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INTRODUCTION

This report compares estimates calculated from the 2004 Nationwide Inpatient Sample (NIS) with statistics from two comparable databases – the National Hospital Discharge Survey (NHDS) and the Medicare Provider Analysis and Review (MedPAR) – with the objective of assessing potential biases. In addition, NIS estimates were contrasted with summary information from the American Hospital Association (AHA). This report summarizes methods and findings and provides all comparisons in detailed tables in the appendices. Further information on the databases compared in this report and descriptions of analytic methods can be found in previous NIS comparison reports (available at <http://www.hcup-us.ahrq.gov/db/nation/nis/nisrelatedreports.jsp>). In addition to comparisons with national statistics, these data were also evaluated across several categories, including region, expected payer, hospital characteristics, patient demographics, diagnosis groupings, and procedure groupings.

NIS BACKGROUND

The 2004 NIS was established as part of the Healthcare Cost and Utilization Project (HCUP) to provide data supporting analyses of hospital utilization across the United States. NIS data were selected using a stratified probability sample of hospitals, drawn from a frame of 37 states. Sampling probabilities were calculated to select 20 percent of the universe in each stratum defined by hospital characteristics (region, urban/rural location, number of beds, teaching status, and ownership/control). As a result, the NIS includes approximately 8 million discharges from 994 hospitals, with weights to facilitate national estimates. One of the most distinctive features of the NIS is that its large sample size allows for the study of relatively uncommon disorders, procedures, and hospital types; in fact, NIS estimates can be calculated for any number of special sub-populations. In addition, the NIS contains information on hospital charges and includes all payers.

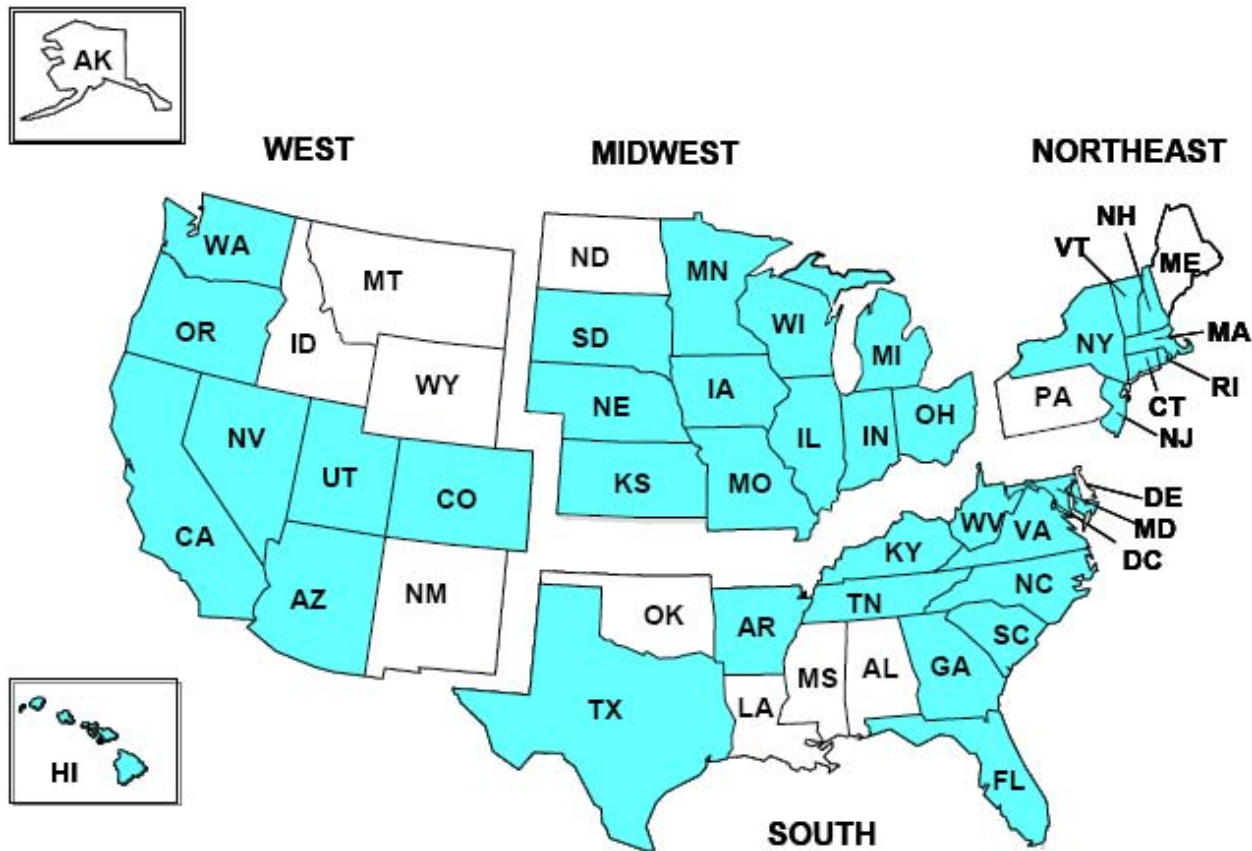
NIS coverage of United States discharges is impressive, because these 37 states include nearly 78 percent of United States community hospitals, more than 84 percent of all discharges, and nearly 91 percent of the U.S. population during 2004. By region, the sampling frame for the NIS includes states with 98 percent of the population in the Northeast, 99 percent of the population in the Midwest, 81 percent of the South, and 92 percent of the West. Figure 1 displays the geographic distribution of NIS Partners.

The key difference between the NIS and the databases with which it was compared relates to geographic scope. Both the NHDS and the MedPAR are national in coverage; MedPAR data include all Medicare-paid, fee-for-service discharges in the United States, while NHDS data were gathered from a sampling frame of all 50 states plus the District of Columbia. In contrast, the 2004 NIS was drawn from only 37 states (as shown in Figure 1); these states comprise 75.5% of all U.S. hospitals and 87.5% of the U.S. population. This difference may be a factor for researchers who require comprehensive geographic representation. Some significant differences between the states excluded and included in the NIS may explain several of the observed differences between the databases described in this report.

NIS states are disproportionately the more densely populated states. The average population density of NIS states was 115.1 persons per square mile in 2004. This compares with a national

average of 83.0 persons per square mile and an average population density for non-NIS states of 38.5 persons per square mile. Of the 10 most densely populated states, all but two were included in the NIS. These NIS states, and their rank in terms of population density order, are: New Jersey (1), Rhode Island (2), Massachusetts (3), Connecticut (4), Maryland (5), New York (7), Florida (8), and Ohio (9). At the other end of the spectrum, only four of the 10 least populous states were included in the NIS: Utah (41), Nebraska (42), Nevada (43), and South Dakota (46).¹

Figure 1. States Participating in the NIS, 2004



Because of these population differences between NIS and non-NIS states, the NIS sampling frame begins with few hospitals in sparsely populated areas. Even weighting the discharges from rural states does not adequately account for the remote areas of the country, which include

¹Source of state rankings: *State and Metropolitan Area Data Book - 5th Edition* and the *Annual Estimates of the Population for the United States*. December 22, 2005. <http://www.census.gov/popest/states/tables/NST-EST2005-01.xls>.

The three most populous states not included in the NIS were Pennsylvania (rank 6), Alabama (rank 23), and Louisiana (rank 24). The six least populous states not included in the NIS were Maine (rank 40), Montana (rank 44), Delaware (rank 45), Alaska (rank 47), North Dakota (rank 48), and Wyoming (rank 50).

a disproportionate number of the smallest hospitals. The most rural states included in the sample, Nevada and South Dakota, have population densities of 21.3 and 10.2 persons per square mile, respectively. This contrasts with population densities of 1.1, 5.2, and 6.4 persons per square mile in Alaska, Wyoming, and Montana, which are not included in the sample.²

One impact of the specific subset of states selected for the NIS was an over-representation of Medicare patients in managed care. In the 37 states included in the 2004 NIS, the market penetration of managed care providers for Medicare enrollees averaged 13.5 percent. In contrast, for the 13 states not included in the NIS, the mean market penetration of managed care providers was only 5.5 percent.

It is important to note that NIS data differed in scope from the comparison databases in several ways:

- The NIS is a sample, while the MedPAR is a census of fee-for-service Medicare discharges.
- NIS data include Medicare managed care discharges that are generally omitted from the MedPAR data.
- MedPAR and NHDS data are drawn from all 50 states plus the District of Columbia, while the NIS sample is drawn from 37 states.
- The NIS includes discharge-level data, while the AHA Annual Survey reports data at the hospital level.

AHA BACKGROUND

For 2004, the American Hospital Association (AHA) Annual Survey Database (also known as the AHA Annual Survey and the AHA Survey of Hospitals) included records for 4,836 hospitals. The AHA Survey data report discharges and inpatient days (overall, Medicare, and Medicaid), as well as hospital information such as bed counts, employment, and payroll. In addition, hospitals indicate specific services offered. The sampling frame for the NIS is based on AHA Survey data.

