

**Maryland 2005**  
**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 2005 Maryland hospital discharge data:

- 3.0% of all Maryland hospital discharges in 2005 had a primary diagnosis of cancer. Of the 686,446 Maryland hospital discharges in 2005, 36,161, or 5.3% had cancer listed in any one of the 15 discharge diagnostic categories. Of these 36,161 discharges 20,413 (3.0% of all discharges) had cancer as the primary diagnostic category (Figure 1).
- 8,185 of 20,413 (40.0%) 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 or bronchus, colon or rectum, prostate, breast, oral, melanoma, and cervical (Table 1).
- The total hospital charges for Maryland residents in whom the primary diagnosis on discharge was any type of cancer was \$354,414,360 (Table 3). See caveats in Methods as to why this is an underestimate of the total cost (page 4).
- Among the targeted cancers, total hospital-specific costs (not including physician fees and laboratory fees) in 2005 had a median cost of \$11,301 per hospitalization for all targeted cancers together (Table 3).
- At the top of the cost list is colon and rectum cancer, having a median total hospital charge of \$14,902; the second highest cost was oral cancer with a median cost of \$13,645, followed by lung and bronchus with a median cost of \$12,753 (Table 3).

## 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, 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.

Our analysis may help planners at DHMH and the local programs allocate their 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 2005 discharge file using the Statistical Package for the Social Sciences, Version 14.0, using personal computers within the Maryland Center for Cancer Surveillance and Control.

## **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, breast, prostate, cervical, oral, and melanoma, and their ICD-9 codes are found in Attachment 1. **Note:** for these analyses in 2005, "colorectal cancer" includes anal cancer (*154.2-154.3:15 admissions as primary diagnosis; 154.8:31 admissions*) and unspecified intestinal tract cancer (*159.0:3 admissions*); "breast" includes male breast cancer (*175.0-.9:14 admissions*).

**“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.

When data are analyzed using “cancer as primary diagnosis,” the hospitalization is highly likely to be due to that cancer. If “cancer in any diagnostic category” is used for analysis or tally, it *overestimates* the number of hospitalizations *due to* the cancer by attributing the reason for the hospitalization to cancer when, in fact, there were other diagnoses more likely to have occasioned the hospitalization in a patient with cancer.

When only “cancer as primary diagnosis” is used for analysis, however, it *underestimates* the total number of hospitalizations due to that cancer. For example, we have analyzed the hospitalizations where CRC is the *second* diagnosis (and therefore not included when we look at hospitalizations where CRC is the primary diagnosis), and checked to see what the primary diagnosis was. Many of the diagnoses were related to CRC, such as “liver metastases” “colostomy closure,” “volume depletion,” etc.

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 charges”** are the total charges billed for the hospitalization, such as room, pharmacy, radiology, laboratory, operating room, and central supply charges, but excluding charges that are not part of the hospital bill, such as the physician, internist, oncologist, or surgeon, or laboratory. Hospitalizations for which the Total Charges 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 that had a non-zero number below 6 (i.e., 1-5) were suppressed and denoted with an asterisk. If the number could be calculated by subtraction from the data shown, adjustment was made to suppress another cell as well.

## 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 2005, 36,161 of 686,446, or 5.3%, had a cancer listed in one or more of the diagnostic categories; 20,413 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. Figure 3 depicts the rate of hospital discharges where cancer was listed as the primary diagnosis per 10,000 population for the jurisdiction, showing a range of 20.4 hospitalizations with a primary diagnosis of cancer in Charles County to a high of 62.7 per 10,000 population in Dorchester County.

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 (20,413 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 (40.0%) 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, colorectal, prostate, breast, oral, melanoma, and cervical) contribute a total of 8,185 of 20,413, or 40.0%, of total discharges where cancer is listed as the primary diagnosis. By way of comparison, metastatic cancers are listed as the primary diagnosis 4,543 of 20,413, or 22.3%, 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 20,413 discharges where cancer was the primary diagnosis.

The total cost of hospital charges for patients where cancer was the primary diagnosis is shown in Table 3. The HSCRC data gives the sum of the

total hospital charges. For each cancer are listed the number of discharges, the mean, median, minimum, and maximum charges, and the total hospital charges for that cancer. Hospital charges do *not* reflect physician and other charges that are billed separately. The total hospital charges for Maryland residents in whom the primary diagnosis on discharge was any type of cancer was \$354,414,360 (see caveats in Methods as to why this is an underestimate, page 4).

Besides providing data about hospital charges 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 charges. Total hospital charges (not including physician fees and some laboratory fees) in 2005 for all targeted cancers together had a median total charge of \$11,301 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 (\$14,902), 2) oral (\$13,645), and 3) lung and bronchus (\$12,753).

Tables 4, 5, and 6, display the data on the number of hospital discharges and hospital charges 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 charges due to the seven targeted cancers increased with age. For the 49 and under age category, median total costs in 2005 were \$10,305; for discharges of persons ages 50 to 64, the median was \$10,938; for the 65 and over grouping, the median cost at discharge was \$11,906.

Table 7 gives the actual number of discharges by various cost categories. These data are plotted in Figures 5 through 13. Examining Table 7 reveals that among the targeted cancers, lung, colorectal, and oral are the most expensive to treat. Table 7 generally confirms cost rankings in Table 3. Although median cost data in Table 3 suggests a slightly different ranking than corresponding data in Table 7, colorectal, oral, and lung cancers occupy the top three rankings in both tables. Twenty colon and rectum cancer patients had costs of \$100,000 or more compared to 16 for the next highest cancer type, lung and bronchus, followed by eight for oral.

