

Description of Data Elements

HCUP State Inpatient Databases (SID)

Volume 5 - Data Elements Beginning with letters R-Z

This document contains cumulative descriptions of data elements across all HCUP Central Distributor states and years of HCUP data from 1988 to the current data year. Please refer to the separate documents on the Availability of Data Elements (1995-1997) and (1998-2003) for specific information on which states and data elements are included in each year of the SID.

Not all data elements are uniformly coded or available across all the states. Please check the "State Specific Notes" section for each data element before analysis.

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RACE - Race

General Notes

HCUP coding includes race and ethnicity in one data element (RACE). If the source supplied race and ethnicity in separate data elements, ethnicity takes precedence over race in setting the HCUP value for race.

Two HCUP data elements contain source-specific information about the race and ethnicity of the patient.

- RACE_X retains information on the race of the patient as provided by the data source.
- HISPANIC_X retains information on the Hispanic ethnicity as provided by the data source.

Not all data sources provide information on race (RACE_X) and ethnicity (HISPANIC_X).

Uniform Values

Variable	Description	Value	Value Description
RACE	Race	1	White
		2	Black
		3	Hispanic
		4	Asian or Pacific Islander
		5	Native American
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Arizona
(Beginning July 2003)

RACE_X		RACE	
Value	Description	Value	Description
5	White	1	White
3	Black or African American	2	Black
4	Hispanic or Latino	3	Hispanic
2	Asian	4	Asian or Pacific Islander
6	Hawaiian Native or Other Pacific Islander		
1	American Indian or Alaska Native	5	Native American
7	Other (Use if patient not described above)	6	Other
9	Refused	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Arizona			
(Valid through June 2003)			
RACE_X		RACE	
Value	Description	Value	Description
5	Caucasian, Non Hispanic	1	White
3	Black	2	Black
4	Caucasian, Hispanic	3	Hispanic
2	Asian, Pacific Islander	4	Asian or Pacific Islander
1	American Indian, Aleut, Eskimo	5	Native American
6	Other	6	Other
9	Refused	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

California

California			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
If HISPANIC_X = 1		3	Hispanic
4	Asian/Pacific Islander	4	Asian or Pacific Islander
3	Native American/Eskimo/Aleut	5	Native American
5	Other	6	Other
6	Unknown	.	Missing
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Hispanic	
2		Non-Hispanic	
3		Unknown	
<p>Information on ethnicity was provided by California and used to code RACE beginning in 1995. The variable HISPANIC_X was retained on the HCUP databases beginning in 1998.</p> <p>There are a small number of discharges with undocumented values in HISPANIC_X that are not considered valid by the data source.</p>			

Colorado

Colorado			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
5	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
4	Native American	5	Native American
6	Other	6	Other
7,0, Blank	Missing	.	Missing

Any other values	.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.		

Florida

Florida			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
5	Hispanic - White	3	Hispanic
6	Hispanic - Black		
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian/Eskimo/Aleut	5	Native American
7	Other	6	Other
8, Blank	No Response, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Iowa

Iowa			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
--		3	Hispanic
4	Asian or Pacific Islander	4	Asian or Pacific Islander
3	American Indian or Alaskan native	5	Native American
--		6	Other
9, Blank	Other/Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Iowa does not separately classify Hispanic (RACE = 3). No documentation was available about how these were coded. HISPANIC_X is not available.

Iowa uses one category for "Other" and "Unknown", which is assigned to the HCUP category for missing (.).

Some Iowa hospitals report "Other" race for all or a high percentage of their discharges. Some hospitals report "White" race for all discharges.

Maryland

Beginning in 1993, Maryland reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Spanish/Hispanic origin, patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993, Maryland did not report Hispanic ethnicity as a separate variable or category of race. Hispanic ethnicity (RACE = 3) is not coded in the 1988-1992 HCUP Maryland data. The source documentation available for Maryland did not indicate which race code(s) were used for Hispanic ethnicity.

Maryland			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	African American	2	Black
If HISPANIC_X = 1		3	Hispanic
3	Asian or Pacific Islander	4	Asian or Pacific Islander
4	American Indian, Eskimo, Aleut	5	Native American
5	Other	6	Other
9	Unknown	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Spanish/Hispanic origin	
2		Not of Spanish/Hispanic origin	
9		Unknown	

Massachusetts

Massachusetts			
(Valid beginning October 1999)			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
4	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
5	American Indian	5	Native American
6	Other	6	Other
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Massachusetts			
(Valid prior to October 1999)			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
9	Hispanic	3	Hispanic
6	Asian	4	Asian or Pacific Islander
5	American Indian	5	Native American
3	Other	6	Other
4, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Michigan

Michigan			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPANIC_X = 1		3	Hispanic
2, 7	Asian; Native Hawaiian/Pacific Islander	4	Asian or Pacific Islander
1	American Indian/Eskimo/Aleut	5	Native American
5	Other	6	Other
0, Blank	Missing, invalid or unrecorded	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
	1	Hispanic origin	
	2	Other	
	3	Arabic	
	0	Unknown or not stated	

New Jersey

New Jersey			
RACE_X		RACE	
Value	Description	Value	Description
1	White (Includes Mexican, Puerto Rican and Other Caucasian, Cajun and Creole)	1	White
2	Black	2	Black
If HISPANIC_X = 1, 2, 3, 4, or 5		3	Hispanic
4	Chinese	4	Asian or Pacific Islander
5	Japanese		
6	Hawaiian (including part Hawaiian)		
7	Filipino		
8	Other Asian or Pacific Islander (e.g. Pakistani, Bangladeshi, Cambodian, Thai)		

A	Asian Indian (Beginning 2005)		
B	Korean (Beginning 2005)		
C	Samoan (Beginning 2005)		
D	Vietnamese (Beginning 2005)		
E	Guamian (Beginning 2005)		
3	Indian (North American, Central American, South American, Eskimo, Aleut)	5	Native American
0	Other races	6	Other
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
0		Non-Hispanic	
1		Mexican	
2		Puerto Rican	
3		Cuban	
4		Central or South American	
5		Other and Unknown Hispanic	
9		Not Classified or Unknown	
<p><i>Beginning in 1993.</i> New Jersey reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, Other or Unknown Hispanic), patient race was set to Hispanic (RACE = 3) during HCUP processing.</p> <p><i>Prior to 1993.</i> New Jersey reported Hispanic ethnicity as a category of race. If New Jersey reported patient race as Hispanic, HCUP assigned patient race as Hispanic (RACE = 3).</p>			

New York

New York			
RACE_X		RACE	
Value	Description	Value	Description
01	White	1	White
02	African American (Black)	2	Black
If HISPANIC_X = 1		3	Hispanic

04	Asian	4	Asian or Pacific Islander
04	Asian	05	Native Hawaiian or Other Pacific Islander
03	Native American (American Indian, Eskimo, Aleut)	5	Native American
88	Other	6	Other
99, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1	Spanish/Hispanic origin	1	Spanish/Hispanic origin
2	Not of Spanish/Hispanic origin	2	Non-Spanish/Non-Hispanic
9, Blank	Missing	9	Unknown

North Carolina

North Carolina			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
--		3	Hispanic
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian/Eskimo	5	Native American
5	Other Race	6	Other
0, 6, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available. Reporting of the race of the patient is optional for hospitals in North Carolina.			

Rhode Island

Rhode Island
(Valid beginning 4/1/03)

RACE_X		RACE	
Value	Description	Value	Description
A	White	1	White
B	Black	2	Black
	If HISPANIC_X=1	3	Hispanic
C	Asian	4	Asian or Pacific Islander
E	Hawaiian/Pacific Islander		
D	Native American	5	Native American
F	White/Black	6	Other
G	White/Asian		
H	White/American Indian or Alaska Native		
I	White/Native Hawaiian or Other Pacific Islander		
J	Black/Asian		
K	Black/American Indian or Alaska Native		
L	Black/Native Hawaiian or Other Pacific Islander		
M	Asian/American Indian or Alaska Native		
N	American Indian or Alaska Native/Native Hawaiian or Other Pacific Islander		
O	Asian/Native Hawaiian or Other Pacific Islander		
P	All Others		
Blank, Q	Missing, Not provided	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
	1	Hispanic	
	2	Not Hispanic	
	3	Not Reported	

Rhode Island			
(Valid beginning 1/1/03-3/31/03)			
RACE_X		RACE	
Value	Description	Value	Description

1	White	1	White
2	Black	2	Black
5	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
4	Native American	5	Native American
6	Other	6	Other
Blank, 9	Missing, Unknown	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Rhode Island			
(Valid through 2002)			
RACE_X		RACE	
Value	Description	Value	Description
4	White, not Hispanic	1	White
3	Black, not Hispanic	2	Black
7	White Hispanic	3	Hispanic
8	Black Hispanic		
2	Asian	4	Asian or Pacific Islander
1	Native American	5	Native American
5	Other	6	Other
Blank, 6	Missing, Unknown	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

South Carolina

South Carolina			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White

2	African American	2	Black
6	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
4	American Indian	5	Native American
5	Other	6	Other
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Utah

Utah			
(Beginning in 2003)			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPANIC_X=1		3	Hispanic
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian or Alaskan Native	5	Native American
5	Other	6	Other
6, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1	Spanish/Hispanic origin		
2	Non-Spanish/Non-Hispanic		
In 2003, Utah changed their race coding from White, Non-White, White-Hispanic, and Non-White-Hispanic to the more common White, Black, Hispanic, Asian, Native American, and Other. This caused the number of reported Hispanics to decrease.			