NHDS BACKGROUND

In 2004, the National Center for Health Statistics drew a sample of 319,530 short-stay discharges from 426 hospitals, including both general and children's hospitals for the NHDS data set. Statistics from the NHDS are considered geographically representative because the NHDS sampling frame was relatively unrestricted. The NHDS usually presents diagnoses and procedures in the order in which they were listed on the abstract form, with three specific exceptions: (1) code V27, outcome of delivery, was re-ordered as the principal diagnosis when it appeared as a secondary diagnosis; (2) acute myocardial infarction codes were re-ordered as

²These three states were ineligible for HCUP inclusion because none collected all-payer hospital discharge data for the year 2004.

the principal diagnosis when this condition appeared as a secondary diagnosis and another circulatory disease appeared on the record; and (3) if a symptom appeared as a first-listed diagnosis and a diagnosis appeared as a secondary code, the diagnosis replaced the symptom, which was moved to appear after the diagnosis.

MEDPAR BACKGROUND

Obtained from the Centers for Medicare and Medicaid Services (CMS), MedPAR data include all paid fee-for-service Medicare discharges from Medicare-certified, short-stay U.S. hospitals. For calendar year 2004, 12.7 million discharges from U.S. community hospitals were included. One important characteristic of MedPAR data is that the database under-reported total Medicare discharges by omitting most managed care discharges (approximately 14 percent of Medicare patients). This particular omission has significant implications for the various comparisons between the MedPAR and NIS data files.

METHODS

Statistics compared in the NIS, NHDS, and MedPAR databases included total number of discharges, average length of stay, in-hospital mortality rates, and average total charges (NIS and MedPAR only). These measures of utilization and outcomes were selected because they are common in health services research and serve important roles in health policy and resource planning analyses.

Both the NIS and NHDS are samples, and statistics derived from them are estimates. Therefore, comparisons between NIS and NHDS estimates utilized two-sample *t*-tests. MedPAR data, in contrast, are not derived from a sample. The NIS-MedPAR comparisons employed one-sample *t*-tests, which are useful in comparing an entire population (MedPAR) with sample estimates (NIS).

The report cautions that estimates cannot be expected to be identical when two different samples are drawn. When viewing results, readers should note that statistically significant differences between the NIS and the NHDS can be expected for a number of reasons. These include:

- Random variation between the two samples
- Differences in sampling strategies
- The NHDS practice of reordering some diagnosis codes
- The sheer volume of tests conducted.

MAJOR FINDINGS

Considering all of these possible reasons for significant differences among the samples, data analyses revealed remarkable similarity among the estimates. NIS estimates of essential health

care policy variables (i.e., number of inpatient discharges, in-hospital mortality, length of stay, and charges) were accurate and precise.

NIS-AHA Comparisons

Tables 1-6 summarize comparisons between the NIS and the AHA Annual Survey. NIS hospitals resembled typical hospitals in the AHA universe in bed size and most characteristics, although NIS hospitals were more active, had higher staffing rates, and had larger expenditures compared to the AHA universe. NIS facilities also admitted and discharged more patients and had higher expenditures and larger payrolls than hospitals in the AHA universe. NIS hospitals also tended to offer slightly more high-technology services, as compared with the universe. While NIS hospitals had more full-time equivalent (FTE) RNs per 1,000 patient days, there were fewer more FTE employees per bed. In addition, Medicaid patients were less prevalent in NIS hospitals than in all AHA facilities.

Nearly all NIS discharge estimates closely align with the discharge counts from the AHA Survey. This is not surprising, because NIS sampling strata and NIS discharge weights were based on AHA Annual Survey results. The AHA-derived sampling weights in the NIS yield discharge counts consistent with the AHA universe, overall, by region, and for most categories of hospital control and type. Of the 35 discharge comparisons shown in Table 5, only one significant difference was observed: the NIS discharge estimate for proprietary hospitals with more than 500 beds was moderately larger than the AHA total.

NIS-NHDS Comparisons

NIS-NHDS comparisons are presented in Table 7 through Table 12. NIS and NHDS estimates agreed in overall comparisons and across patient categories. This was also true for most hospital comparisons and specific diagnosis and procedure categories. Overall, agreements were observed for 72 percent of the discharge comparisons and 98 percent of the average length of stay (ALOS) comparisons. The degree of consistency for in-hospital mortality rates was also high: no significant differences were found with region and patient categories, and estimates agreed for 76 percent of hospital category comparisons. Of the NIS-NHDS differences discovered, most occur in diagnosis and procedure groupings.

NIS-MedPAR Comparisons

As shown in Tables 13-19, with the exception of discharge counts, NIS estimates of Medicare measures were generally consistent with MedPAR statistics. NIS discharge estimates were uniformly higher than the MedPAR numbers by approximately 15 percent, consistent with the omission of most managed care clients from the MedPAR. While 12.9 percent of Medicare patients were enrolled in managed care programs, the MedPAR data contain virtually no managed care discharges (only 1,313 out of 12,660,083 total discharges, or 0.01 percent).

Key Findings

The following sections provide summary highlights of key findings from this comparative analysis:

Summary of overall and regional comparisons:

- NIS estimates of discharge count, average length of stay, and in-hospital mortality rate measures were statistically consistent with NHDS estimates (Table 7).
- The NIS over-estimated discharges by 15 percent for Medicare patients, as compared with MedPAR statistics. This discrepancy was likely rooted in the omission of most discharges for managed care patients from the MedPAR file (Table 13).
- NIS-MedPAR discharge differences were greatest in the Northeast and West – regions with the highest Medicare managed care penetration. This finding was consistent with the hypothesis that MedPAR data under-report Medicare managed care discharges, such as Medicare+Choice. When we examined the percentage of discharges in each region, only two significant differences were observed: NIS estimates were higher in the West, and lower in the Midwest (Table 13).
- All NIS estimates of average length of stay and in-hospital mortality, along with most estimates of average total hospital charges from the NIS, were consistent with MedPAR statistics (Table 13).

Comparisons by hospital characteristics:

- NIS discharge estimates differed from NHDS estimates by reporting relatively more discharges from larger hospitals and relatively fewer discharges from smaller hospitals. NIS estimates of discharges by hospital size, however, closely approximated counts from the American Hospital Association (Table 8).
- NIS discharge estimates routinely exceeded MedPAR statistics, consistent with the absence of most Medicare managed care discharges from MedPAR data, although the proportion of NIS and MedPAR discharges in the hospital categories was generally consistent (Tables 14-15).
- Average length of stay, in-hospital mortality, and average total charge estimates from the NIS were consistent with NHDS estimates and MedPAR statistics for most hospital categories (Tables 8, 14, and 15).

Comparisons by patient characteristics:

- NIS and NHDS estimates were virtually identical across all patient categories (age group, gender, and race) for discharges, average length of stay, and in-hospital mortality rate. All NIS and NHDS estimates by expected payer were consistent, with the exception of discharges with missing or unknown payer information (Tables 9-10).
- Both the NIS and NHDS include large numbers of discharges without race information. In the NIS, patterns of missing race are state-specific: some states do not report race information to HCUP. It is not possible to determine whether the pattern of missing race is similar in the NHDS because the NHDS does not include state information. However, given that a large proportion of NHDS data is derived from the same administrative data sources included in the NIS, this same pattern of missing race data is likely (Table 9).

- Most NIS estimates of Medicare discharges differed from corresponding MedPAR counts, with higher NIS estimates in most cases. Race was not available for approximately one-quarter of NIS discharges, while less than one percent of MedPAR discharges lacked race information (Table 16).
- NIS-MedPAR differences also occurred for most estimates of age group discharge proportions. In general, the NIS over-estimated Medicare patients ages 75-84 and under-estimated Medicare patients younger than 65 and older than 84 (Table 16).
- Most NIS Medicare estimates of average length of stay and average hospital charges were consistent with corresponding MedPAR statistics. Differences for average length of stay were discovered for most race categories. However, nearly all NIS in-hospital mortality rate estimates differed from MedPAR statistics (Table 16).

Comparisons by diagnosis and procedure categories:

- NIS and NHDS estimates of discharges and average length of stay were generally consistent across diagnosis categories. Many of the differences that were observed can be attributed to coding changes employed in the NHDS: the NHDS recodes diagnosis codes in certain circumstances, while the NIS does not (Tables 11-12).
- NIS in-hospital mortality rate estimates for specific diagnosis and procedure categories often differed from NHDS estimates. Only some of these differences can be linked to the recoding of NHDS diagnosis codes (Tables 11-12).
- The rank order of the most common diagnosis and procedure categories was nearly identical for the NIS and the NHDS. Similarly, the NIS and the MedPAR held almost identical rankings for the most common diagnosis and procedure categories within the Medicare population (Tables 11-12 and Tables 17-19, respectively).
- Because of the omission of managed care patients in the MedPAR data, the NIS discharge estimates were higher for most diagnosis categories, as well as for approximately one-third of the discharge-proportion comparisons. However, few differences emerged between the NIS and MedPAR in total charges, inpatient mortality, or length of stay (Tables 17-19).

DISCUSSION

Each data source possesses distinct strengths and weaknesses and may be regarded as the optimum choice for answering different research questions. In general, NIS estimates of essential health care policy variables are accurate and precise. The NIS offers a large sample that might allow for the study of disorders, procedures, and hospital types that occur with low frequency in other databases. NIS estimates can be calculated for thousands of special sub-populations that may be of interest to researchers.

NIS Strengths

While the previous discussion focused on differences between the NIS and other data sources, it should be noted that these differences are only of concern when there is a reason to expect

that geographic region might relate to the variable of interest. We must emphasize that the NIS provides a large sample size that tends to yield estimates with much smaller standard errors than does a sample such as the NHDS. Without a sample of several million, as provided by the NIS, estimates for less common procedures and diagnoses are unreliable. While the NIS may over-represent urban areas, the prevalence of higher-density states in the NIS yields data on atypical conditions rarely included in a smaller sample.

