

**Maryland 2004
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 2004 Maryland hospital discharge data:

- 5.1% of all Maryland hospital discharges in 2004 had a primary diagnosis of cancer. Of the 653,840 Maryland hospital discharges in 2004, 33,662, or 5.1% had cancer listed in any one of the 15 discharge diagnostic categories. Of these 33,662 discharges, 19,586 (3.0% of all discharges) had cancer as the primary diagnostic category.
- 8,026 of 19,586 (41.0%) 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 costs for Maryland residents in whom the primary diagnosis on discharge was any type of cancer was \$323,803,896. 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 2004 had a median cost of \$10,456 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 \$13,784; the second highest cost was lung and bronchus cancer with a median cost of \$12,851, followed by cancer of the oral with a median cost of \$12,199.

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 2004 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 9th 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 2004, 33,662 of 653,840, or 5.1%, had a cancer listed in one or more of the diagnostic categories; 19,586 discharges, or 3.0%, had cancer listed as the primary diagnosis.

Figure 2 plots the total number of hospital discharges where cancer was listed as the primary diagnosis by the jurisdiction of residence of the patient. Total number of hospital discharges ranged from 91 discharges for Somerset County to a high of 3,724 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 20.4 hospitalizations with a primary diagnosis of cancer in Prince Georges County to a high of 71.5 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 268.4 per 100,000 population in Garrett County to a high of 533.9 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 0.54 in Frederick County to a high of 1.13 in Baltimore City.

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 oral, colon and rectum, lung and oral 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 (19,586 discharges) were most likely people hospitalized for that diagnosis. For discharges where cancer is listed in a 2nd through 15th 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 2nd through 15th 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 (41.0%) of hospital discharges in Maryland where metastatic-stage 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 8,026 of 19,586, or 41.0%, of total discharges where cancer is listed as the primary diagnosis. By way of comparison, metastatic cancers are listed as the primary diagnosis 4,225 of 19,586, or 21.6%, 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 19,586 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 \$323,803,896 (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 2004 for all targeted cancers together had a median total cost of \$10,456 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 (\$13,784), 2) lung and bronchus (\$12,851), and 3) oral (\$12,199).

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. Tables 4, 5, and 6 further show that the median total hospital costs due to the seven targeted cancers increased with age. For the 49 and under age category, median total costs in 2004 were \$10,380; for discharges of persons ages 50 to 64, the median was \$10,684; for the 65 and over grouping, the median cost at discharge was \$11,006.

Figure 1.

**Total General Hospital Discharges Among Maryland Residents for Calendar Year 2004
(653,840)**

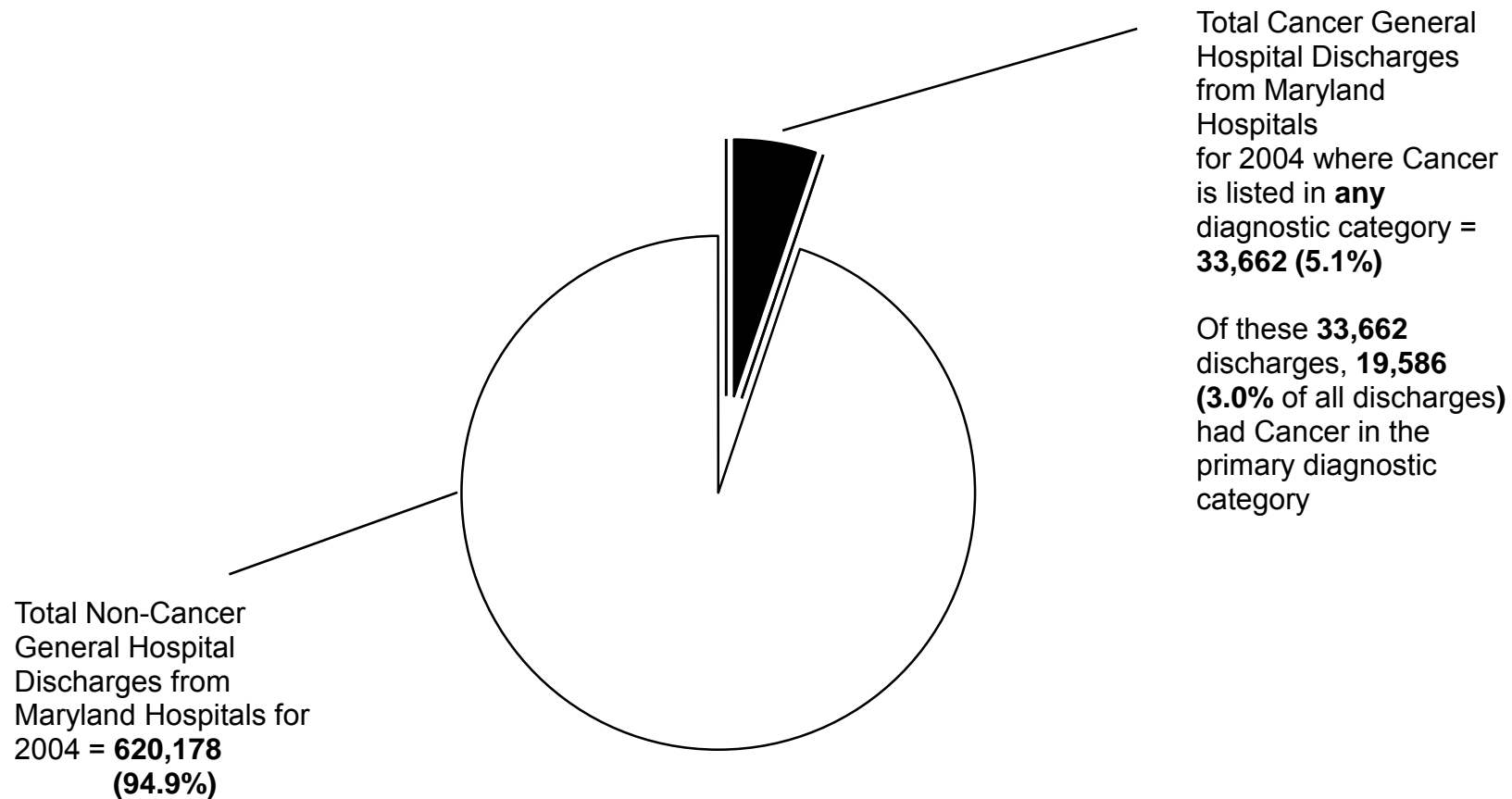


Table 1.

Frequency of General Hospital Discharges in 2004 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 Cancer | Metastatic Cancer | Total Cancer |
| as Primary Dx | 2,465 | 2,419 | 1,356 | 1,237 | 289 | 72 | 188 | 8,026 | 7,335 | 4,225 | 19,586 |
| as 2nd Dx | 533 | 121 | 53 | 34 | 18 | s | <6 | 771 | 489 | 4,746 | 6,006 |
| as 3rd Dx | 186 | 55 | 62 | 41 | 18 | 14 | 9 | 385 | 345 | 2,421 | 3,151 |
| as 4th Dx | 72 | 26 | 60 | 42 | 14 | <6 | <6 | 222 | 223 | 1,369 | 1,814 |
| as 5th Dx | 35 | 9 | 41 | 38 | 7 | <6 | <6 | 138 | 190 | 746 | 1,074 |
| as 6th Dx | 14 | <6 | 40 | 37 | 6 | <6 | <6 | 109 | 125 | 437 | 671 |
| as 7th Dx | <6 | <6 | 31 | 26 | <6 | <6 | <6 | 76 | 118 | 250 | 444 |
| as 8th Dx | 10 | <6 | 22 | 17 | 7 | <6 | <6 | 66 | 84 | 166 | 316 |
| as 9th Dx | 6 | <6 | 17 | 14 | <6 | <6 | <6 | 46 | 62 | 106 | 214 |
| as 10th Dx | <6 | <6 | 10 | 14 | <6 | <6 | <6 | 31 | 30 | 65 | 126 |
| as 11th Dx | <6 | <6 | <6 | 6 | <6 | <6 | <6 | 12 | 33 | 45 | 90 |
| as 12th Dx | <6 | <6 | <6 | 6 | <6 | <6 | <6 | 12 | 18 | 26 | 56 |
| as 13th Dx | <6 | <6 | 6 | <6 | <6 | <6 | <6 | 14 | 22 | 19 | 55 |
| as 14th Dx | <6 | <6 | <6 | <6 | <6 | <6 | <6 | 7 | 11 | 13 | 31 |
| as 15th Dx | <6 | <6 | <6 | <6 | <6 | <6 | <6 | s | 15 | <6 | 28 |