**Total General Hospital Discharges Among Maryland Residents for Calendar Year 2005  
(686,446)**

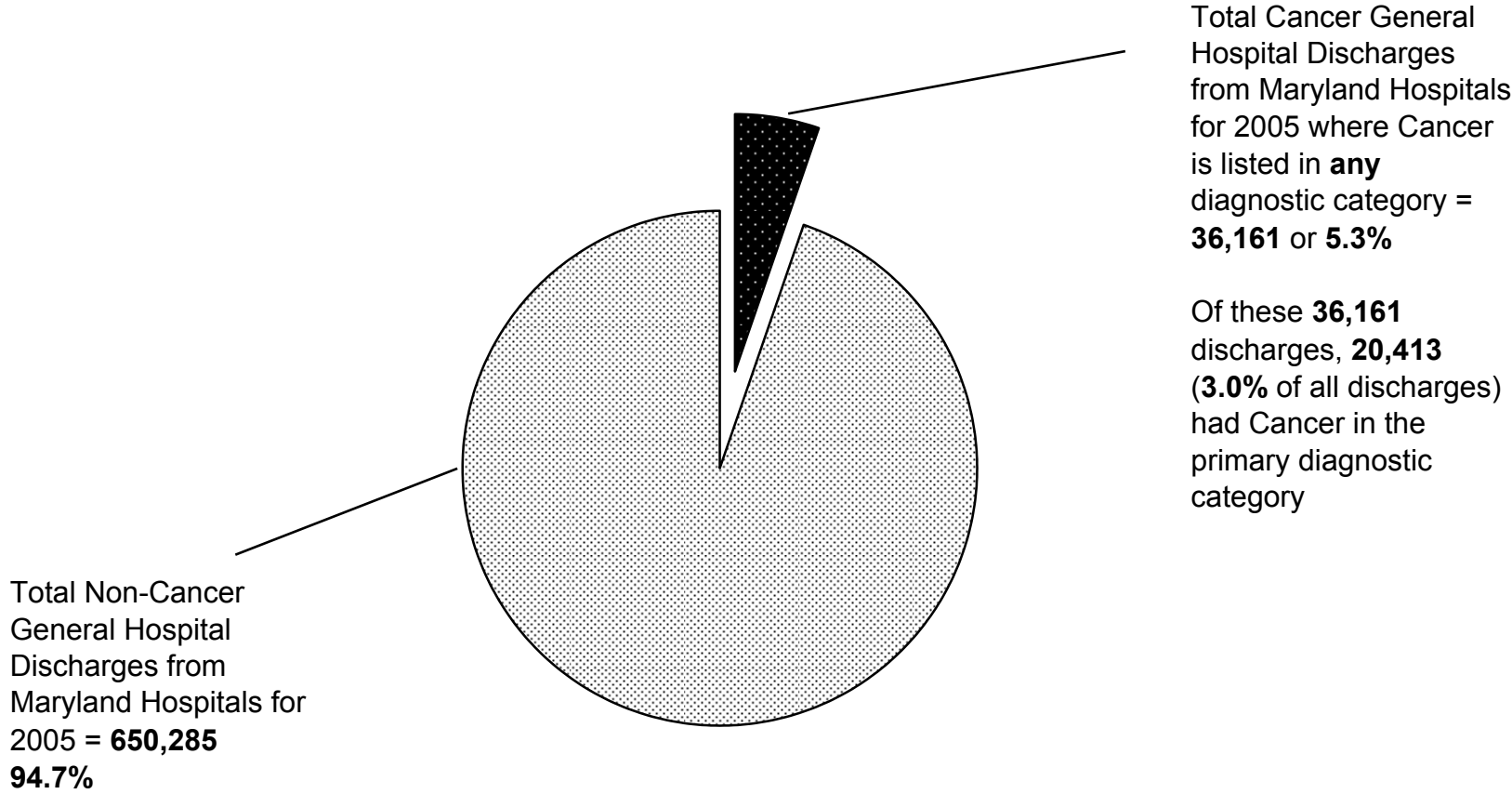


Figure 1

**Frequency of General Hospital Discharges in 2005 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 | Breast | Prostate | Oral | Melanoma | Cervix | Total Targeted Cancer | Non-Targeted Cancer | Metastatic Cancer | Total Cancer |
| as Primary Dx                                      | 2,637             | 2,537            | 1,289  | 1,148    | 290  | 98       | 186    | 8,185                 | 7,685               | 4,543             | 20,413       |
| as 2nd Dx  | 482               | 153              | 48     | 30       | 19   | 14       | 6      | 752                   | 501                 | 4,462             | 5,715        |
| as 3rd Dx  | 208               | 58               | 68     | 50       | 13   | 16       | 5      | 418                   | 320                 | 2,498             | 3,236        |
| as 4th Dx  | 108               | 40               | 77     | 43       | 11   | 18       | 3      | 300                   | 277                 | 1,608             | 2,185        |
| as 5th Dx  | 72                | 21               | 57     | 45       | 7    | 7        | 7      | 216                   | 188                 | 1,102             | 1,506        |
| as 6th Dx  | 50                | 17               | 36     | 22       | 9    | 4        | 4      | 142                   | 143                 | 733               | 1,018        |
| as 7th Dx  | 25                | 9                | 26     | 28       | 3    | 6        | 2      | 99                    | 89                  | 455               | 643          |
| as 8th Dx  | 14                | 2                | 20     | 18       | 6    | 1        | 4      | 65                    | 80                  | 299               | 444          |
| as 9th Dx  | 15                | 7                | 18     | 12       | 6    | 1        | 2      | 61                    | 62                  | 187               | 310          |
| as 10th Dx   | 3                 | 2                | 11     | 15       | 4    | 0        | 1      | 36                    | 43                  | 135               | 214          |
| as 11th Dx   | 4                 | 3                | 14     | 8        | 2    | 1        | 2      | 34                    | 48                  | 77                | 159          |
| as 12th Dx   | 3                 | 0                | 8      | 11       | 3    | 0        | 2      | 27                    | 36                  | 67                | 130          |
| as 13th Dx   | 1                 | 2                | 7      | 5        | 1    | 0        | 0      | 16                    | 27                  | 38                | 81           |
| as 14th Dx   | 1                 | 0                | 7      | 2        | 1    | 0        | 0      | 11                    | 20                  | 35                | 66           |
| as 15th Dx   | 0                 | 0                | 3      | 2        | 0    | 0        | 0      | 5                     | 13                  | 23                | 41           |

\*International Classification of Diseases, Version 9 Attachment 1

Table 1

**Number of General Hospital Discharges in 2005 With Targeted and All Other Cancers Listed as the Primary Diagnosis Among Maryland Residents, by Jurisdiction of Residence**

| Jurisdiction or County | Type of Cancer  |                |              |              |            |           |            |              |              | Total         |
|------------------------|-----------------|----------------|--------------|--------------|------------|-----------|------------|--------------|--------------|---------------|
|                        | Lung & Bronchus | Colon & Rectum | Breast       | Prostate     | Oral       | Melanoma  | Cervix     | Other Cancer | Metastatic   |               |
| Allegany               | 43              | 44             | 9            | 23           | 3          | 0         | 2          | 139          | 82           | 345           |
| Anne Arundel           | 280             | 209            | 129          | 136          | 23         | 16        | 13         | 789          | 428          | 2,023         |
| Baltimore County       | 515             | 495            | 234          | 202          | 58         | 24        | 38         | 1,536        | 902          | 4,004         |
| Baltimore City         | 454             | 381            | 190          | 158          | 58         | 8         | 46         | 1,123        | 832          | 3,250         |
| Calvert                | 32              | 40             | 21           | 15           | 9          | 0         | 3          | 77           | 55           | 252           |
| Caroline               | 18              | 24             | 3            | 7            | 1          | 0         | 1          | 56           | 35           | 145           |
| Carroll                | 89              | 83             | 45           | 33           | 14         | 5         | 7          | 289          | 157          | 722           |
| Cecil                  | 40              | 51             | 15           | 18           | 3          | 0         | 1          | 72           | 54           | 254           |
| Charles                | 47              | 46             | 23           | 20           | 6          | 0         | 1          | 88           | 52           | 283           |
| Dorchester             | 27              | 29             | 9            | 11           | 0          | 0         | 0          | 89           | 32           | 197           |
| Frederick              | 74              | 89             | 24           | 30           | 2          | 10        | 1          | 234          | 145          | 609           |
| Garrett                | 4               | 17             | 12           | 5            | 0          | 0         | 0          | 23           | 16           | 77            |
| Harford                | 116             | 111            | 59           | 39           | 9          | 9         | 7          | 382          | 210          | 942           |
| Howard                 | 92              | 84             | 74           | 58           | 10         | 4         | 3          | 305          | 161          | 791           |
| Kent                   | 24              | 9              | 10           | 12           | 0          | 3         | 1          | 33           | 24           | 116           |
| Montgomery             | 239             | 284            | 185          | 116          | 30         | 5         | 26         | 1,032        | 550          | 2,467         |
| Prince George's        | 222             | 251            | 151          | 126          | 30         | 4         | 18         | 649          | 384          | 1,835         |
| Queen Anne's           | 33              | 31             | 12           | 11           | 3          | 2         | 0          | 64           | 36           | 192           |
| St. Mary's             | 34              | 28             | 28           | 21           | 0          | 3         | 4          | 71           | 46           | 235           |
| Somerset               | 19              | 16             | 5            | 12           | 0          | 1         | 1          | 28           | 24           | 106           |
| Talbot                 | 29              | 23             | 3            | 18           | 2          | 0         | 1          | 75           | 53           | 204           |
| Washington             | 69              | 75             | 7            | 33           | 7          | 1         | 1          | 187          | 96           | 476           |
| Wicomico               | 70              | 62             | 15           | 29           | 7          | 2         | 5          | 145          | 79           | 414           |
| Worcester              | 40              | 38             | 17           | 10           | 3          | 1         | 2          | 86           | 53           | 250           |
| Maryland, Unspecified  | 27              | 17             | 9            | 5            | 12         | 0         | 4          | 113          | 37           | 224           |
|                        |                 |                |              |              |            |           |            |              |              |               |
| <b>Total</b>           | <b>2,637</b>    | <b>2,537</b>   | <b>1,289</b> | <b>1,148</b> | <b>290</b> | <b>98</b> | <b>186</b> | <b>7,685</b> | <b>4,543</b> | <b>20,413</b> |

**Total of General Hospital Discharges in 2005 With Targeted and All Other Cancers Listed as the Primary Diagnosis, by Jurisdiction of Residence**

