treatment.

## **Methods**

General hospitals in Maryland report a standard set of information to the Health Services Cost Review Commission (HSCRC) on each hospital discharge. The HSCRC maintains a database, by year, of this information and makes available a database containing non-confidential (unidentified) discharge information for analysis.

DHMH staff analyzed the calendar year 2002 discharge file using SAS software.

The number of hospitalizations where cancer is listed as the primary diagnosis or as any diagnosis among the 15 provided diagnoses was calculated for Maryland and compared to the total number of hospitalizations for the year. The type of cancer was determined by ICD code for the primary diagnosis and in each of the other 14 diagnostic positions coded on the discharge summary. Table 1 depicts the type of cancer by its diagnostic position. Using only the primary diagnosis of cancer, Table 2 gives the total number of cancer discharges and the total by cancer type for each Maryland jurisdiction of residence of the patient. Figure 2 plots the total of general hospital discharges with cancer as the primary diagnosis by jurisdiction of residence.

In order to standardize these numbers for comparison across jurisdictions, we calculated crude rates for the population, age-adjusted standardized rates and the number of hospitalizations for cancer divided by the number of cancer cases reported in each jurisdiction. The crude rates in Figure 3 are the number of general hospital discharges with cancer as a primary diagnosis for each jurisdiction (Table 2) per 10,000 population of each jurisdiction.

The rates in Figure 4 were age-adjusted and standardized using the 2000 U.S. standard million population, which is broken down by age group in 19 categories. We calculated the age-specific rate for all cancers as the primary diagnosis for each age category in each jurisdiction, then, using the 2000 U.S. standard million, we calculated the age-adjusted rate for each jurisdiction standardized to the 2000 U.S. standard million.

In Figure 5, the number of general hospital discharges for all cancers as a primary diagnosis for each jurisdiction was divided by the number of new cancer cases reported to the Maryland Cancer Registry diagnosed in that jurisdiction that year. The number of new cancer cases diagnosed in each jurisdiction was provided by the Maryland Cancer Registry.

The data in Figures 2 - 5 present counts, rates, and ratios that use the HSCRC zip code of the patient's residence to impute 'Jurisdiction of Residence.'

Data obtained from HSCRC is secure from unauthorized access and disclosure. DHMH manages and releases this information in accordance with the HSCRC Data Use Agreement. Cells with counts of 0-5 hospital discharges are suppressed and presented as "<6." Complementary suppression of discharge counts in additional cell(s) is used, denoted by "s," to prevent back-calculation of numbers in those cells with primary suppression.

### Definitions and Notes

**"General hospital"** means any of Maryland's 66 general hospitals. These exclude specialty hospitals such as chronic care, rehabilitation, psychiatric, Veterans, or orthopedic hospitals.

**"ICD-9"** codes mean codes from the International Classification of Disease 9<sup>th</sup> Revision, Clinical Modification 2001 code book (AMA Press, July, 2000).

**"Any cancer"** means having an International Classification of Disease (ICD-9) code denoting cancer in the hospital discharge dataset. ICD-9 codes that denote primary or secondary cancer are found in Attachment 1.

**"Targeted cancer"** means one of seven cancers selected as "targeted" under the Cigarette Restitution Fund program. These include lung, colorectal, female breast, prostate, cervical, oral, and melanoma, and their ICD-9 codes are found in Attachment 1.

**"All other cancers" or "Non-targeted cancers"** mean all other cancers found in the list in Attachment 1 other than the targeted cancers—and do include secondary cancers.

**"Secondary cancer"** means having an ICD-9 code of 197.0—198.99 that denotes secondary cancer in various sites.

**"Diagnostic position" or "Diagnosis category."** Upon discharge from a hospital, the hospital codes each individual discharge by up to 15 diagnostic ICD-9 codes that reflect the diagnoses the patient has. The coding instructions to the hospital state that the *primary diagnosis*

is the “condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital.”

When an ICD-9 code appears in a “secondary,” “tertiary,” or subsequent diagnostic category, it is less certain the patient was admitted *because of* that diagnosis or whether this is another diagnosis the patient has that is *unrelated to* this hospitalization. For example, a patient admitted for a heart attack will have “myocardial infarction” coded as the primary diagnosis; if the patient *also* has colorectal (CRC) cancer, colorectal cancer may be coded in one of the subsequent diagnostic categories. Having a diagnosis in a secondary, tertiary, or subsequent diagnostic category may or may not indicate that the hospitalization was *due to* the cancer for purposes of attributing the reason for or the costs of the hospitalization to that cancer.

We have chosen to use “cancer as the primary diagnosis” in most of the tables and figures because we were certain that those represented a hospitalization *due to* that cancer. We recognize that these data are an *underestimate* of the total number of hospitalizations due to that cancer. Ideally, we would include the cancer-related causes of hospitalization but the exact number of these is difficult or impossible to determine.

**“Hospital discharge” versus “Patient discharge.”** In one year of HSCRC hospital discharge data, each hospital discharge is listed as a separate record. The analyses contained in this document looked at *hospital discharges*. Some patients may have been hospitalized more than once during the period and are thus counted more than once in our analysis. Because the HSCRC database does not have identifiers, it is not possible to determine whether a patient had one or multiple hospital discharges within that year and we could *not* analyze based on the number of *patients* discharged from Maryland hospitals in that period.

**“Jurisdiction of residence”** is the Maryland location where the hospitalized patient was noted to reside when admitted to the hospital. These include Maryland’s 23 counties and Baltimore City.

**“Total costs”** are the total costs billed for the hospitalization, such as room, pharmacy, radiology, laboratory, operating room, and central supply costs, but excluding costs that are not part of the hospital bill, such as the physician, internist, oncologist, or surgeon, or laboratory. Hospitalizations for which the total costs were zero dollars were removed from the dataset for this analysis because they likely reflected patients who were not actually admitted. The amount paid for the services will be the entire amount or 94%-96% of the amount

if the insurer receives a discounted rate; Medicare and Medical Assistance receive the 6% reduction in the rate.

**“Primary source of payment” and “Secondary source of payment”** mean the first and second sources of payment for the hospitalization as declared by the patient at the time of admission. Because this is declared on admission, it may not accurately reflect who actually is billed for the hospitalization after discharge. For example, a patient may lose insurance coverage, or may have said “self pay” but be found eligible for Medical Assistance and therefore not be billed for the hospitalization.

**Number of hospital discharges—confidentiality considerations.** Because of confidentiality restrictions on the use of the non-confidential dataset, all cells in the tables with a number less than 6 (i.e., 0-5) were suppressed and presented as “<6.” Complementary suppression of discharge counts in additional cell(s) is used, denoted by “s,” to prevent back-calculation of numbers in those cells with primary suppression.

## Results

Figure 1 compares the number and percent of discharges of Maryland residents from General Hospitals in Maryland where any cancer is listed in any of 15 diagnosis positions, with the number of discharges where cancer was not among any of the listed diagnoses. Of the hospital discharges in 2002, 34,144 of 641,809, or 5.3%, had a cancer listed in one or more of the diagnostic categories; 20,431 discharges, or 3.2%, had cancer listed as the primary diagnosis.

Figure 2 plots the total number of hospital discharges where any cancer was listed as the primary diagnosis by the jurisdiction of residence of the patient. Total number of hospital discharges ranged from 62 discharges in Garrett County to a high of 4,116 discharges for Baltimore County residents.

Figure 3 depicts the crude rate of general hospital discharges where cancer was listed as the primary diagnosis per 10,000 population for each jurisdiction, showing a range of 20.7 hospitalizations with a primary diagnosis of cancer in Garrett County to a high of 70.0 per 10,000 population in Kent County.

Figure 4 shows the age-adjusted rate of hospital discharges where cancer was listed as the primary diagnosis per 100,000 population, showing a range of 171.8 per 100,000 population in Garrett County to a high of 500.7 per 100,000 population in Kent County.

Figure 5 shows the ratio of hospital discharges to the number of all new cancer cases reported. This graph shows a range of 0.34 in Garrett County to a high of 1.17 in Kent County.

Figures 6 through 12 show the total hospital costs for all of the targeted cancers. These figures also show that based on median hospital costs, the targeted cancers that are the most expensive to treat are colon and rectum, oral, and lung cancers.

Table 1 analyzes each of the 15 diagnostic positions separately and asks whether any type of cancer was coded in that diagnostic position. Those listed in the primary diagnostic position (20,431 discharges) were most likely people hospitalized for that diagnosis. For discharges where cancer is listed in a 2<sup>nd</sup> through 15<sup>th</sup> position, the discharge may have already been counted in that same cancer under the primary diagnosis, under another cancer, or under an entirely different diagnosis. Therefore, one cannot add the columns to get a total number of hospitalizations for that cancer. In a percentage of the hospitalizations where cancer is listed in 2<sup>nd</sup> through 15<sup>th</sup> diagnostic category, the reason for the hospitalization will be because of that cancer; however, determining that percentage is difficult. Additionally, the next to the last column in Table 1 lists the number of

hospitalizations for which "metastatic cancer" is listed as the primary or other diagnostic position.

About half (42.6%) of hospital discharges in Maryland where primary or metastatic cancer is listed as the primary diagnosis have one of the targeted cancers as the primary diagnosis. Examining the row of Primary Diagnosis, of Table 1 reveals targeted cancers (lung, colon and rectum, prostate, female breast, oral, melanoma, and cervical) contribute a total of 8,712 of 20,431, or 42.6%, of total discharges where cancer is listed as the primary diagnosis. By way of comparison, metastatic cancers are listed as the primary diagnosis 4,245 of 20,431, or 20.8%, of these discharges.

Table 2 gives a breakdown of discharges in Maryland, where cancer was listed as the primary diagnosis by type of cancer and jurisdiction among the 20,431 discharges where cancer was the primary diagnosis.

The total of hospital costs for patients where cancer was the primary diagnosis is shown in Table 3. The HSCRC data gives the sum of the total hospital costs. Listed for each cancer are the number of discharges, the mean, median, minimum, and maximum costs, and the total hospital costs for that cancer. Hospital costs do *not* reflect physician and other costs that are billed separately. The total hospital costs for Maryland residents in whom the primary diagnosis on discharge was any type of cancer was \$293,520,635 (see Definitions and Notes as to why this is an underestimate of the total cost).