<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 2004 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 | 57 | 55 | 11 | 14 | <6 | <6 | <6 | 137 | 81 | 359 |
| Anne Arundel | 238 | 211 | 150 | 155 | 47 | 8 | 17 | 711 | 406 | 1,943 |
| Baltimore County | 480 | 456 | 264 | 203 | 39 | 24 | 36 | 1,404 | 818 | 3,724 |
| Baltimore City | 471 | 396 | 194 | 163 | 57 | 10 | 57 | 1,182 | 694 | 3,224 |
| Calvert | 27 | 34 | 20 | 17 | 7 | <6 | <6 | 87 | 51 | 244 |
| Caroline | 20 | 23 | 6 | 6 | <6 | <6 | <6 | 44 | 33 | 134 |
| Carroll | 82 | 82 | 39 | 37 | 8 | <6 | s | 298 | 167 | 722 |
| Cecil | 37 | 47 | 24 | 20 | <6 | <6 | <6 | 91 | 81 | 306 |
| Charles | 55 | 52 | 28 | 21 | <6 | <6 | <6 | 97 | 46 | 311 |
| Dorchester | 22 | 31 | <6 | 10 | <6 | <6 | <6 | 65 | 31 | 169 |
| Frederick | 60 | 78 | 25 | 40 | s | <6 | 10 | 253 | 131 | 606 |
| Garrett | s | 22 | 8 | 6 | <6 | <6 | <6 | 26 | 14 | 92 |
| Harford | 134 | 81 | 62 | 57 | <6 | <6 | <6 | 298 | 208 | 849 |
| Howard | 66 | 90 | 64 | 57 | 7 | <6 | <6 | 299 | 134 | 725 |
| Kent | 24 | 20 | 8 | 8 | 8 | <6 | <6 | 42 | 25 | 140 |
| Montgomery | 237 | 251 | 182 | 185 | 33 | <6 | s | 1,028 | 547 | 2,491 |
| Prince George's | 196 | 243 | 169 | 113 | 27 | <6 | s | 584 | 370 | 1,720 |
| Queen Anne's | 33 | 35 | 8 | 20 | <6 | <6 | <6 | 59 | 39 | 197 |
| St. Mary's | 31 | 21 | 26 | 13 | <6 | <6 | <6 | 76 | 35 | 207 |
| Somerset | 19 | 12 | <6 | <6 | <6 | <6 | <6 | 34 | 16 | 91 |
| Talbot | 21 | 30 | 9 | 16 | <6 | <6 | <6 | 96 | 38 | 214 |
| Washington | 46 | 65 | 9 | 30 | <6 | <6 | <6 | 189 | 126 | 472 |
| Wicomico | 56 | 45 | 16 | 28 | <6 | <6 | <6 | 107 | 69 | 327 |
| Worcester | 37 | 30 | 13 | 12 | <6 | <6 | <6 | 88 | 51 | 237 |
| Maryland, Unspecified | <6 | 9 | 12 | <6 | <6 | <6 | <6 | 40 | 14 | 82 |
| Total | 2,465 | 2,419 | 1,356 | 1,237 | 289 | 72 | 188 | 7,335 | 4,225 | 19,586 |

<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 of General Hospital Discharges in 2004 With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence**

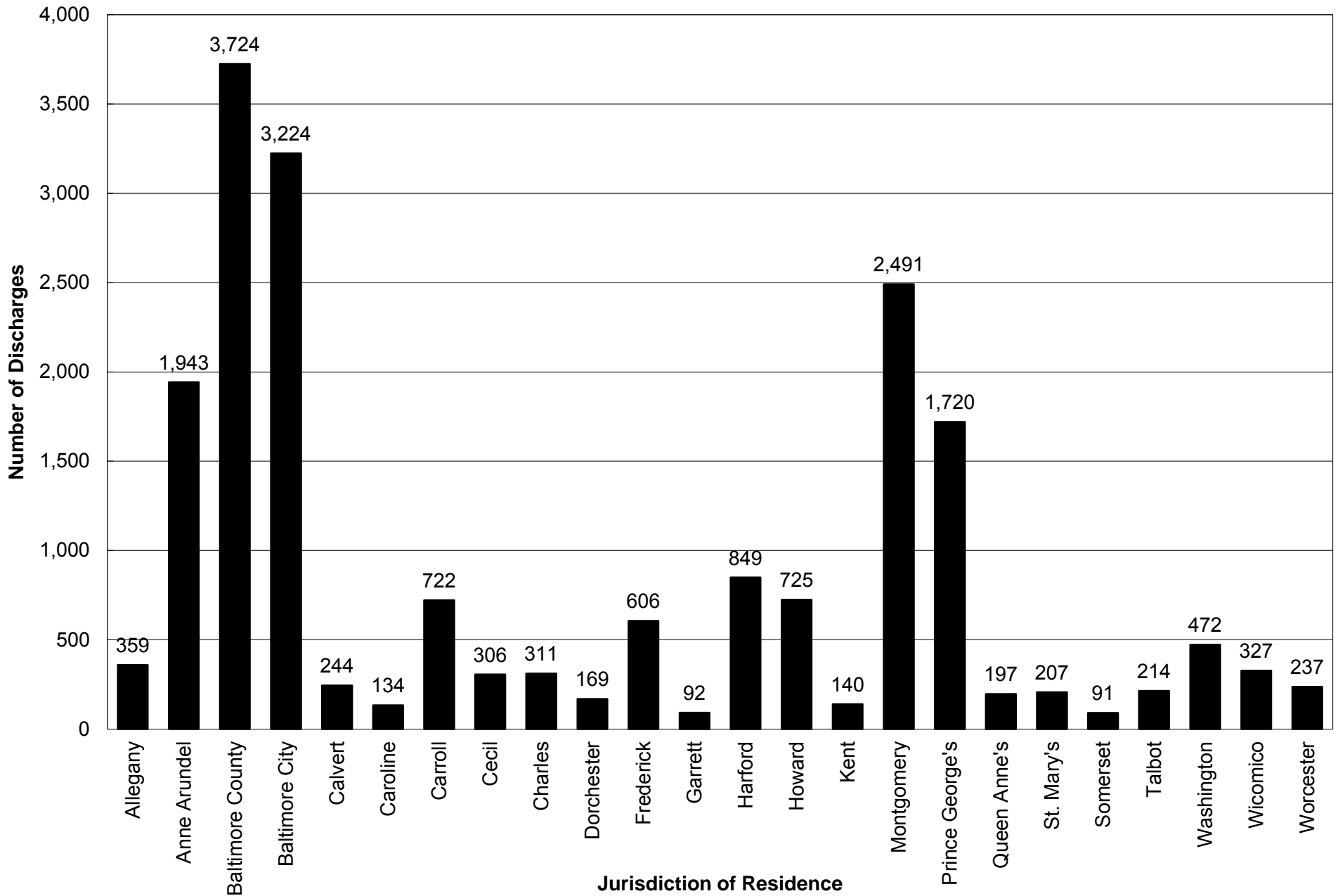


Figure 3.
Crude Rate of General Hospital Discharges per 10,000 Jurisdiction Population With Targeted and All Other Cancers Listed as The Primary Diagnosis, by Jurisdiction of Residence in 2004