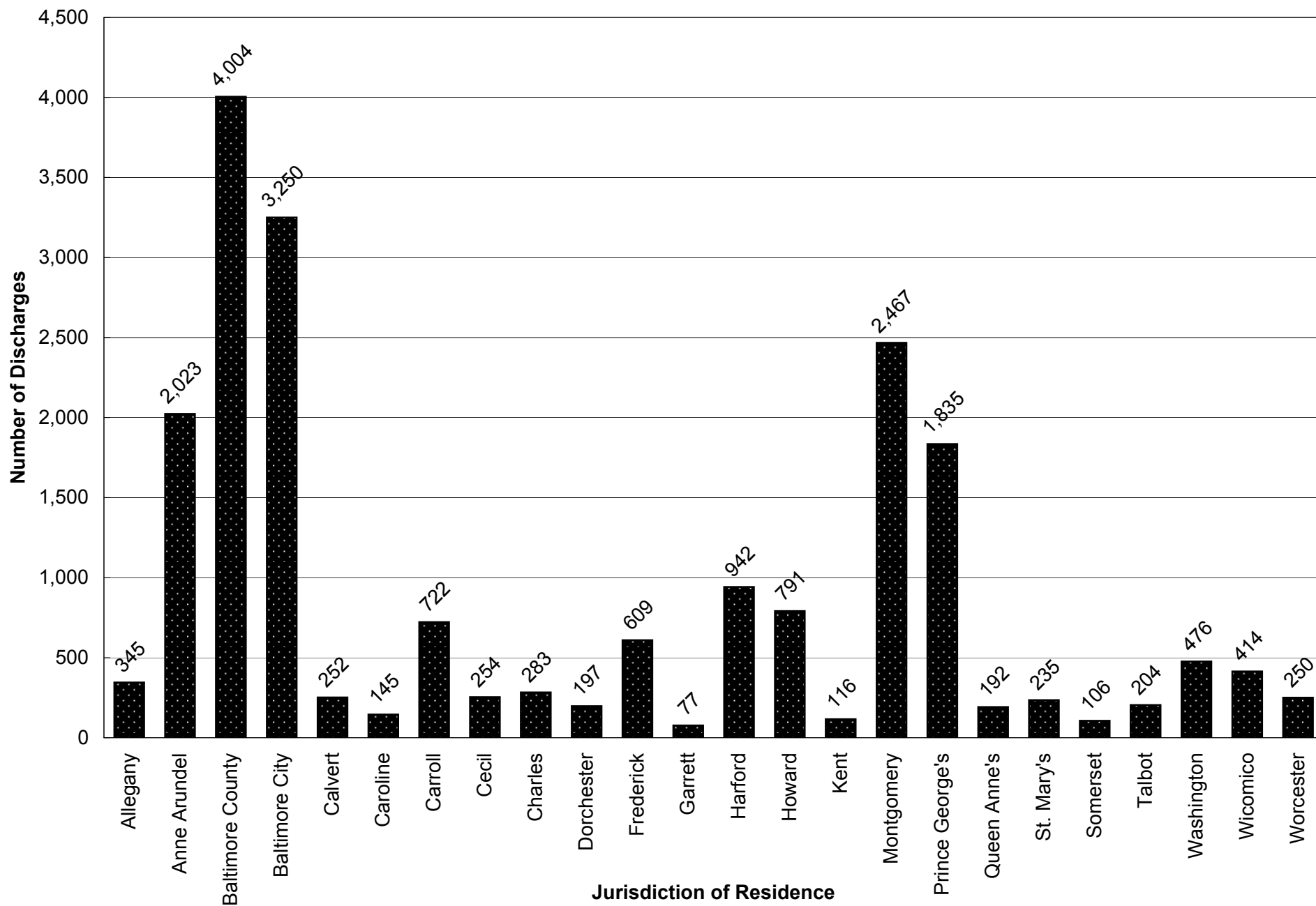


Figure 2

**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 2005**

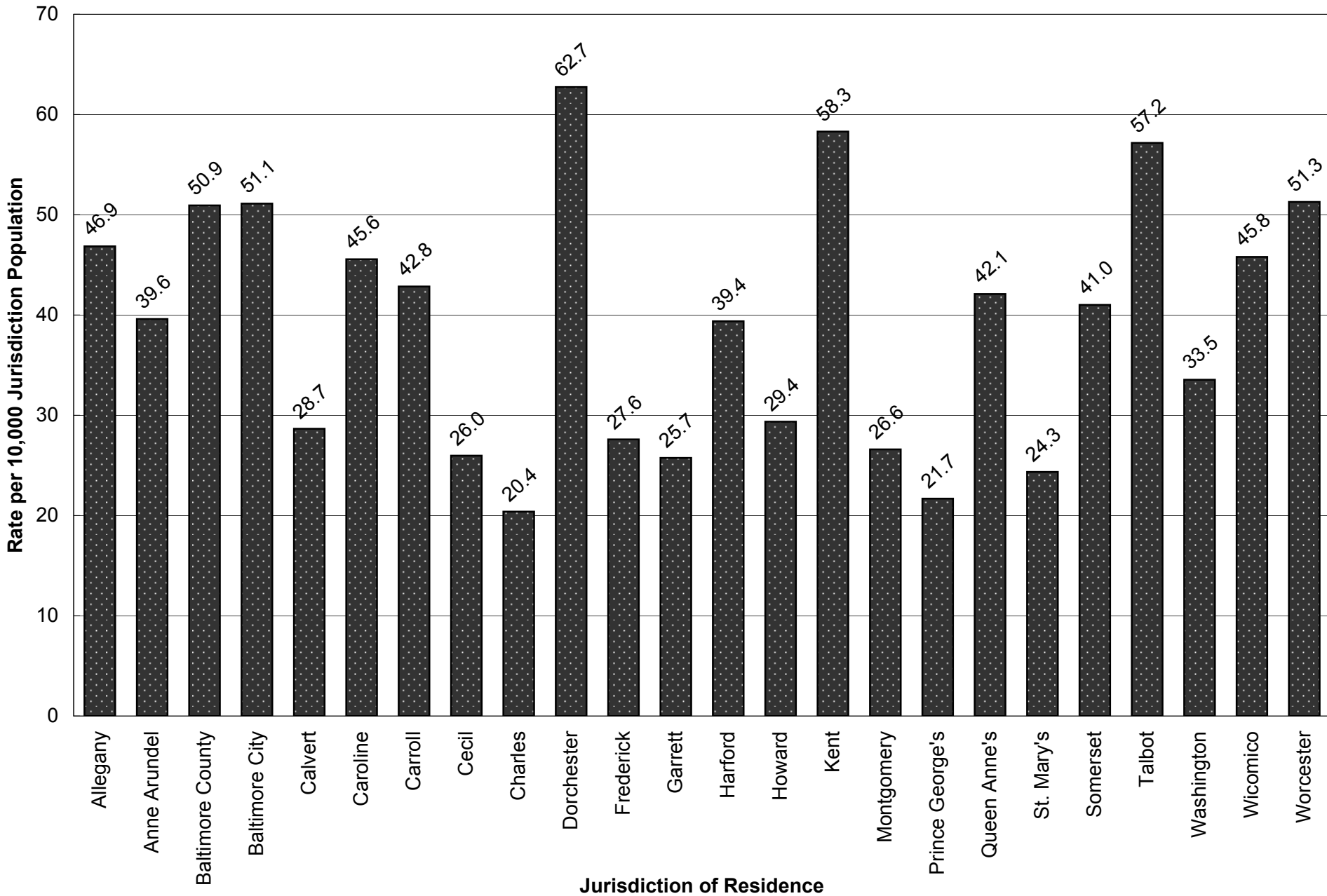
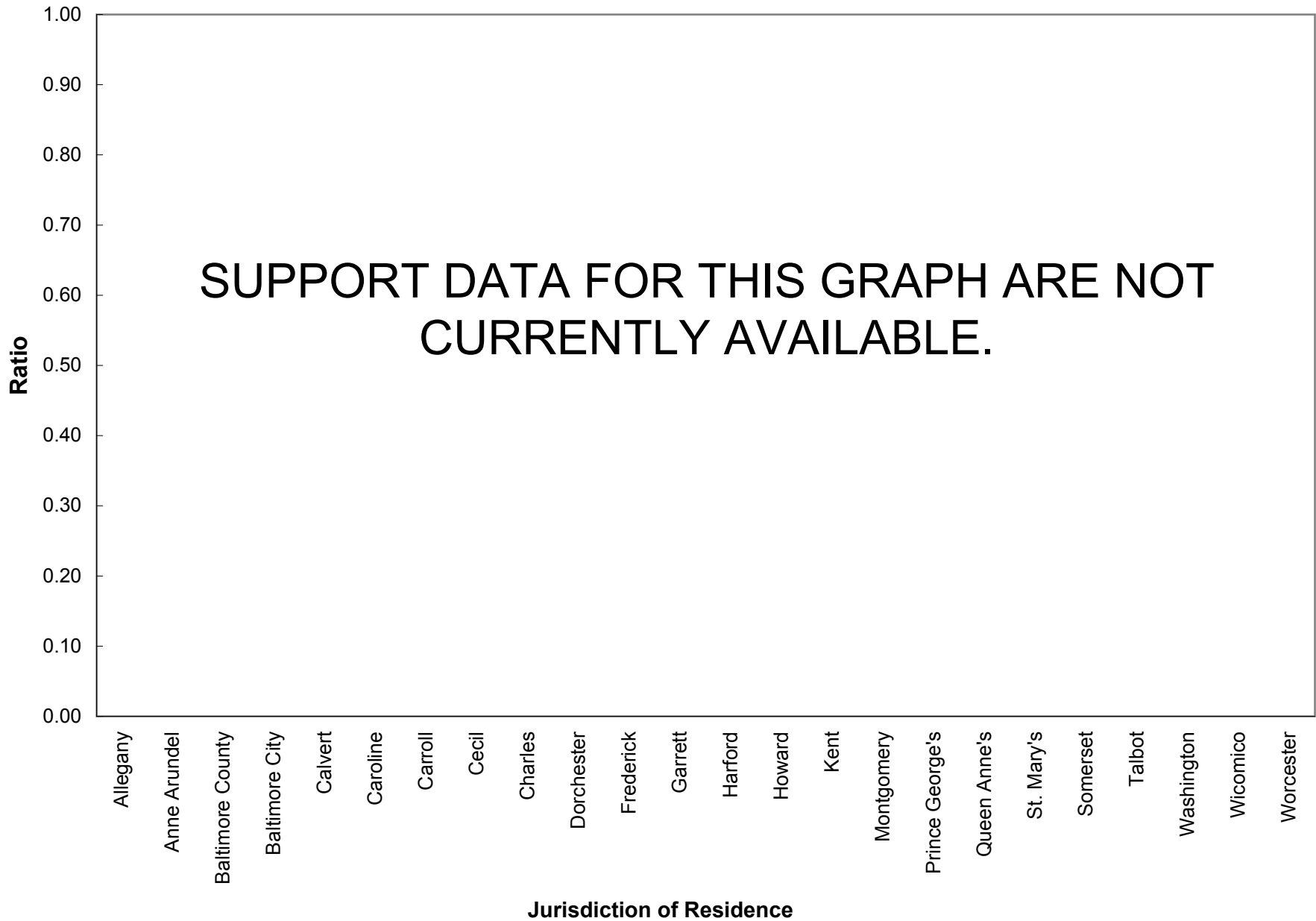


Figure 3

**Ratio of General Hospital Cancer Discharges in 2005 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 2005 for residents of that jurisdiction

Figure 4

**General Hospital Discharges in Maryland in 2005:  
Charges by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for All Ages**

| Cancer                           | Total Discharges | Total Charge for Hospitalization |                 |             |                  | Total                |
|----------------------------------|------------------|----------------------------------|-----------------|-------------|------------------|----------------------|
|                                  |                  | Mean                             | Median          | Minimum     | Maximum          |                      |
| Lung and Bronchus                | 2,637            | \$16,620                         | \$12,753        | \$99        | \$236,449        | \$43,825,718         |
| Colon and Rectum                 | 2,537            | \$19,222                         | \$14,902        | \$755       | \$358,953        | \$48,766,361         |
| Breast                           | 1,289            | \$8,948                          | \$7,079         | \$948       | \$47,732         | \$11,533,420         |
| Prostate                         | 1,148            | \$9,704                          | \$8,969         | \$99        | \$60,706         | \$11,140,624         |
| Oral                             | 290              | \$23,111                         | \$13,645        | \$1,065     | \$166,579        | \$6,702,229          |
| Melanoma                         | 98               | \$12,752                         | \$8,689         | \$1,546     | \$54,668         | \$1,249,677          |
| Cervix                           | 186              | \$11,315                         | \$8,882         | \$1,521     | \$69,481         | \$2,104,646          |
| <b>Total of Targeted Cancers</b> | <b>8,185</b>     | <b>\$15,311</b>                  | <b>\$11,301</b> | <b>\$99</b> | <b>\$358,953</b> | <b>\$125,322,676</b> |
| <b>Total Other Cancers</b>       | <b>12,228</b>    | <b>\$18,735</b>                  | <b>\$11,081</b> | <b>\$80</b> | <b>\$823,069</b> | <b>\$229,091,685</b> |
| <b>Total of All Cancers</b>      | <b>20,413</b>    | <b>\$17,362</b>                  | <b>\$11,185</b> | <b>\$80</b> | <b>\$823,069</b> | <b>\$354,414,360</b> |