NIS discharge estimates were quite similar to AHA numbers, regardless of the hospital characteristics. NIS statistics were generally parallel to NHDS estimates, as well. When estimating ALOS and in-hospital mortality for the nation, or within any major categories, NIS rates were consistent with the NHDS data. Because NIS estimates have greater precision – the result of the large sample size – it may be preferred for certain analyses based on relatively uncommon conditions. Furthermore, the NIS contains total hospital charges, while the NHDS does not. For analyses involving charges on all payers, the NIS is the only choice.

The NIS provides a large sample of Medicare discharges both in managed care and fee-for-service plans; it would therefore be the choice of researchers who wished to include all discharges regardless of payment type. Inclusion of Medicare managed care discharges leads to discrepancies in estimated discharge counts, but most other NIS Medicare estimates were similar to MedPAR statistics, particularly with respect to comparisons by hospital characteristics.

NIS Weaknesses

NIS discharge estimates vary from NHDS estimates on the dimension of hospital size: the NIS includes more discharges from large hospitals than the NHDS. In contrast, NIS discharge estimates were similar to AHA Survey results. Because the NHDS uses a more geographically complete sampling frame, it might be preferable for researchers in certain cases where regional differences are expected.

The NIS also contains significant numbers of discharges for which race was missing (26 percent). While the NHDS also suffers from this problem (24 percent of discharges without race), race information is present for nearly all MedPAR discharges.

Because of the limitations of the NIS sampling frame, the NIS exaggerates the discrepancy between total Medicare discharges and the MedPAR's primarily fee-for-service population. The MedPAR database provides no estimate for managed care participants, while the NIS database may over-estimate the number of discharges in managed care.

The NHDS sample and MedPAR data were drawn from all 50 states, while only 37 states were included in the NIS database. However, for 2004, NIS states encompassed nearly 78 percent of all short-stay hospitals and more than 84 percent of all United States discharges. The NIS contains charges for each hospital stay, all payers, and a large sample of discharges. In contrast, the NHDS includes a smaller number of discharges, does not contain charges, but does sample from all 50 states. The MedPAR database is limited to Medicare discharges and contains all Medicare patients covered by the fee-for-service program, but excludes Medicare patients enrolled in managed care plans. Thus, the appropriateness of each of these databases is dependent on researcher needs and institutional priorities. In conclusion, the NIS appears to provide reliable national estimates when compared with these other national data sources along the dimensions examined in this report.

Contrasting Findings from the Previous NIS Comparisons

NIS-NHDS Evaluations

Estimates of most outcome measurements from the 2004 NIS and NHDS data were consistent, as were previous years' evaluations. Overall, the discharge and ALOS estimates from these two databases were similar for 2000 through 2004. NIS and NHDS estimates of ALOS were almost indistinguishable. Of more than 80 comparisons, few significant ALOS differences were observed in any year. When considered by year, there were four differences with the 2000 data, two with the 2001 data, one with the 2002 data, two with the 2003 data, and three with the 2004 data. NIS and NHDS discharge estimates from 2000 through 2004 were also similar, although in all years, the data sources generated divergent statistics for large and small hospitals.

Similarly, in-hospital mortality rate estimates for 2004 data were consistent with previous data across hospital and patient categories. Of all hospital comparisons, only two significant mortality differences were observed, and two meaningful mortality rate differences were discovered for patient categories. These outcomes were similar to the 2001-2003 analyses and represented improvements over the 2000 assessments. For diagnosis and procedure comparisons, the 2004 in-hospital mortality rate evaluations were similar to comparisons for 2003, 2002, and 2000 (2001 now appears to be an aberration). No trend appears with these differences. The number of categories with lower NIS rates was about the same as the number of categories with higher NIS rates.

Discrepancies in in-hospital mortality rate comparisons may be related to differences in the hospitals included in the two samples. The NIS tends to have better representation from larger hospitals and better captures less common diagnoses, which tend to have higher mortality rates.³ Furthermore, because the NIS retains all discharges from a hospital, it was not possible to exclude some of the higher mortality cases that might have been treated in skilled-nursing facilities and other long-term care units within the hospital. Differences may also be linked to a hospital's teaching status or location, although this cannot be verified because the NHDS does not report this information.

NIS-MedPAR Evaluations

As discussed previously, NIS Medicare discharge estimates were higher than MedPAR counts for almost all categories. Inconsistencies were noted for nearly all discharge counts; the overall discrepancy rate was 12 percent. This discrepancy was also true for earlier years: the difference in 2003 was 14 percent, while in 2000, 2001, and 2002, the difference was 22, 21, and 20 percent, respectively. In 1999, the figure was lower, at 12 percent. The growth from 1999 to 2000 may have been caused by increases in Medicare managed care market penetration, particularly within NIS states, while the slow decline after 2000 reflects a decrease in market penetration in later years.

While differences emerged for discharge statistics, other estimates were similar between the two data sources. Most NIS estimates of discharge proportions, ALOS, in-hospital mortality

³The average in-hospital mortality rate for discharges associated with the 50 most frequent diagnosis groups was 2.1 percent. This compares to an average of 3.9 percent for discharges associated with one of the 50 least frequent diagnosis groups.

rates, and average total hospital charges were comparable to MedPAR statistics. Mortality rates were quite similar to earlier years.

The overall ALOS statistics were consistent for the 2004 NIS and MedPAR data; ALOS comparisons were similar to the 2003 and 2002 results, which demonstrated fewer differences than in previous reports. These findings for the latest three years demonstrate fewer differences when compared with the 2000 data. The overall NIS Medicare estimate of ALOS in 2000 was significantly shorter in duration than the MedPAR average. Finally, average hospital charge comparisons revealed few differences in any year.

Conclusion

Each of the data sources discussed has its strengths and weaknesses, and each may be the preferred choice for different research questions. The NIS offers a large sample that enables study of low incidence disorders and less common procedures; NIS estimates can be calculated for literally thousands of special sub-populations that may be of interest to researchers. In addition, NIS hospitals accurately reflect the universe of United States hospitals, particularly the relative mix of large and small hospitals. Therefore, the NIS may be more appropriate when hospital type and size are important considerations.

In contrast, the NHDS and MedPAR both offer data drawn from all 50 states, rather than the 37 states that make up the 2004 NIS. Where a comprehensive geographic representation is more important than a large sample size, and the question under study requires all age groups, the NHDS might be preferable. In the same situation, if only Medicare clients are of interest, the MedPAR data set might be preferable.

The NIS is not without bias: specifically, it over-represents large hospitals and urban states and under-represents smaller hospitals and rural/frontier states. It does, however, provide a useful data source for answering many research questions. The source of the few differences that do exist between the NIS and NHDS are areas that warrant further investigation. The relationship between hospital size and treatment patterns is an example.

As for which of the data sources discussed is preferable or better, the answer depends on the needs of the researcher. The intended use of the data is the most critical factor in determining which data source will be most valuable. In general, the NIS estimates of variables essential to health care policy – including in-hospital mortality, inpatient population size, length of stay, and costs – are accurate and precise. Statistics can be calculated for large groups ranging from the inpatient population of the United States, as well as for small subsets featuring specific conditions. The characteristics documented in this report suggest that the 2004 NIS is a valuable tool for researchers and policy makers alike.

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Table 1. Number of Hospitals in NIS Frame and Universe, 2004

	2004 NIS Frame¹ (Weighted)	2004 NIS Frame¹ (Unweighted)	2004 AHA Universe
U.S.	4,906	1,004	4,961
Region			
Northeast	653	135	653
Midwest	1,411	285	1,411
South	1,937	397	1,937
West	905	187	905
Hospital Control			
Public	1,141	235	1,126
Not for-profit	2,942	601	2,937
Proprietary	823	168	843
Location / Teaching Status			
Rural	2,026	413	2,026
Small	905	184	1,234
Medium	485	99	449
Large	636	130	343
Urban, non-teaching	2,071	424	2,071
Small	850	173	864
Medium	586	121	615
Large	635	130	592
Urban, teaching	809	167	809
Small	249	51	229
Medium	250	52	248
Large	310	64	332

Note: Significance tests were not performed because AHA numbers are not sample statistics.

¹The 2004 frame contains 37 states.

Table 2. NIS Hospitals and AHA Universe Comparisons, 2004

	NIS	Universe
High Tech Index ¹ (mean)	2.59	2.45
High Tech Index ¹ (median)	2.00	2.00
Neonatal ICUs ² (pct)	18.92	18.65
Cardiac Catheterization ² (pct)	25.00	23.91
CT Scanners ² (pct)	78.09	74.68
MRIs ² (pct)	54.88	50.44
Open Heart Surgeries ² (pct)	20.42	20.02
Transplant Services ² (pct)	7.17	7.28
Intensity Modulated Ray Radiation Therapy ² (pct)	15.24	15.37
Extracorporeal Shock Wave Lithotripsy ² (pct)	21.41	20.02
PET Scanners ² (pct)	17.63	14.86
Pediatric Specialty Hospitals (pct)	1.20	1.62
Burn Units (pct)	4.48	4.55
Rehabilitation Units (pct)	22.51	24.79
Alc/Chem Dep Services (pct)	8.47	8.21
Trauma Centers (pct)	27.19	28.76
Emergency Departments (pct)	80.58	77.89

Note: Significance tests were not performed because AHA numbers are not sample statistics.