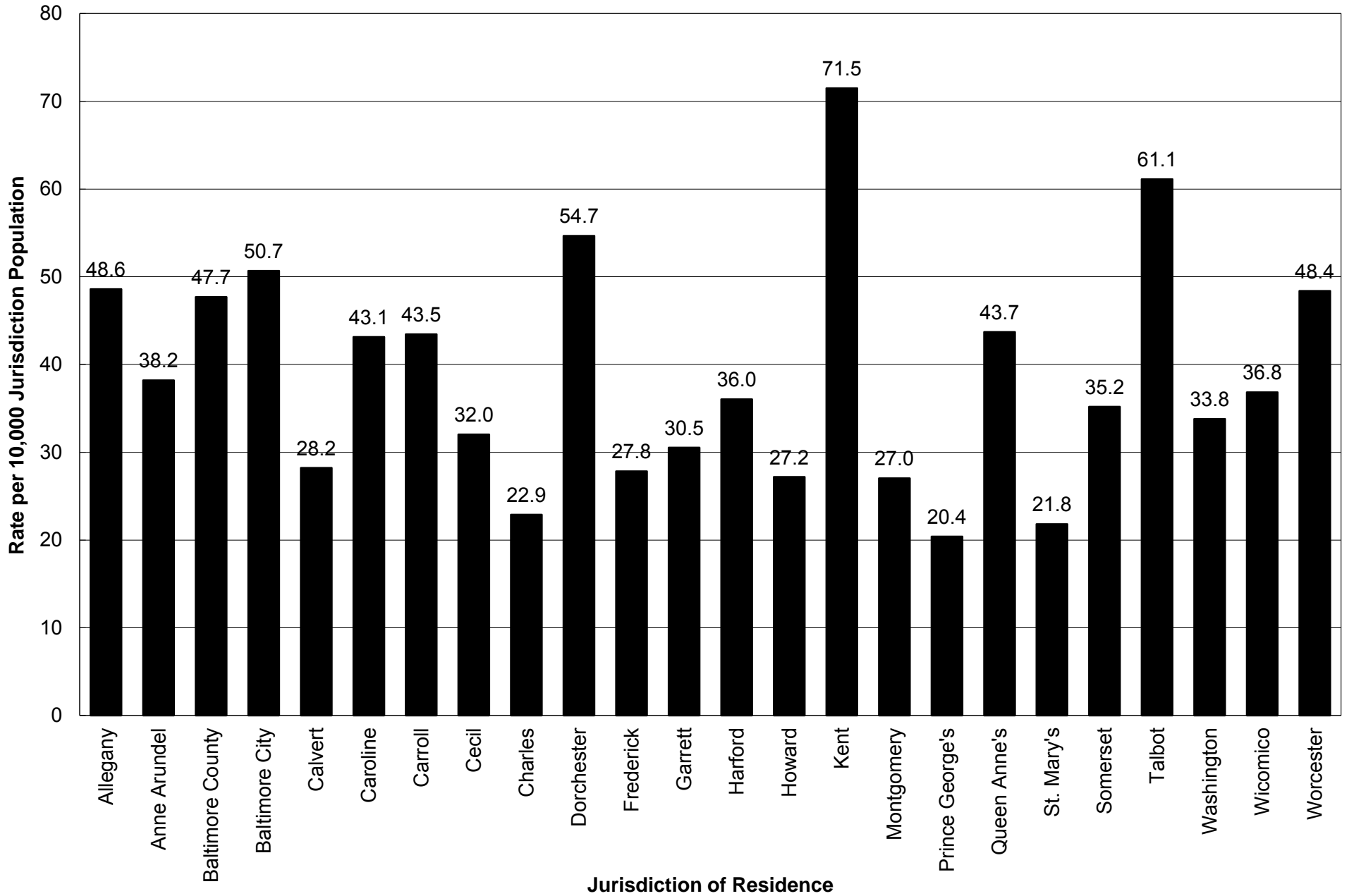
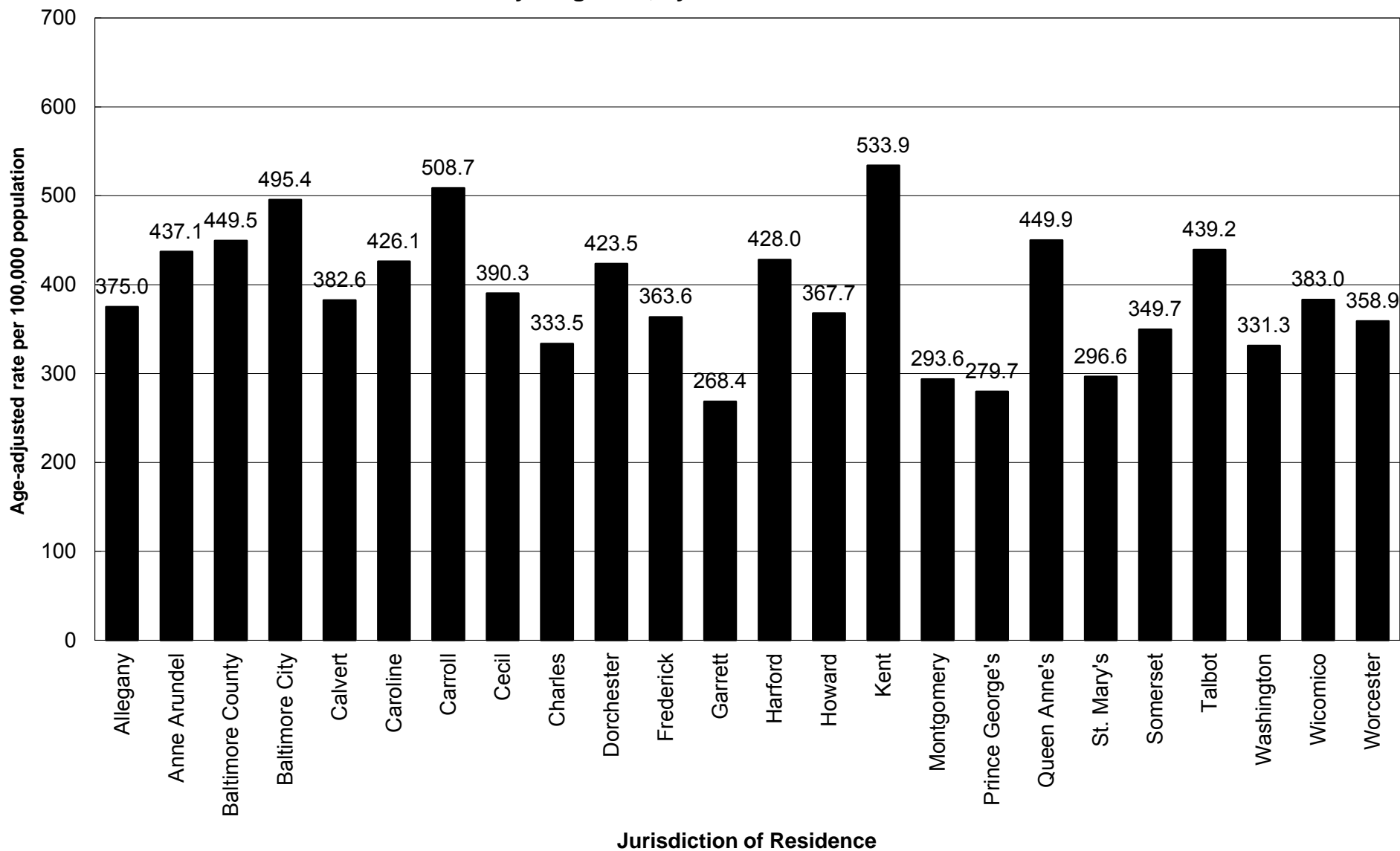


Figure 4.

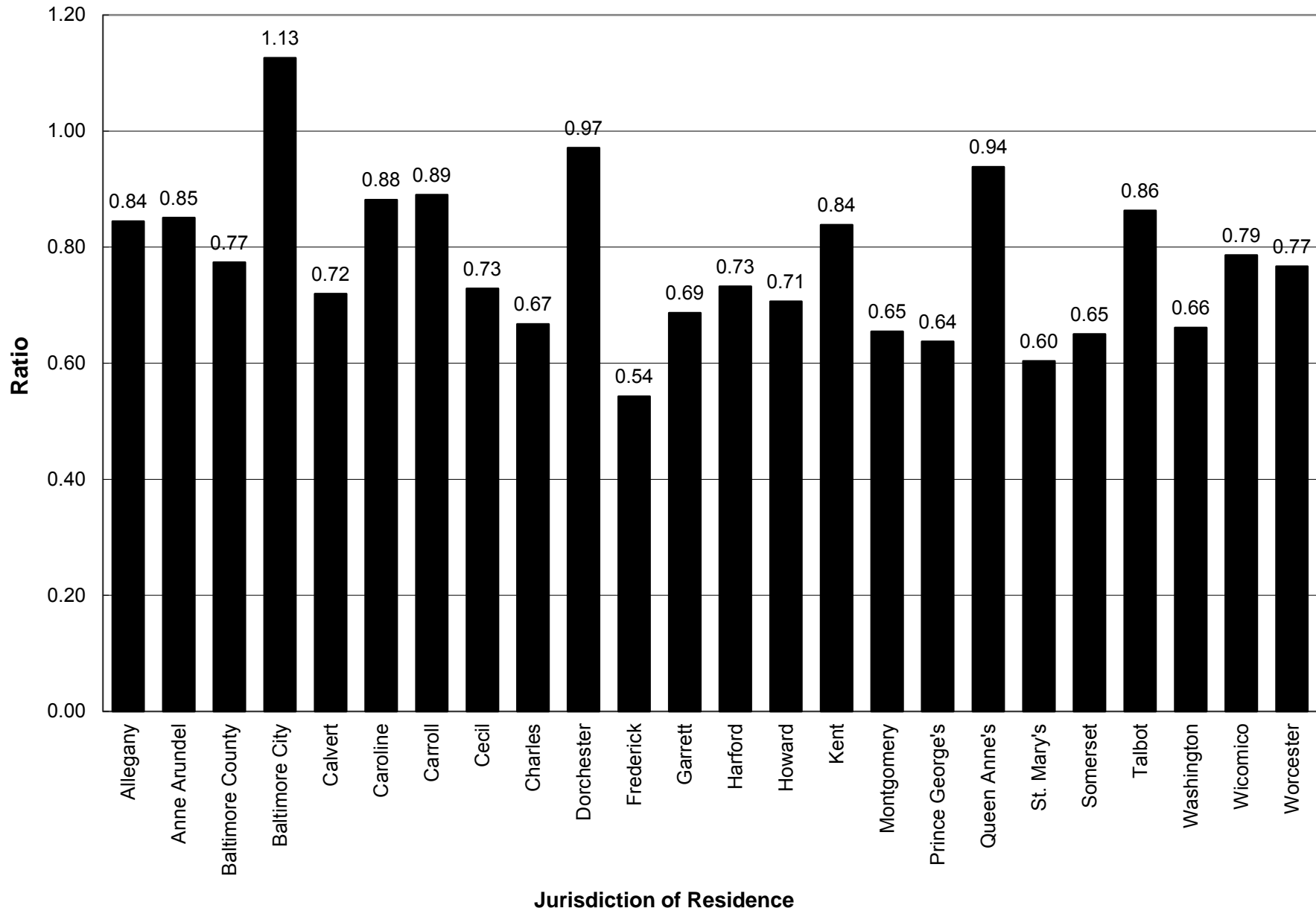
Age-adjusted* Rate of General Hospital Discharges per 100,000 Population With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence in 2004



* 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 2004 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 2004

Table 3.