Besides providing data about hospital costs for all cancer types, Table 3 further reveals information about the relative cost burden or cost of treatment among the seven targeted cancers. Median costs were used for comparing and ranking hospital costs. Total hospital costs (not including physician fees and some laboratory fees) in 2002 for all targeted cancers together had a median total cost of \$9,008 per hospitalization. Based on median hospital cost, the three targeted cancers with the highest hospital cost burden are, in order of cost: 1) colon and rectum (\$12,000), 2) oral (\$11,736), and 3) lung and bronchus (\$11,145).

Tables 4, 5, and 6, display the data on the number of hospital discharges and hospital costs by type of cancer for three different age groups: those 49 and under, 50-64 year olds, and for those residents 65 years and over. For the 49 and under age category, median total costs in 2002 were \$9,041; for discharges of persons ages 50 to 64, the median was \$8,343; for the age group 65 and over, the median cost at discharge was \$9,790.

Tables 4, 5, and 6 further show that the median total hospital costs due to the seven targeted cancers decreased \$698 between the 49 and under and 50 to 64 age groups. The median total hospital costs due to the seven

targeted cancers increased \$1,447 between the 50 to 64 and 65 and over age groups.

Figure 1.

**Total General Hospital Discharges among Maryland Residents for Calendar Year 2002  
(N=641,809)**

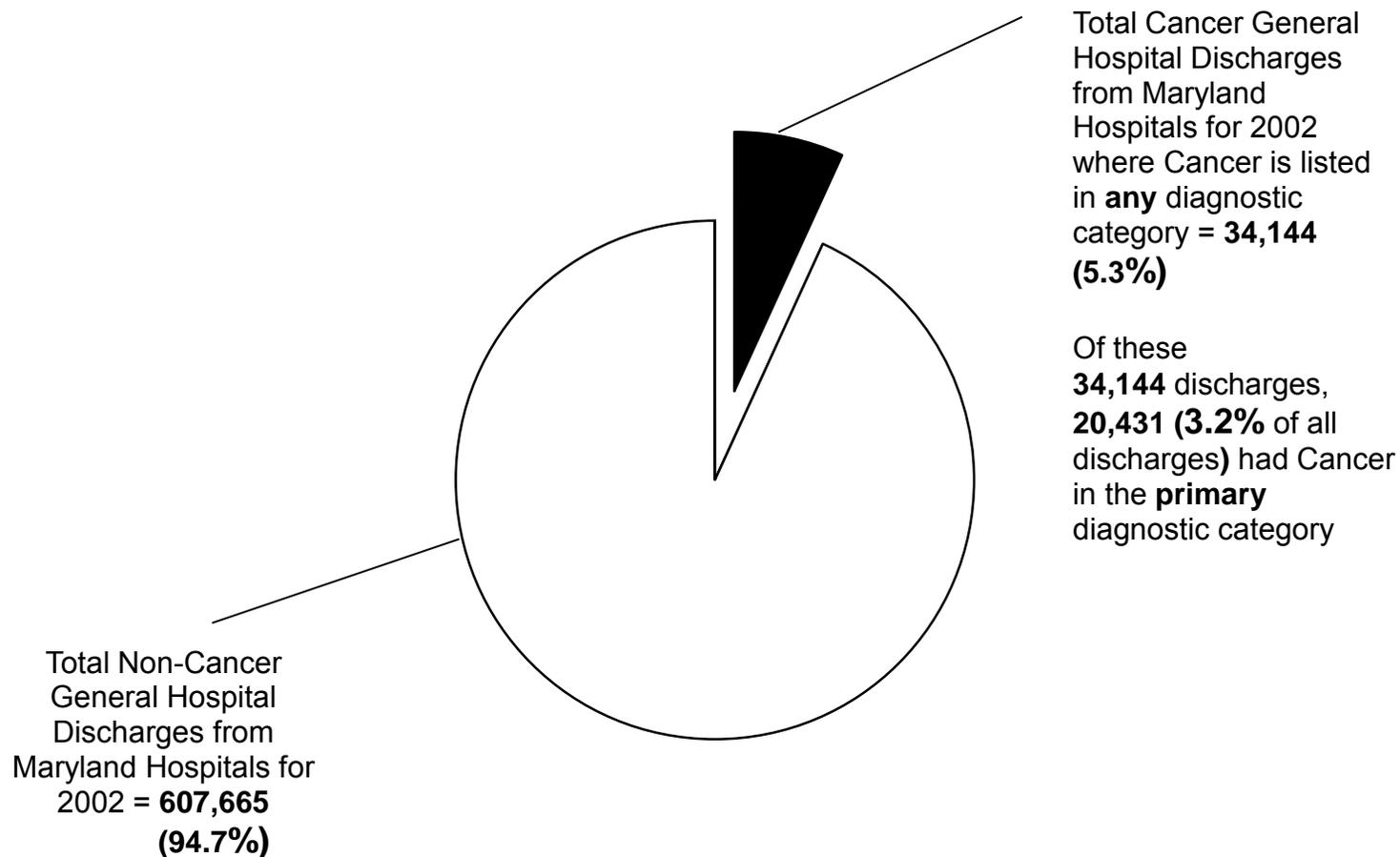


Table 1.

**Frequency of General Hospital Discharges in 2002 With Targeted and All Other Cancers Listed as the Primary Diagnosis\* and Subsequent Diagnoses\* Among Maryland Residents**

Hospital diagnosis position where cancer is listed	Type of Cancer										
	Lung and Bronchus	Colon and Rectum	Female Breast	Prostate	Oral	Melanoma	Cervix	Total Targeted Cancer	Other	Metastatic Cancer	Total Cancer
as Primary Dx	2,582	2,515	1,509	1,520	306	76	204	8,712	7,474	4,245	20,431
as 2nd Dx	593	144	59	47	19	s	<6	879	538	4,914	6,331
as 3rd Dx	217	57	50	44	12	16	8	404	309	2,341	3,054
as 4th Dx	76	29	46	32	7	<6	<6	197	243	1,220	1,660
as 5th Dx	29	13	47	41	s	9	<6	150	162	633	945
as 6th Dx	23	<6	28	22	8	s	6	98	125	384	607
as 7th Dx	8	<6	29	20	7	<6	<6	73	96	207	376
as 8th Dx	7	<6	23	28	<6	7	<6	69	72	120	261
as 9th Dx	<6	<6	13	12	<6	<6	<6	31	42	83	156
as 10th Dx	<6	<6	6	8	<6	<6	<6	20	37	56	113
as 11th Dx	<6	<6	8	8	<6	<6	<6	17	33	31	81
as 12th Dx	<6	<6	<6	8	<6	<6	<6	15	19	21	55
as 13th Dx	<6	<6	<6	<6	<6	<6	<6	6	16	10	32
as 14th Dx	<6	<6	<6	<6	<6	<6	<6	<6	14	s	26
as 15th Dx	<6	<6	<6	<6	<6	<6	<6	<6	7	s	16

<6=Cells containing 0-5 hospital discharges are suppressed per HSCRC Data Use Agreement.

s= Data in a cell is suppressed to prevent disclosure of data in other cell(s).

\*International Classification of Diseases, Version 9 Attachment 1

Table 2.

**Number of General Hospital Discharges in 2002 With Targeted and All Other Cancers Listed as the Primary Diagnosis Among Maryland Residents  
by Jurisdiction of Residence**

Jurisdiction or County	Type of Cancer									
	Lung and Bronchus	Colon and Rectum	Female Breast	Prostate	Oral	Melanoma	Cervix	Other Cancer	Metastatic	Total
Allegany	66	50	10	31	<6	<6	<6	123	122	406
Anne Arundel	267	238	164	188	32	11	10	753	331	1,994
Baltimore County	540	537	272	278	58	21	32	1,512	866	4,116
Baltimore City	520	434	245	207	76	6	59	1,180	804	3,531
Calvert	27	43	22	21	<6	<6	<6	72	35	224
Caroline	13	19	11	7	<6	<6	<6	49	28	130
Carroll	70	79	45	54	9	6	7	279	152	701
Cecil	37	38	23	20	<6	<6	<6	80	79	281
Charles	46	32	19	31	<6	<6	<6	110	51	294
Dorchester	37	24	17	17	<6	<6	<6	57	43	196
Frederick	51	80	35	37	7	<6	<6	252	130	596
Garrett	<6	11	10	<6	<6	<6	<6	22	9	62
Harford	96	78	66	77	13	<6	s	371	206	919
Howard	67	81	57	53	s	<6	12	300	134	715
Kent	25	14	13	14	<6	<6	<6	43	24	136
Montgomery	240	271	205	193	31	7	27	978	460	2,412
Prince George's	232	249	194	154	s	<6	23	648	368	1,891
Queen Anne's	28	25	20	14	7	<6	<6	59	34	189
St. Mary's	20	32	23	17	6	<6	<6	65	45	214
Somerset	20	s	<6	10	<6	<6	<6	48	27	118
Talbot	24	31	15	25	<6	<6	<6	66	53	219
Washington	62	63	15	42	7	<6	<6	194	105	494
Wicomico	50	42	10	11	<6	<6	<6	115	77	311
Worcester	35	32	14	13	12	<6	<6	82	53	247
Maryland, Unspecified	<6	<6	<6	<6	<6	<6	<6	16	9	35
<b>Total</b>	2,582	2,515	1,509	1,520	306	76	204	7,474	4,245	20,431

<6=Cells containing 0-5 hospital discharges are suppressed per HSCRC Data Use Agreement.

s= Data in a cell is suppressed to prevent disclosure of data in other cell(s).