Utah			
(Prior to 2003)			
RACE_X		RACE	
Value	Description	Value	Description
W	White, non-Hispanic origin	1	White
--		2	Black
WH	White, Hispanic origin	3	Hispanic
NW	Non-white, Hispanic origin		
--		4	Asian or Pacific Islander
--		5	Native American
NH	Non-white, non-Hispanic origin	6	Other
UK, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Vermont

Vermont			
RACE_X		RACE	
Value	Description	Value	Description
4	White/Non-Hispanic	1	White
3	Black/Non-Hispanic	2	Black
7	Hispanic-White	3	Hispanic
8	Hispanic-Black		
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian/Alaska Native	5	Native American
5	Other Race	6	Other
6, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Wisconsin

Wisconsin			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPANIC_X = 1		3	Hispanic
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian or Alaskan Native	5	Native American
5	Other	6	Other
6, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Hispanic origin	
2		Not of Hispanic origin	
6		Unknown	

RACE_X - Race, as received from data source

General Notes

RACE_X retains information on the race of the patient as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain other information about the race of the patient:

- HISPANIC_X retains information on the Hispanic ethnicity as provided by the data source.
- RACE contains uniformly coded information about the race and ethnicity of the patient. The data element RACE should be used when analyzing race across data sources.

Uniform Values

Variable	Description	Value	Value Description
RACE_X	Race, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element RACE.

RATE - Line Item Rate as Received from Source

General Notes

The daily rate (RATE) is retained as provided by the data source. Zero values are retained and NOT set to missing (.). Negative values are set to invalid (.A).

RATE is contained in a line item charge detail file. This file will contain multiple observations in the file with the same revenue code (REVCODE) for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

Uniform Values			
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Variable	Description	Value	Value Description
RATE	Line Item Rate as Received from Source	4(n).nn	Dollars
		.	Missing
		.A	Invalid

State Specific Notes

None

RATEn - Daily rate

General Notes

The daily rate (RATEn) is retained as provided by the data source. Zero values are retained and NOT set to missing (.). Negative values are set to invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
RATEn	Daily rate	4(n).nn	Dollars
		.	Missing
		.A	Invalid

State Specific Notes

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

- RATE1-RATE5 contain accommodation rates.

See note under revenue codes (REVCDn) for definitions of revenue codes associated with these accommodation rates (RATEn).

Adjustment to Charges for Interim Bills

- For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

RDRG - Refined DRG

General Notes

Refined DRGs were developed at Yale University in response to criticism that HCFA DRGs were not appropriate for non-Medicare populations and did not adequately adjust for patient severity. The HCFA DRGs were expanded to better accommodate pediatric and neonate cases, and DRGs for other high cost conditions like trauma and HIV were expanded. All age and complications and comorbidity (CCs) splits of HCFA DRGs were eliminated and replaced by subclasses (Refinement Classes) to indicate severity. Some RDRGs are consistent with HCFA DRGs.

Secondary diagnoses are used to determine complications and comorbidity. The CCs are used to subdivide DRGs into Refinement Classes based upon the highest level secondary diagnosis. Surgical patients are split into the four Refinement Classes. Medical patients are split into three Refinement Classes. The Refinement Class indicates varying levels of impact on patient resource use.

Surgical Refinement Class	Medical Refinement Class	Description
0	0	Baseline/No substantial CCs
1	1	Moderate CCs
2	2	Major CCs
3	-	Catastrophic CCs

The last digit of the RDRG value is the refinement class. The preceding digit(s) are the refined DRG category.

How the RDRG value provided by the data source is stored in the HCUP databases varies by year. - In the 1988-1997 HCUP databases, RDRG is stored in a numeric field which causes leading zeros to be removed. Consider the following examples:

HCUP RDRG Value (1988-97)	Refined DRG Category	Refinement Class
50	5	0
892	89	2
1821	182	1

- Beginning in the 1998 data, RDRG is stored in a character field which retains leading zeros. Consider the following examples:

HCUP RDRG Value (Beginning in the 1998 data)	Refined DRG Category	Refinement Class
0050	5	0
0892	89	2
1821	182	1

Uniform Values

Variable	Description	Value	Value Description
RDRG	Refined DRG	aaaa	RDRG value
		Blank	Missing
		A	Invalid

State Specific Notes

Kentucky

Source documentation does not indicate which version of the Refined DRG grouper was used.

North Carolina

Source documentation does not indicate which version of the Refined DRG grouper was used.

Oregon

Beginning in the 1997 data, Oregon supplied the Refined DRG (RDRG). There was no source documentation on which version of the HCFA Grouper was used to assign the RDRGs.

Washington

Beginning in 1998, RDRG is loaded as a character variable so that the leading zero are retained in the values (e.g., the number 4 is read as the character values "004").

Based on documentation supplied by Washington, the HCFA Grouper version for RDRG is as follows:

<u>Time Period</u>	<u>HCFA Grouper Version</u>
10/92 - 09/93	10.0
10/93 - 09/94	11.0
11/94 - 09/95	12.0
10/95 - 09/96	13.0
10/96 - 09/97	14.0
10/97 - 09/98	15.0
10/98 - 09/99	16.0
10/99 - 09/00	17.0
10/00 - 09/01	18.0
10/01 - 09/02	19.0
10/02 - 09/03	20.0

RDRGWT - Refined DRG weight

General Notes

The RDRG relative weight (RDRGWT) is retained as provided by the data source. During HCUP processing, the weights are assigned as reported, without modification. Nonnumeric values are set to invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
RDRGWT	Refined DRG weight	nnnn.nn	RDRG weight
		.	Missing
		.A	Invalid

State Specific Notes

Washington

Based on documentation supplied by Washington, the version of the Washington State specific RDRG relative weight (RDRGWT) is as follows:

<u>Time Period</u>	<u>Washington State specific relative weight Version</u>
10/92 - 09/93	10.0
10/93 - 09/94	11.0
11/94 - 09/95	12.0
10/95 - 09/96	13.0
10/96 - 09/97	14.0
10/97 - 09/98	15.0
10/98 - 09/99	16.0
10/99 - 09/00	17.0
10/00 - 09/01	18.0
10/01 - 09/02	19.0
10/02 - 09/03	20.0

When Washington first supplied RDRG weight in their 1993 inpatient data, source documentation specified a format of 6.2 (nnnn.nn) for RDRGWT. In 1995, source documentation specified a format of 6.4 (nn.nnnn) for RDRGWT. From 1995-2001, RDRGWT continued to be loaded in the 6.2 (nnnn.nn) format for consistency with previous years.

Beginning in 2002, the data was provided to HCUP in SAS format and appears to be in 6.4 format. Values will not be consistent with previous years.

READMIT - Readmission

General Notes

Information on readmissions (READMIT) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
READMIT	Readmission	0	Not a readmission
		1	Readmission
		.	Missing
		.A	Invalid

State Specific Notes

New Jersey

A readmission (READMIT = 1) is defined as admission to the same facility from which the patient was discharged within the previous seven days.

Vermont

A readmission (READMIT = 1) is defined as admission to the same facility from which the patient was discharged within the previous thirty days.

REVCDn - Revenue code

General Notes

Revenue center codes specify a specific accommodation, ancillary service, or billing calculation. Many states use the codes defined by the UB-92, but some states have developed their own coding scheme. Line item revenue center codes specify a specific accommodation, ancillary service, or billing calculation. States Data organizations that report line item revenue center codes use UB-92 definitions as defined by the National Uniform Billing Committee. Revenue codes (REVCDn) are retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. No validity checks are performed.

Uniform Values

Variable	Description	Value	Value Description
REVCDn	Revenue code	nnnn	Revenue Code
		Blank	Missing or Invalid

State Specific Notes

Kentucky

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1. Kentucky reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. Kentucky does not collapse or redefine ranges of revenue codes.