**General Hospital Discharges in Maryland in 2004:
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 | 2,465 | \$16,519 | \$12,851 | \$10 | \$298,370 | \$40,720,466 |
| Colon and Rectum | 2,419 | \$18,161 | \$13,784 | \$611 | \$225,118 | \$43,931,925 |
| Female Breast | 1,356 | \$8,230 | \$6,474 | \$761 | \$46,399 | \$11,159,631 |
| Prostate | 1,235 | \$9,031 | \$8,539 | \$1,048 | \$55,966 | \$11,153,366 |
| Oral | 289 | \$19,700 | \$12,199 | \$938 | \$128,360 | \$5,693,195 |
| Melanoma | 72 | \$10,158 | \$7,584 | \$1,932 | \$48,780 | \$731,376 |
| Cervix | 188 | \$11,603 | \$9,273 | \$1,207 | \$85,529 | \$2,181,380 |
| Total of Targeted Cancers | 8,024 | \$14,403 | \$10,456 | \$10 | \$298,370 | \$115,571,338 |
| Total Other Cancers | 11,560 | \$18,013 | \$10,453 | \$4 | \$724,109 | \$208,232,558 |
| Total of All Cancers | 19,584 | \$16,534 | \$10,455 | \$4 | \$724,109 | \$323,803,896 |

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

Table 4.

**General Hospital Discharges in Maryland in 2004:
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 | | | | Total |
|----------------------------------|------------------|--------------------------------|-----------------|--------------|------------------|---------------------|
| | | Mean | Median | Minimum | Maximum | |
| Lung and Bronchus | 194 | \$19,179 | \$14,522 | \$811 | \$226,587 | \$3,720,816 |
| Colon and Rectum | 245 | \$16,289 | \$12,903 | \$1,266 | \$94,886 | \$3,990,820 |
| Female Breast | 373 | \$9,818 | \$8,150 | \$900 | \$46,399 | \$3,662,234 |
| Prostate | 54 | \$9,922 | \$9,123 | \$4,689 | \$29,077 | \$535,793 |
| Oral | 67 | \$21,708 | \$14,587 | \$2,652 | \$122,604 | \$1,454,443 |
| Melanoma | 17 | \$10,677 | \$7,611 | \$1,932 | \$31,779 | \$181,513 |
| Cervix | 107 | \$11,421 | \$9,046 | \$1,207 | \$85,529 | \$1,222,011 |
| Total of Targeted Cancers | 1,057 | \$13,971 | \$10,380 | \$811 | \$226,587 | \$14,767,630 |
| Total Other Cancers | 2,288 | \$23,188 | \$11,336 | \$4 | \$724,109 | \$53,053,725 |
| Total of All Cancers | 3,345 | \$20,275 | \$10,950 | \$4 | \$724,109 | \$67,821,354 |

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

Table 5.

**General Hospital Discharges in Maryland in 2004:
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 | | | | Total |
|----------------------------------|------------------|--------------------------------|-----------------|-------------|------------------|----------------------|
| | | Mean | Median | Minimum | Maximum | |
| Lung and Bronchus | 761 | \$16,499 | \$13,032 | \$10 | \$237,713 | \$12,555,908 |
| Colon and Rectum | 647 | \$16,351 | \$12,356 | \$806 | \$189,817 | \$10,579,191 |
| Female Breast | 488 | \$8,595 | \$7,042 | \$1,520 | \$38,353 | \$4,194,359 |
| Prostate | 663 | \$9,091 | \$8,802 | \$2,162 | \$55,966 | \$6,027,244 |
| Oral | 122 | \$20,972 | \$13,610 | \$1,713 | \$128,360 | \$2,558,581 |
| Melanoma | 18 | \$12,831 | \$7,870 | \$2,780 | \$48,780 | \$230,950 |
| Cervix | 39 | \$11,550 | \$10,511 | \$3,037 | \$29,037 | \$450,466 |
| Total of Targeted Cancers | 2,738 | \$13,366 | \$9,847 | \$10 | \$237,713 | \$36,596,699 |
| Total Other Cancers | 3,736 | \$17,888 | \$10,684 | \$57 | \$462,919 | \$66,829,765 |
| Total of All Cancers | 6,474 | \$15,976 | \$10,165 | \$10 | \$462,919 | \$103,426,464 |

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

Table 6.

**General Hospital Discharges in Maryland in 2004:
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 | 1,510 | \$16,188 | \$12,587 | \$853 | \$298,370 | \$24,443,743 |
| Colon and Rectum | 1,527 | \$19,228 | \$14,397 | \$611 | \$225,118 | \$29,361,914 |
| Female Breast | 495 | \$6,673 | \$5,371 | \$761 | \$43,712 | \$3,303,038 |
| Prostate | 518 | \$8,862 | \$7,659 | \$1,048 | \$52,588 | \$4,590,329 |
| Oral | 100 | \$16,802 | \$10,039 | \$938 | \$87,469 | \$1,680,171 |
| Melanoma | 37 | \$8,619 | \$7,258 | \$3,833 | \$22,101 | \$318,912 |
| Cervix | 42 | \$12,117 | \$9,282 | \$1,579 | \$44,488 | \$508,903 |
| Total of Targeted Cancers | 4,229 | \$15,183 | \$11,006 | \$611 | \$298,370 | \$64,207,009 |
| Total Other Cancers | 5,536 | \$15,959 | \$9,970 | \$727 | \$490,819 | \$88,349,068 |
| Total of All Cancers | 9,765 | \$15,623 | \$10,499 | \$611 | \$490,819 | \$152,556,077 |

*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 2004
Where Lung and Bronchus Cancer is Listed as the Primary Diagnosis**

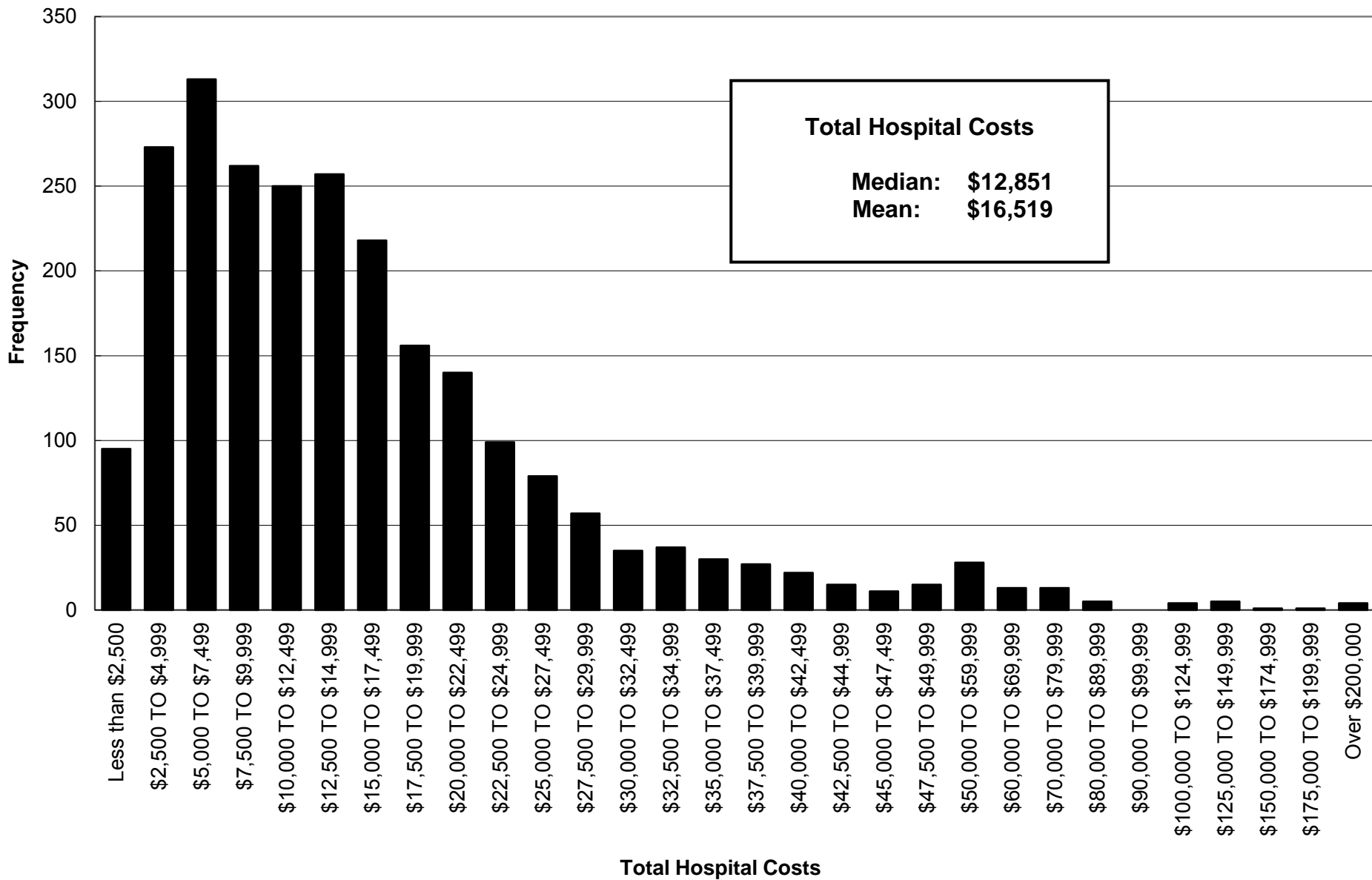


Figure 7.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004
Where Colon and Rectum Cancer is Listed as the Primary Diagnosis**