Figure 2. **Total General Hospital Discharges in 2002 With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence**

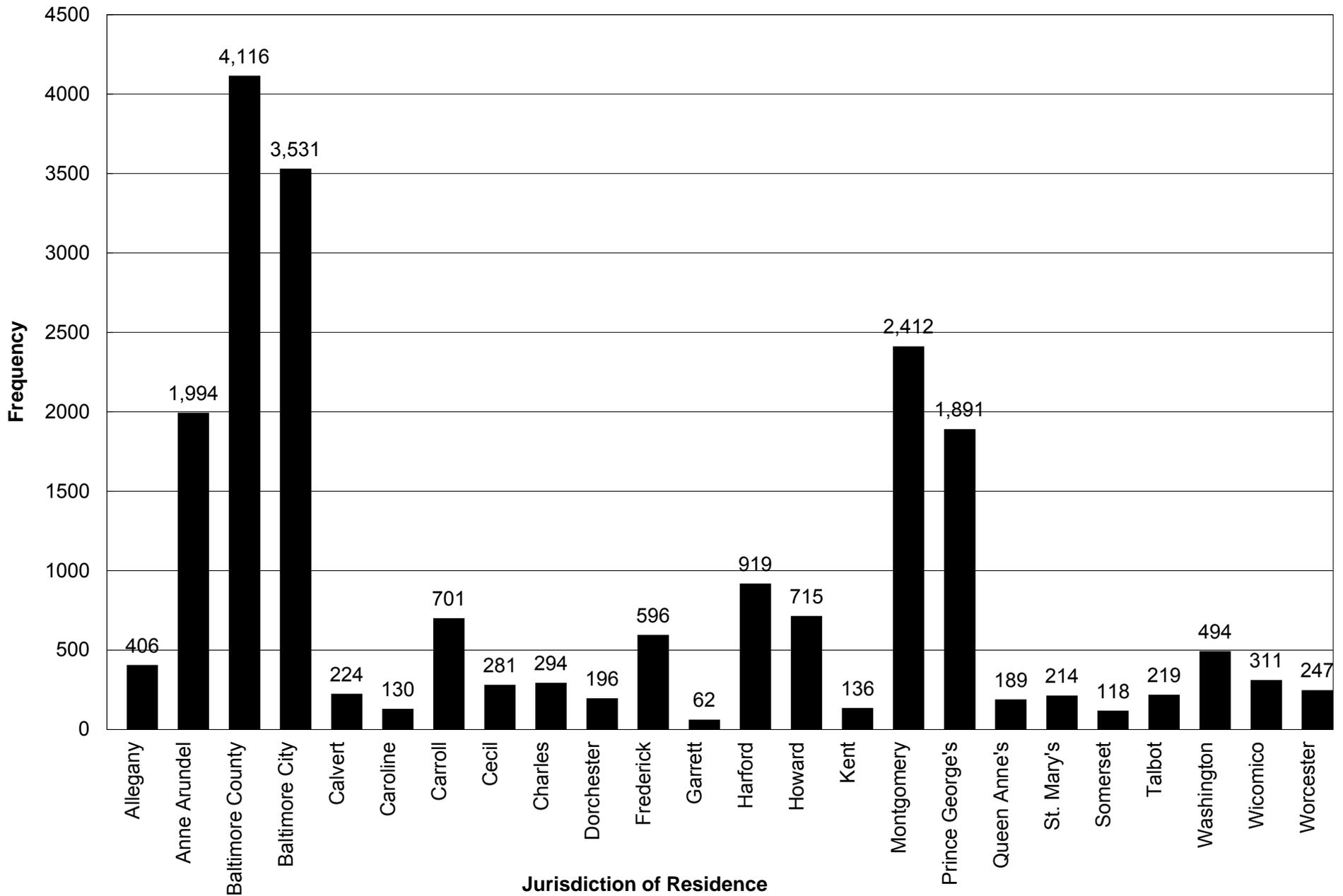


Figure 3. **Crude Rate of General Hospital Discharges per 10,000 Jurisdiction Population With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence in 2002**

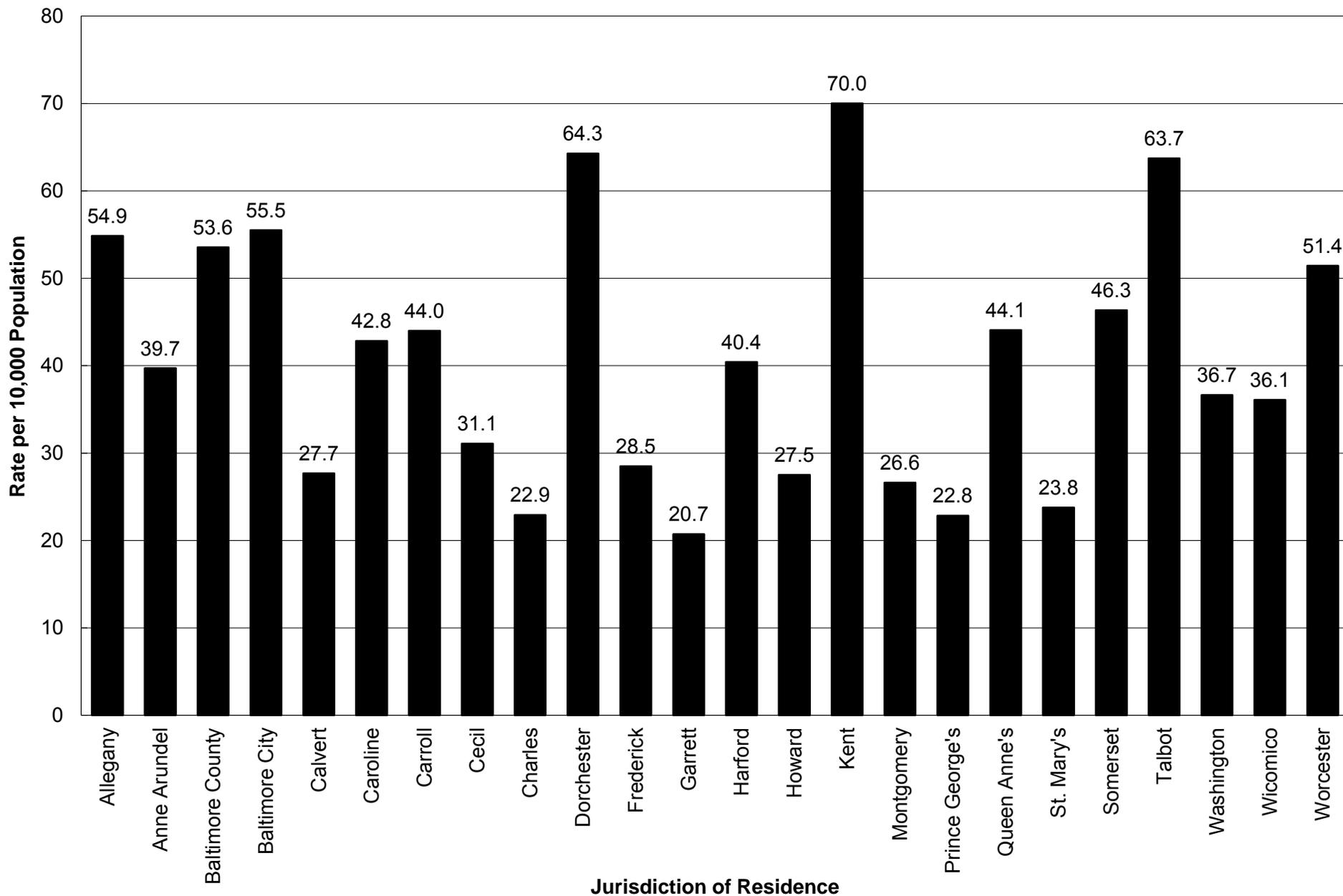
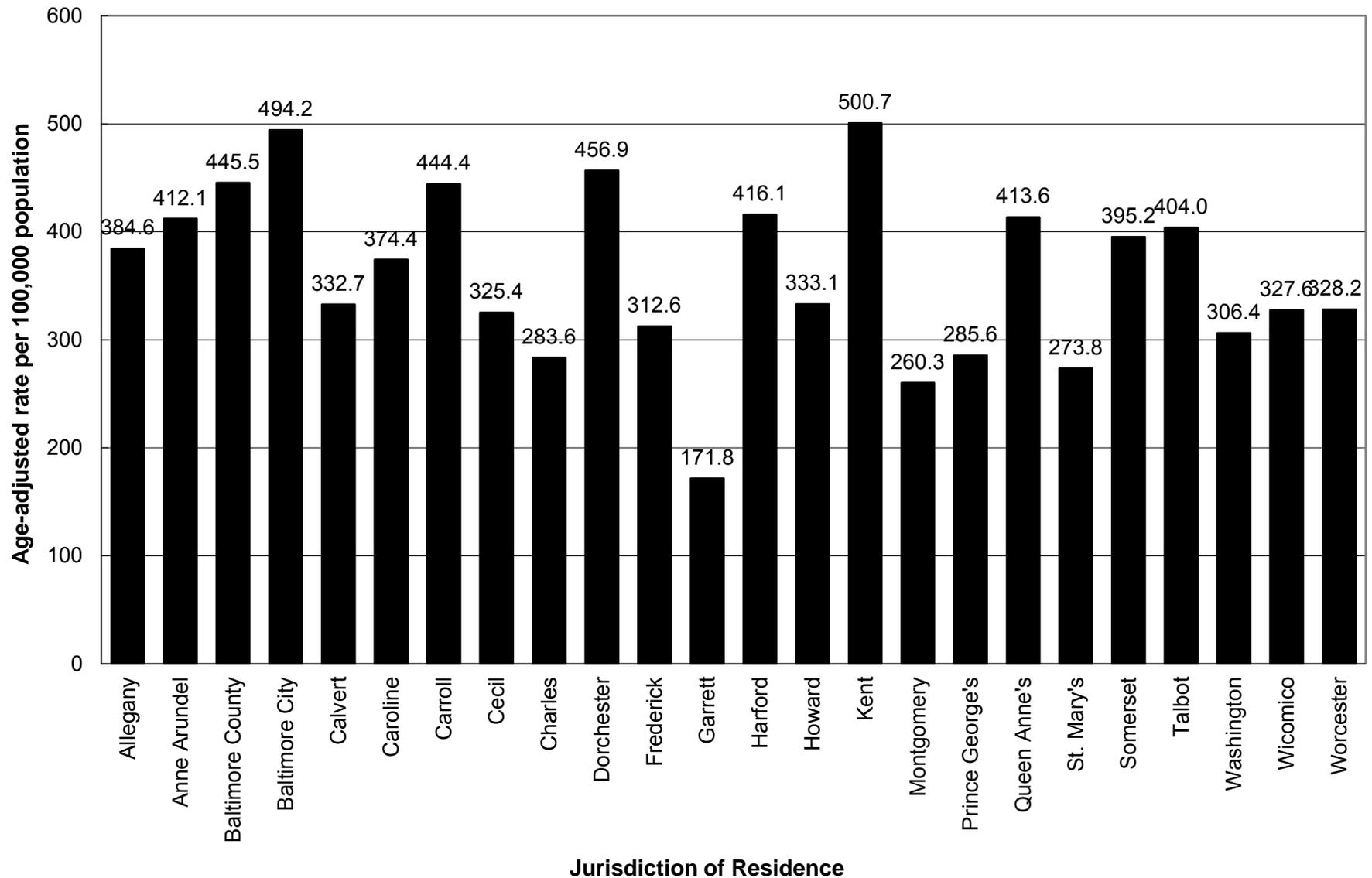