Information on total charges (revenue center 001) was removed from the detailed charge arrays. (CHGn, REVCDn, and UNITn). Information on total charges is available in the HCUP variables TOTCHG and TOTCHG_X.

Maine

Detailed charges (CHG1-CHG33) are associated with the identified revenue centers (REVCD1-REVCD33), and units of service (UNIT1-UNIT3). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Revenue

codes are available for accommodation and ancillary charges. Units are available for accommodation charges.

Massachusetts

The charge detail provided by Massachusetts varies across years.

- *Starting in 1999:* Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have an associated charge (CHGn = .). During HCUP processing, the array of revenue codes, charges, and units are condensed so that only the revenue codes that have non-missing charges are retained. No information is lost.
- *In 1998:* Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn = .) have a charge (CHGn = .). The revenue codes are constant across records. For example, REVCD1 = 111 on all discharges even if there is no charge (CHG1 = .) for that revenue center.
- *Prior to 1998:* Revenue codes are not retained on the discharge record. The detailed charges and units are retained on the HCUP files in assigned positions. For example, CHG1 is always for UB-92 revenue code 111 "Routine Medical/Surgical." See the variable note for CHGn for more details.

Because of the timing of HCUP data processing for the 1999 NIS, the Massachusetts source file provided to HCUP was an interim file that included records that had failed edit checks. The percent of failed records is very small, ranging from 0.0% to 1.5% (with a mean of 0.4%) for most hospitals. A handful of hospitals had a large percent of failed records. Failed records have one or more of the following errors:

- Invalid diagnosis code *
- Invalid procedure code *
- Invalid or missing birth weight
- Invalid claim certificate number **
- Invalid or inconsistent UB-92 revenue code
- Invalid medical record or person number
- Invalid type of payer *
- Inconsistent primary and secondary payer
- Invalid physician identifier
- Invalid patient or employer ZIP Code. **

* These errors would have been handled during HCUP data processing.

** These data elements are not included in the HCUP data files.

Nebraska

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes and units are available for accommodation and ancillary charges. Rates are available only for accommodation charges.

Nebraska provided the charge detail in a separate, linkage file that was not edited. During HCUP processing, the source file was manipulated to be consistent with the format of detail charge information in other states. The source file had one record per service, multiple records per discharge. The HCUP file has one record per patient that includes all of the provided detail.

Nevada

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

In the rare event that there were more revenue charges than could be retained in the array of revenue codes, charges, and units, Nevada set the revenue code to "9999", the charge to the sum of the remaining charges, and the units to the sum of the remaining units.

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

- REVCD1-REVCD5 contain accommodation revenue centers and
- REVCD6-REVCD25 contain ancillary revenue centers.

Adjustment to Charges for Interim Bills

- For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

- Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Revenue Codes for Accommodations (REVCD1-REVCD5)

Valid accommodation revenue codes used in REVCD1-REVCD5 are listed below:

Codes marked with a dash (-) are only valid beginning in 1994.

All other codes are only valid before 1994.

	203x Detoxification Unit - Alcohol Acute
-	204x Alcohol Rehabilitation - Acute Care
	205x Mental Retardation - Acute Care
	208x Detoxification Unit - Drug Acute
	217x Mental Rehabilitation - Acute Care
-	218x Rehabilitation - Medical Acute
-	219x Alternate Level of Care Unit
-	301x Medical/Surgical - Acute
-	317x Pediatric - Acute
-	321x Psychiatric - Acute
-	325x Obstetrics (including gynecological)
	363x Psychiatric - Long Term Care
-	370x AIDS Unit
-	376x Drug Rehabilitation - Acute Care
-	377x Epilepsy Unit
-	378x Comprehensive Psychiatric Emergency Program Observation Bed
-	379x Tuberculosis
-	380x Traumatic Brain Injury - Acute Care
-	381x Ventilator Dependent - Acute Care
-	382x Other Long-Term Care
-	383x Skilled Nursing Facility
-	384x Hospice

Valid fourth digits ("x") for the above accommodation codes are:

1	Private Room - 1 bed
2	Semi-Private - 2, 3, or 4 beds
3	Ward - 5 or more beds
6	Isolation - special isolation services
8	Alternate Level of Care

The following accommodation revenue codes, used in REVCD1-REVCD5, were always used exactly as they are listed below.

3310	Medical/Surgical Intensive Care
3330	Coronary Care
3350	Pediatric Intensive Care
3370	Neonatal Intensive Care
3380	Burn Care
3410	Other Intensive Care
3510	Newborn Nursery
3520	Premature Nursery
3711	Secured Room Charge (correctional facility inmates)

Revenue Codes for Ancillary Services (REVCD6-REVCD25)

- Ancillary Revenue Codes: Beginning in 1994

Beginning in 1994, New York employed a set of state-specific Ancillary revenue codes based on the UB-92 coding system. The new system is extensive and well documented in Appendix J of the SPARCS Inpatient Output Data Dictionary.

- Ancillary Revenue Codes: 1988-1993

Ancillary revenue center codes are three-character codes. For 1988-1992 data, the ancillary revenue center codes are left-justified, with a blank in the fourth column (e.g., '401 '). Beginning with the 1993 data, the ancillary revenue center codes are right-justified, with a leading zero (e.g., '0401').

For 1988-1993, the following lists the valid ancillary revenue codes used in REVCD6-REVCD25.

116	Electroshock Therapy
-----	----------------------

117	Intravenous Therapy
119	Pulmonary Function, Other
120	Diagnostic Services, Other
127	Lithotripsy
136	Gastro-Intestinal Services
137	Gastro-Intestinal Services, other
138	Urology
139	Oncology
234	Ambulance Service
235	Clinic
236	Emergency Room
401	Labor and Delivery Services
404	Operating Room Services
406	Recovery Room
408	Anesthesiology
411	Medical/Surgical Supplies
415	Pharmacy
421	Laboratory Services - Clinical
423	Laboratory Services - Pathology
426	Blood Processing and Storage
429	Electrocardiography (EKG/ECG)
431	Cardiac Catheterization Laboratory
432	Radiology Diagnostic
434	CT Scanner
436	Radiology Therapeutic
438	Nuclear Medicine
442	Respiratory Therapy
444	Pulmonary Function Testing
446	Neurology - Diagnostic (EEG)
451	Physical Therapy
453	Occupational Therapy
455	Speech - Language Pathology
457	Recreational Therapy
458	Audiology
459	Physical Medicine, other

467	Psychiatric/Psychological Service
471	Renal Dialysis - General
473	Organ Acquisition - General
475	Organ Acquisition - Other Donor Bank
476	Hemodialysis (Inpatient)
477	Peritoneal Dialysis (Inpatient)
478	Continuous Ambulatory Peritoneal Dialysis (CAPD) Inpatient
479	Continuous Cycling Peritoneal Dialysis (CCPD) Inpatient
491	Ancillary Services, other
561	Telephone and Telegraph Revenue
584	Television/Radio Rentals
990	Outpatient Services, Other

North Carolina

Beginning in 2002, detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn), and daily rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1, and the rate in RATE1. North Carolina reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn.

For 2002-2003 data, charge detail was incorrect for about 1% of the discharges. Some facilities in North Carolina reused their record identifiers across fiscal years (starting each October). This means that two distinct discharges share an identical state-supplied record identifier. The charge detail for the different discharges were erroneously combined because of the identical record identifiers. There is no way to determine which HCUP records have this problem.

Prior to 2002, North Carolina provided 10 detail charges.

Washington

Overview

Revenue codes (REVCDn) identify the revenue center for which the detailed charges (CHGn) apply in the number of units (UNITn) given. For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Units are not required for all revenue sources; the unit's field may be coded as missing (.) or zero.

Caveats

For 2000-2004, if total charges are identified in the detail charges (REVCDn = "001"), the corresponding detail charge, unit, and revenue code are set to missing. Beginning with 2005, total charges are kept in the detailed charges.

Outpatient revenue codes (REVCDn = 500 or 509) are used when patient is admitted as an inpatient before midnight of the day following the date of service. Late discharges for medical necessity are to be shown under Discharge, Medically Necessary (REVCDn = 224), rather than under room charge. Hourly nursing charges are in addition to room and board for ICU and CCU. Other Drugs (REVCDn = 259) is a code for "Generic Take Home Drugs." Treatment or Observation Room revenue codes are used when the patient is held in an observation room and then subsequently admitted.

Invalid Revenue Codes

Revenue codes in 1988-1992 were kept as reported; no validity check was performed. In 1993-1994, invalid revenue codes (values less than 100, greater than 999, and alpha-numeric codes) were set to "A" (REVCDn = "A"). Starting in 1995, invalid codes were set to missing (REVCDn = " ").