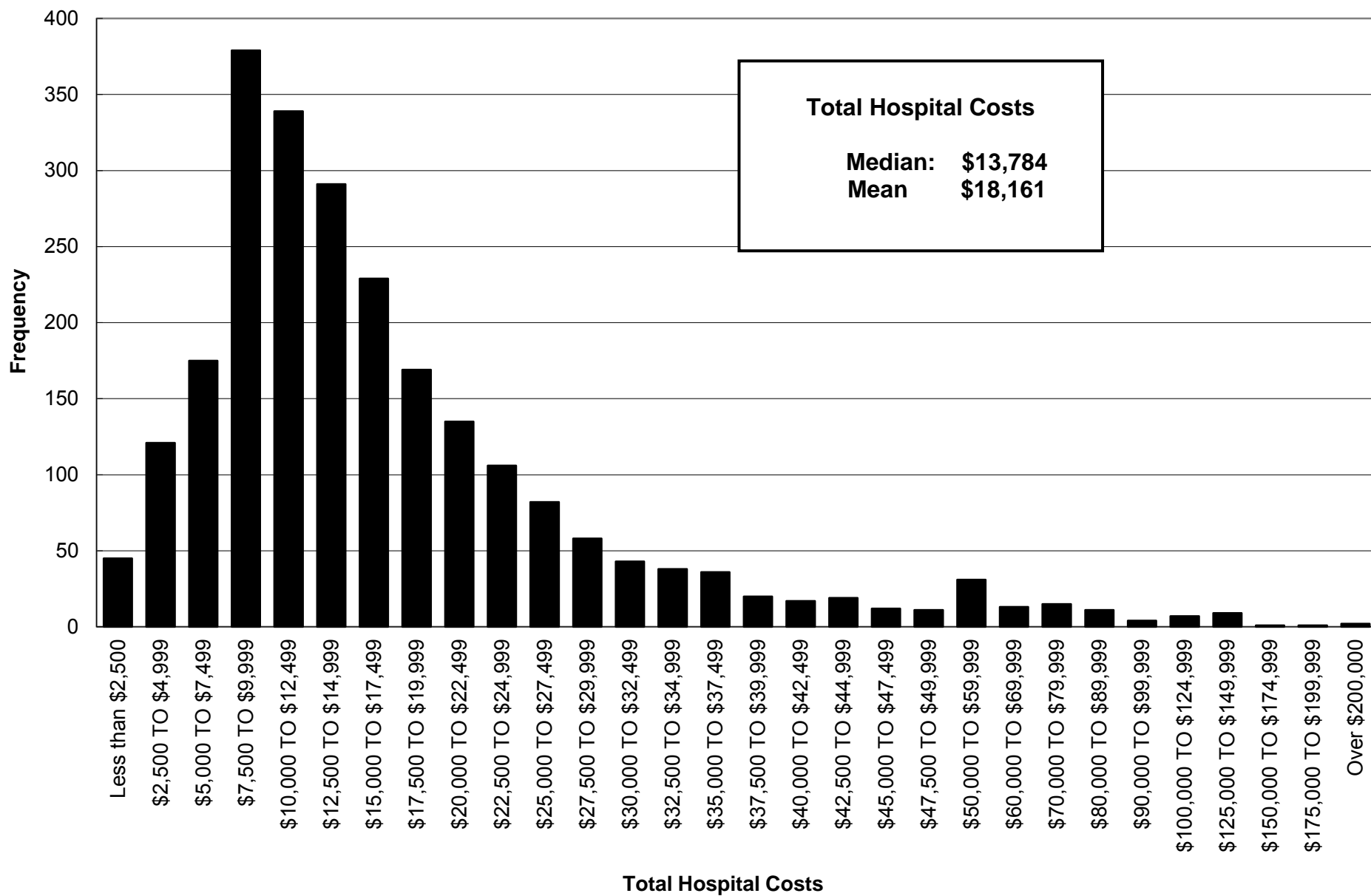


Figure 8.

Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004 Where Female Breast Cancer is Listed as the Primary Diagnosis

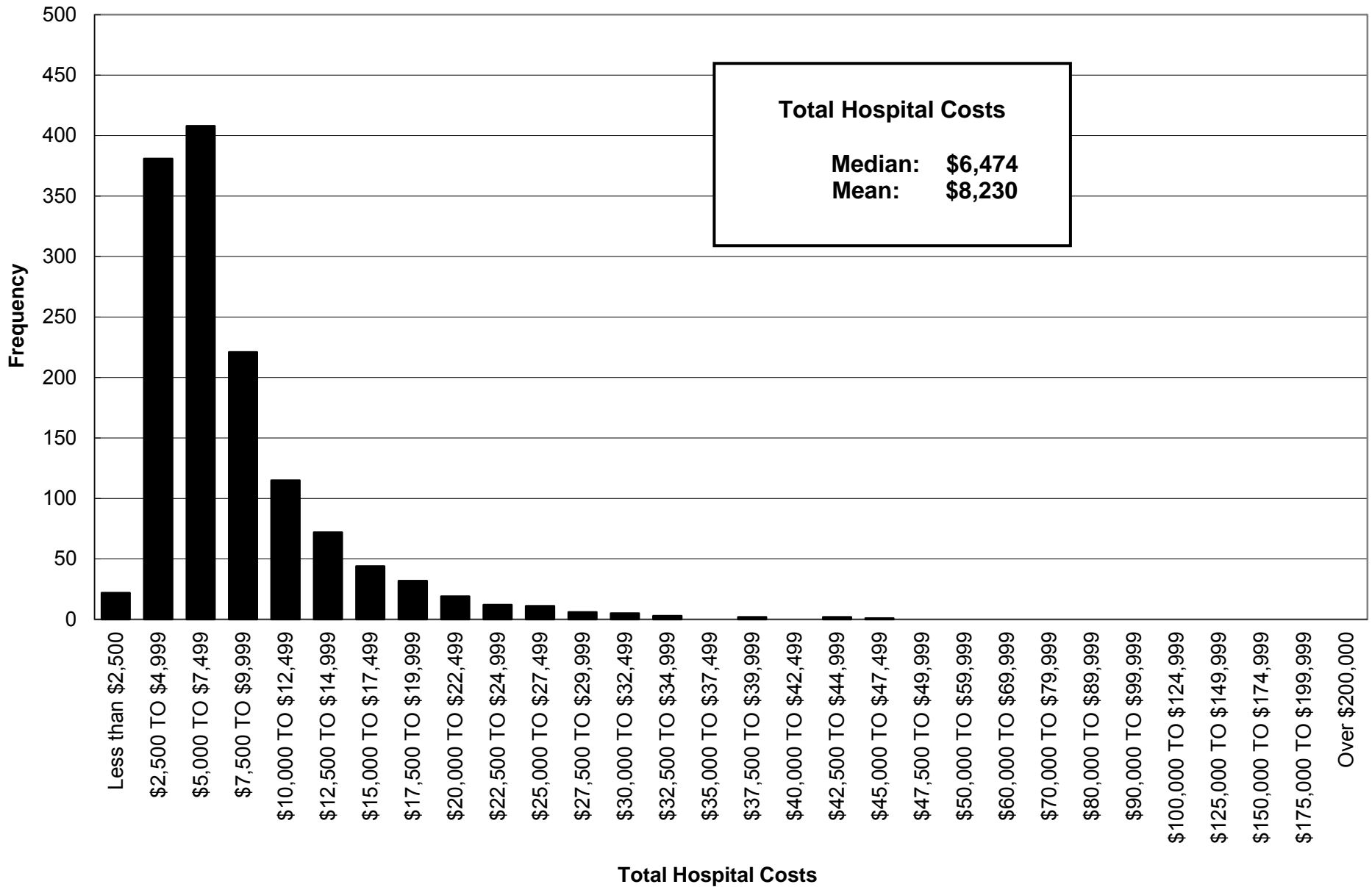


Figure 9.

Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004 Where Prostate Cancer is Listed as the Primary Diagnosis

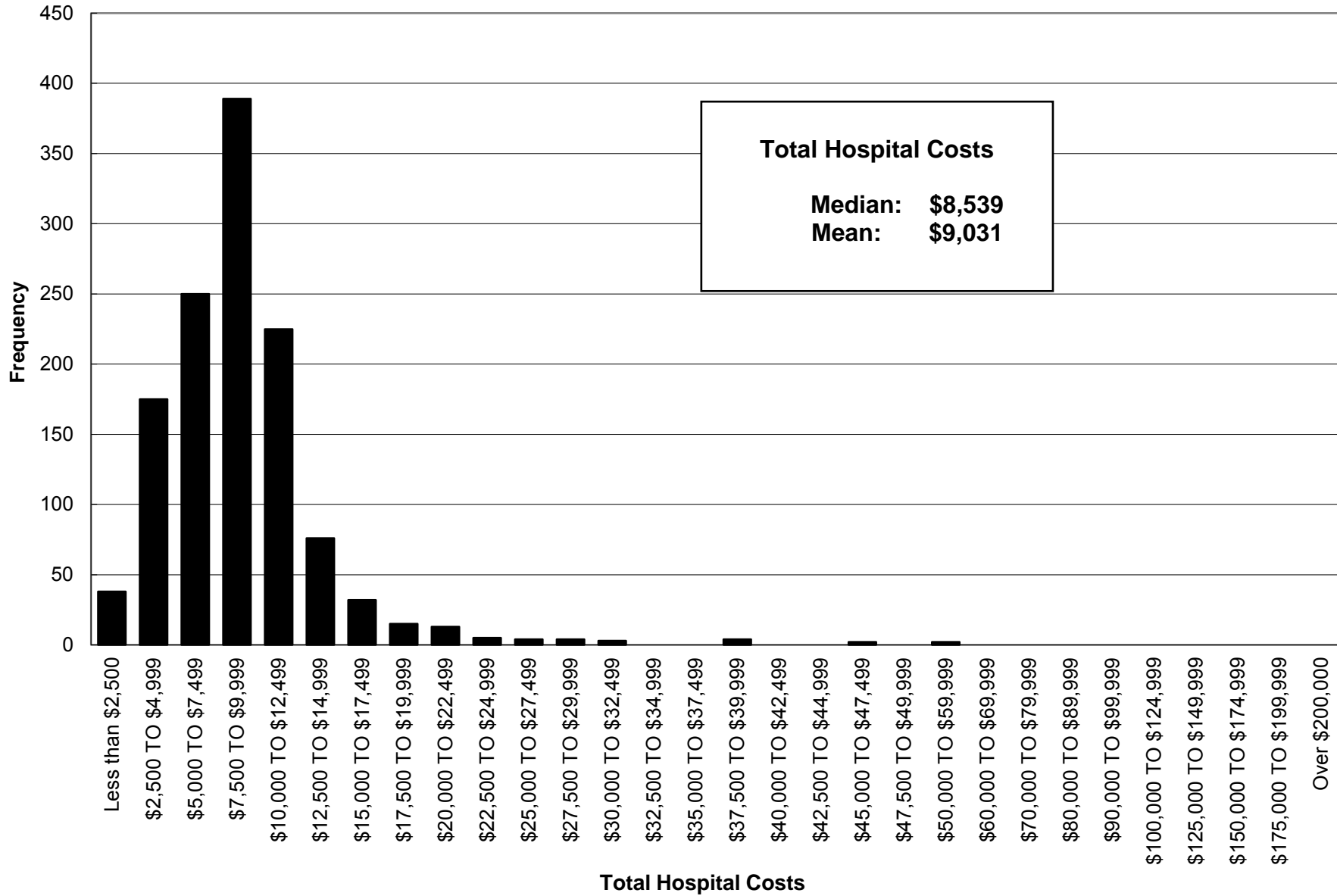


Figure 10.

Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004 Where Oral Cancer is Listed as the Primary Diagnosis

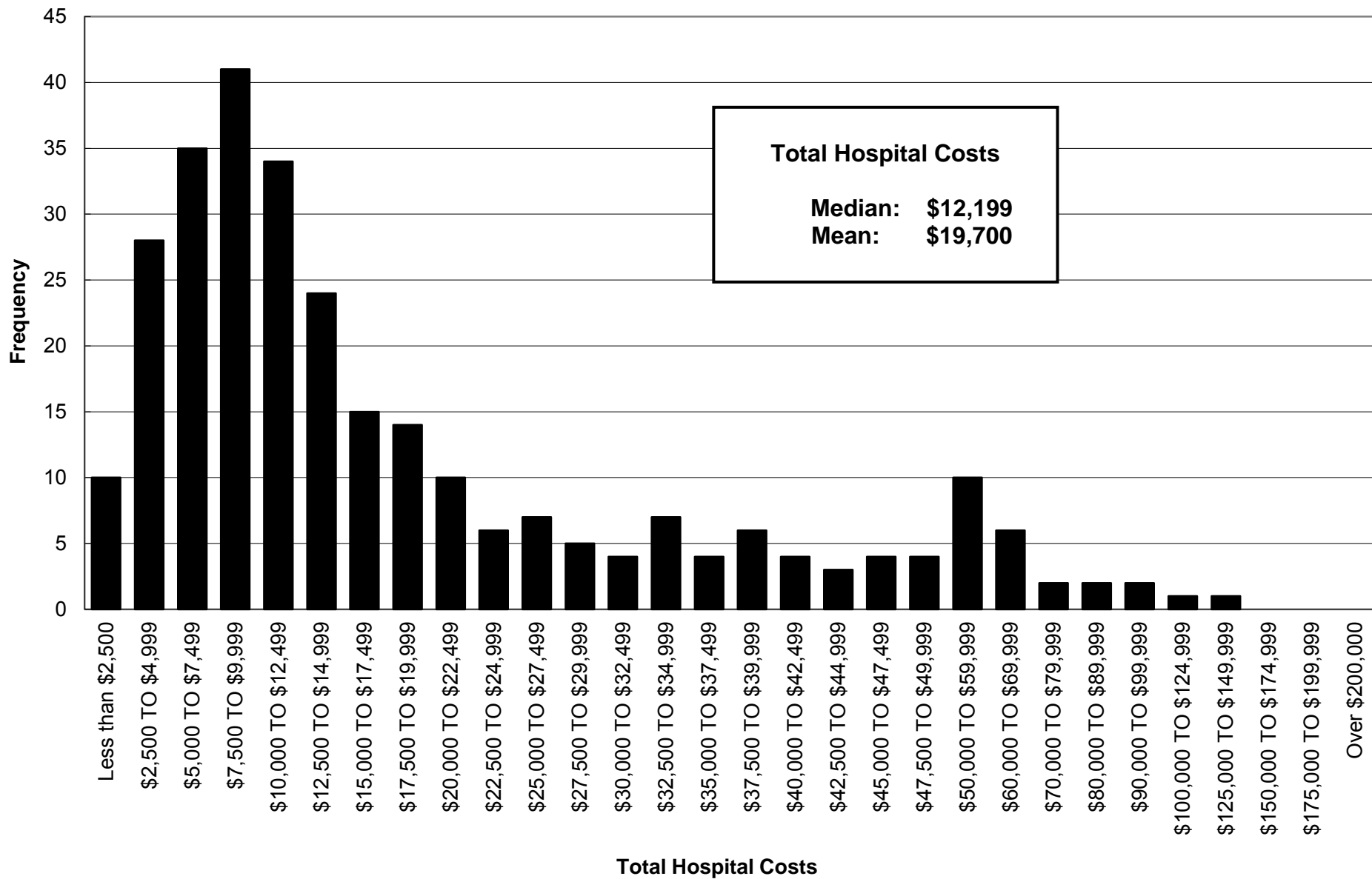


Figure 11.

Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004 Where Melanoma is Listed as the Primary Diagnosis