**General Hospital Discharges in Maryland in 2005:  
Charges by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 49 and Under**

| Cancer                           | Total Discharges | Total Charge for Hospitalization |                 |             |                  |                     |
|----------------------------------|------------------|----------------------------------|-----------------|-------------|------------------|---------------------|
|                                  |                  | Mean                             | Median          | Minimum     | Maximum          | Total               |
| Lung and Bronchus                | 190              | \$17,295                         | \$12,954        | \$590       | \$146,668        | \$3,286,045         |
| Colon and Rectum                 | 281              | \$18,438                         | \$14,708        | \$1,491     | \$162,265        | \$5,181,041         |
| Breast                           | 362              | \$10,241                         | \$8,450         | \$948       | \$45,581         | \$3,707,329         |
| Prostate                         | 85               | \$9,627                          | \$9,135         | \$99        | \$28,833         | \$818,335           |
| Oral                             | 71               | \$22,883                         | \$14,177        | \$1,278     | \$166,579        | \$1,624,715         |
| Melanoma                         | 30               | \$15,230                         | \$8,674         | \$3,492     | \$49,915         | \$456,887           |
| Cervix                           | 104              | \$9,769                          | \$7,870         | \$1,531     | \$41,610         | \$1,015,927         |
| <b>Total of Targeted Cancers</b> | <b>1,123</b>     | <b>\$14,328</b>                  | <b>\$10,305</b> | <b>\$99</b> | <b>\$166,579</b> | <b>\$16,090,279</b> |
| <b>Total Other Cancers</b>       | <b>2,426</b>     | <b>\$23,396</b>                  | <b>\$11,837</b> | <b>\$80</b> | <b>\$823,069</b> | <b>\$56,759,836</b> |
| <b>Total of All Cancers</b>      | <b>3,549</b>     | <b>\$20,527</b>                  | <b>\$11,124</b> | <b>\$80</b> | <b>\$823,069</b> | <b>\$72,850,116</b> |

**General Hospital Discharges in Maryland in 2005:  
Charges by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 50 to 64**

| Cancer                           | Total Discharges | Total Charge for Hospitalization |                 |              |                  | Total                |
|----------------------------------|------------------|----------------------------------|-----------------|--------------|------------------|----------------------|
|                                  |                  | Mean                             | Median          | Minimum      | Maximum          |                      |
| Lung and Bronchus                | 870              | \$16,381                         | \$12,767        | \$793        | \$122,715        | \$14,251,528         |
| Colon and Rectum                 | 713              | \$18,282                         | \$14,476        | \$755        | \$167,993        | \$13,035,223         |
| Breast                           | 439              | \$9,957                          | \$7,904         | \$1,070      | \$47,732         | \$4,370,935          |
| Prostate                         | 590              | \$9,758                          | \$9,337         | \$1,376      | \$36,429         | \$5,757,483          |
| Oral                             | 113              | \$21,533                         | \$13,242        | \$1,815      | \$114,040        | \$2,433,218          |
| Melanoma                         | 22               | \$17,267                         | \$12,724        | \$3,901      | \$54,668         | \$379,870            |
| Cervix                           | 51               | \$12,570                         | \$11,514        | \$1,521      | \$32,231         | \$641,084            |
| <b>Total of Targeted Cancers</b> | <b>2,798</b>     | <b>\$14,607</b>                  | <b>\$10,938</b> | <b>\$755</b> | <b>\$167,993</b> | <b>\$40,869,340</b>  |
| <b>Total Other Cancers</b>       | <b>3,932</b>     | <b>\$18,484</b>                  | <b>\$11,139</b> | <b>\$99</b>  | <b>\$504,377</b> | <b>\$72,678,311</b>  |
| <b>Total of All Cancers</b>      | <b>6,730</b>     | <b>\$16,872</b>                  | <b>\$11,065</b> | <b>\$99</b>  | <b>\$504,377</b> | <b>\$113,547,652</b> |

**General Hospital Discharges in Maryland in 2005:  
Charges by Type of Cancer Among Maryland Residents,  
Where Cancer is Listed as the Primary Diagnosis for Ages 65 and Over**

| Cancer                           | Total Discharges | Total Charge for Hospitalization |                 |             |                  |                      |
|----------------------------------|------------------|----------------------------------|-----------------|-------------|------------------|----------------------|
|                                  |                  | Mean                             | Median          | Minimum     | Maximum          | Total                |
| Lung and Bronchus                | 1,577            | \$16,670                         | \$12,738        | \$99        | \$236,449        | \$26,288,145         |
| Colon and Rectum                 | 1,543            | \$19,799                         | \$15,160        | \$882       | \$358,953        | \$30,550,097         |
| Breast                           | 488              | \$7,080                          | \$5,801         | \$995       | \$45,422         | \$3,455,156          |
| Prostate                         | 473              | \$9,651                          | \$8,252         | \$1,297     | \$60,706         | \$4,564,807          |
| Oral                             | 106              | \$24,946                         | \$15,040        | \$1,065     | \$151,025        | \$2,644,296          |
| Melanoma                         | 46               | \$8,977                          | \$8,264         | \$1,546     | \$22,699         | \$412,920            |
| Cervix                           | 31               | \$14,440                         | \$10,955        | \$3,206     | \$69,481         | \$447,635            |
| <b>Total of Targeted Cancers</b> | <b>4,264</b>     | <b>\$16,033</b>                  | <b>\$11,906</b> | <b>\$99</b> | <b>\$358,953</b> | <b>\$68,363,056</b>  |
| <b>Total Other Cancers</b>       | <b>5,870</b>     | <b>\$16,977</b>                  | <b>\$10,746</b> | <b>\$99</b> | <b>\$412,002</b> | <b>\$99,653,537</b>  |
| <b>Total of All Cancers</b>      | <b>10,134</b>    | <b>\$16,579</b>                  | <b>\$11,321</b> | <b>\$99</b> | <b>\$412,002</b> | <b>\$168,016,593</b> |

**Number of General Hospital Discharges in 2005 by Category of Total Hospital Charges Where Targeted and all Other Cancers are Listed as the Primary Diagnosis among Maryland Residents**

| Total Hospital Charges | Type of Cancer  |                |               |              |            |           |            |              |              |               |
|------------------------|-----------------|----------------|---------------|--------------|------------|-----------|------------|--------------|--------------|---------------|
|                        | Lung & Bronchus | Colon & Rectum | Female Breast | Prostate     | Oral       | Melanoma  | Cervix     | Other Cancer | Metastatic   | Total         |
| Less than \$2,500      | 109             | 40             | 18            | 24           | 10         | 2         | 3          | 243          | 163          | 612           |
| \$2,500 TO \$4,999     | 301             | 112            | 308           | 114          | 27         | 12        | 37         | 1,071        | 681          | 2,663         |
| \$5,000 TO \$7,499     | 296             | 176            | 375           | 257          | 42         | 22        | 34         | 1,184        | 712          | 3,098         |
| \$7,500 TO \$9,999     | 290             | 294            | 215           | 308          | 35         | 20        | 29         | 949          | 611          | 2,751         |
| \$10,000 TO \$12,499   | 293             | 348            | 125           | 225          | 16         | 11        | 27         | 645          | 436          | 2,126         |
| \$12,500 TO \$14,999   | 243             | 312            | 78            | 109          | 28         | 6         | 20         | 593          | 372          | 1,761         |
| \$15,000 TO \$17,499   | 218             | 284            | 52            | 47           | 21         | 4         | 6          | 436          | 304          | 1,372         |
| \$17,500 TO \$19,999   | 155             | 198            | 42            | 31           | 14         | 6         | 11         | 414          | 221          | 1,092         |
| \$20,000 TO \$22,499   | 140             | 143            | 26            | 8            | 10         | 1         | 4          | 276          | 192          | 800           |
| \$22,500 TO \$24,999   | 120             | 127            | 18            | 8            | 10         | 4         | 3          | 245          | 151          | 686           |
| \$25,000 TO \$27,499   | 96              | 91             | 10            | 5            | 7          | 0         | 3          | 178          | 112          | 502           |
| \$27,500 TO \$29,999   | 83              | 64             | 5             | 1            | 2          | 2         | 1          | 170          | 90           | 418           |
| \$30,000 TO \$32,499   | 53              | 48             | 4             | 2            | 7          | 0         | 4          | 149          | 90           | 357           |
| \$32,500 TO \$34,999   | 41              | 46             | 7             | 0            | 4          | 1         | 0          | 105          | 60           | 264           |
| \$35,000 TO \$37,499   | 38              | 50             | 1             | 2            | 0          | 1         | 0          | 108          | 48           | 248           |
| \$37,500 TO \$39,999   | 29              | 29             | 2             | 1            | 5          | 3         | 1          | 91           | 47           | 208           |
| \$40,000 TO \$42,499   | 18              | 24             | 0             | 2            | 3          | 0         | 1          | 86           | 27           | 161           |
| \$42,500 TO \$44,999   | 19              | 16             | 0             | 0            | 5          | 1         | 0          | 65           | 24           | 130           |
| \$45,000 TO \$47,499   | 12              | 12             | 2             | 0            | 5          | 0         | 0          | 59           | 22           | 112           |
| \$47,500 TO \$49,999   | 10              | 12             | 1             | 1            | 3          | 1         | 0          | 57           | 17           | 102           |
| \$50,000 TO \$59,999   | 27              | 42             | 0             | 1            | 13         | 1         | 0          | 136          | 51           | 271           |
| \$60,000 TO \$69,999   | 8               | 23             | 0             | 2            | 4          | 0         | 2          | 86           | 23           | 148           |
| \$70,000 TO \$79,999   | 9               | 14             | 0             | 0            | 5          | 0         | 0          | 58           | 23           | 109           |
| \$80,000 TO \$89,999   | 6               | 5              | 0             | 0            | 4          | 0         | 0          | 48           | 16           | 79            |
| \$90,000 TO \$99,999   | 7               | 7              | 0             | 0            | 2          | 0         | 0          | 45           | 13           | 74            |
| \$100,000 TO \$124,999 | 5               | 10             | 0             | 0            | 5          | 0         | 0          | 67           | 14           | 101           |
| \$125,000 TO \$149,999 | 6               | 1              | 0             | 0            | 1          | 0         | 0          | 43           | 11           | 62            |
| \$150,000 TO \$174,999 | 1               | 6              | 0             | 0            | 2          | 0         | 0          | 26           | 5            | 40            |
| \$175,000 TO \$199,999 | 2               | 0              | 0             | 0            | 0          | 0         | 0          | 11           | 1            | 14            |
| Over \$200,000         | 2               | 3              | 0             | 0            | 0          | 0         | 0          | 41           | 6            | 52            |
| Unknown                | 0               | 0              | 0             | 0            | 0          | 0         | 0          | 0            | 0            | 0             |
|                        |                 |                |               |              |            |           |            |              |              |               |
| <b>TOTAL</b>           | <b>2,637</b>    | <b>2,537</b>   | <b>1,289</b>  | <b>1,148</b> | <b>290</b> | <b>98</b> | <b>186</b> | <b>7,685</b> | <b>4,543</b> | <b>20,413</b> |