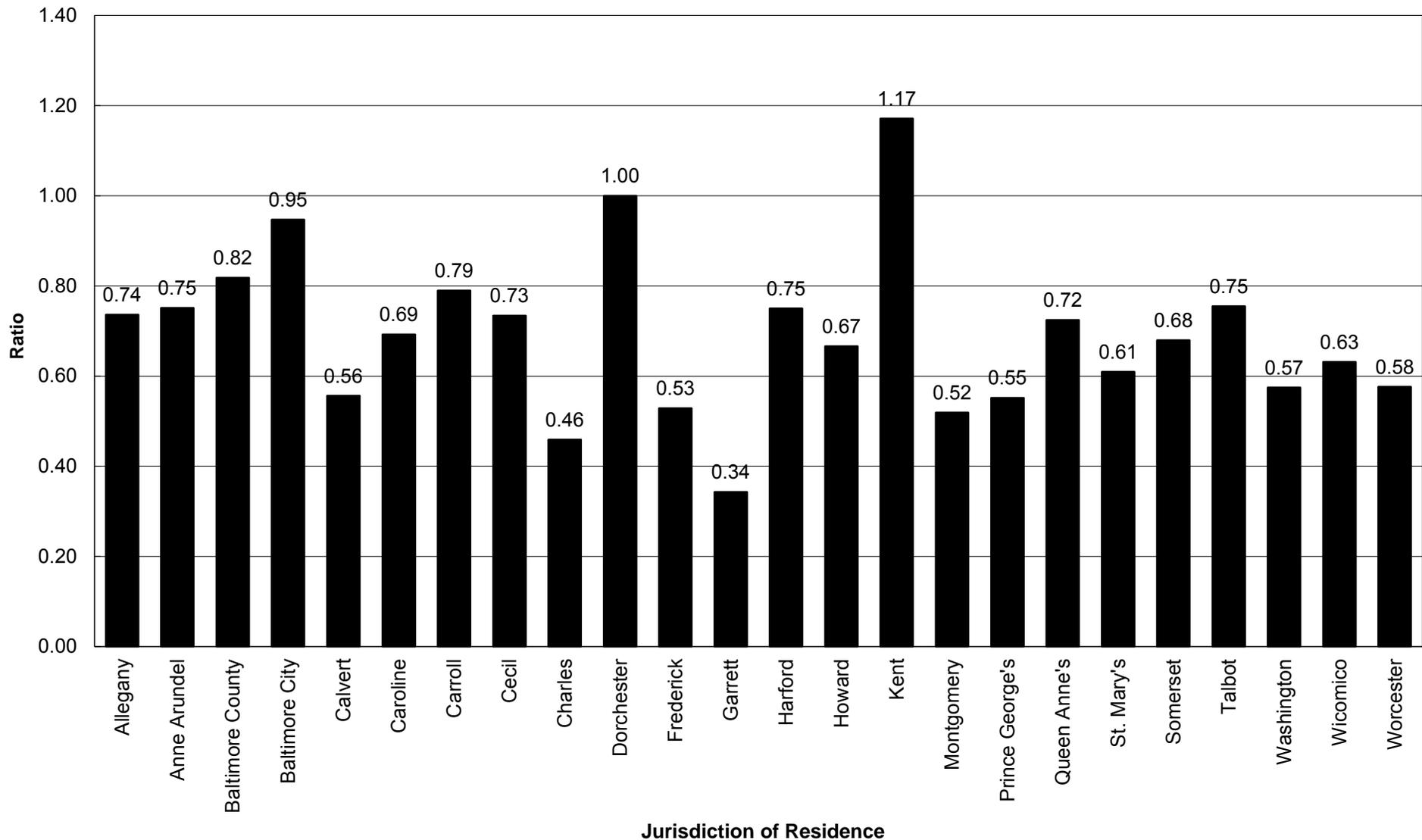
Figure 4.

**Age-adjusted\* Rate of General Hospital Discharges per 100,000 Population With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence in 2002**



\* Rates are per 100,000 and are age-adjusted to 2000 U.S. standard million population

**Figure 5. Ratio of General Hospital Cancer Discharges in 2002 With Targeted and All Other Cancers Listed as the Primary Diagnosis to the Number of All New Cancer Cases Reported,\* by Jurisdiction of Residence**



\* Total cancer cases reported to the Maryland Cancer Registry for 2002

Table 3.

**General Hospital Discharges in Maryland in 2002:  
Costs\* by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for All Ages**

Cancer	Total Discharges	Total Cost for Hospitalization				
		Mean	Median	Minimum	Maximum	Total
Lung and Bronchus	2,582	\$14,062	\$11,145	\$536	\$146,340	\$36,309,156
Colon and Rectum	2,514	\$15,776	\$12,000	\$642	\$269,790	\$39,660,979
Female Breast	1,509	\$7,019	\$5,389	\$746	\$122,651	\$10,591,247
Prostate	1,520	\$8,136	\$7,354	\$1,325	\$64,417	\$12,366,788
Oral	306	\$18,812	\$11,736	\$1,054	\$155,752	\$5,756,499
Melanoma	76	\$8,673	\$5,855	\$1,028	\$51,131	\$659,126
Cervix	204	\$11,407	\$7,747	\$903	\$274,511	\$234,060
<b>Total of Targeted Cancers</b>	<b>8,711</b>	<b>\$12,360</b>	<b>\$9,008</b>	<b>\$536</b>	<b>\$274,511</b>	<b>\$107,670,856</b>
<b>Total Other Cancers</b>	<b>11,718</b>	<b>\$15,860</b>	<b>\$9,243</b>	<b>\$318</b>	<b>\$962,284</b>	<b>\$185,849,779</b>
<b>Total of All Cancers</b>	<b>20,429</b>	<b>\$14,368</b>	<b>\$9,121</b>	<b>\$318</b>	<b>\$962,284</b>	<b>\$293,520,635</b>

\*Hospitalizations where the total costs was zero dollars were removed from this analysis.

Table 4.

**General Hospital Discharges in Maryland in 2002:  
Costs\* by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 49 and Under**

Cancer	Total Discharges	Total Cost for Hospitalization				
		Mean	Median	Minimum	Maximum	Total
Lung and Bronchus	237	\$14,595	\$11,139	\$737	\$102,720	\$3,459,049
Colon and Rectum	256	\$13,750	\$11,050	\$1,574	\$155,001	\$3,519,896
Female Breast	368	\$8,703	\$7,223	\$746	\$121,587	\$3,202,749
Prostate	89	\$8,939	\$8,087	\$4,285	\$27,766	\$795,565
Oral	62	\$16,363	\$9,651	\$1,902	\$64,097	\$1,014,522
Melanoma	21	\$8,373	\$6,709	\$1,028	\$23,190	\$175,824
Cervix	97	\$12,377	\$7,745	\$903	\$274,511	\$1,200,532
<b>Total of Targeted Cancers</b>	<b>1,130</b>	<b>\$11,830</b>	<b>\$9,041</b>	<b>\$737</b>	<b>\$274,511</b>	<b>\$13,368,138</b>
<b>Total Other Cancers</b>	<b>2,330</b>	<b>\$21,824</b>	<b>\$9,630</b>	<b>\$537</b>	<b>\$962,284</b>	<b>\$50,849,902</b>
<b>Total of All Cancers</b>	<b>3,460</b>	<b>\$18,560</b>	<b>\$9,333</b>	<b>\$537</b>	<b>\$962,284</b>	<b>\$64,218,039</b>

\*Hospitalizations where the total costs was zero dollars were removed from this analysis.

Table 5.

**General Hospital Discharges in Maryland in 2002:  
Costs\* by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 50 to 64**

Cancer	Total Discharges	Total Cost for Hospitalization				
		Mean	Median	Minimum	Maximum	Total
Lung and Bronchus	769	\$13,614	\$10,573	\$796	\$139,561	\$10,469,377
Colon and Rectum	667	\$14,598	\$11,380	\$642	\$165,785	\$9,736,542
Female Breast	551	\$7,254	\$5,675	\$830	\$46,332	\$3,997,107
Prostate	783	\$8,078	\$7,442	\$2,327	\$64,417	\$6,325,270
Oral	138	\$19,110	\$14,017	\$1,690	\$82,109	\$2,637,171
Melanoma	20	\$8,777	\$5,285	\$1,135	\$45,188	\$175,536
Cervix	57	\$11,010	\$9,196	\$3,029	\$71,890	\$627,561
<b>Total of Targeted Cancers</b>	<b>2,985</b>	<b>\$11,380</b>	<b>\$8,343</b>	<b>\$642</b>	<b>\$165,785</b>	<b>\$33,968,564</b>
<b>Total Other Cancers</b>	<b>3,572</b>	<b>\$15,273</b>	<b>\$9,402</b>	<b>\$318</b>	<b>\$280,065</b>	<b>\$54,555,993</b>
<b>Total of All Cancers</b>	<b>6,557</b>	<b>\$13,501</b>	<b>\$8,772</b>	<b>\$318</b>	<b>\$280,065</b>	<b>\$88,524,557</b>

\*Hospitalizations where the total costs was zero dollars were removed from this analysis.

Table 6.