¹Prior to 2004, the index included Angioplasty services.

²High technology service - used in the "High Tech Index."

Table 3. NIS Hospitals and AHA Universe Comparisons, 2004

	NIS Mean	Universe Mean	NIS Median	Universe Median
Hospital Admissions	7,310.88	7,011.17	3,801.50	3,560.00
Hospital Discharges	7,310.88	7,011.17	3,801.50	3,560.00
Hospital Discharges ¹	8,159.49	7,802.22	4,266.00	3,936.00
Average Length of Stay	5.66	5.93	4.37	4.42
Average Length of Stay ¹	5.27	5.55	4.01	4.03
Births	848.61	791.05	323.50	275.00
Percent Medicare Days	53.86	54.45	54.02	55.25
Percent Medicare Discharges	48.14	48.52	48.24	48.29
Percent Medicare Discharges ²	44.73	45.21	43.21	43.91
Percent Medicaid Days	15.23	15.00	13.14	12.84
Percent Medicaid Discharges	16.08	15.78	15.07	15.09
Percent Medicaid Discharges ²	14.53	14.30	13.66	13.88
Hospital Beds	153.83	149.92	92.00	88.00
Occupancy Rate	54.72	52.30	56.33	53.68
Inpatient Surgeries	2,099.41	2,058.12	1,022.00	940.00
FTE ¹	867.80	837.98	434.00	398.00
FTE ¹ per Bed	5.57	5.30	5.21	4.84
RN FTE ¹ per 1000 Patient Days	4.29	3.24	2.97	2.91
Intern-Resident FTE ¹ per 100 Beds	5.61	6.32	0.00	0.00
Intern-Resident FTE ¹ per 100 Beds (Teaching Hospitals)	28.50	34.10	14.66	11.36
Total Hospital Expenses [dollars]	101,600,413	96,080,119	48,015,871	39,108,434
Hosp. Expenses per Bed [dollars]	629,176	557,231	552,169	505,981
Total Hospital Payroll [dollars]	41,315,160	39,081,256	19,424,823	16,149,252
Hosp. Payroll per Bed [dollars]	253,704	224,590	222,248	202,095

Note: Significance tests were not performed because AHA numbers are not sample statistics.

¹Adjusted for well newborns.

²Full-time equivalents.

Table 4. NIS and AHA Comparisons by Overall, 2004

	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)	
	NIS	AHA	NIS	AHA
Overall	38,661 (707)	39,065	4.65 (0.03)	4.54**
Region				
Northeast	7,650 (329)	7,649	5.28 (0.12)	5.14
South	8,913 (313)	8,913	4.44 (0.06)	4.38
Midwest	14,733 (452)	14,733	4.67 (0.05)	4.54*
West	7,364 (297)	7,364	4.22 (0.07)	4.09

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 5. NIS and AHA Comparisons by Hospital Ownership, 2004

Hospital Ownership	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)	
	NIS	AHA	NIS	AHA
Total Public	5,382 (553)	5,238	4.82 (0.15)	4.80
1-99 Beds	1,190 (99)	1,107	3.72 (0.06)	4.03**
100-199 Beds	889 (133)	894	4.26 (0.16)	4.41
200-299 Beds	711 (160)	607	4.32 (0.17)	4.53
300-499 Beds	1,261 (257)	1,271	5.39 (0.22)	5.11
500+ Beds	1,329 (317)	1,357	5.92 (0.33)	5.53
Total Private Non-Profit	28,274 (900)	28,328	4.64 (0.04)	4.49**
1-99 Beds	2,634 (147)	2,629	3.78 (0.07)	3.87
100-199 Beds	4,886 (299)	5,041	4.29 (0.07)	4.19
200-299 Beds	5,520 (480)	5,755	4.64 (0.10)	4.37*
300-499 Beds	8,301 (737)	7,988	4.60 (0.08)	4.46
500+ Beds	6,930 (760)	6,912	5.26 (0.09)	5.09
Total Proprietary	5,004 (335)	5,094	4.54 (0.08)	4.50
1-99 Beds	815 (94)	821	4.42 (0.27)	4.41
100-199 Beds	1,753 (152)	1,671	4.28 (0.11)	4.31
200-299 Beds	1,109 (202)	1,226	4.50 (0.14)	4.43
300-499 Beds	1,202 (213)	922	4.96 (0.14)	4.69
500+ Beds	123 (123)	452**	5.18 (0.00)	5.12 ¹

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 6. NIS and AHA Comparisons by Location / Teaching Status, 2004

Location / Teaching Status	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)	
	NIS	AHA	NIS	AHA
Rural	5,160 (217)	5,160	3.92 (0.05)	4.23**
small	1,186 (54)	1,225	3.46 (0.05)	3.66**
medium	1,515 (130)	1,416	3.66 (0.05)	3.94**
large	2,459 (250)	2,518	4.30 (0.09)	4.67**
Urban, Non-teaching	16,669 (444)	16,668	4.48 (0.04)	4.35**
small	1,847 (139)	1,808	4.28 (0.14)	4.26
medium	4,659 (249)	4,728	4.31 (0.07)	4.13*
large	10,162 (436)	10,131	4.59 (0.06)	4.47
Urban, Teaching	16,831 (505)	16,831	5.04 (0.06)	4.81**
small	2,129 (277)	2,333	4.73 (0.20)	4.44
medium	4,283 (539)	4,607	4.84 (0.12)	4.65
large	10,418 (781)	9,890	5.19 (0.08)	4.98*

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 7. NIS and NHDS Comparisons by Overall, 2004

	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
Overall						
Overall	38,661 (707)	38,772 (1,738)	4.63 (0.03)	4.64 (0.32)	2.13 (0.03)	2.10 (0.13)
Region						
Northeast	7,650 (329)	8,089 (685)	5.25 (0.12)	5.21 ¹ (c)	2.46 (0.15)	2.18 (0.26)
South	8,913 (313)	8,482 (972)	4.42 (0.06)	4.22 ¹ (c)	1.95 (0.05)	2.41 ¹ (c)
Midwest	14,733 (452)	14,642 (932)	4.65 (0.05)	4.75 (0.49)	2.19 (0.04)	1.93 (0.17)
West	7,364 (297)	7,557 (605)	4.20 (0.07)	4.29 (0.54)	1.87 (0.06)	2.01 (0.22)

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

(c) A valid standard error could not be calculated.

Table 8. NIS and NHDS Comparisons by Control, 2004

Control	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
Total Public	5,382 (553)	4,531 (207)	4.80 (0.15)	4.72 (0.33)	2.11 (0.08)	2.01 (0.13)
1-99 Beds	1,190 (99)	1,217 (59)	3.69 (0.06)	3.61 (0.27)	2.23 (0.10)	2.43 (0.16)
100-199 Beds	889 (133)	778 (39)	4.24 (0.16)	4.50 (0.34)	2.31 (0.09)	1.82** (0.13)
200-299 Beds	711 (160)	409 (22)	4.30 (0.17)	4.65 (0.38)	1.77 (0.20)	2.08 (0.16)
300-499 Beds	1,261 (257)	1,462 (70)	5.37 (0.22)	5.33 (0.39)	2.20 (0.29)	1.89 (0.12)
500+ Beds	1,329 (317)	663* (34)	5.91 (0.33)	5.73 (0.44)	1.98 (0.14)	1.67 (0.12)
Total Private Non-Profit	28,274 (900)	29,232 (1,312)	4.61 (0.04)	4.62 (0.32)	2.15 (0.05)	2.16 (0.13)
1-99 Beds	2,634 (147)	6,429** (292)	3.75 (0.07)	3.96 (0.28)	2.06 (0.06)	2.22 (0.14)
100-199 Beds	4,886 (299)	6,723** (305)	4.27 (0.07)	4.61 (0.32)	2.10 (0.07)	1.83 (0.11)
200-299 Beds	5,520 (480)	6,558 (298)	4.62 (0.10)	4.63 (0.32)	2.18 (0.20)	2.14 (0.13)
300-499 Beds	8,301 (737)	5,619** (256)	4.57 (0.08)	4.85 (0.34)	2.12 (0.07)	2.45 (0.15)
500+ Beds	6,930 (760)	3,901** (179)	5.24 (0.09)	5.36 (0.38)	2.24 (0.07)	2.23 (0.14)
Total Proprietary	5,004 (335)	5,008 (228)	4.52 (0.08)	4.70 (0.33)	2.01 (0.07)	1.84 (0.11)
1-99 Beds	815 (94)	1,301** (63)	4.40 (0.27)	4.76 (0.35)	2.01 (0.14)	1.84 (0.12)
100-199 Beds	1,753 (152)	2,223* (104)	4.27 (0.11)	4.58 (0.33)	2.04 (0.09)	1.58** (0.10)
200-299 Beds	1,109 (202)	729 (37)	4.49 (0.14)	4.74 (0.36)	1.97 (0.13)	2.20 (0.15)
300-499 Beds	1,202 (213)	753* (38)	4.94 (0.14)	4.92 (0.38)	2.05 (0.13)	2.26 (0.16)
500+ Beds	123 (123)	0 ¹ (a)	5.16 (0.00)	0.00 ¹ (a)	1.58 (0.00)	0.00 ¹ (a)

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

(a) Because of very small sample size, the NHDS estimate and standard error were unreliable and not reported.