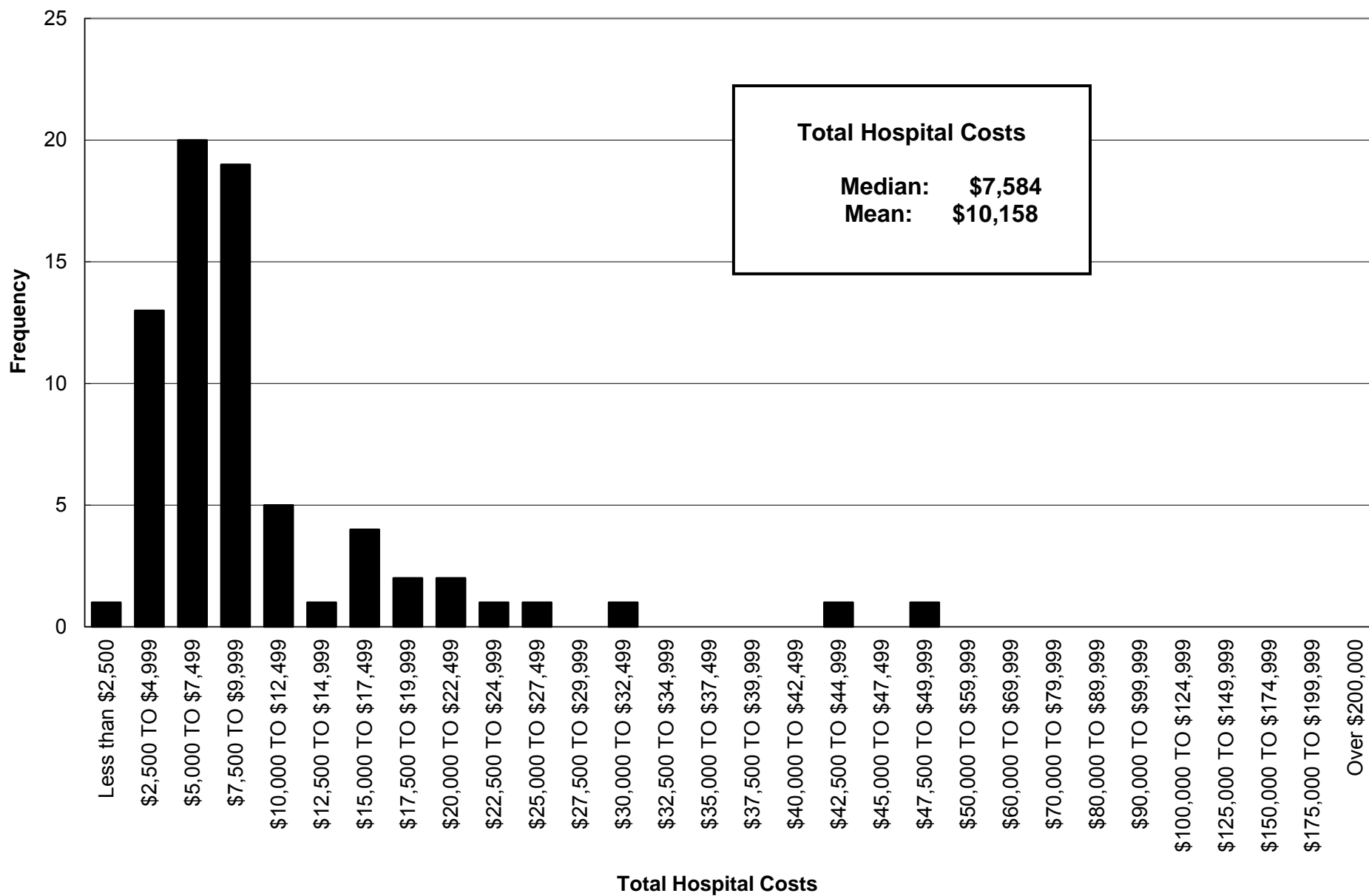


Figure 12.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004
Where Cervix Cancer is Listed as the Primary Diagnosis**

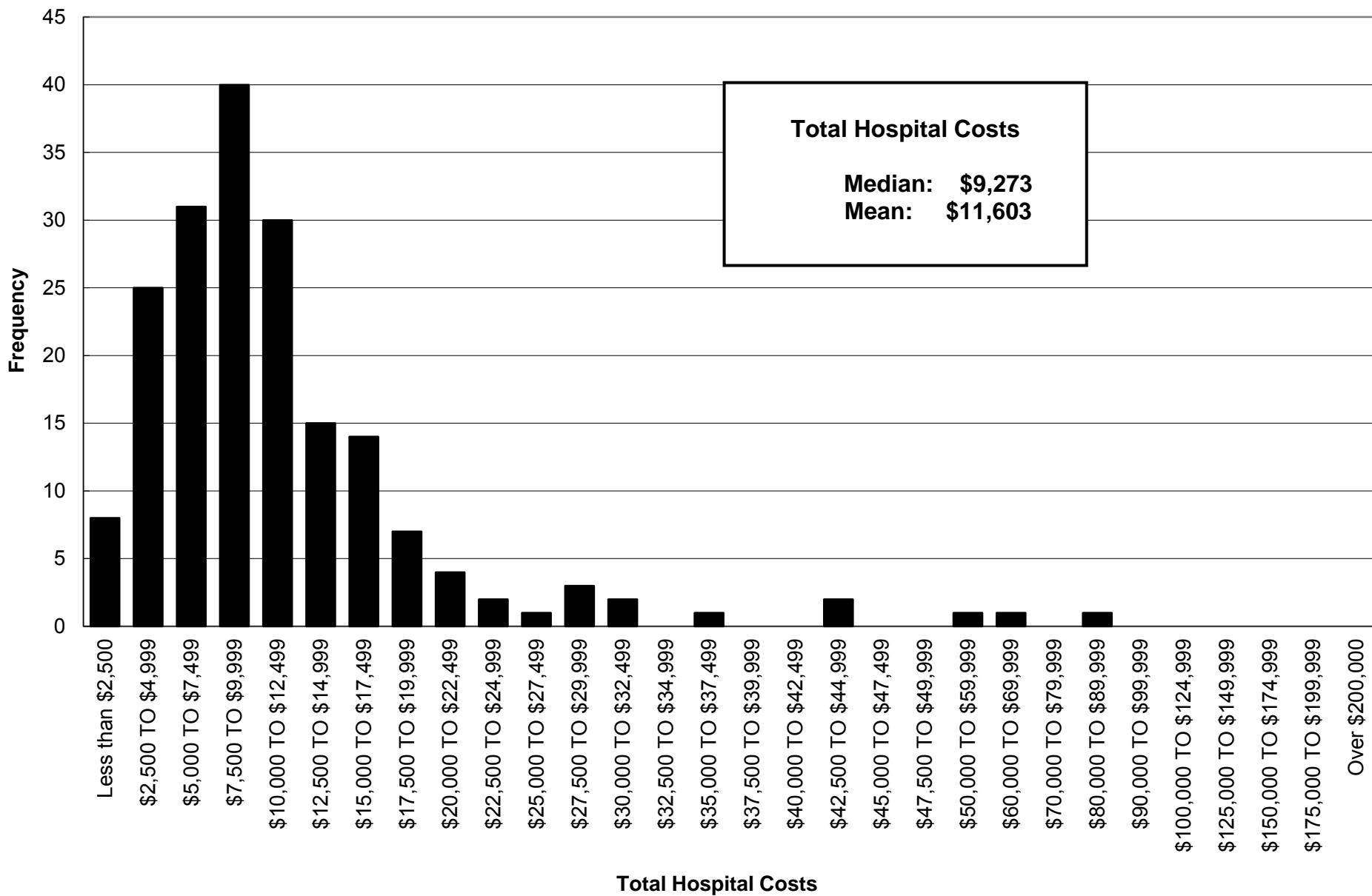


Figure 13.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004
Where Other Non-Targeted Cancer is Listed as the Primary Diagnosis**

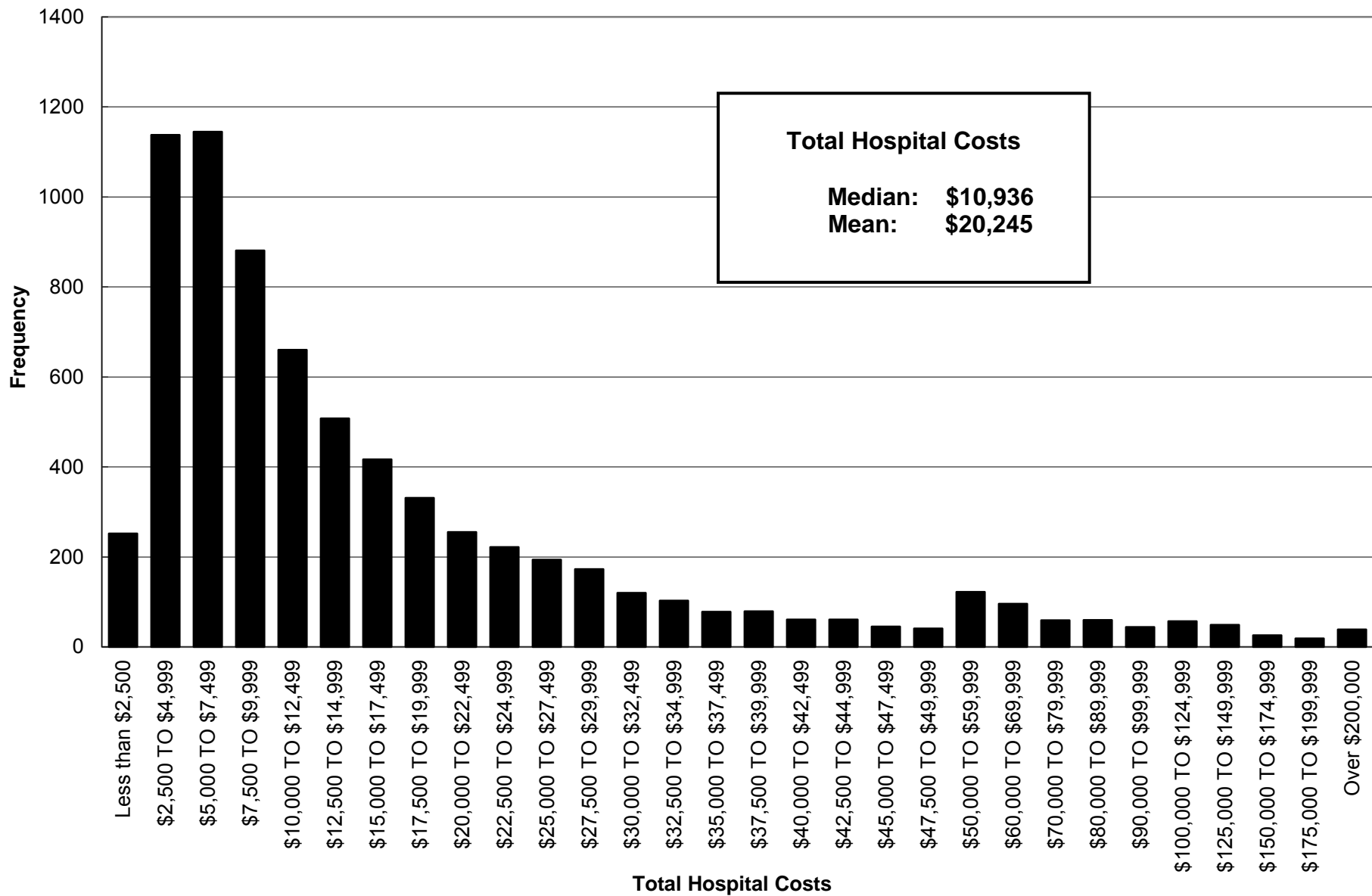


Figure 14.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004
Where Metastatic Cancer is Listed as the Primary Diagnosis**