Revenue Codes and Associated Units

Below are the revenue codes and units associated with the charges for each patient bill:

MEDICARE REQUIRED

ROOM AND BOARD, PRIVATE UNITS OF SERVICE

110 = General Classification	DAYS
111 = Medical/Surgical/GYN	DAYS
112 = OB	DAYS
113 = Pediatric	DAYS
114 = Psychiatric	DAYS
115 = Hospice	DAYS
116 = Detoxification	DAYS
117 = Oncology	DAYS
118 = Rehabilitation	DAYS
119 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE TWO BEDS

120 = General Classification	DAYS
121 = Medical/Surgical/GYN	DAYS

122 = OB	DAYS
123 = Pediatric	DAYS
124 = Psychiatric	DAYS
125 = Hospice	DAYS
126 = Detoxification	DAYS
127 = Oncology	DAYS
128 = Rehabilitation	DAYS
129 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE THREE AND FOUR BEDS

130 = General Classification	DAYS
131 = Medical/Surgical/GYN	DAYS
132 = OB	DAYS
133 = Pediatric	DAYS
134 = Psychiatric	DAYS
135 = Hospice	DAYS
136 = Detoxification	DAYS
137 = Oncology	DAYS
138 = Rehabilitation	DAYS
139 = Other	DAYS

PRIVATE (DELUXE)

140 = General Classification	DAYS
141 = Medical/Surgical/GYN	DAYS
142 = OB	DAYS
143 = Pediatric	DAYS
144 = Psychiatric	DAYS
145 = Hospice	DAYS
146 = Detoxification	DAYS
147 = Oncology	DAYS
148 = Rehabilitation	DAYS
213 = Heart Transplant	DAYS
214 = Post CCU	DAYS
219 = Other Coronary Care	DAYS

SPECIAL CHARGES

220 = General Classification
221 = Admission Charge
222 = Technical Support Charge
223 = U.R. Service Charge
224 = Late Discharge, Medically Necessary
229 = Other Special Charges

INCREMENTAL NURSING CHARGE RATE

230 = General Classification
231 = Nursery
232 = OB
233 = ICU - Includes Transitional Care
234 = CCU - Includes Transitional Care
235 = Hospice
239 = Other Coronary Care

ALL INCLUSIVE ANCILLARY

240 = General Classification
249 = Other Inclusive Ancillary

PHARMACY

250 = General Classification
251 = Generic Drug
252 = Non-Generic Drug
253 = Take Home Drug
254 = Drugs Incident to Other Diag. Srvs.
255 = Drugs Incident to Radiology
256 = Experimental Drugs
257 = Non-Prescription.
258 = IV Solutions
259 = Other Drugs

IV THERAPY (HOME IV THERAPY)

260 = General Classification
261 = Infusion Pump
262 = IV Therapy/Pharmacy Services
263 = IV Therapy/Drug/Supply Delivery
264 = IV Therapy/Supplies

RADIOLOGY - THERAPEUTIC

330 = General Classification
331 = Chemotherapy - Injected
332 = Chemotherapy - Oral
333 = Radiation Therapy
335 = Chemotherapy - IV
339 = Other

NUCLEAR MEDICINE

340 = General Classification
341 = Diagnostic
342 = Therapeutic - Oral
349 = Other

CT SCAN

350 = General Classifications	# Scans
351 = Head Scan	# Scans
352 = Body Scan	# Scans
359 = Other CT Scan	# Scans

OPERATING ROOM SERVICES

360 = General Classification
361 = Minor Surgery
362 = Organ Transplant - Other than Kidney
367 = Kidney Transplant

369 = Other Operating Room Services

ANESTHESIA

370 = General Classification

371 = Anesthesia Incident to Radiology
--

372 = Anesthesia Incident to Other Diag. Srvs.
--

374 = Acupuncture

379 = Other Anesthesia

BLOOD

380 = General Classification

381 = Packed Red Cells

382 = Whole Blood

383 = Plasma

384 = Platelets

385 = Leucocytes

386 = Other Components

387 = Other Derivatives (cryoprecipitates)
--

389 = Other Blood

BLOOD STORAGE AND PROCESSING

390 = General Classification

391 = Blood Administration

399 = Other Blood Storage and Processing
--

OTHER IMAGING SERVICES

480 = General Classification

481 = Cardiac Catheterization Lab

482 = Stress Test

489 = Other Cardiology

AMBULATORY SURGICAL CARE

490 = General Classification

499 = Other Ambulatory Surgical Care

OUTPATIENT SERVICES

500 = General Classification

509 = Other

CLINIC

510 = General Classification

511 = Chronic Pain Center

512 = Dental Clinic

513 = Diabetic Counseling

514 = OB-GYN Clinic

515 = Pediatric Clinic

519 = Other Clinic

FREESTANDING CLINIC

520 = General Classification

521 = Rural Health Clinic

522 = Rural Home Health

523 = Family Practice

529 = Other Clinic

OSTEOPATHIC SERVICES

530 = General Classification

531 = Osteopathic Therapy

539 = Other Osteopathic Services

AMBULANCE

540 = General Classification	# Miles
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541 = Supplies	# Miles
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542 = Medical Transport	# Miles
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543 = Heart Mobile	# Miles
--------------------	---------

544 = Oxygen	# Miles
--------------	---------

545 = Air Ambulance	# Miles
546 = NeoNatal Amb, Support Crews	# Miles
547 = Pharmacy	
548 = EKG (Telephonic Transmission)	
549 = Other Ambulance	# Miles

SKILLED NURSING

550 = General Classification	DAYS
551 = Visit Charge	DAYS

CAST ROOM

700 = General Classification
702 = Other Cast Room

RECOVERY ROOM

710 = General Classification
712 = Other Recovery Room

LABOR ROOM/DELIVERY

720 = General Classification	DAYS
721 = Labor	HOURS/DAYS
722 = Delivery	HOURS/DAYS
723 = Circumcision	
724 = Birthing Center	HOURS/DAYS
729 = Other Labor Room/Delivery	DAYS

EKG/ECG (ELECTROCARDIOGRAM)

730 = General Classification
731 = Holter Monitor
732 = Telemetry
739 = Other EKG/ECG

EEG (ELECTROENCEPHALOGRAM)

740 = General Classification

749 = Other EEG

GASTRO-INTESTINAL SERVICES

750 = General Classification

759 = Other Gastro-Intestinal Services
--

TREATMENT OR OBSERVATION ROOM

760 = General Classification

769 = Other Treatment Room

LITHOTRIPSY

790 = General Classification

799 = Other Lithotripsy

INPATIENT RENAL DIALYSIS

800 = General Classification	# Sessions
801 = Inpatient Hemodialysis	# Sessions
802 = Inpatient Peritoneal (NON-CAPD)	# Sessions
803 = Inpatient (CAPD)	# Sessions
804 = Inpatient Continuous Cycling Peritoneal	# Sessions
809 = Other Inpatient Dialysis	# Sessions

ORGAN ACQUISITION

810 = General Classification	
811 = Living Donor - Kidney	
943 = Cardiac Rehabilitation	# Visits
944 = Drug Rehabilitation	# Visits
945 = Alcohol Rehabilitation	# Visits
946 = Air Fluidize Support Beds	Days
947 = Complex Medical Equipment	Days
948 = Occupational Therapy	# Visits
949 = Other Therapeutic Services	# Visits

PATIENT CONVENIENCE ITEMS

990 = General Classification
991 = Cafeteria/Guest Tray
992 = Private Linen Service
993 = Telephone/Telegraph
994 = TV/Radio
995 = Nonpatient Room Rentals
996 = Late Discharge Charge
997 = Admission Kits
998 = Beauty Shop/Barber
999 = Other Patient Convenience Items
851 = Peritoneal/Composite or Other Rate
852 = Home Supplies
853 = Home Equipment
854 = Maintenance/100%
855 = Support Services
859 = Other Outpatient CCPD

PROFESSIONAL FEES

960 = General Classification
961 = Psychiatric
962 = Ophthalmology
963 = Anesthesiologist (MD)
964 = Anesthetist (CRNA)
969 = Other Professional Fees
971 = Laboratory
972 = Radiology - Diagnostic
973 = Radiology - Therapeutic
974 = Radiology - Nuclear Medicine
975 = Operating Room
976 = Respiratory Therapy
977 = Physical Therapy
978 = Occupational Therapy
979 = Speech Pathology

981 = Emergency Room
982 = Outpatient Service
983 = Clinic
984 = Medical Social Services
985 = EKG
986 = EEG
987 = Hospital Visit
988 = Consultation
989 = Private Duty Nurse

West Virginia

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. West Virginia reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. West Virginia does not collapse or redefine ranges of revenue codes.