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Lung and Bronchus Cancer is Listed as the Primary Diagnosis**

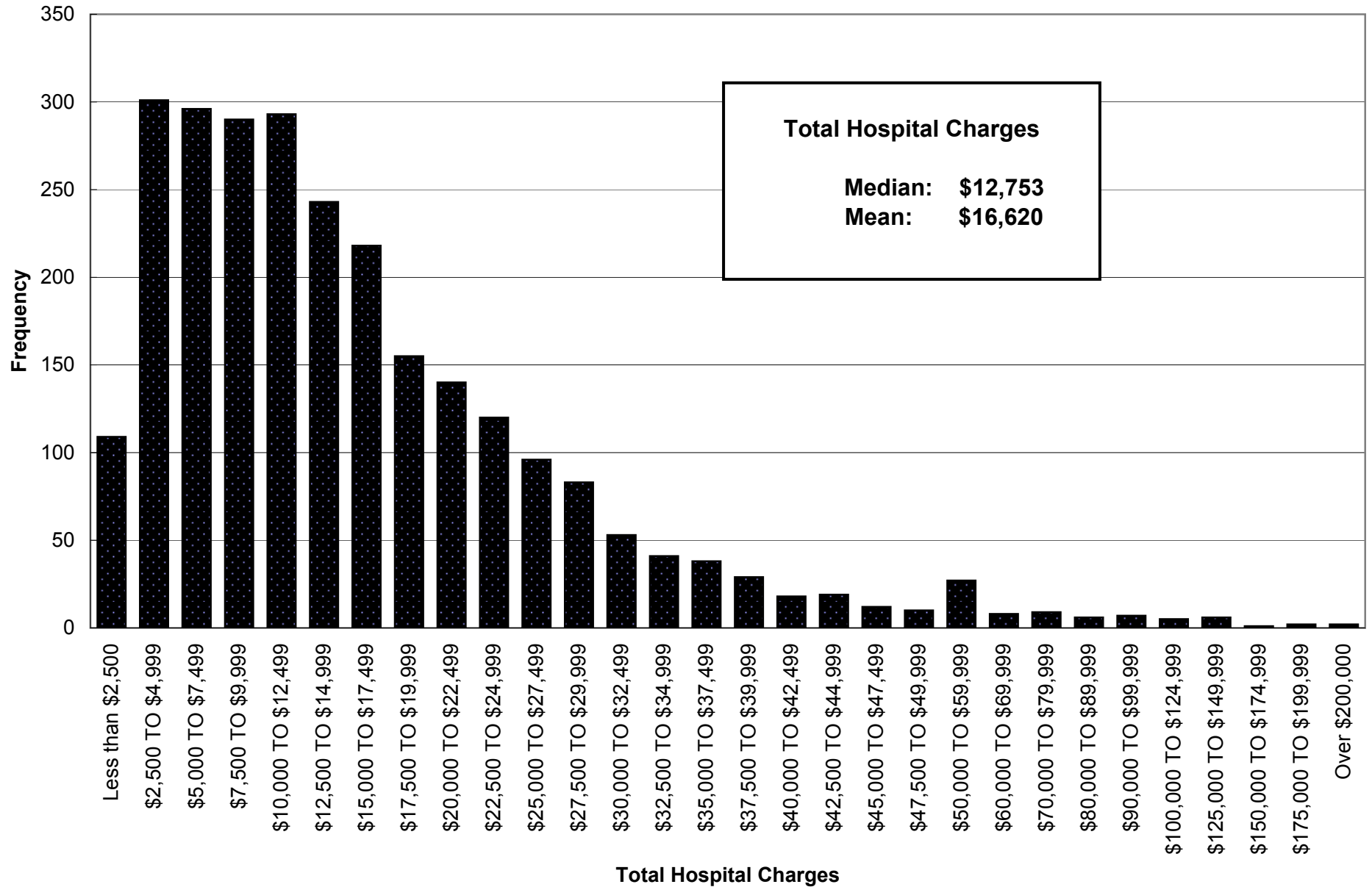


Figure 5

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Colon and Rectum Cancer is Listed as the Primary Diagnosis**

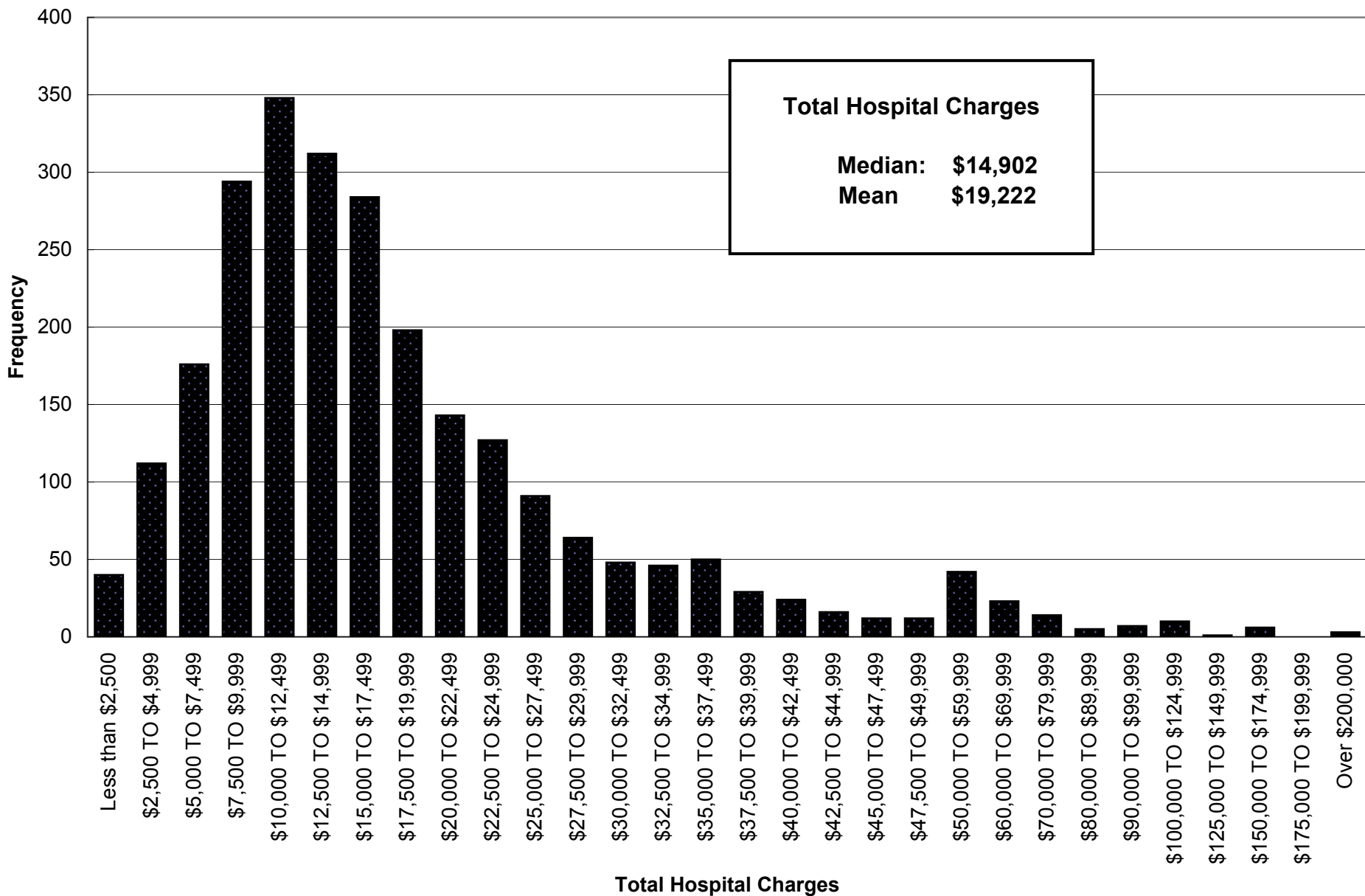


Figure 6

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Breast Cancer is Listed as the Primary Diagnosis**