Table 9. NIS and NHDS Comparisons by Patient Characteristics, 2004

	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
Age Group						
0-15 Years	6,294 (216)	6,648 (302)	3.61 (0.07)	3.79 (0.27)	0.41 (0.02)	0.46 (0.02)
16-44 Years	10,711 (241)	10,630 (480)	3.65 (0.05)	3.67 (0.26)	0.43 (0.01)	0.36* (0.02)
45-64 Years	8,546 (177)	8,322 (377)	4.96 (0.05)	5.00 (0.35)	1.88 (0.05)	1.87 (0.12)
65+ Years	13,059 (272)	13,170 (594)	5.71 (0.04)	5.63 (0.39)	4.51 (0.06)	4.47 (0.28)
Gender						
Female	22,757 (437)	22,908 (1,029)	4.41 (0.03)	4.40 (0.31)	1.82 (0.03)	1.75 (0.11)
Male	15,773 (287)	15,863 (714)	4.96 (0.04)	4.98 (0.35)	2.58 (0.04)	2.61 (0.16)
Race						
White	18,987 (724)	23,068* (1,528)	4.73 (0.04)	4.67 (0.47)	2.40 (0.05)	2.24 (0.21)
Black	4,159 (296)	4,545 (322)	5.47 (0.10)	5.27 (0.60)	2.11 (0.08)	1.94 (0.19)
Other	5,346 (340)	1,804** (248)	4.28 (0.07)	4.59 ¹ (c)	1.46 (0.06)	1.67 ¹ (c)
Unknown	10,168 (728)	9,354 (1,201)	4.28 (0.06)	4.26 ¹ (c)	1.97 (0.05)	1.92 ¹ (c)

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

(c) A valid standard error could not be calculated.

Table 10. NIS and NHDS Comparisons by Principal Payer, 2004

Principal Payer	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
Medicare	14,028 (286)	13,751 (676)	5.77 (0.04)	5.73 (0.45)	3.99 (0.05)	4.05 (0.28)
Medicaid	7,344 (263)	7,286 (611)	4.36 (0.07)	4.43 ¹ (c)	0.90 (0.03)	0.95 (0.11)
Private Insurance	13,956 (427)	13,580 (898)	3.75 (0.03)	3.79 (0.40)	1.02 (0.03)	0.98 (0.09)
Self Pay	1,933 (95)	1,750 (122)	3.86 (0.10)	3.90 (0.46)	1.49 (0.07)	1.11 ^{**} (0.11)
No Charge	147 (44)	118 (22)	4.89 (0.21)	4.93 ¹ (c)	1.37 (0.21)	1.69 ¹ (c)
Other	1,185 (80)	2,284* (420)	4.36 (0.10)	4.34 ¹ (c)	1.79 (0.14)	1.43 ¹ (c)
Missing	14 (12)	0 ¹ (a)	6.83 (0.73)	0.00 ¹ (a)	3.00 (0.37)	0.00 ¹ (a)

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

(a) Because of very small sample size, the NHDS estimate and standard error were unreliable and not reported.

(c) A valid standard error could not be calculated.

Table 11. NIS and NHDS Comparisons by Principal Diagnosis, 2004

Principal Diagnosis	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
218: Liveborn	4,249 (144)	3,917 (180)	3.26 (0.06)	3.31 (0.23)	0.35 (0.01)	0.36 (0.02)
122: Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	1,213 (20)	1,344 (65)	5.73 (0.04)	5.56 (0.41)	4.74 (0.07)	5.38 (0.36)
101: Coronary atherosclerosis and other heart disease	1,192 (48)	1,208 (58)	3.42 (0.04)	3.31 (0.25)	0.57 (0.02)	0.44** (0.03)
108: Congestive heart failure; nonhypertensive	1,104 (24)	1,131 (55)	5.48 (0.05)	5.35 (0.40)	4.05 (0.06)	3.70 (0.25)
102: Nonspecific chest pain	845 (24)	54** (5)	1.85 (0.01)	1.42 ¹ (c)	0.06 (0.00)	0.16 ¹ (c)
193: OB-related trauma to perineum and vulva	785 (33)	-- ¹ (a)	2.02 (0.01)	-- ¹ (a)	0.00 (0.00)	-- ¹ (a)
195: Other complications of birth; puerperium affecting management of mother	758 (28)	62** (5)	2.73 (0.03)	3.42 ¹ (c)	0.02 (0.00)	0.07** (0.00)
69: Affective disorders	708 (40)	866** (43)	7.30 (0.19)	7.52 (0.56)	0.03 (0.01)	0.02 (0.00)
100: Acute myocardial infarction	695 (22)	732 (37)	5.35 (0.06)	5.72 (0.44)	7.17 (0.13)	8.67* (0.62)
106: Cardiac dysrhythmias	693 (17)	746 (38)	3.54 (0.03)	3.55 (0.27)	1.19 (0.03)	1.26 (0.09)
203: Osteoarthritis	659 (28)	695 (35)	3.84 (0.04)	3.87 (0.30)	0.13 (0.01)	0.21** (0.01)
205: Spondylosis; intervertebral disc disorders; other back problems	615 (22)	649 (33)	3.15 (0.04)	3.00 (0.24)	0.19 (0.01)	0.15* (0.01)
237: Complication of device; implant or graft	601 (20)	565 (29)	5.90 (0.07)	5.99 (0.47)	1.85 (0.05)	1.60 (0.11)
127: Chronic obstructive pulmonary disease and bronchiectasis	555 (11)	635* (33)	4.92 (0.04)	4.72 (0.37)	2.26 (0.06)	2.35 (0.17)
55: Fluid and electrolyte disorders	554 (11)	761** (38)	3.78 (0.03)	3.53 (0.27)	2.10 (0.06)	1.66** (0.12)

Principal Diagnosis	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
109: Acute cerebrovascular disease	545 (12)	540 (28)	6.33 (0.07)	6.33 (0.50)	10.69 (0.19)	10.63 (0.80)
181: Other complications of pregnancy	511 (17)	205** (13)	2.45 (0.02)	2.49 (0.25)	0.03 (0.00)	0.04 (0.00)
159: Urinary tract infections	506 (10)	603** (31)	4.47 (0.03)	4.54 (0.36)	1.37 (0.04)	1.67* (0.12)
197: Skin and subcutaneous tissue infections	505 (10)	579* (30)	4.69 (0.04)	4.73 (0.37)	0.42 (0.02)	0.32** (0.02)
254: Rehabilitation care; fitting of prostheses; and adjustment of devices	489 (32)	513 (27)	12.57 (0.23)	11.90 (0.92)	0.57 (0.07)	0.52 (0.03)
50: Diabetes mellitus with complications	488 (10)	494 (26)	5.40 (0.05)	5.19 (0.41)	1.11 (0.03)	0.64** (0.04)
238: Complications of surgical procedures or medical care	457 (12)	442 (24)	6.22 (0.06)	6.05 (0.49)	1.42 (0.05)	2.00** (0.15)
189: Previous C-section	455 (17)	-- ¹ (a)	2.87 (0.02)	-- ¹ (a)	0.00 (0.00)	-- ¹ (a)
149: Biliary tract disease	453 (9)	459 (25)	4.19 (0.03)	4.14 (0.34)	0.72 (0.03)	0.70 (0.05)
2: Septicemia (except in labor)	451 (11)	413 (22)	8.58 (0.09)	8.40 (0.67)	17.84 (0.26)	17.60 (1.38)

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

(a) Because of very small sample size, the NHDS estimate and standard error were unreliable and not reported.

(c) A valid standard error could not be calculated.

Table 12. NIS and NHDS Comparisons by Principal Procedure, 2004

Principal Procedure	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
137: Other procedures to assist delivery	1,472 (65)	1,007** (49)	2.12 (0.01)	2.10 (0.16)	0.00 (0.00)	0.00 (0.00)
134: Cesarean section	1,268 (48)	1,229 (59)	3.70 (0.04)	3.69 (0.27)	0.01 (0.00)	0.01 (0.00)
115: Circumcision	1,102 (46)	1,086 (53)	2.68 (0.03)	2.59 (0.19)	0.00 (0.00)	0.00* (0.00)
70: Upper gastrointestinal endoscopy; biopsy	731 (22)	716 (36)	5.23 (0.11)	5.38 (0.41)	1.49 (0.05)	0.96** (0.07)
45: Percutaneous transluminal coronary angioplasty (PTCA)	720 (43)	596* (31)	2.76 (0.04)	3.05 (0.24)	0.74 (0.03)	0.71 (0.05)
140: Repair of current obstetric laceration	680 (39)	799* (40)	2.14 (0.01)	2.11 (0.17)	0.00 (0.00)	0.00 (0.00)
216: Respiratory intubation and mechanical ventilation	676 (19)	611 (32)	10.96 (0.25)	10.97 (0.84)	26.09 (0.60)	26.67 (1.97)
47: Diagnostic cardiac catheterization; coronary arteriography	638 (25)	584 (30)	3.62 (0.05)	3.77 (0.30)	0.91 (0.03)	1.04 (0.07)
124: Hysterectomy; abdominal and vaginal	574 (19)	595 (31)	2.72 (0.03)	2.71 (0.22)	0.08 (0.00)	0.08 (0.00)
222: Blood transfusion	568 (20)	542 (28)	5.67 (0.06)	5.84 (0.46)	5.10 (0.11)	5.05 (0.38)
228: Prophylactic vaccinations and inoculations	550 (60)	535 (28)	2.45 (0.05)	2.48 (0.20)	0.01 (0.00)	0.00** (0.00)
231: Other therapeutic procedures	518 (47)	575 (30)	5.24 (0.13)	4.84 (0.38)	2.31 (0.15)	1.94 (0.14)
152: Arthroplasty knee	481 (19)	510 (27)	3.89 (0.04)	3.93 (0.32)	0.12 (0.01)	0.19** (0.01)
54: Other vascular catheterization; not heart	462 (14)	456 (24)	9.38 (0.14)	9.56 (0.75)	8.40 (0.20)	8.40 (0.65)
84: Cholecystectomy and common duct exploration	390 (9)	383 (21)	4.65 (0.04)	4.78 (0.40)	0.75 (0.03)	0.54** (0.04)
153: Hip replacement; total and partial	365 (15)	387 (21)	4.96 (0.05)	5.12 (0.42)	0.98 (0.04)	1.16 (0.09)
219: Alcohol and drug rehabilitation/detoxification	358 (42)	325 (18)	5.04 (0.26)	5.34 (0.45)	0.11 (0.02)	0.01** (0.00)
133: Episiotomy	356 (19)	418* (23)	2.18 (0.01)	2.16 (0.19)	0.00 (0.00)	0.00 (0.00)