The first 12 variables in each array (CHG1-CHG12, REVCD1-REVCD12, and UNIT1-UNIT12) are reserved for room and board services; the remaining variables are used for ancillary services.

REVCODE - Line item revenue code as received from source

General Notes

Line item revenue center codes specify a specific accommodation, ancillary service, or billing calculation. Data organizations that report line item revenue center codes use UB-92 definitions as defined by the National Uniform Billing Committee. Line item revenue codes (REVCODE) are retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

REVCODE is contained in a line item charge detail file. There may be multiple observations in the file with the same revenue code for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

Uniform Values

Variable	Description	Value	Value Description
REVCODE	Line item revenue code as received from source	nnnn	Revenue Code
		Blank	Missing or Invalid

State Specific Notes

None

SEQ_SID - HCUP SID sequence number

General Notes

The unique HCUP record number assigned to each discharge varies by year.

- In the 1988-1993 data, the data element SEQ is on all HCUP databases.
- In the 1994-1997 data,
 - SEQ is only on the NIS.
 - SEQ_SID is on the HCUP inpatient databases (SID and NIS), and
 - SEQ_ASD is on the HCUP outpatient databases.
- Beginning in the 1998 data, the data element KEY is used on all HCUP databases.

Uniform Values

Variable	Description	Value	Value Description
SEQ_SID	HCUP SID sequence number	13(n)	Record sequence number in SID

State Specific Notes

None

SEX - Sex of the patient

General Notes

The sex of the patient (SEX) is provided by the data source. All non-male, no-female (e.g., "other") values are set to missing (.).

If SEX is inconsistent with diagnoses (DE1nn) or procedures (DE2nn), SEX is set to inconsistent (.C).

Beginning in 1998, this information is retained in the data element FEMALE.

Uniform Values

Variable	Description	Value	Value Description
SEX	Sex of the patient	1	Male
		2	Female
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: ED1nn, ED2nn

State Specific Notes

Colorado

According to the documentation available from the source, "Other/Unknown" includes patients undergoing sex changes, undetermined sex, live births with congenital abnormalities, and patients whose sex was unavailable from any source document.

The source value for "Other/Unknown" was recoded to missing (.), during HCUP processing of 1988 1992 discharges. Beginning in 1993, "Other/Unknown" was recoded to invalid (.A) during HCUP processing.

Florida

Beginning in 1997, Florida reports an "Other" sex category. These values are included under missing (.).

SURGID_S - Synthetic primary surgeon number

General Notes

For HCUP data from 2001 to 2002, this data element is called MDNUM2_S. Beginning in 2003, this data element is called MDNUM2_R.

SURGID_S contains a fixed-key (one-to-one) encryption of the supplied primary surgeon number (SURGID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,;:'*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.
- When the SURGID in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, SURGID_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier SURGID_S refers to individual physicians or to groups. If the primary surgeon numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether SURGID_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values

Variable	Description	Value	Value Description
SURGID_S	Synthetic primary surgeon number	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

The identification number for primary surgeons (SURGID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal other physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

Arizona's identification number for primary surgeons includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The primary surgeon number (SURGID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available about the prevalence of this practice.

Florida

Florida reports state license numbers for the operating physician identifiers. During HCUP processing, physician identifiers were encrypted (SURGID_S).

Iowa

Beginning in 1994, Iowa reports a principal physician ID (SURGID_S) in addition to the attending physician ID (MDID_S).

Iowa reports Universal Physician Identification Numbers (UPINs) as physician identification numbers.

Kentucky

The encrypted identifier for the physician performing the principal procedure (SURGID_S) may not accurately track physicians across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) for the attending physician. Source documentation describes strict assignment and verification rules for this field.

Michigan

Michigan reports hospital-specific physician identifiers for the surgeon. Coding of physician identifiers are not consistent across hospitals. During HCUP processing, physician identifiers were encrypted (SURGID_S).

New Jersey

The coding of primary surgeon identification number (SURGID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the operating physician did not possess a valid New York state license number, the license number of the operating physician or Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

Source physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

North Carolina

North Carolina provides the Universal Physician Identification Number (UPINs) for the 1st other physician. During HCUP processing, this identifier is encrypted.

Washington

Washington reports this identifier as "Other Physician ID" which can refer to any physician who performs the procedure, not just a surgeon.

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, physician identifiers were re-encrypted (SURGID_S).

West Virginia

The encrypted other physician identifier (SURGID_S) may not accurately track physicians across patients and hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number is coded on most commercial patients. Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers.

SURGSPEC - Primary surgeon specialty, as received from source

General Notes

Beginning in 2001, this data element is called MDSPEC2.

The primary surgeon's specialty (SURGSPEC) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
SURGSPEC	Primary surgeon specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maine

In Maine, SURGSPEC is coded as follows:

SURGSPEC	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab
08	Infectious Diseases

09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used
43	Pathology

44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopaedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used
78	DO Gastroenterology

79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopaedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

South Carolina

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Physicians report their specialties to South Carolina using the categories and abbreviations in the "source-specific descriptions" column of the following table. South Carolina assigns them to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to SURGSPEC.

In South Carolina, SURGSPEC is coded as follows. Any other codes are undefined.

Source Value	Description
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0AA	Pediatric Endocrinology (PDE)
0AB	Internal Medicine/Diagnostic Laboratory Immunology (ILI)
0AC	Internal Medicine, Geriatrics (IMG)
0AD	Neurological Surgery, Critical Care (NCC)
0AE	Pathology, Neuropathology (NP)
0AF	Neurology, Pediatric Surgery (NSP)
0AG	Orthopedic Surgery, Adult Reconstructive Orthopedics (OAR)
0AH	Obstetrics & Gynecology/Critical Care Medicine (OCC)
0AI	Orthopedic Surgery, Musculoskeletal Oncology (OMO)
0AJ	Orthopedic Surgery, Pediatric Orthopedics (OP)
0AK	Orthopedic Surgery, Sports Medicine (OSM)
0AL	Orthopedic Surgery, Trauma (OTR)
0AM	Pathology, Chemical (PCH)
0AN	Pathology, Cytopathology (PCP)
0AO	Pediatric Gastroenterology (PG) (code is zero-A-oh)
0AP	Pathology, Immunopathology (PIP)
0AQ	Pediatrics/Diagnostic Laboratory Immunology (PLI)
0AT	Undersea Medicine (UM)
0AU	Radiology, Vascular and Interventional (VIR)
0AV	Addiction Medicine (ADM)
0BB	Pathology, Radioisotopic (RIP)
0BJ	Pediatric Otolaryngology
0BL	Pain Medicine
0BM	Pediatric Ophthalmology
0BS	Obstetrics
0CB	Cardiothoracic Surgery
0CC	Surgery, Vascular (VS)
0CE	Cardiac Electrophysiology
0CJ	Pediatric Infectious Disease
0DD	Neonatal Medicine (NEO)
0EE	Pediatric Pulmonology (PDP)
0FF	Radiation Oncology (RO)
0HH	Pediatric Emergency Medicine (PEM)
0II	Medical Genetics (MG)

0JJ	Psychiatry, Geriatric (PYG)
0KK	Orthopedic Surgery, Spine Surgery (OSS)
0LL	Allergy & Immunology/Diagnostic Laboratory Immunology (ALI)
0MM	Anesthesiology, Pain Management (APM)
0OO	Pathology, Blood Banking (BBK) (code is zero-oh-oh)
0PP	Anesthesiology, Critical Care (CCA)
0QQ	Pediatric Critical Care (CCP)
0RR	Surgery, Critical Care (CCS)
0SS	Neurology, Clinical Neurophysiology (CN)
0TT	Dermatological Immunology/Diagnostic Laboratory Immunology (DDL)
0UU	Family Practice, Geriatric Medicine (FPG)
0VV	Family Practice, Sports Medicine (FSM)
0WW	Pathology, Hematology (HMP)
0XX	Orthopedic Surgery, Hand Surgery (HSO)
0YY	Plastic Surgery, Hand Surgery (HSP)
0ZZ	Internal Medicine Cardiac Electrophysiology (ICE)
001	Aerospace Medicine (AM)
002	Allergy & Immunology (AI)
003	Anesthesiology (AN)
005	Cardiovascular Disease (CD)
006	Dermatology (D)
007	Diabetes (DIA)
008	Emergency Medicine (EM)
009	Endocrinology (END)
010	Family Practice (FP, FPP)
011	Gastroenterology (GE)
012	General Practice (GP), Dental Health Program (DHP), Intern
013	General Preventative Medicine (GPM)
014	Geriatrics (GER)
015	Gynecology (GYN, G)
016	Hematology (HEM)
018	Infectious Diseases (ID)
019	Internal Medicine (IM)