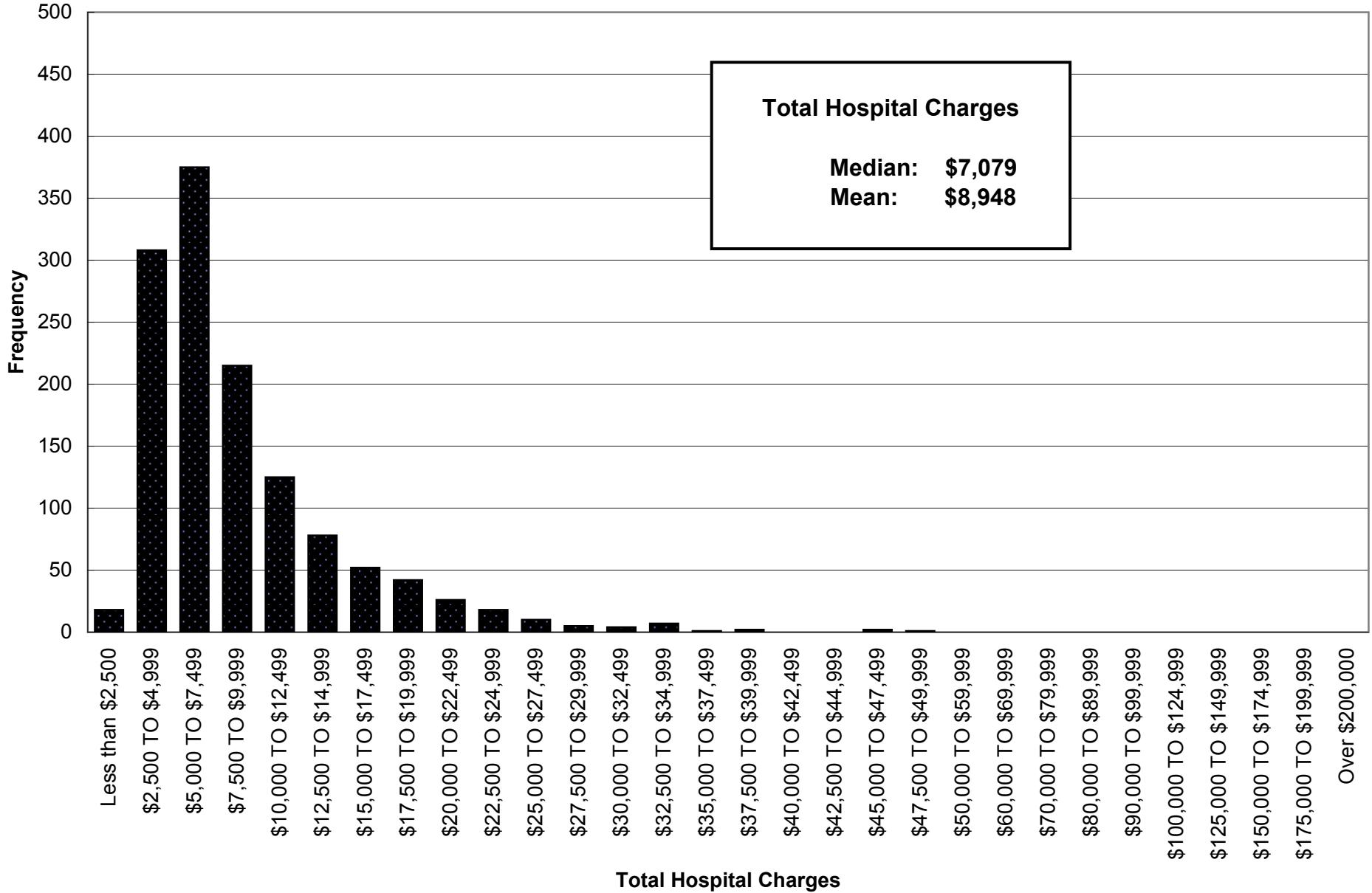


Figure 7

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Prostate Cancer is Listed as the Primary Diagnosis**

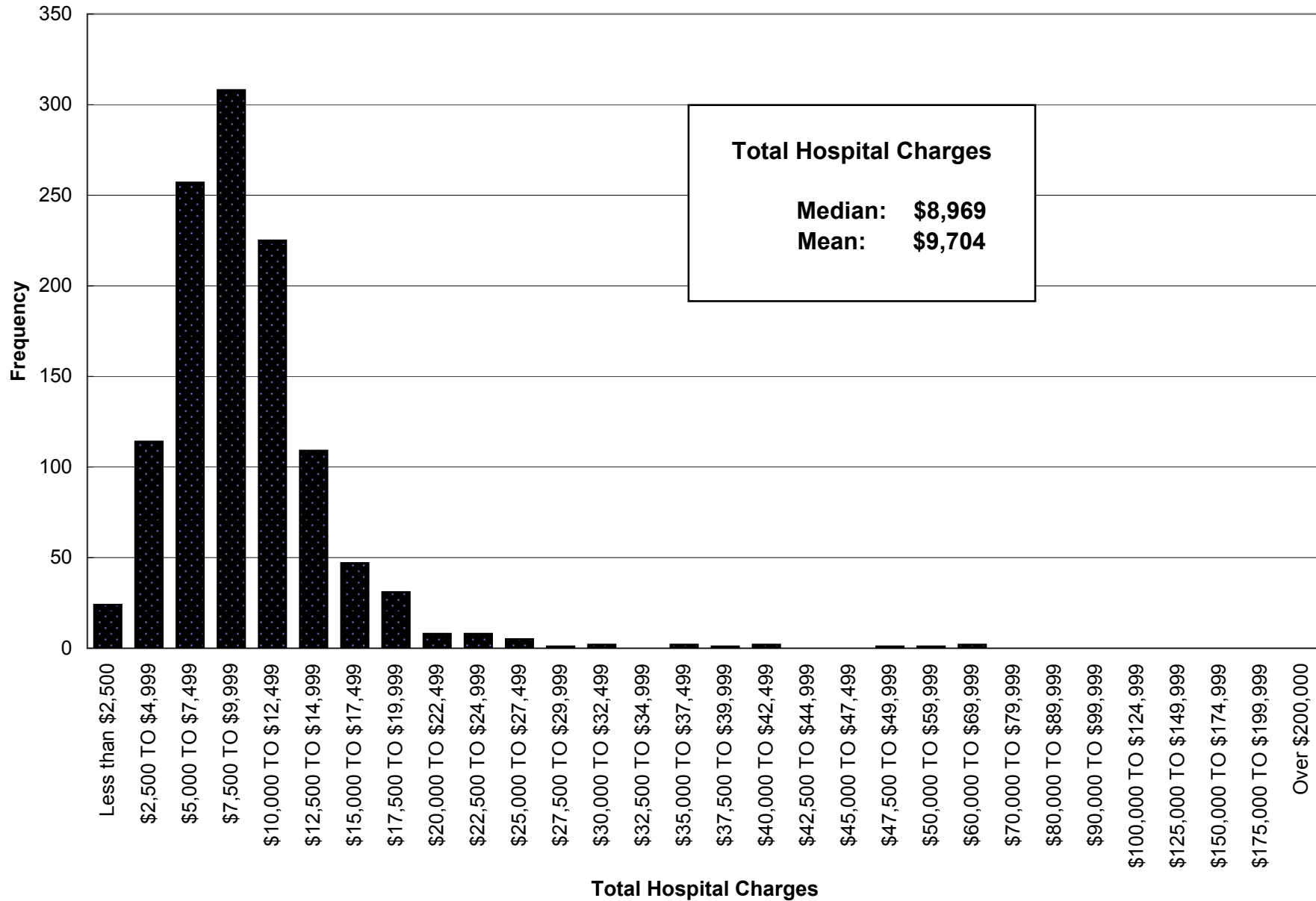


Figure 8

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Oral Cancer is Listed as the Primary Diagnosis**

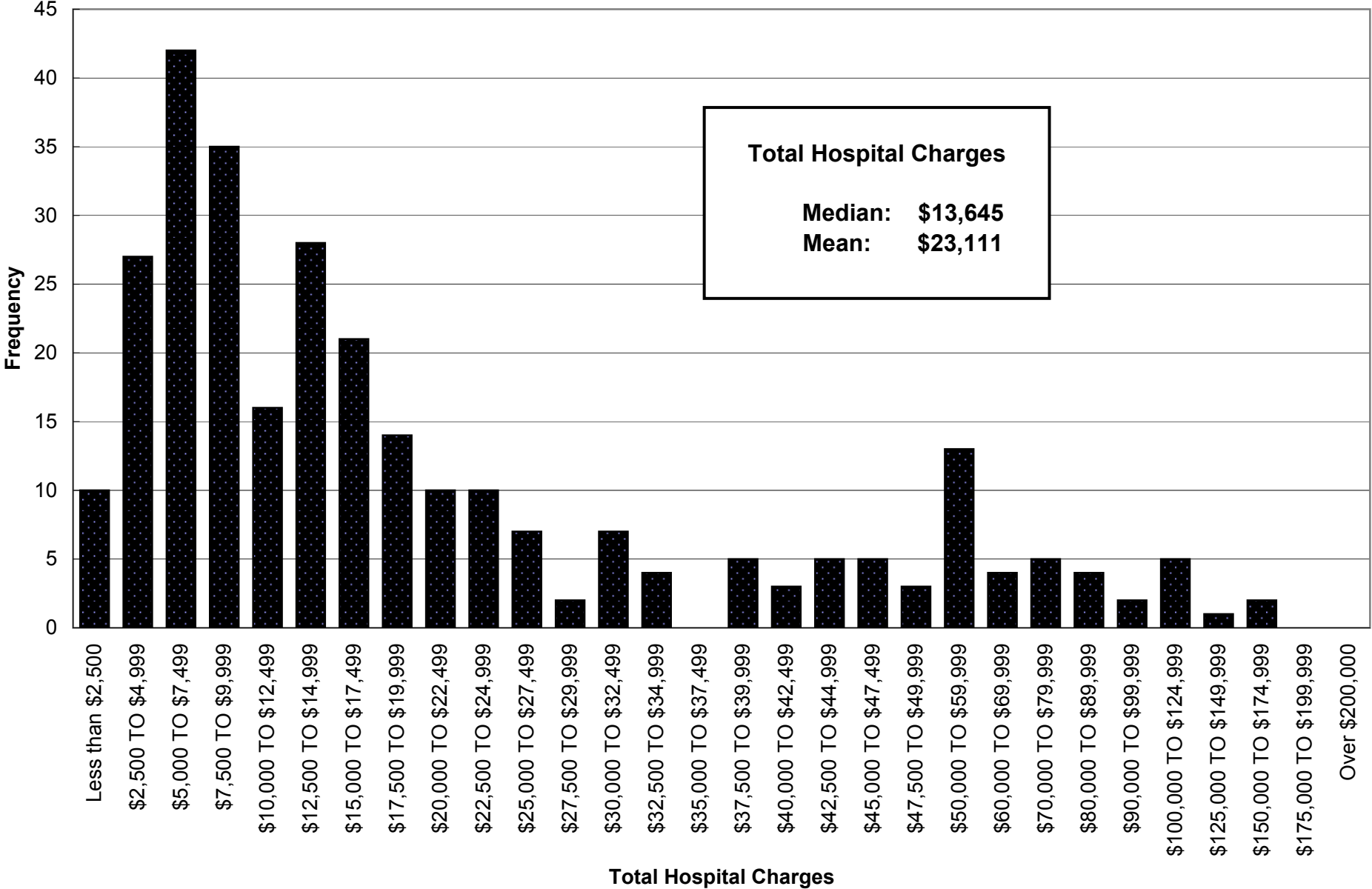


Figure 9

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Melanoma is Listed as the Primary Diagnosis**