Principal Procedure	Number of Discharges in Thousands (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)	
	NIS	NHDS	NIS	NHDS	NIS	NHDS
48: Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	316 (13)	262* (16)	5.14 (0.07)	5.20 (0.46)	1.18 (0.04)	1.45* (0.12)
158: Spinal fusion	303 (15)	276 (16)	4.08 (0.08)	4.23 (0.37)	0.26 (0.02)	0.33* (0.02)
76: Colonoscopy and biopsy	301 (23)	280 (16)	5.03 (0.37)	5.46 (0.47)	0.87 (0.07)	1.21** (0.10)
80: Appendectomy	298 (7)	307 (18)	2.89 (0.03)	2.97 (0.27)	0.12 (0.01)	0.00** (0.00)
58: Hemodialysis	290 (9)	258 (15)	5.39 (0.06)	6.19 (0.54)	3.46 (0.10)	3.55 (0.30)
78: Colorectal resection	279 (8)	268 (16)	9.94 (0.08)	10.05 (0.85)	4.03 (0.11)	4.32 (0.37)
146: Treatment; fracture or dislocation of hip and femur	272 (6)	289 (17)	6.06 (0.06)	5.94 (0.51)	1.84 (0.06)	1.53* (0.12)

* Significant at a 5 percent level.

** Significant at a 1 percent level.

¹ A significance test was not performed because a valid standard error was not available.

(a) Because of very small sample size, the NHDS estimate and standard error were unreliable and not reported.

(c) A valid standard error could not be calculated.

Table 13. NIS and MedPAR Comparisons by Overall, 2004

	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
U.S.	14,028 (285)	12,530**	0.00 (0.00)	0.00 ¹	5.79 (0.04)	5.77	3.99 (0.05)	3.80**	\$25,837 (531)	\$26,766
Region										
Northeast	2,812 (141)	2,479*	20.04 (0.88)	19.78	6.60 (0.14)	6.47	4.75 (0.21)	4.27*	\$31,458 (1,790)	\$31,337
South	3,521 (142)	3,332	25.10 (0.88)	26.59	5.46 (0.07)	5.43	3.48 (0.07)	3.41	\$20,640 (517)	\$22,020**
Midwest	5,565 (171)	5,053**	39.67 (0.98)	40.32	5.69 (0.06)	5.74	3.88 (0.06)	3.82	\$23,562 (646)	\$24,401
West	2,129 (108)	1,665**	15.18 (0.71)	13.29**	5.49 (0.12)	5.50	4.14 (0.13)	3.85*	\$33,797 (1,637)	\$36,629

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 14. NIS and MedPAR Comparisons by Hospital Control, 2004

Control	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
Total Public	1,781 (151)	1,429*	12.70 (1.10)	11.40	5.63 (0.12)	5.73	4.03 (0.11)	3.85	\$20,166 (964)	\$22,186*
1-99 Beds	544 (38)	326**	30.53 (2.39)	22.85**	4.60 (0.08)	4.57	3.90 (0.09)	3.56**	\$10,649 (650)	\$11,125
100-199 Beds	343 (57)	303	19.28 (2.90)	21.23	5.33 (0.22)	5.48	4.26 (0.20)	3.82*	\$18,217 (1,053)	\$17,823
200-299 Beds	225 (41)	193	12.63 (2.52)	13.56	5.90 (0.20)	5.84	3.93 (0.30)	3.89	\$25,010 (2,562)	\$22,717
300-499 Beds	339 (89)	306	19.04 (4.78)	21.42	6.51 (0.29)	6.29	4.25 (0.44)	3.96	\$28,515 (2,046)	\$29,200
500+ Beds	329 (92)	299	18.50 (4.90)	20.91	6.54 (0.38)	6.59	3.84 (0.30)	4.05	\$26,003 (2,443)	\$31,174*
Total Private Non-Profit	10,357 (319)	9,388**	73.83 (1.41)	74.92	5.81 (0.05)	5.78	4.04 (0.07)	3.85**	\$25,868 (653)	\$26,216
1-99 Beds	1,162 (58)	879**	11.22 (0.61)	9.37**	4.71 (0.09)	4.69	3.74 (0.09)	3.53*	\$13,964 (608)	\$14,766
100-199 Beds	1,979 (120)	1,810	19.11 (1.16)	19.28	5.49 (0.08)	5.43	3.98 (0.10)	3.84	\$21,652 (1,284)	\$20,564
200-299 Beds	1,972 (190)	1,913	19.03 (1.86)	20.37	5.94 (0.13)	5.75	4.24 (0.29)	3.83	\$26,869 (1,830)	\$26,093
300-499 Beds	3,047 (280)	2,669	29.42 (2.59)	28.43	5.79 (0.10)	5.92	3.92 (0.11)	3.88	\$25,475 (953)	\$27,823*
500+ Beds	2,196 (251)	2,114	21.20 (2.23)	22.52	6.60 (0.13)	6.38	4.26 (0.11)	3.98*	\$35,649 (1,698)	\$33,903

Control	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
Total Proprietary	1,888 (129)	1,712	13.46 (0.89)	13.66	5.80 (0.12)	5.76	3.67 (0.09)	3.50	\$31,022 (1,498)	\$33,601
1-99 Beds	358 (40)	310	18.96 (2.21)	18.10	5.65 (0.38)	4.56**	3.52 (0.20)	2.83**	\$24,679 (1,749)	\$22,670
100-199 Beds	655 (50)	583	34.71 (2.73)	34.04	5.77 (0.16)	5.72	3.76 (0.13)	3.55	\$29,563 (1,980)	\$29,869
200-299 Beds	393 (77)	398	20.81 (4.13)	23.26	5.85 (0.28)	6.05	3.81 (0.20)	3.79	\$33,664 (4,630)	\$38,439
300-499 Beds	453 (102)	285	23.99 (4.83)	16.69	5.86 (0.09)	6.31**	3.54 (0.16)	3.57	\$34,313 (2,686)	\$43,902**
500+ Beds	28 (28)	135**	1.51 (1.51)	7.88**	6.68 (0.00)	6.66**	3.67 (0.00)	3.85 ¹	\$55,351 (0)	\$38,730**

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 15. NIS and MedPAR Comparisons by Hospital Type, 2004

Hospital Type	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
Rural	2,420 (100)	1,964**	17.25 (0.67)	15.67*	4.83 (0.05)	4.97*	3.84 (0.07)	3.69*	\$14,133 (582)	\$14,763
small	595 (25)	277**	24.58 (1.37)	14.12**	4.19 (0.06)	4.05*	3.81 (0.11)	3.26**	\$9,336 (302)	\$9,895
medium	694 (60)	591	28.71 (2.77)	30.09	4.63 (0.08)	4.59	3.72 (0.10)	3.57	\$13,231 (638)	\$13,057
large	1,130 (114)	1,095	46.70 (3.26)	55.78**	5.30 (0.09)	5.41	3.93 (0.12)	3.86	\$17,211 (1,106)	\$16,914
Urban, Non-teaching	6,440 (174)	5,704**	45.91 (0.99)	45.52	5.79 (0.06)	5.69	3.97 (0.10)	3.76*	\$26,777 (778)	\$27,199
small	759 (51)	627*	11.79 (0.79)	11.00	5.47 (0.20)	4.91**	3.76 (0.13)	3.33**	\$20,595 (1,127)	\$20,343
medium	1,765 (92)	1,618	27.41 (1.42)	28.37	5.75 (0.10)	5.60	4.14 (0.10)	3.82**	\$25,600 (1,303)	\$24,599
large	3,915 (165)	3,458**	60.79 (1.50)	60.62	5.87 (0.08)	5.88	3.93 (0.15)	3.81	\$28,529 (1,146)	\$29,660
Urban, Teaching	5,167 (202)	4,861	36.83 (1.05)	38.79	6.23 (0.08)	6.18	4.09 (0.07)	3.90*	\$30,310 (984)	\$31,108
small	597 (91)	618	11.56 (1.74)	12.72	6.06 (0.27)	5.92	3.82 (0.26)	3.78	\$28,098 (3,620)	\$28,711
medium	1,360 (189)	1,308	26.33 (3.75)	26.91	5.96 (0.16)	6.04	4.09 (0.16)	3.92	\$25,662 (1,360)	\$28,522*
large	3,208 (261)	2,934	62.09 (3.87)	60.35	6.38 (0.10)	6.31	4.14 (0.09)	3.91*	\$32,602 (1,283)	\$32,767