021	Legal Medicine (LM)
023	Nephrology (NEP)
024	Neurology (N)
025	Neurology, Child (CHN)
026	Neuropathology (NA)
027	Nuclear Medicine (NM)
028	Nutrition (NTR)
029	Obstetrics (OBS)
030	Obstetrics & Gynecology (OBG)
031	Occupational Medicine (OM)
032	Ophthalmology (OPH)
033	Otology (OT)
034	(OTL)
035	Pathology, Anatomic/Clinical (PTH)
036	Pathology, Clinical (CLP)
037	Pathology, Forensic (FOP)
038	Pediatrics (PD)
039	Pediatric Allergy (PDA)
040	Pediatric Cardiology (PDC)
041	Pharmacology, Clinical (PA)
042	Physical Medicine & Rehabilitation (PM)
043	Psychiatry (P)
044	Psychiatry, Child (CHP)
045	Psychoanalysis (PYA)
047	Public Health (PH)
048	Pulmonary Disease (PUD)
049	Radiology (R)
050	Radiology, Diagnostic (DR)
051	Radiology, Pediatric (PDR)
052	Therapeutic Radiology (TR)
053	Rheumatology (RHU)
056	Abdominal Surgery (ABS)
057	Surgery, Cardiovascular (CDS)
058	Surgery, Colon & Rectal (CRS)
059	Surgery, General (GS)

060	Surgery, Hand (HS)
061	Surgery, Head & Neck (HNS)
062	Surgery, Neurological (NS)
063	Surgery, Orthopedic (ORS)
064	Surgery, Pediatric (PDS)
065	Surgery, Plastic (PS)
066	Surgery, Thoracic (TS)
067	Surgery, Traumatic (TRS)
068	Surgery, Urological (U)
069	1993: Nuclear Radiology (NR)
	1994: Nuclear Radiology (OTHER)
071	Immunology (IG)
073	Oncology Medical (ON)
074	Otolaryngology (OTO)
080	Administrative Medicine (ADM)
081	Student Health (SH)
082	Pediatric Hematology-Oncology (PHO)
083	Pediatric Nephrology (PN, PNP)
084	Neonatal-Perinatal Medicine (NPM)
085	Pathology, Anatomic (ATP)
086	Gynecological Oncology (GO, ONC)
087	Maternal & Fetal Medicine (MFM)
088	Reproductive Endocrinology (REN, RE)
089	Allergy (A)
090	Adolescent Medicine (ADL)
091	Blood Banking (BLB)
092	Critical Care Medicine (CCM)
093	Chemical Pathology (CMP)
094	Diagnostic Lab Immunology (DLI)
095	Dermatopathology (DMP)
096	Facial Plastic Surgery, Otolaryngology (FPS)
097	Immunopathology (SID and NIS)
098	Medical Microbiology (MM)
099	Nuclear Radiology (NR)
103	General Practice, Dentist (GP-DENT)

108	Oral Surgery (OS-DENT)
110	Periodontics Dentist (PERIO-DENT)

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

- U.S. Air Force (AF)
- Pathology, Pediatric Pathology (PP)
- U.S. Navy (USN)
- U.S. Army (USA)
- Osteopathy (OST)
- U.S. Public Health Service (PHS)

TMDXn - Diagnosis present at admission

General Notes

TMDXn indicates whether each diagnosis (DXn) was present at admission. This provides an indicator of complications arising during a hospitalization. If there is a time of onset for which no diagnosis code is present, TMDXn is set to missing (.).

Beginning in the 1998 data, this data element is called DXatAdmitn.

Uniform Values

Variable	Description	Value	Value Description
TMDXn	Diagnosis present at admission	0	Diagnosis not present at admission
		1	Diagnosis present at admission
		.	Missing or diagnosis is an E-code
		.A	Invalid

State Specific Notes

New York

TMDX1 was not supplied by New York, because the principal diagnosis was, by definition, present at the time of admission. Therefore, TMDX1 was imputed to a value of one for all records.

TMDXn for E-codes were not reported by New York and were set to missing (.) during HCUP processing.

TOTCHG - Total charges, cleaned

General Notes

TOTCHG contains the edited total charges. The original value provided by the data source is retained in the data element TOTCHG_X. How total charges are edited depends on the year of the data.

In the 1988-1997 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- Negative charges are set to invalid (.A); and
- For HCUP inpatient databases, if charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C).
- For HCUP outpatient databases, if total charges are excessively low (ED912) or high (ED922), then TOTCHG is set to inconsistent (.C). (SASD)

Beginning in the 1998 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- If total charges are excessively low (ETCHG01) or high (ETCHG02), then TOTCHG is set to inconsistent (.C). The limits for excessively low and high total charges vary for inpatient and outpatient databases.

Generally, total charges (TOTCHG and TOTCHG_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values

Variable	Description	Value	Value Description
TOTCHG	Total charges, cleaned	25 - 1 million	Total Charge rounded (In the 1988-1997 data, TOTCHG can be less than 25 and greater than 1 million)
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ETCHG01, ETCHG02; in 1998-1997 data, ED911, ED912, ED921, ED922

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges (CHG59, CHG60, CHG61 and CHG62). Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of \$216 and a range from \$1 to \$5,718. Total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

Beginning in 1997, all reported professional fees and patient convenience items were subtracted from total charges (TOTCHG and TOTCHG_X).

Arizona

In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days,

cleaned total charges, TOTCHG, was set to missing (.) and uncleaned total charges, TOTCHG_X, retained the supplied total charge. Due to an error in HCUP processing, cleaned total charges, TOTCHG, were not set to missing in the 1998-1999 HCUP files.

Some hospitals in California (including all Kaiser and Shriners hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges (\$0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1. Due to an error in HCUP processing, cleaned total charges, TOTCHG, were not set to missing in the 1998-1999 HCUP files.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maine

For the 2003 data year, Maine did not provide any charge information on their inpatient or outpatient files. This includes the detail charge records as well as the various total

charge data elements (i.e., total charge, total professional fees, and total ancillary charges). This restriction is due to changes in Maine's data release policies.

Professional charges were subtracted from the supplied total charge during HCUP processing to make Maine total charges (TOTCHG) comparable to data from other states.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, but not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Massachusetts

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

Nevada

The total charges for Nevada are the charges reported for UB-92 revenue center "0001".

New York

For the 1988-1993 HCUP files, New York supplied their Master File which consists of Discharge Data Abstracts (DDA) matched to Uniform Billing Forms (UBF) for inpatient stays. Information on total charges is included in the UBF part of the record. Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information is missing. The match rate improves over time and stabilizes after 1991.

The percentage of DDA records that have a matching UBF record in the Master File is as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Beginning in the 1994 data, hospitals submitted discharge records to New York in a new format, using Universal Data Set (UDS) specifications. This format combines the old UBF and DDA data into a single submission record.

Adjustment to Charges for Interim Bills

- For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCn) was not made.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser Hospitals in Oregon.

Beginning in the 1995 data, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Rhode Island

Charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make Rhode Island total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Utah

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG_X) comparable to data from other states. Utah indicates that for the majority of the discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG_X).

West Virginia

West Virginia has rate setting. The data source confirms that the all covered charges are included in the total charge (TOTCHG).

Wisconsin

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG) to be set to missing (.) instead of invalid (.A). For other years, negative values of TOTCHG were processed correctly.

TOTCHG_X - Total charges, as received from data source

General Notes

TOTCHG_X retains the total charge supplied by a data source, including cents and negative values, with the following exceptions:

- Zero charges are set to missing (.); and
- Charges that round to zero are set to missing (.).

TOTCHG_X has the same value as TOTCHG just before edit checks on total charges are performed. TOTCHG contains the cleaned total charges. TOTCHG_X contains the original value of total charges.

Generally, total charges (TOTCHG and TOTCHG_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

In some cases, only copay amounts, such as \$10 or \$20, may be in the total charges. There is no documentation as to the prevalence of this practice.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values			
Variable	Description	Value	Value Description
TOTCHG_X	Total charges, as received from data source	+/- 100 million	Total charge (with 2 decimal places)
		.	Missing
		.A	Invalid (nonnumeric or out of range)

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges (CHG59, CHG60, CHG61 and CHG62). Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of \$216 and a range from \$1 to \$5,718. Total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

Beginning in 1997, all reported professional fees and patient convenience items were subtracted from total charges (TOTCHG and TOTCHG_X).

Arizona

In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days,

- cleaned total charges, TOTCHG, was set to missing (.) and
- uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges (\$0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maine

Professional charges were subtracted from the supplied total charge during HCUP processing to make Maine total charges (TOTCHG_X) comparable to data from other states.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Massachusetts

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

Michigan

Michigan provides Total Charges beginning in 2001.