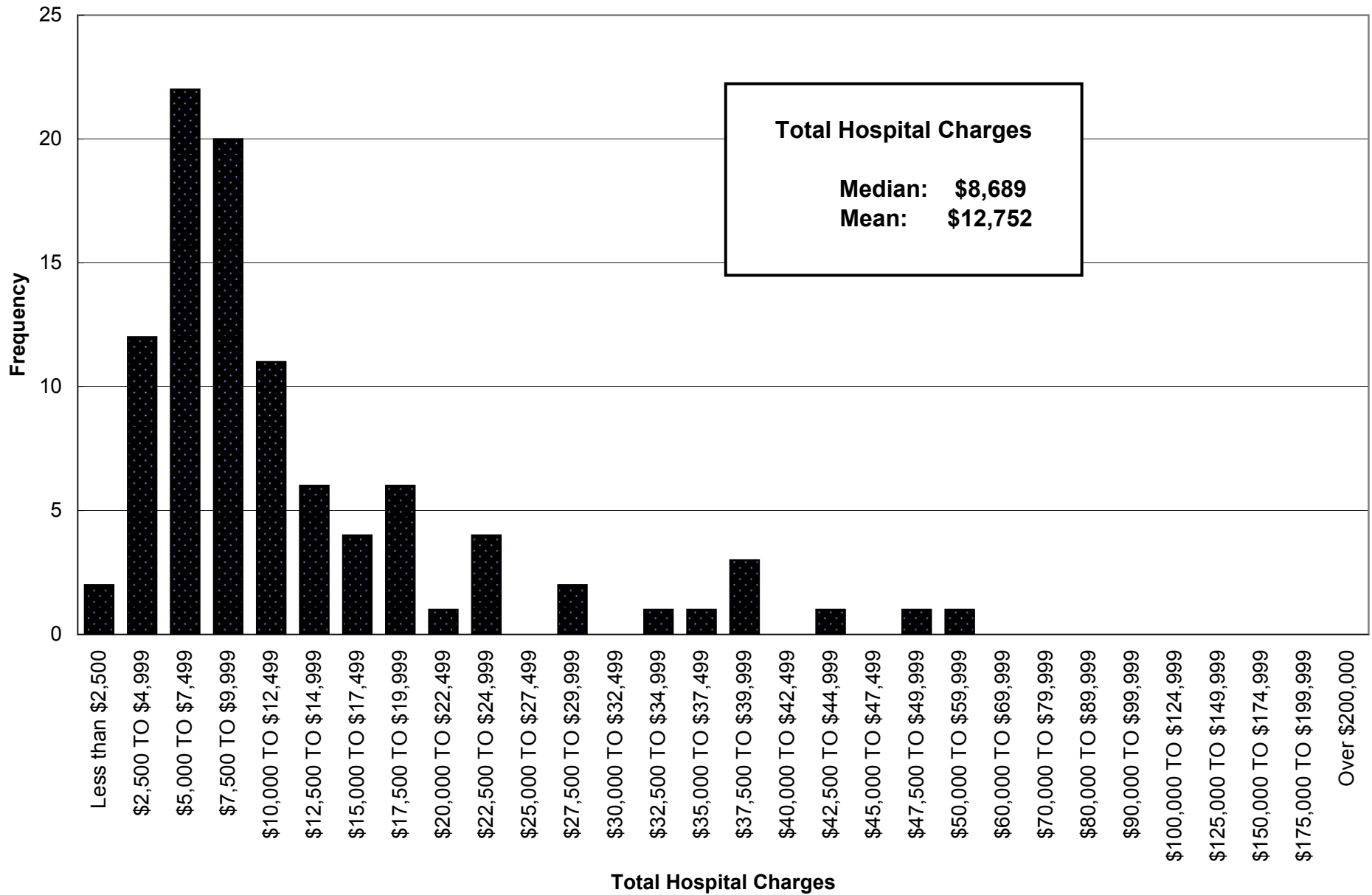


Figure 10

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Cervix Cancer is Listed as the Primary Diagnosis**

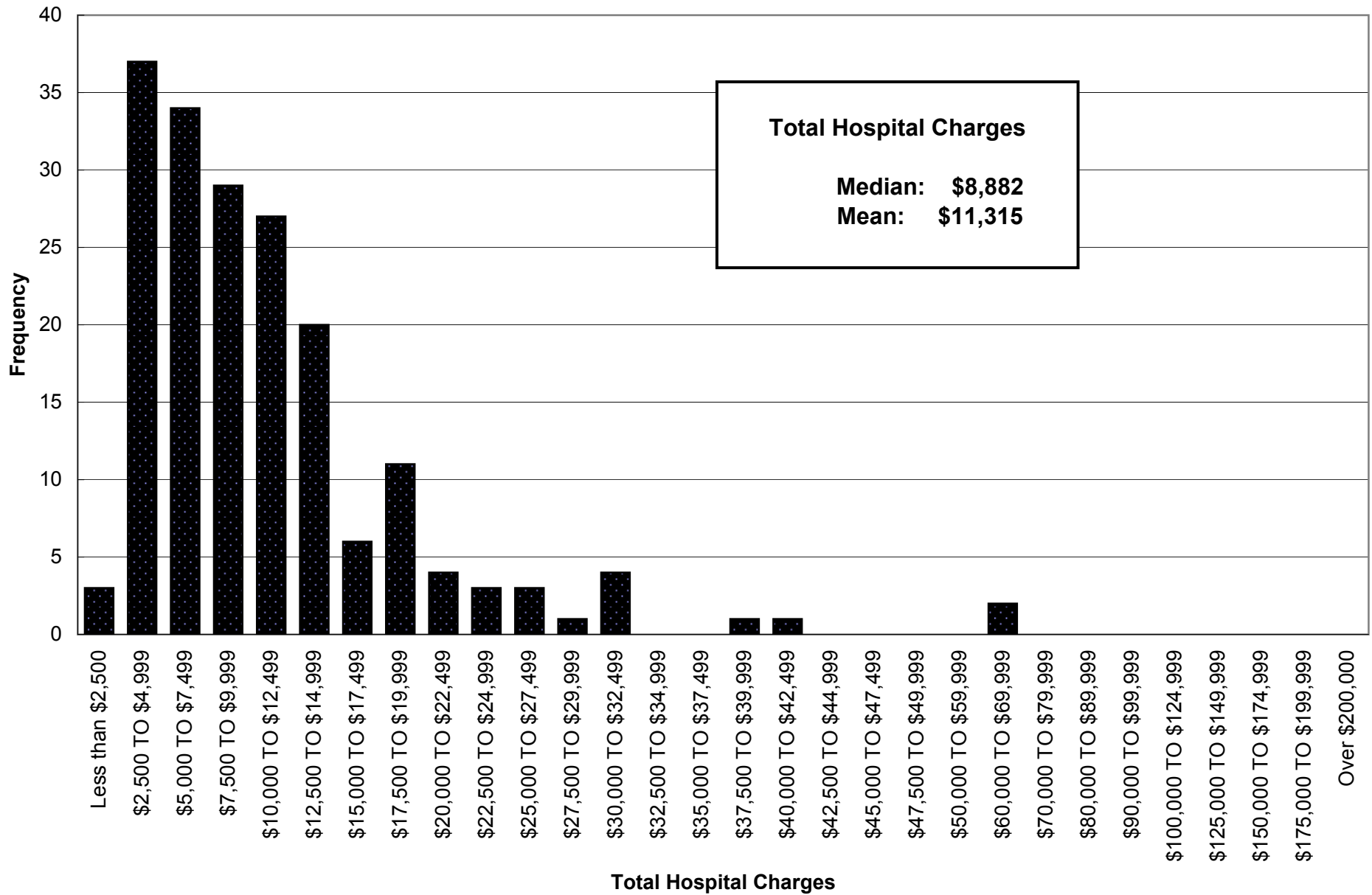


Figure 11

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Other Non-Targeted Cancer is Listed as the Primary Diagnosis**