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 16. NIS and MedPAR Comparisons by Patient Characteristics, 2004

	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
Age Group										
0-64 Years	2,307 (54)	2,191*	16.44 (0.32)	17.48**	6.13 (0.06)	6.09	2.04 (0.04)	1.95*	\$24,990 (564)	\$26,380*
65-74 Years	4,210 (93)	3,766**	30.01 (0.18)	30.05	5.50 (0.04)	5.50	3.08 (0.05)	3.01	\$27,845 (554)	\$28,962*
75-84 Years	4,978 (113)	4,253**	35.48 (0.20)	33.94**	5.83 (0.04)	5.79	4.35 (0.06)	4.11**	\$26,447 (577)	\$27,184
85+ Years	2,529 (58)	2,319**	18.02 (0.19)	18.50*	5.87 (0.04)	5.86	6.58 (0.09)	6.28**	\$22,097 (531)	\$22,797
Gender										
Female	7,969 (161)	7,077**	56.81 (0.15)	56.48*	5.77 (0.04)	5.76	3.71 (0.05)	3.54**	\$24,350 (499)	\$25,129
Male	6,047 (127)	5,453**	43.10 (0.15)	43.51**	5.81 (0.04)	5.79	4.36 (0.06)	4.14**	\$27,805 (589)	\$28,891
Race										
White	8,175 (313)	10,362**	58.27 (1.68)	82.69**	5.75 (0.05)	5.63*	4.11 (0.06)	3.84**	\$26,083 (608)	\$26,190
Black	1,253 (94)	1,537**	8.93 (0.63)	12.27**	6.86 (0.11)	6.55**	4.08 (0.12)	3.73**	\$27,859 (1,071)	\$28,043
Other	987 (75)	583**	7.03 (0.53)	4.65**	6.30 (0.11)	6.15	4.25 (0.12)	3.50**	\$34,989 (1,853)	\$33,672
Unknown	3,612 (258)	47**	25.75 (1.85)	0.37**	5.36 (0.07)	5.65**	3.63 (0.07)	2.97**	\$22,231 (1,067)	\$26,342**

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 17. NIS and MedPAR Comparisons by DRG, 2004

DRG	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
127: HEART FAILURE & SHOCK	775 (17)	673**	5.53 (0.06)	5.37*	5.06 (0.04)	5.11	4.06 (0.07)	3.97	\$18,394 (477)	\$18,629
89: SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	589 (11)	495**	4.20 (0.05)	3.95**	5.57 (0.04)	5.62	4.81 (0.09)	4.61*	\$18,141 (431)	\$18,461
209: MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY	495 (19)	464	3.53 (0.11)	3.70	4.57 (0.04)	4.52	0.69 (0.03)	0.66	\$35,082 (642)	\$34,820
88: CHRONIC OBSTRUCTIVE PULMONARY DISEASE	433 (9)	378**	3.08 (0.04)	3.02	4.82 (0.03)	4.85	1.54 (0.05)	1.43*	\$15,585 (378)	\$15,823
430: PSYCHOSES	356 (21)	340	2.54 (0.15)	2.71	10.48 (0.29)	10.60	0.08 (0.01)	0.09	\$17,630 (800)	\$17,514
462: REHABILITATION	334 (22)	308	2.38 (0.15)	2.46	12.01 (0.19)	11.72	0.61 (0.07)	0.22**	\$24,446 (1,189)	\$24,058
182: ESOPHAGITIS	327 (7)	287**	2.33 (0.02)	2.29	4.37 (0.03)	4.41	1.23 (0.04)	1.29	\$14,886 (337)	\$15,266
174: G.I. HEMORRHAGE W CC	302 (6)	262**	2.15 (0.02)	2.09**	4.64 (0.03)	4.67	2.92 (0.07)	2.98	\$18,123 (385)	\$18,279
296: NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	283 (6)	245**	2.01 (0.02)	1.96*	4.69 (0.04)	4.70	3.38 (0.09)	3.45	\$14,626 (376)	\$14,749

DRG	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
416: SEPTICEMIA AGE >17	282 (7)	245**	2.01 (0.04)	1.95	7.42 (0.07)	7.43	20.19 (0.30)	19.89	\$30,758 (851)	\$31,003
143: CHEST PAIN	278 (8)	247**	1.98 (0.04)	1.97	2.08 (0.02)	2.09	0.11 (0.01)	0.11	\$10,250 (257)	\$10,340
14: SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	276 (6)	243**	1.97 (0.02)	1.94	5.55 (0.04)	5.61	11.31 (0.20)	11.24	\$21,974 (509)	\$22,385
320: KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	250 (5)	213**	1.78 (0.02)	1.70**	5.02 (0.04)	5.04	2.18 (0.07)	2.05	\$15,150 (368)	\$15,573
138: CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	237 (5)	202**	1.69 (0.02)	1.61**	3.85 (0.03)	3.89	2.64 (0.08)	2.59	\$14,897 (402)	\$14,857
527	210 (15)	213	1.50 (0.09)	1.70*	2.29 (0.05)	2.22	0.27 (0.02)	0.27	\$42,981 (1,509)	\$41,617
316: RENAL FAILURE	209 (6)	183**	1.49 (0.02)	1.46	6.28 (0.05)	6.26	7.62 (0.17)	7.52	\$22,434 (573)	\$22,861
79: RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	185 (4)	157**	1.32 (0.02)	1.25*	8.13 (0.07)	8.15	12.44 (0.23)	12.15	\$27,647 (745)	\$28,317
121: CIRCULATORY DISORDERS W AMI & MAJOR COMP	177 (4)	150**	1.26 (0.02)	1.20**	6.07 (0.05)	6.24**	0.00 (0.00)	0.00 ¹	\$27,594 (751)	\$27,757
148: MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	147 (3)	133**	1.05 (0.01)	1.06	11.99 (0.09)	12.06	7.55 (0.17)	7.53	\$59,889 (1,226)	\$60,660

DRG	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
210: HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	140 (3)	126**	1.00 (0.01)	1.00	6.60 (0.05)	6.66	2.75 (0.10)	2.68	\$32,183 (625)	\$32,282
141: SYNCOPE & COLLAPSE W CC	138 (4)	120**	0.98 (0.01)	0.96	3.43 (0.04)	3.44	0.42 (0.04)	0.45	\$13,746 (413)	\$13,837
395: RED BLOOD CELL DISORDERS AGE >17	132 (3)	112**	0.94 (0.01)	0.90*	4.06 (0.06)	4.27**	1.29 (0.07)	1.39	\$14,785 (422)	\$15,563
132: ATHEROSCLEROSIS W CC	131 (4)	109**	0.93 (0.02)	0.87*	2.76 (0.03)	2.78	0.72 (0.05)	0.68	\$11,298 (353)	\$11,425
124: CIRCULATORY DISORDERS EXCEPT AMI	130 (5)	128	0.93 (0.02)	1.02**	4.43 (0.06)	4.36	1.04 (0.07)	0.97	\$26,500 (708)	\$26,013
524: TRANSIENT ISCHEMIA	128 (3)	113**	0.91 (0.01)	0.90	3.12 (0.03)	3.15	0.23 (0.03)	0.23	\$13,134 (351)	\$13,281

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 18. NIS and MedPAR Comparisons by Principal Diagnosis, 2004

Principal Diagnosis	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
108: Congestive heart failure; nonhypertensive	839 (19)	733**	5.98 (0.06)	5.85*	5.53 (0.05)	5.59	4.32 (0.07)	4.28	\$24,995 (676)	\$25,960
122: Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	736 (14)	620**	5.25 (0.07)	4.95**	6.29 (0.05)	6.36	6.29 (0.09)	6.10	\$22,591 (558)	\$23,367
101: Coronary atherosclerosis and other heart disease	654 (28)	612	4.66 (0.15)	4.88	3.75 (0.05)	3.72	0.81 (0.03)	0.83	\$37,904 (1,262)	\$38,804
106: Cardiac dysrhythmias	462 (12)	408**	3.29 (0.04)	3.25	3.86 (0.03)	3.87	1.45 (0.04)	1.37	\$24,551 (659)	\$25,159
100: Acute myocardial infarction	407 (12)	359**	2.90 (0.05)	2.86	5.99 (0.07)	6.03	9.75 (0.16)	9.70	\$43,845 (1,342)	\$44,817
127: Chronic obstructive pulmonary disease and bronchiectasis	394 (8)	344**	2.81 (0.04)	2.74	5.10 (0.04)	5.16	2.46 (0.07)	2.34	\$17,648 (444)	\$18,221
203: Osteoarthritis	390 (16)	364	2.78 (0.10)	2.90	3.97 (0.05)	3.92	0.19 (0.01)	0.17	\$32,700 (629)	\$32,568