Nevada

The total charges for Nevada are the charges reported for UB-92 revenue center "0001".

New York

For the 1988-1993 HCUP files, New York supplied their Master File which consists of Discharge Data Abstracts (DDA) matched to Uniform Billing Forms (UBF) for inpatient stays. Information on total charges is included in the UBF part of the record. Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File is as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
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1993	95.5%.

Beginning in the 1994 data, hospitals submitted discharge records to New York in a new format, using Universal Data Set (UDS) specifications. This format combines the old UBF and DDA data into a single submission record.

Adjustment to Charges for Interim Bills

- For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) were set to missing (.) because this billing information pertained only

to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser Hospitals in Oregon.

Beginning in the 1995 data, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Rhode Island

Charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make Rhode Island total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Utah

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG_X) comparable to data from other states. Utah indicates that for the majority of the discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG_X).

West Virginia

West Virginia has rate setting. The data source confirms that the all covered charges are included in the total charge (TOTCHG_X).

Wisconsin

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG_X) to be set to missing (.) instead of retained as reported by the data source. For other years, negative values of TOTCHG_X were processed correctly.

TOWN - Patient town of residence, as received from source

General Notes

Information on the town in which the patient resides (TOWN) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

Uniform Values

Variable	Description	Value	Value Description
TOWN	Patient town of residence, as received from source	n/a	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Nebraska

Nebraska provided the full name of the patient's town.

New Jersey

New Jersey	
Value of TOWN	Description
1 = Atlantic County	
101	Absecon City
102	Atlantic City
103	Brigantine City
104	Buena Boro
105	Buena Vista Twp.
106	Corbin City
107	Egg Harbor City
108	Egg Harbor Twp.

109	Estell Manor City
110	Folsom Boro
111	Galloway Twp.
112	Hamilton Twp.
113	Hammonton Town
114	Linwood City
115	Longport Boro
116	Margate City
117	Mullica Twp.
118	Northfield City
119	Pleasantville City
120	Port Republic City
121	Somers Point City
122	Ventnor City
123	Weymouth Twp.
2 = Bergen County	
201	Allendale Boro
202	Alpine Boro
203	Bergenfield Boro
204	Bogota Boro
205	Carlstadt Boro
206	Cliffside Park Boro
207	Closter Boro
208	Cresskill Boro
209	Demarest Boro
210	Dumont Boro
211	Elmwood Park Boro
212	East Rutherford Boro
213	Edgewater Boro
214	Emerson Boro
215	Englewood City
216	Englewood Cliffs Boro
217	Fair Lawn Boro
218	Fairview Boro
219	Fort Lee Boro

220	Franklin Lakes Boro
221	Garfield City
222	Glen Rock Boro
223	Hackensack City
224	Harrington Park Boro
225	Hasbrouck Heights Boro
226	Haworth Boro
227	Hillsdale Boro
228	Hohokus Boro
229	Leonida Boro
230	Little Ferry Boro
231	Lodi Boro
232	Lyndhurst Twp.
233	Mahwah Twp.
234	Maywood Boro
235	Midland Park Boro
236	Montvale Boro
237	Moonachie Boro
238	New Milford Boro
239	North Arlington Boro
240	Northvale Boro
241	Norwood Boro
242	Oakland Boro
243	Old Tappan Boro
244	Oradell Boro
245	Palisade Park Boro
246	Paramus Boro
247	Park Ridge Boro
248	Ramsey Boro
249	Ridgefield Boro
250	Ridgefield Park Village
251	Ridgefield Village
252	River Edge Boro
253	River Vale Twp.
254	Rochelle Park Twp.

255	Rockleigh Boro
256	Rutherford Boro
257	Saddle Brook Twp.
258	Saddle River Boro
259	South Hackensack Twp.
260	Teaneck Twp.
261	Tenafly Boro
262	Teterboro Boro
263	Upper Saddle River Boro
264	Waldwick Boro
265	Wallington Boro
266	Washington Twp.
267	Westwood Boro
268	Woodcliff Lake Boro
269	Wood-Ridge Boro
270	Wyckoff Twp.
3 = Burlington County	
301	Bass River Twp.
302	Beverly City
303	Bordentown City
304	Bordentown Twp.
305	Burlington City
306	Burlington Twp.
307	Chesterfield Twp.
308	Cinnaminson Twp.
309	Delanco Twp.
310	Delran Twp.
311	Eastampton Twp.
312	Edgewater Park Twp.
313	Evesham Twp.
314	Fieldsboro Boro
315	Florence Twp.
316	Hainesport Twp.
317	Lumberton Twp.
318	Mansfield Twp.

319	Maple Shade Twp.
320	Medford Twp.
321	Medford Lakes Boro
322	Moorestown Twp.
323	Mount Holly Twp.
324	Mount Laurel Twp.
325	New Hanover Twp.
326	North Hanover Twp.
327	Palmyra Boro
328	Pemberton Boro
329	Pemberton Twp.
330	Riverside Twp.
331	Riverton Boro
332	Shamong Twp.
333	Southampton Twp.
334	Springfield Twp.
335	Tabernacle Twp.
336	Washington Twp.
337	Westampton Twp.
338	Willingboro Twp.
339	Woodland Twp.
340	Wrightstown Boro
4 = Camden County	
401	Audubon Boro
402	Audubon Park Boro
403	Barrington Boro
404	Bellmawr Boro
405	Berlin Boro
406	Berlin Twp.
407	Brooklawn Boro
408	Camden City
409	Cherry Hill Twp.
410	Chelsilhurst Boro
411	Clementon Boro
412	Collingswood Boro

413	Gibbsboro Boro
414	Gloucester City
415	Gloucester Twp.
416	Haddon Twp.
417	Haddonfield Boro
418	Haddon Heights Boro
419	Hi-Nella Boro
420	Laurel Springs Boro
421	Lawnside Boro
422	Lindenwold Boro
423	Magnolia Boro
424	Merchantville Boro
425	Mount Ephraim Boro
426	Oaklyn Boro
427	Pennsauken Twp.
428	Pine Hill Boro
429	Pine Valley Boro
430	Runnemede Boro
431	Somerdale Boro
432	Stratford Boro
433	Tavistock Boro
434	Voorhees Twp.
435	Waterford Twp.
436	Winslow Twp.
437	Woodlynne Boro
5 = Cape May County	
501	Avalon Boro
502	Cape May City
503	Cape May Point Boro
504	Dennis Twp.
505	Lower Twp.
506	Middle Twp.
507	North Wildwood City
508	Ocean City
509	Sea Isle City

510	Stone Harbor Boro
511	Upper Twp.
512	West Cape May Boro
513	West Wildwood Boro
514	Wildwood City
515	Wildwood Crest Boro
516	Woodbine Boro
6 = Cumberland County	
601	Bridgeton City
602	Commercial Twp.
603	Deerfield Twp.
604	Downe Twp.
605	Fairfield Twp.
606	Greenwich Twp.
607	Hopewell Twp.
608	Lawrence Twp.
609	Maurice River Twp.
610	Millville City
611	Shiloh Boro
612	Stow Creek Twp.
613	Upper Deerfield Twp.
614	Vineland City
7 = Essex County	
701	Belleville Twp.
702	Bloomfield Twp.
703	Caldwell Boro Twp.
704	Cedar Grove Twp.
705	East Orange City
706	Essex Fells Twp.
707	Fairfield Twp.
708	Glen Ridge Boro Twp.
709	Irvington Twp.
710	Livingston Twp.
711	Maplewood Twp.
712	Millburn Twp.

713	Montclair Twp.
714	Newark City
715	North Caldwell Boro
716	Nutley Twp.
717	City of Orange Twp.
718	Roseland Boro
719	South Orange Village Twp.
720	Verona Twp.
721	West Caldwell Twp.
722	West Orange Twp.
8 = Gloucester County	
801	Clayton Boro
802	Deptford Twp.
803	East Greenwich Twp.
804	Elk Twp.
805	Franklin Twp.
806	Glassboro Boro
807	Greenwich Twp.
808	Harrison Twp.
809	Logan Twp.
810	Mantua Twp.
811	Monroe Twp.
812	National Park Boro
813	Newfield Boro
814	Paulsboro Boro
815	Pitman Boro
816	South Harrison Twp.
817	Swedesboro Boro
818	Washington Twp.
819	Wenonah Boro
820	West Deptford Twp.
821	Westville Boro
822	Woodbury City
823	Woodbury Heights Boro
824	Woolwich Twp.