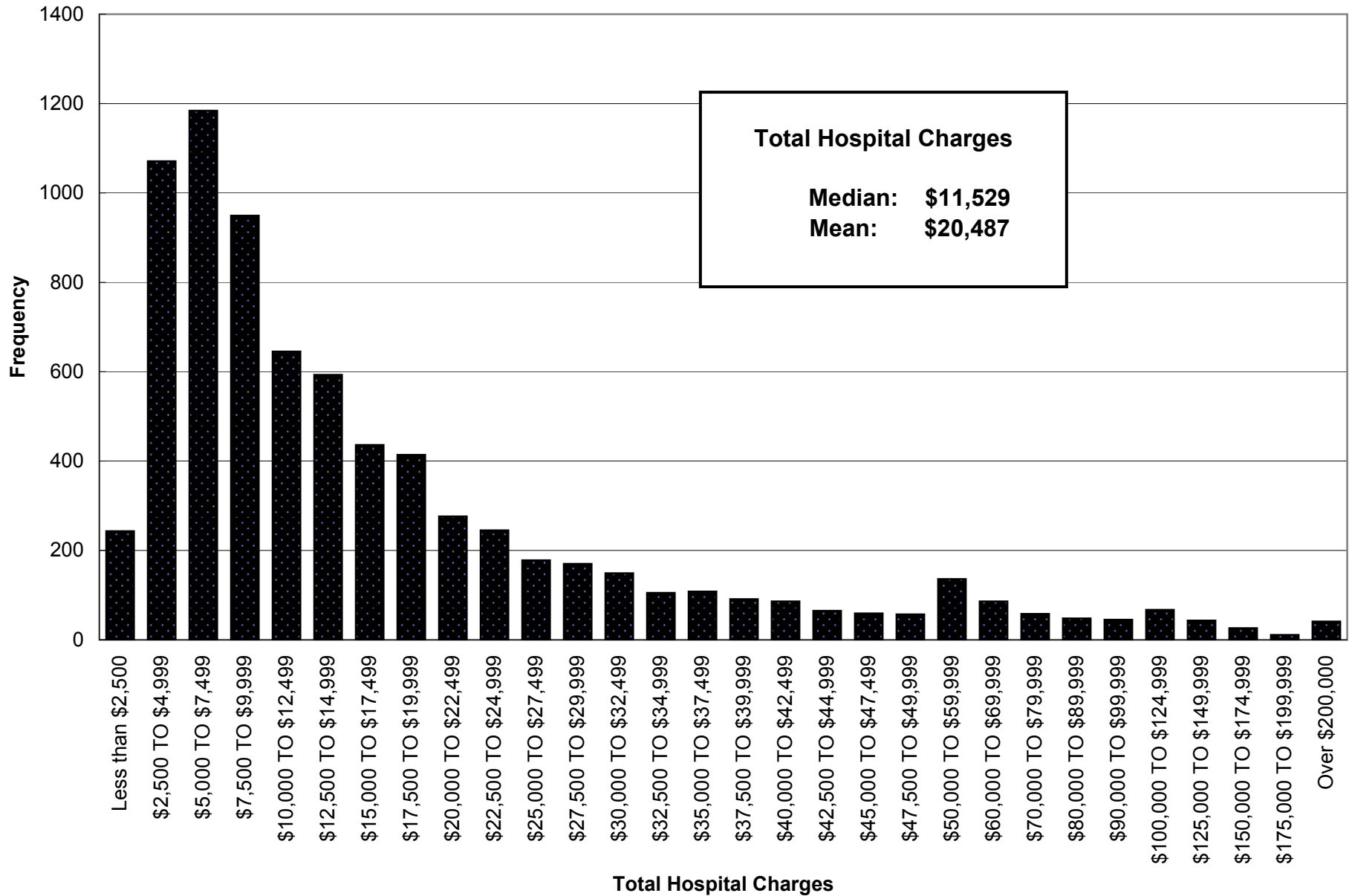


Figure 12

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Metastatic Cancer is Listed as the Primary Diagnosis**

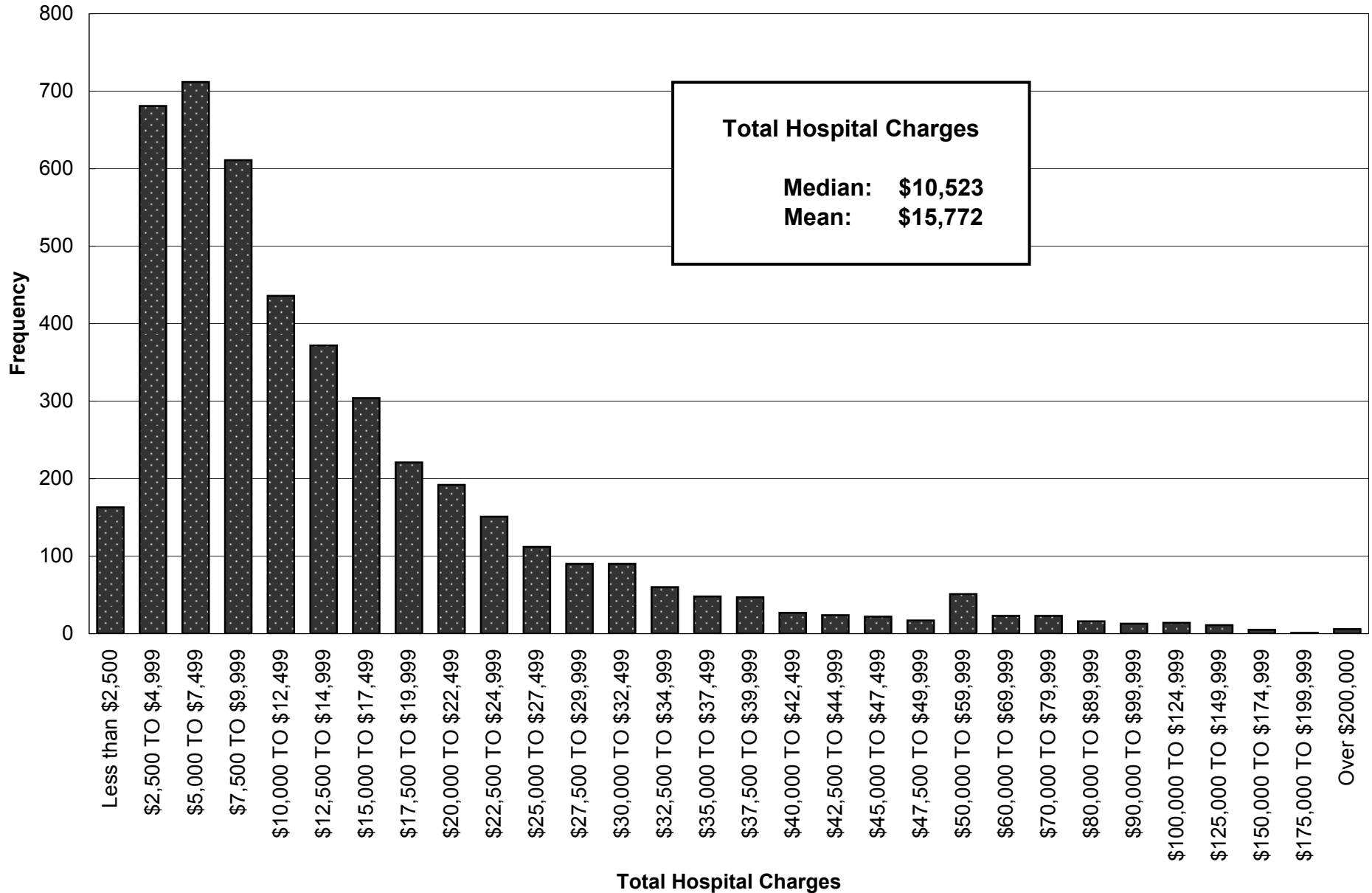


Figure 13

**Frequency of Hospital Discharges by Category of Total Hospital Charges for 2005  
Where Any Type of Cancer is Listed as the Primary Diagnosis**

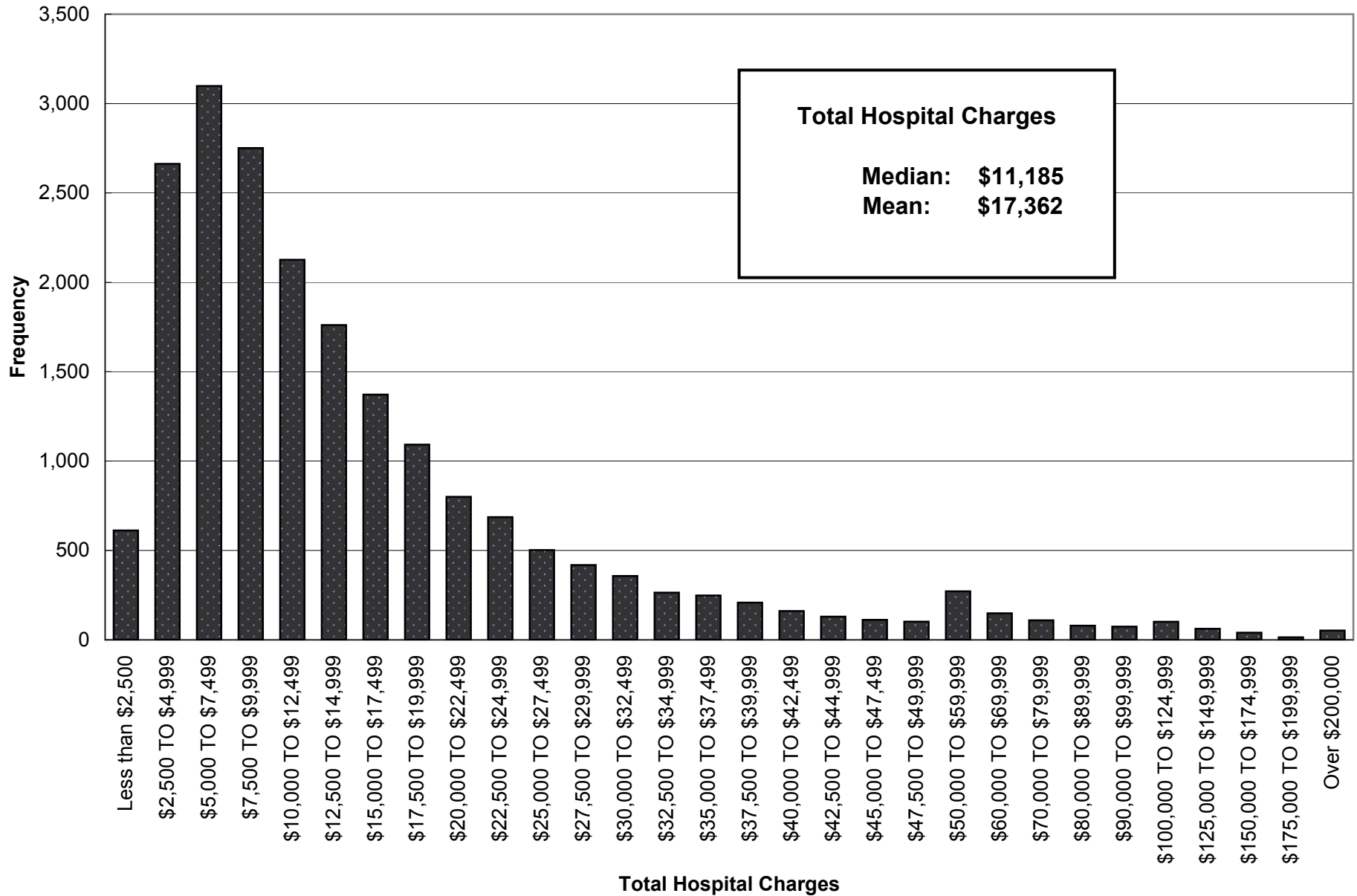


Figure 14

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   |