**General Hospital Discharges in Maryland in 2002:  
Costs\* by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 65 and Over**

Cancer	Total Discharges	Total Cost for Hospitalization				
		Mean	Median	Minimum	Maximum	Total
Lung and Bronchus	1,576	\$14,201	\$11,305	\$536	\$146,340	\$22,380,730
Colon and Rectum	1,591	\$16,596	\$12,519	\$667	\$269,790	\$26,404,540
Female Breast	590	\$5,748	\$4,633	\$821	\$122,651	\$3,391,391
Prostate	648	\$8,096	\$6,844	\$1,325	\$56,314	\$5,245,954
Oral	106	\$19,857	\$11,360	\$1,054	\$155,752	\$2,104,806
Melanoma	35	\$8,793	\$5,869	\$1,097	\$51,131	\$307,766
Cervix	50	\$9,979	\$6,008	\$1,302	\$90,717	\$498,966
<b>Total of Targeted Cancers</b>	<b>4,596</b>	<b>\$13,128</b>	<b>\$9,790</b>	<b>\$536</b>	<b>\$269,790</b>	<b>\$60,334,154</b>
<b>Total Other Cancers</b>	<b>5,816</b>	<b>\$13,831</b>	<b>\$8,995</b>	<b>\$352</b>	<b>\$438,324</b>	<b>\$80,443,885</b>
<b>Total of All Cancers</b>	<b>10,412</b>	<b>\$13,521</b>	<b>\$9,356</b>	<b>\$352</b>	<b>\$438,324</b>	<b>\$140,778,039</b>

\*Hospitalizations where the total costs was zero dollars were removed from this analysis.

Figure 6.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002  
Where Lung and Bronchus Cancer is Listed as the Primary Diagnosis**

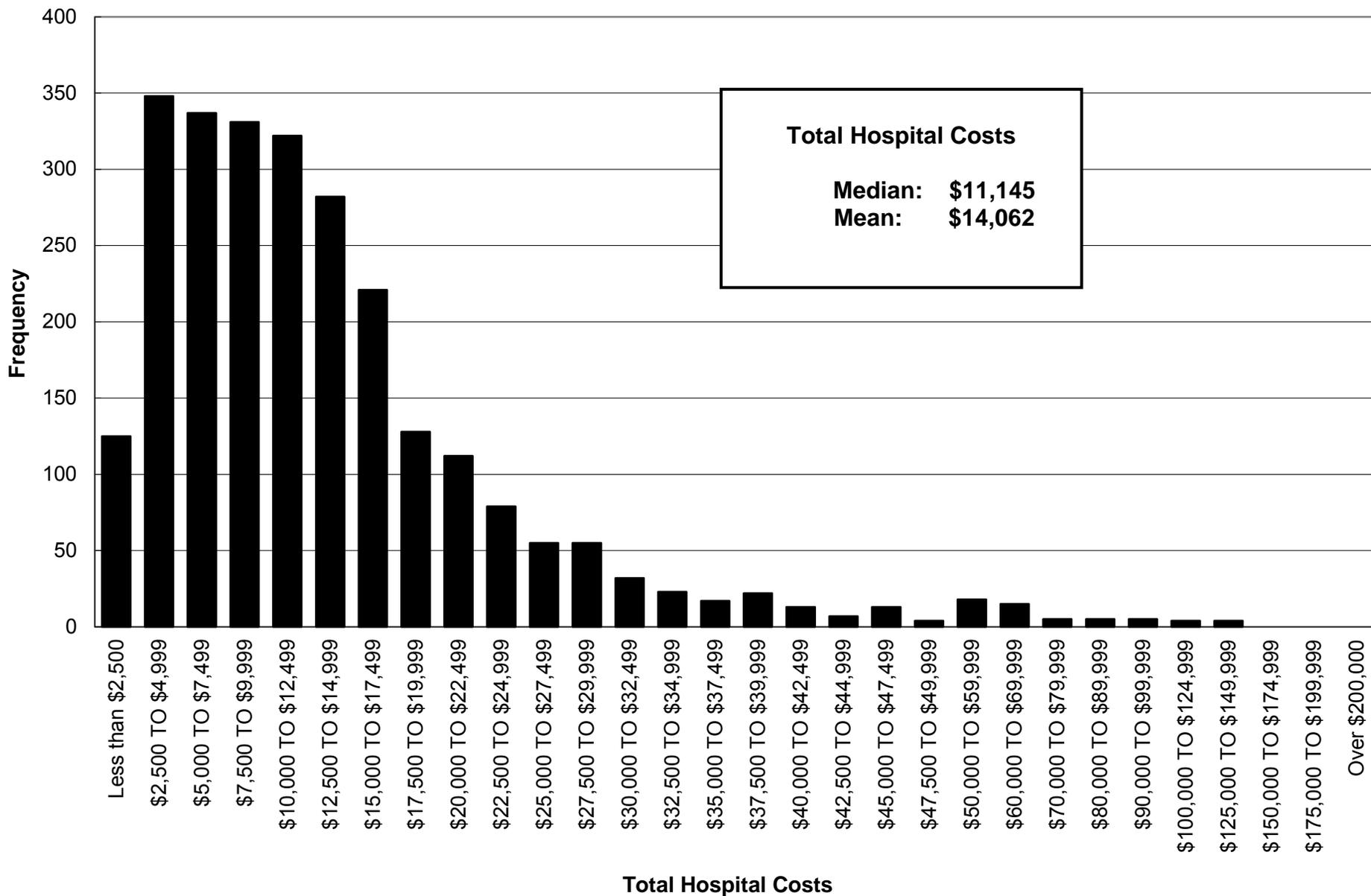


Figure 7.

### Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002 Where Colon and Rectum Cancer is Listed as the Primary Diagnosis

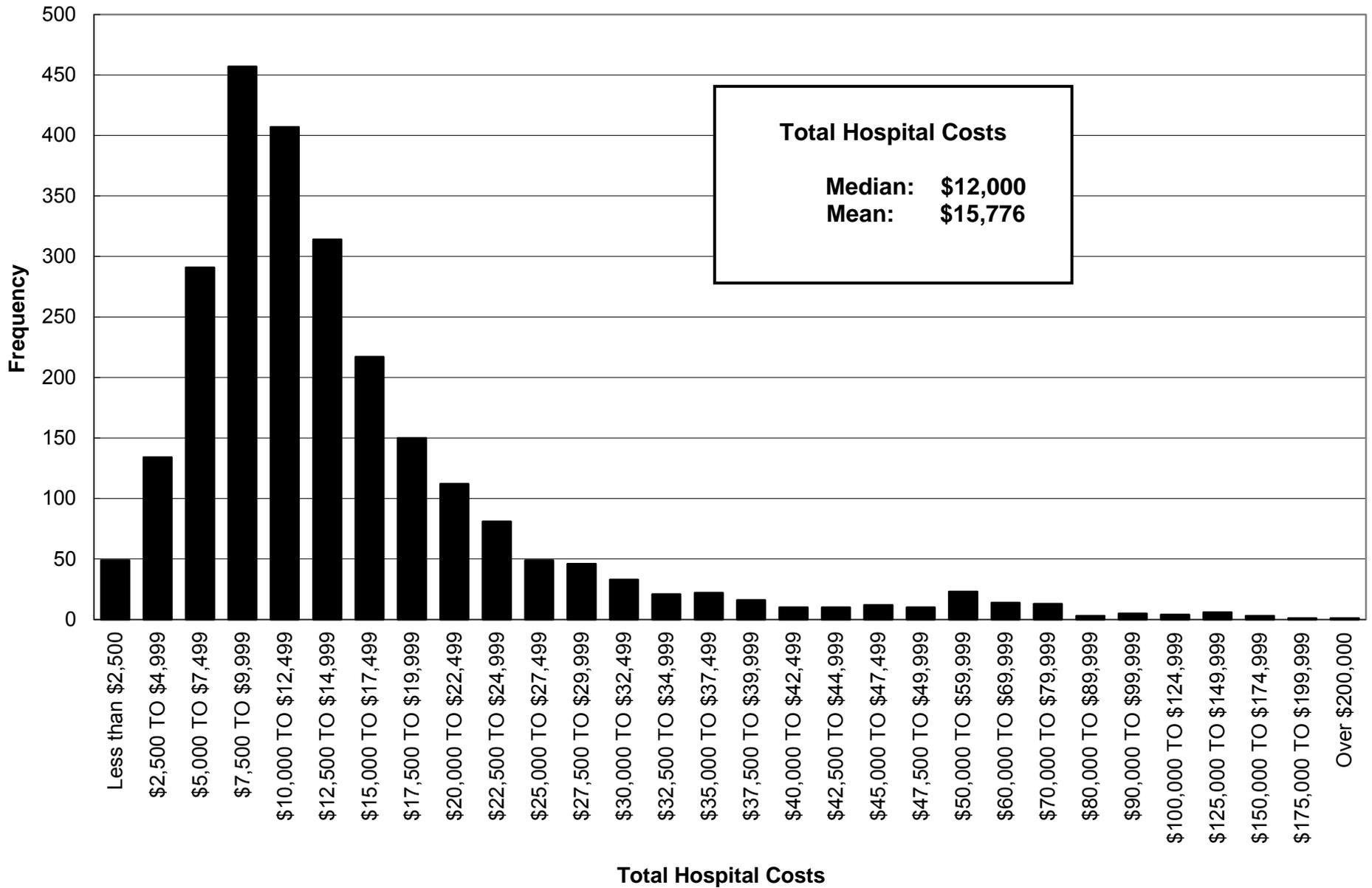


Figure 8.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002  
Where Female Breast Cancer is Listed as the Primary Diagnosis**