Principal Diagnosis	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
109: Acute cerebrovascular disease	360 (8)	315**	2.56 (0.03)	2.51	6.02 (0.06)	6.13	10.94 (0.19)	10.74	\$25,693 (650)	\$26,809
237: Complication of device; implant or graft	342 (11)	324	2.43 (0.05)	2.59**	6.09 (0.07)	5.96	2.28 (0.06)	2.22	\$37,238 (829)	\$38,497
254: Rehabilitation care; fitting of prostheses; and adjustment of devices	338 (23)	312	2.41 (0.16)	2.49	12.10 (0.19)	11.80	0.61 (0.07)	0.22**	\$24,763 (1,214)	\$24,393
102: Nonspecific chest pain	324 (9)	295**	2.31 (0.04)	2.36	2.18 (0.02)	2.20	0.11 (0.01)	0.11	\$11,618 (267)	\$11,892
2: Septicemia (except in labor)	312 (8)	272**	2.22 (0.04)	2.17	8.55 (0.09)	8.64	19.76 (0.29)	19.42	\$37,733 (1,059)	\$39,143
55: Fluid and electrolyte disorders	310 (6)	269**	2.21 (0.02)	2.15*	4.44 (0.03)	4.53*	2.92 (0.08)	3.04	\$14,336 (375)	\$14,667
159: Urinary tract infections	299 (6)	255**	2.13 (0.03)	2.04**	5.02 (0.04)	5.08	1.99 (0.06)	1.87	\$15,556 (377)	\$16,191
226: Fracture of neck of femur (hip)	252 (6)	223**	1.80 (0.02)	1.78	6.42 (0.05)	6.36	3.20 (0.08)	3.14	\$31,099 (590)	\$31,499
205: Spondylosis; intervertebral disc disorders; other back problems	218 (7)	214	1.55 (0.04)	1.71**	4.04 (0.05)	3.88**	0.41 (0.03)	0.34*	\$26,326 (720)	\$26,763
153: Gastrointestinal hemorrhage	216 (4)	189**	1.54 (0.01)	1.51	4.91 (0.04)	4.96	4.16 (0.10)	4.16	\$20,521 (448)	\$20,909

Principal Diagnosis	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
50: Diabetes mellitus with complications	214 (5)	189**	1.52 (0.02)	1.51	6.30 (0.07)	6.27	1.75 (0.06)	1.69	\$24,313 (658)	\$25,530
238: Complications of surgical procedures or medical care	198 (5)	178**	1.41 (0.02)	1.42	6.99 (0.07)	6.79 ¹	2.31 (0.08)	2.28	\$28,609 (658)	\$29,460
69: Affective disorders	183 (10)	180	1.30 (0.07)	1.44	9.54 (0.23)	9.69	0.06 (0.01)	0.09*	\$16,620 (810)	\$16,374
197: Skin and subcutaneous tissue infections	182 (4)	160**	1.30 (0.01)	1.28	5.58 (0.05)	5.52	0.89 (0.05)	0.82	\$16,507 (414)	\$16,819
157: Acute and unspecified renal failure	178 (5)	153**	1.27 (0.02)	1.22	7.10 (0.07)	7.17	8.30 (0.18)	8.45	\$26,485 (733)	\$27,453
131: Respiratory failure; insufficiency; arrest (adult)	174 (5)	152**	1.24 (0.03)	1.21	10.03 (0.22)	9.56*	21.56 (0.39)	21.56	\$50,303 (1,584)	\$50,615
145: Intestinal obstruction without hernia	170 (3)	150**	1.21 (0.01)	1.20	6.84 (0.05)	6.89	4.20 (0.11)	4.30	\$26,711 (592)	\$27,286
146: Diverticulosis and diverticulitis	168 (4)	146**	1.20 (0.01)	1.17	5.57 (0.05)	5.69*	1.68 (0.07)	1.71	\$23,176 (511)	\$23,930

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.

Table 19. NIS and MedPAR Comparisons by Principal Procedure, 2004

Principal Procedure	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
70: Upper gastrointestinal endoscopy; biopsy	409 (11)	365**	2.91 (0.04)	2.91	5.82 (0.07)	5.93	1.90 (0.05)	1.87	\$22,561 (561)	\$22,831
45: Percutaneous transluminal coronary angioplasty (PTCA)	366 (23)	365	2.61 (0.14)	2.91*	3.07 (0.06)	3.00	1.10 (0.05)	1.09	\$45,230 (1,450)	\$43,984
222: Blood transfusion	361 (13)	290**	2.57 (0.08)	2.31**	5.83 (0.06)	5.92	5.75 (0.13)	5.97	\$21,299 (556)	\$22,011
47: Diagnostic cardiac catheterization; coronary arteriography	316 (13)	310	2.25 (0.06)	2.47**	4.16 (0.06)	4.12	1.36 (0.05)	1.30	\$26,566 (687)	\$25,958
216: Respiratory intubation and mechanical ventilation	297 (7)	253**	2.12 (0.03)	2.02*	9.26 (0.12)	9.00*	37.46 (0.41)	38.13	\$52,861 (1,427)	\$53,537
152: Arthroplasty knee	280 (11)	266	1.99 (0.07)	2.12	4.02 (0.05)	3.99	0.18 (0.01)	0.17	\$34,137 (664)	\$33,834
48: Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	241 (10)	226	1.72 (0.05)	1.80	5.17 (0.08)	5.04	1.31 (0.05)	1.29	\$62,568 (2,192)	\$62,118
153: Hip replacement; total and partial	237 (9)	218*	1.69 (0.05)	1.74	5.36 (0.05)	5.31	1.35 (0.06)	1.33	\$37,796 (701)	\$37,810
54: Other vascular catheterization; not heart	230 (7)	214	1.63 (0.04)	1.71	9.11 (0.10)	8.93	11.87 (0.26)	11.77	\$34,951 (776)	\$35,602

Principal Procedure	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
58: Hemodialysis	217 (7)	200*	1.55 (0.04)	1.59	5.49 (0.07)	5.33*	3.70 (0.11)	3.52	\$21,889 (661)	\$21,882
146: Treatment; fracture or dislocation of hip and femur	180 (4)	163**	1.28 (0.01)	1.30	6.20 (0.05)	6.27	2.38 (0.08)	2.34	\$30,173 (586)	\$30,382
76: Colonoscopy and biopsy	167 (7)	141**	1.19 (0.04)	1.12	5.78 (0.16)	6.00	1.27 (0.07)	1.34	\$21,006 (798)	\$21,642
61: Other OR procedures on vessels other than head and neck	163 (6)	154	1.16 (0.03)	1.23	7.22 (0.14)	7.15	4.58 (0.15)	4.43	\$47,118 (1,187)	\$48,160
231: Other therapeutic procedures	161 (18)	145	1.15 (0.13)	1.16	5.71 (0.23)	5.51	5.39 (0.27)	5.34	\$21,008 (1,444)	\$20,647
78: Colorectal resection	142 (3)	128**	1.01 (0.01)	1.02	10.97 (0.09)	11.00	6.37 (0.17)	6.16	\$55,163 (1,155)	\$55,976
44: Coronary artery bypass graft (CABG)	132 (8)	126	0.94 (0.05)	1.01	9.99 (0.12)	9.71*	3.14 (0.14)	3.13	\$90,538 (2,945)	\$90,111
84: Cholecystectomy and common duct exploration	132 (3)	121**	0.94 (0.01)	0.97*	6.26 (0.06)	6.39	1.67 (0.08)	1.78	\$33,938 (695)	\$34,377
193: Diagnostic ultrasound of heart (echocardiogram)	131 (13)	108	0.93 (0.09)	0.86	5.21 (0.09)	5.41*	2.28 (0.16)	2.44	\$20,570 (1,321)	\$20,891
169: Debridement of wound; infection or burn	109 (3)	96**	0.77 (0.01)	0.76	11.38 (0.22)	10.71**	4.27 (0.17)	4.05	\$41,242 (1,169)	\$41,780
39: Incision of pleura; thoracentesis; chest drainage	100 (2)	92**	0.71 (0.01)	0.73*	8.07 (0.07)	8.18	7.83 (0.20)	7.95	\$30,177 (777)	\$30,665

Principal Procedure	Number of Discharges in Thousands (Standard Error)		Percentage of Discharges (Standard Error)		Average Length of Stay in Days (Standard Error)		In-Hospital Mortality Rate Percent (Standard Error)		Average Total Hospital charge (Standard Error)	
	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR	NIS	MedPAR
213: Physical therapy exercises; manipulation; and other procedures	99 (14)	101	0.71 (0.10)	0.80	12.25 (0.43)	10.89**	0.88 (0.15)	0.36**	\$28,990 (2,667)	\$25,017
51: Endarterectomy; vessel of head and neck	87 (3)	86	0.62 (0.02)	0.68**	2.85 (0.07)	2.85	0.49 (0.05)	0.43	\$22,346 (555)	\$22,833
37: Diagnostic bronchoscopy and biopsy of bronchus	86 (3)	81	0.61 (0.01)	0.64	9.23 (0.10)	9.24	6.19 (0.21)	6.31	\$38,673 (1,105)	\$38,774
3: Laminectomy; excision intervertebral disc	82 (4)	87	0.58 (0.02)	0.69**	3.54 (0.07)	3.39*	0.33 (0.04)	0.30	\$22,641 (714)	\$21,771
177: Computerized axial tomography (CT) scan head	80 (12)	58	0.57 (0.08)	0.46	4.96 (0.17)	4.98	4.15 (0.25)	4.21	\$20,077 (2,041)	\$19,805

*Significant at a 5 percent level.

**Significant at a 1 percent level.

¹A significance test was not performed because a valid standard error was not available.