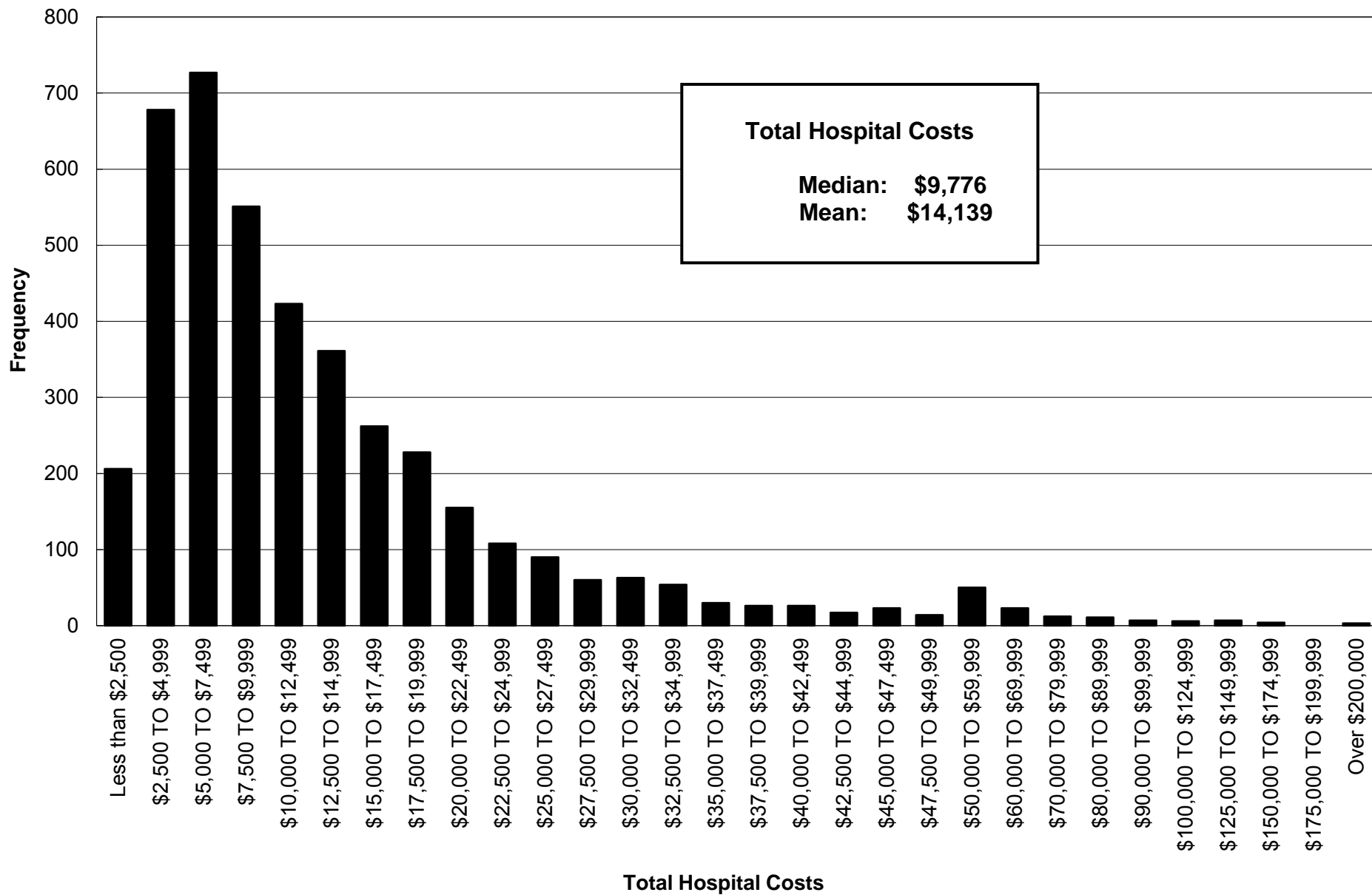
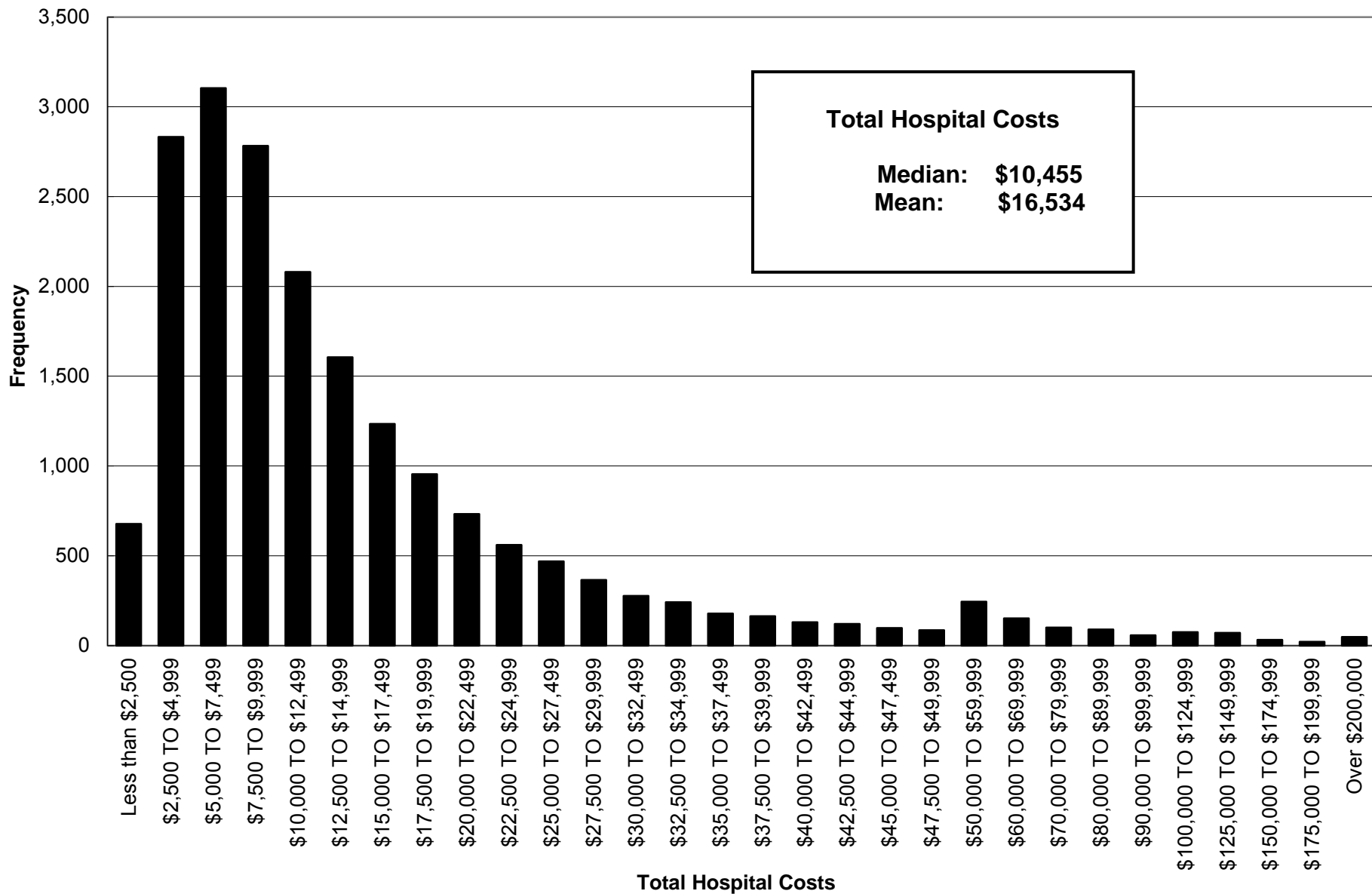


Figure 15.

**Frequency of Hospital Discharges by Category of Total Hospital Costs for 2004
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 |