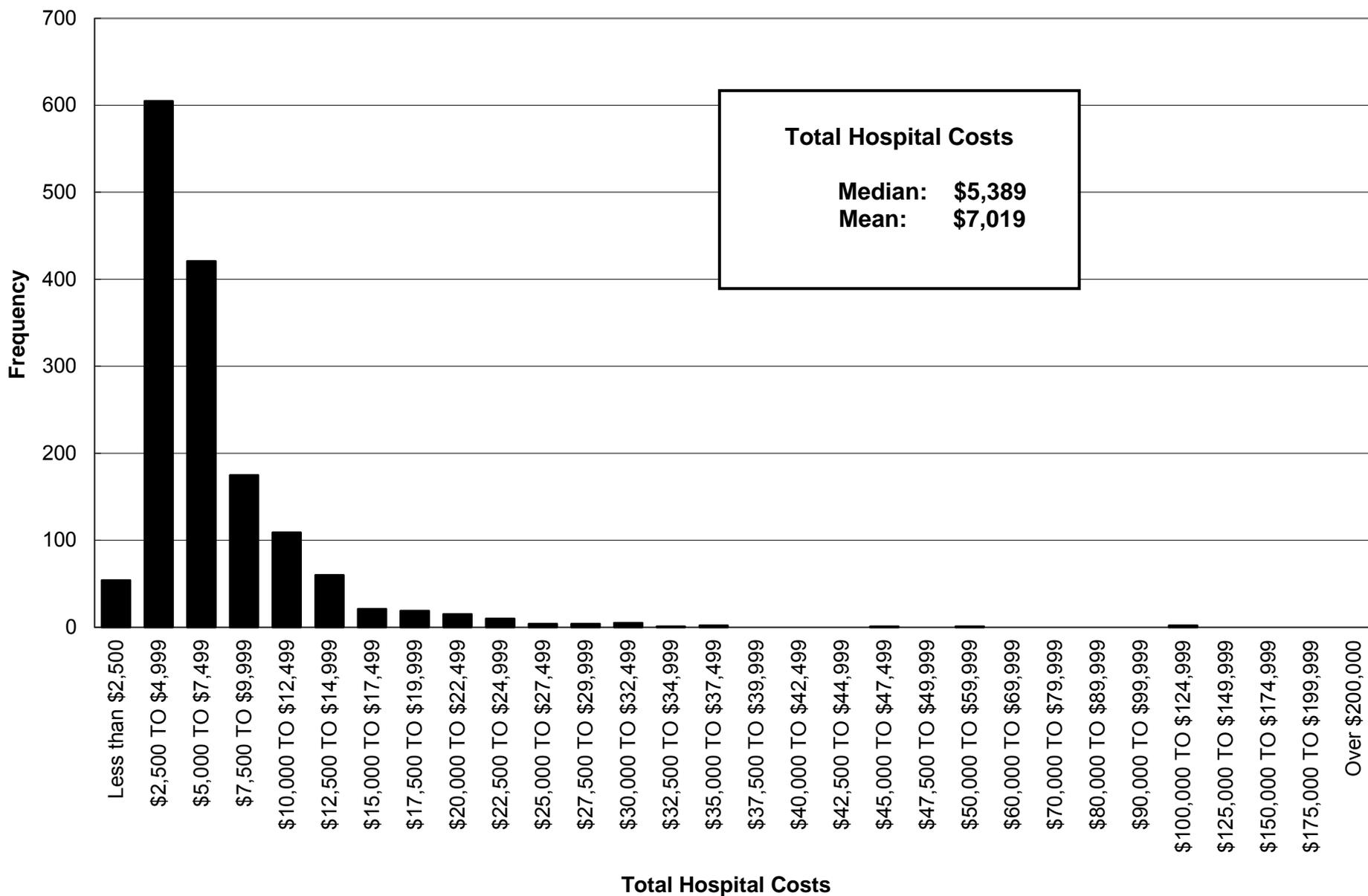


Figure 9.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002  
Where Prostate Cancer is Listed as the Primary Diagnosis**

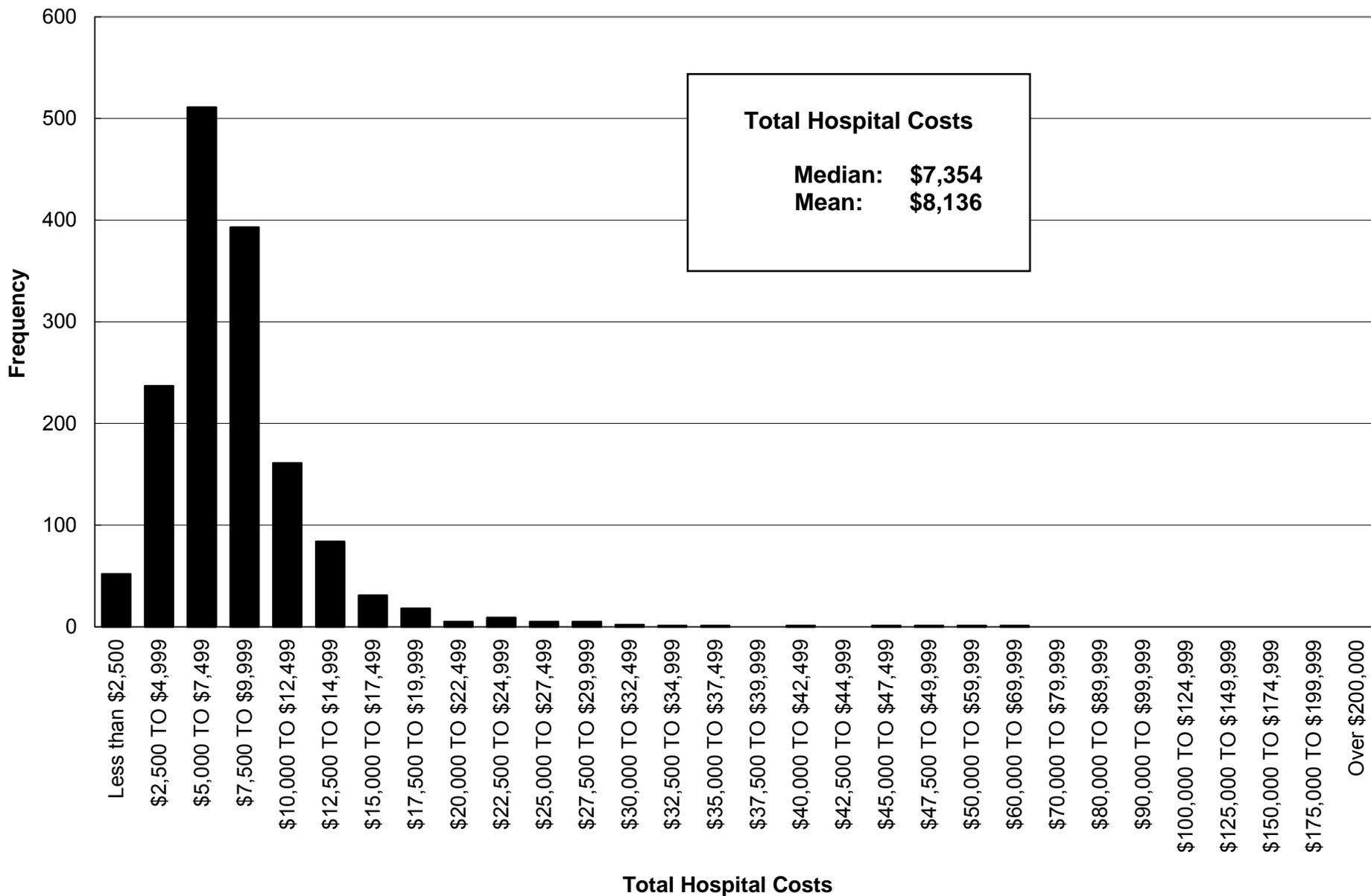


Figure 10.

### Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002 Where Oral Cancer is Listed as the Primary Diagnosis

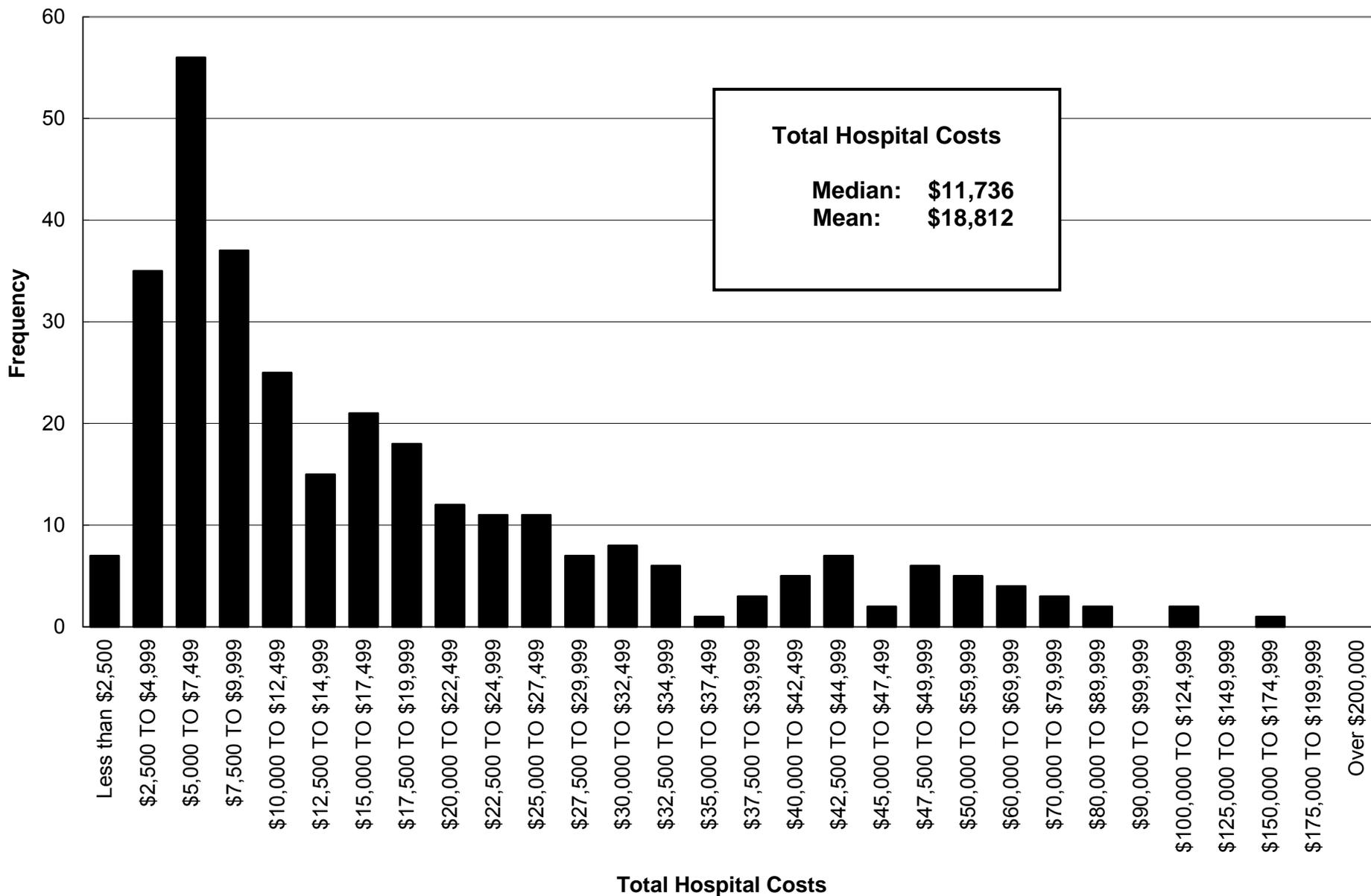


Figure 11.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002  
Where Melanoma is Listed as the Primary Diagnosis**

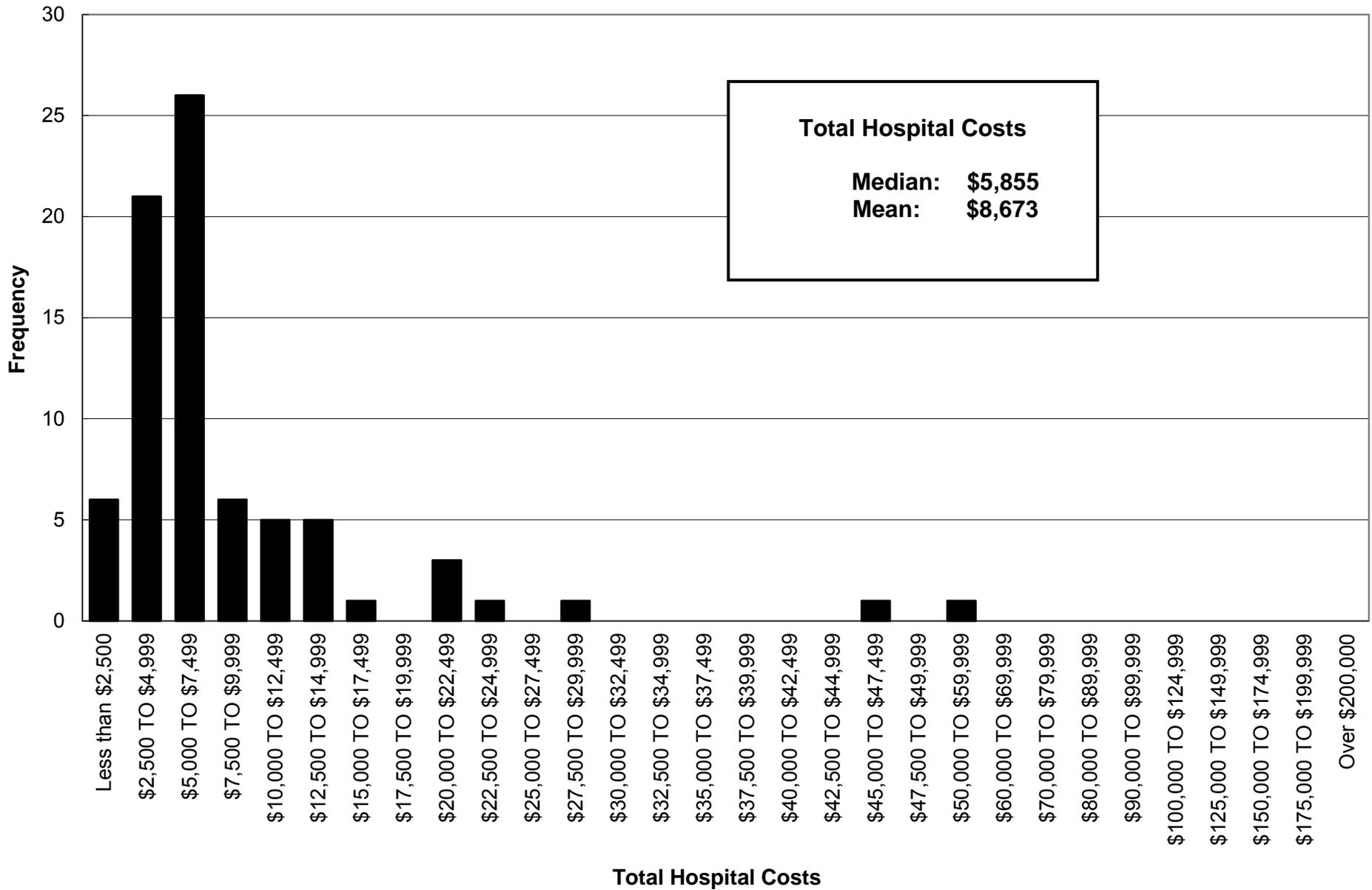


Figure 12.

### Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002 Where Cervix Cancer is Listed as the Primary Diagnosis

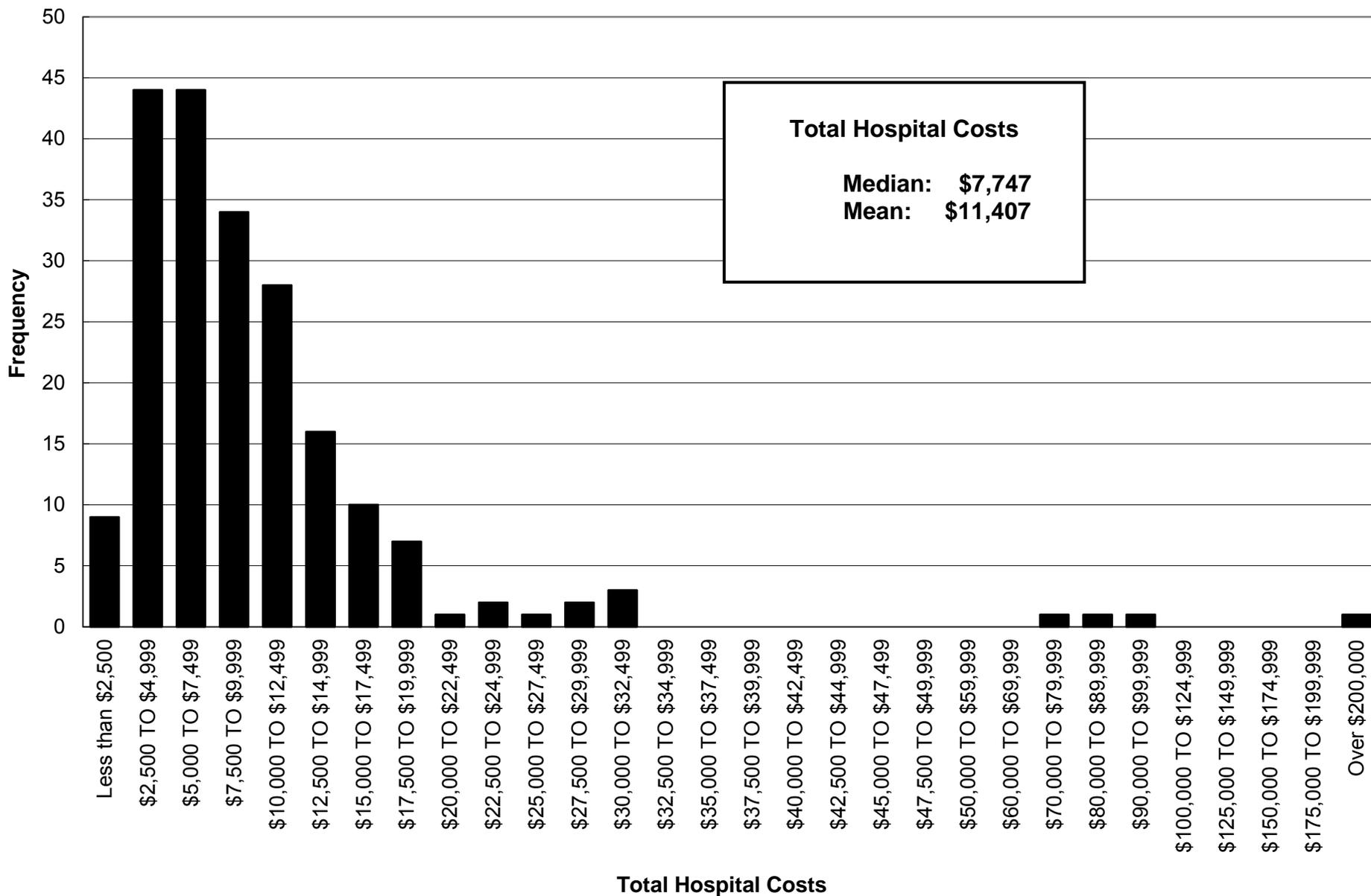


Figure 13.

### Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002 Where Other Non-Targeted Cancer is Listed as the Primary Diagnosis

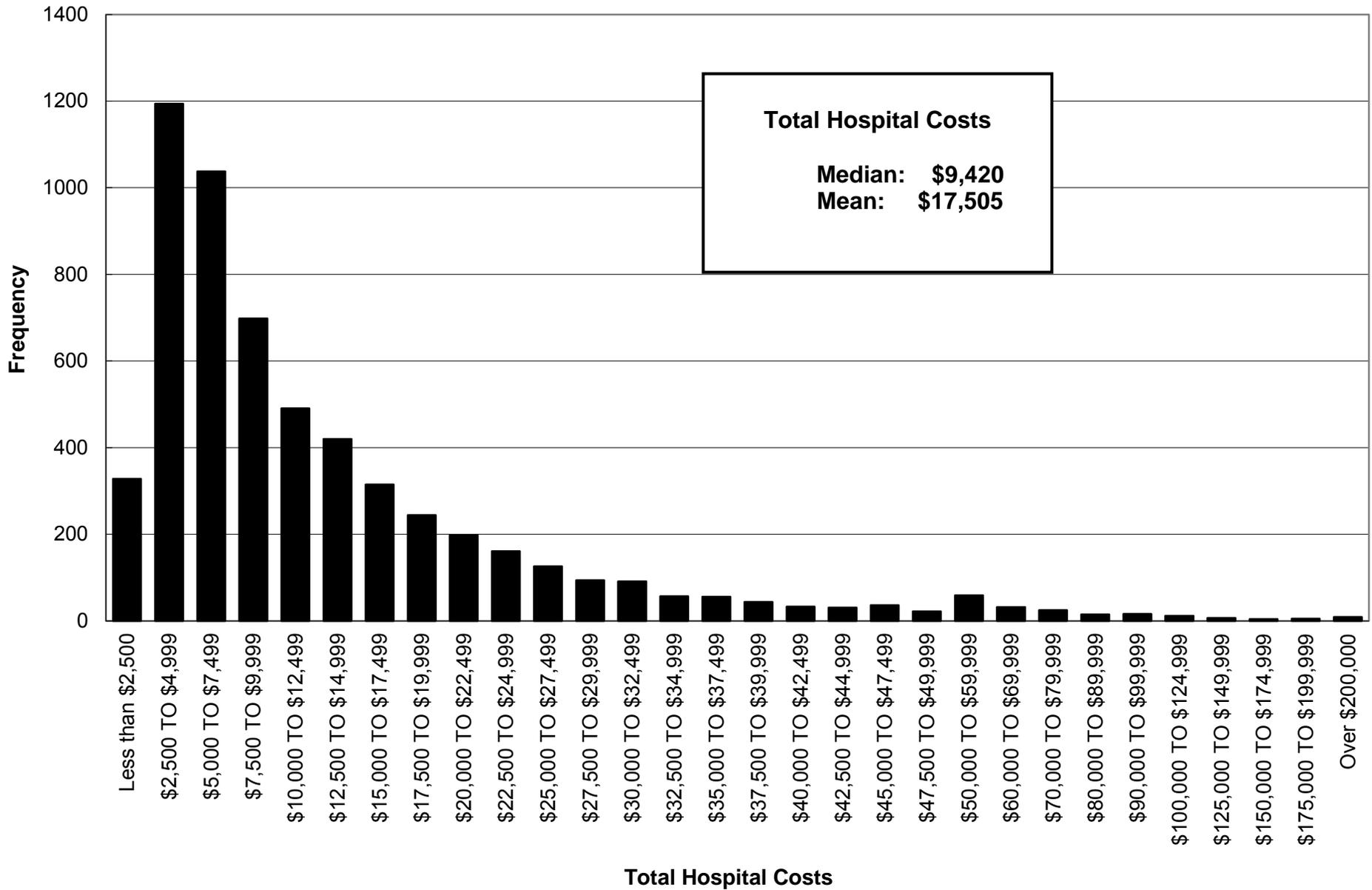


Figure 14.

### Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002 Where Metastatic Cancer is Listed as the Primary Diagnosis

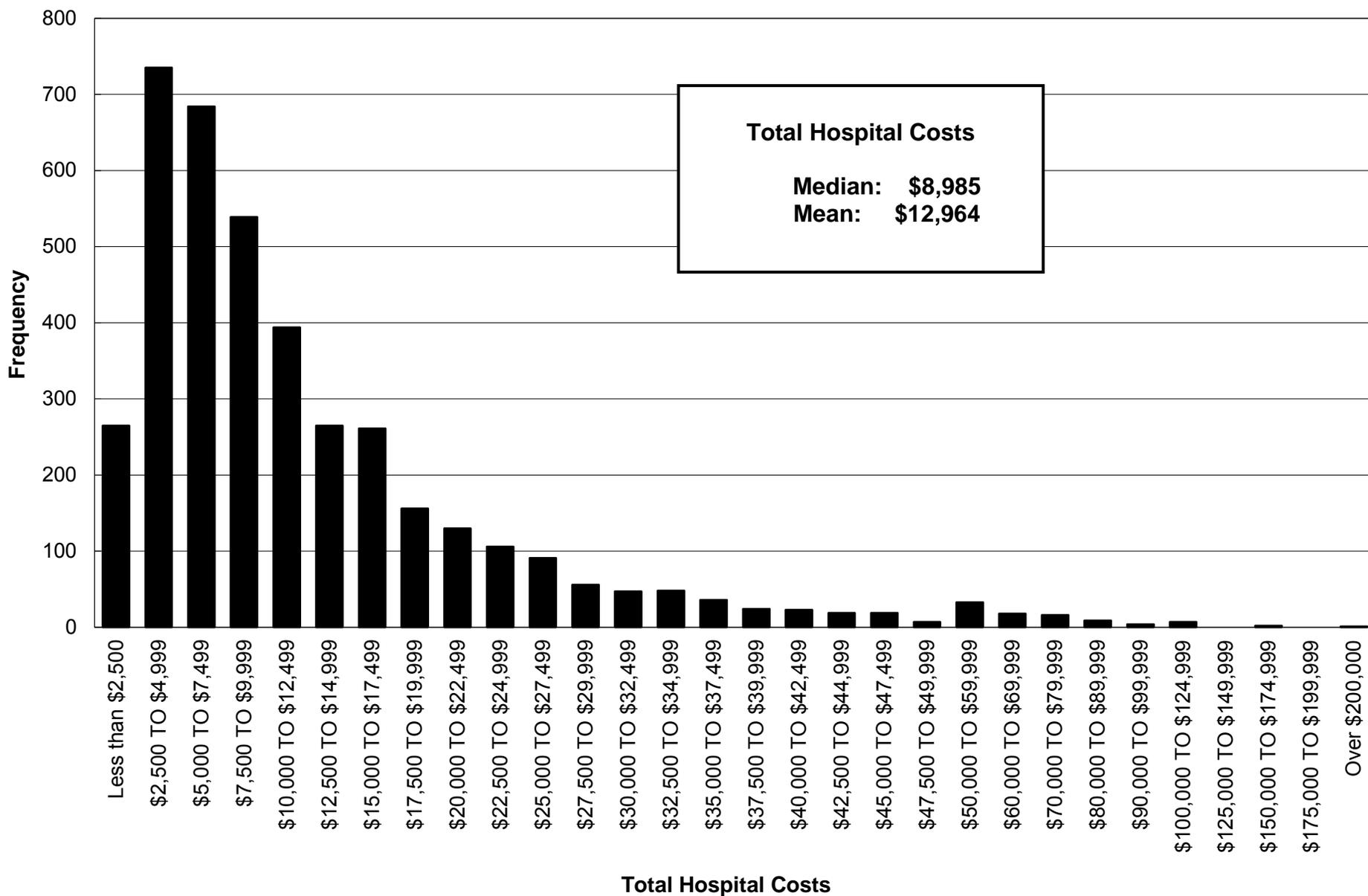
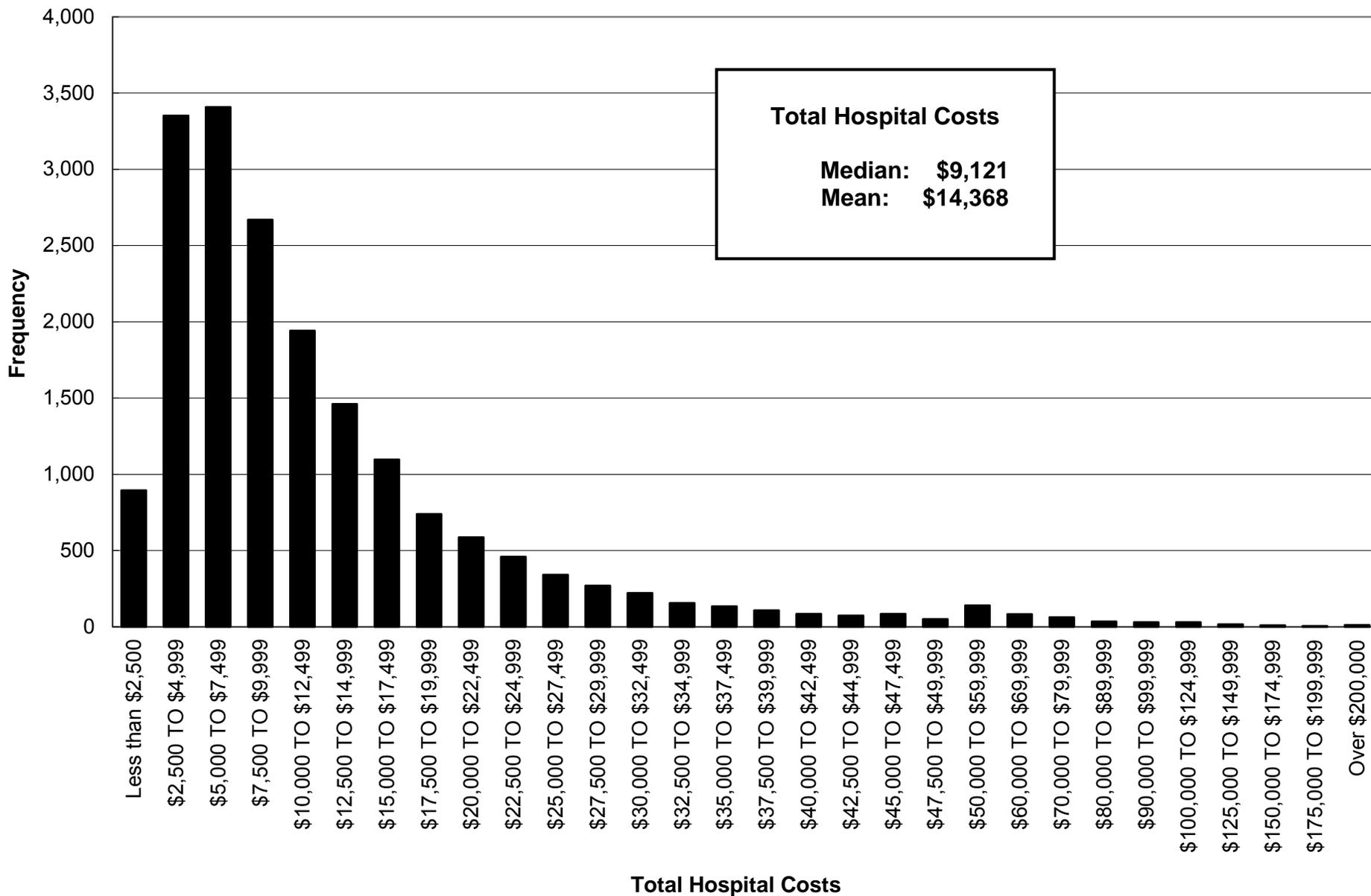


Figure 15.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2002  
Where Any Type of Cancer is Listed as the Primary Diagnosis**



Attachment 1: International Classification of Diseases, Version 9 (ICD-9) Diagnostic Codes  
Used to Define "Targeted Cancers" in the Preparation of this Report

Targeted Cancer	ICD-9 Codes Included
Breast (female)	174.00 - 174.99
Cervix, Invasive	180.00 - 180.99
Colon and Rectum	153.00 - 154.19, 154.40 - 154.89
Lung and Bronchus	162.20 - 162.99
Melanoma	172.00 - 172.99
Oral	140.00 - 149.99
Prostate	185.00 - 185.99
All Other (Primary)	150.00 - 152.99, 154.20 - 154.39, 154.90 - 162.19, 163.00 - 171.99, 173.00 - 173.99, 175.00 - 179.99, 181.00 - 184.99, 186.00 - 195.99, 199.00 - 208.99
Metastatic (Secondary)	196.00 - 198.99
Total	140.00 - 208.99