9 = Hudson County	
901	Bayonne City
902	East Newark Boro
903	Guttenberg Town
904	Harrison Town
905	Hoboken City
906	Jersey City
907	Kearny Town
908	North Bergen Twp.
909	Secaucus Town
910	Union City
911	Weehawken Twp.
912	West New York Town
10 = Hunterdon County	
1001	Alexandria Twp.
1002	Bethlehem Twp.
1003	Bloomsbury Boro
1004	Califon Boro
1005	Clinton Town
1006	Clinton Twp.
1007	Delaware Twp.
1008	East Amwell Twp.
1009	Flemington Boro
1010	Franklin Twp.
1011	Frenchtown Boro
1012	Glen Gardner Boro
1013	Hampton Boro
1014	High Bridge Boro
1015	Holland Twp.
1016	Kingwood Twp.
1017	Lambertville City
1018	Lebanon Boro
1019	Lebanon Twp.
1020	Milford Boro
1021	Raritan Twp.

1022	Readington Twp.
1023	Stockton Boro
1024	Tewksbury Twp.
1025	Union Twp.
1026	West Amwell Twp.
11 = Mercer County	
1101	East Windsor Twp.
1102	Ewing Twp.
1103	Hamilton Twp.
1104	Hightstown Boro
1105	Hopewell Boro
1106	Hopewell Twp.
1107	Lawrence Twp.
1108	Pennington Boro
1109	Princeton Boro
1110	Princeton Twp.
1111	Trenton City
1112	Washington Twp.
1113	West Windsor Twp.
120 = Middlesex County	
1201	Carteret Boro
1202	Cranbury Twp.
1203	Dunellen Boro
1204	East Brunswick Twp.
1205	Edison Twp.
1206	Helmetta Boro
1207	Highland Park Boro
1208	Jamesburg Boro
1209	Old Bridge Twp.
1210	Metuchen Boro
1211	Middlesex Boro
1212	Milltown Boro
1213	Monroe Twp.
1214	New Brunswick City
1215	North Brunswick Twp.

1216	Perth Amboy City
1217	Piscataway Twp.
1218	Plainsboro Twp.
1219	Sayreville Boro
1220	South Amboy City
1221	South Brunswick Twp.
1222	South Plainfield Boro
1223	South River Boro
1224	Spotswood Boro
1225	Woodbridge Twp.
13 = Monmouth County	
1301	Allenhurst Boro
1302	Allentown Boro
1303	Asbury Park City
1304	Atlantic Highlands Boro
1305	Avon-By-The-Sea Boro
1306	Belmar Boro
1307	Bradley Beach Boro
1308	Brielle Boro
1309	Colts Neck Twp.
1310	Deal Boro
1311	Eatontown Boro
1312	Englishtown Boro
1313	Fair Haven Boro
1314	Farmingdale Boro
1315	Freehold Boro
1316	Freehold Twp.
1317	Highlands Boro
1318	Holmdel Twp.
1319	Howell Twp.
1320	Interlaken Boro
1321	Keansburg Boro
1322	Keyport Boro
1323	Little Silver Boro
1324	Loc Arbour Village

1325	Long Branch City
1326	Manalapan Twp.
1327	Manasquan Boro
1328	Marlboro Twp.
1329	Matawan Boro
1330	Aberdeen Twp.
1331	Middletown Twp.
1332	Millstone Twp.
1333	Monmouth Beach Boro
1334	Neptune Twp.
1335	Neptune City Boro
1336	Tinton Falls Boro
1337	Ocean Twp.
1338	Oceanport Boro
1339	Hazlet Twp.
1340	Red Bank Boro
1341	Roosevelt Boro
1342	Rumson Boro
1343	Sea Bright Boro
1344	Sea Girt Boro
1345	Shrewsbury Boro
1346	Shrewsbury Twp.
1347	South Belmar Boro
1348	Spring Lake Boro
1349	Spring Lake Heights Boro
1350	Union Beach Boro
1351	Upper Freehold Twp.
1352	Wall Twp.
1353	West Long Branch Boro
14 = Morris County	
1401	Boonton Town
1402	Boonton Twp.
1403	Butler Boro
1404	Chatham Boro
1405	Chatham Twp.

1406	Chester Boro
1407	Chester Twp.
1408	Denville Twp.
1409	Dover Town
1410	East Hanover Twp.
1411	Florham Park Boro
1412	Hanover Twp.
1413	Harding Twp.
1414	Jefferson Twp.
1415	Kinnelon Boro
1416	Lincoln Park Boro
1417	Madison Boro
1418	Mendham Boro
1419	Mendham Twp.
1420	Mine Hill Twp.
1421	Montville Twp.
1422	Morris Twp.
1423	Morris Plains Boro
1424	Morristown Town
1425	Mountain Lakes Boro
1426	Mount Arlington Boro
1427	Mount Olive Twp.
1428	Netcong Boro
1429	Parsippany-Troy Hills Twp.
1430	Passaic Twp.
1431	Pequannock Twp.
1432	Randolph Twp.
1433	Riverdale Boro
1434	Rockaway Boro
1435	Rockaway Twp.
1436	Roxbury Twp.
1437	Victory Gardens Boro
1438	Washington Twp.
1439	Wharton Boro
15 = Ocean County	

1501	Barnegat Light Boro
1502	Bay Head Boro
1503	Beach Haven Boro
1504	Beachwood Boro
1505	Berkeley Twp.
1506	Brick Twp.
1507	Dover Twp.
1508	Eagleswood Twp.
1509	Harvey Cedars Boro
1510	Island Heights Boro
1511	Jackson Twp.
1512	Lacey Twp.
1513	Lakehurst Boro
1514	Lakewood Twp.
1515	Lavallette Boro
1516	Little Egg Harbor Twp.
1517	Long Beach Twp.
1518	Manchester Twp.
1519	Mantaloking Boro
1520	Ocean Twp.
1521	Ocean Gate Boro
1522	Pine Beach Boro
1523	Plumsted Twp.
1524	Point Pleasant Boro
1525	Point Pleasant Beach Boro
1526	Seaside Heights Boro
1527	Seaside Park Boro
1528	Ship Bottom Boro
1529	South Toms River Boro
1530	Stafford Twp.
1531	Surf City Boro
1532	Tuckerton Boro
1533	Barnegat Twp.
16 = Passaic County	
1601	Bloomingtondale Boro

1602	Clifton City
1603	Haledon Boro
1604	Hawthorne Boro
1605	Little Falls Twp.
1606	North Haledon Boro
1607	Passaic City
1608	Paterson City
1609	Pompton Lakes Boro
1610	Prospect Park Boro
1611	Ringwood Boro
1612	Totowa Boro
1613	Wanaque Boro
1614	Wayne Twp.
1615	West Milford Twp.
1616	West Paterson Boro
17 = Salem County	
1701	Alloway Twp.
1702	Elmer Boro
1703	Elsinboro Twp.
1704	Lower Alloways Creek Twp.
1705	Mannington Twp.
1706	Oldsman Twp.
1707	Penns Grove Boro
1708	Pennsville Twp.
1709	Pilesgrove Twp.
1710	Pittsgrove Twp.
1711	Quinton Twp.
1712	Salem City
1713	Carneys Point Twp.
1714	Upper Pittsgrove Twp.
1715	Woodstown Boro
18 = Somerset County	
1801	Bedminster Twp.
1802	Bernards Twp.
1803	Bernardsville Boro

1804	Bound Brook Boro
1805	Branchburg Twp.
1806	Bridgewater Twp.
1807	Far Hills Boro
1808	Franklin Twp.
1809	Green Brook Twp.
1810	Hillsborough Twp.
1811	Manville Boro
1812	Millstone Boro
1813	Montgomery Twp.
1814	North Plainfield Boro
1815	Peapack Gladstone Boro
1816	Raritan Boro
1817	Rocky Hill Boro
1818	Somerville Boro
1819	South Bound Brook Boro
1820	Warren Twp.
1821	Watchung Boro
19 = Sussex County	
1901	Andover Boro
1902	Andover Twp.
1903	Branchville Boro
1904	Byram Twp.
1905	Frankford Twp.
1906	Franklin Boro
1907	Fredon Twp.
1908	Green Twp.
1909	Hamburg Boro
1910	Hampton Twp.
1911	Hardyston Twp.
1912	Hopatcong Boro
1913	Lafayette Twp.
1914	Montague Twp.
1915	Newton Town
1916	Ogdensburg Boro

1917	Sandyston Twp.
1918	Sparta Twp.
1919	Stanhope Boro
1920	Stillwater Twp.
1921	Sussex Boro
1922	Vernon Twp.
1923	Walpack Twp.
1924	Wantage Twp.
20 = Union County	
2001	Berkeley Heights Twp.
2002	Clark Twp.
2003	Cranford Twp.
2004	Elizabeth City
2005	Fanwood Boro
2006	Garwood Boro
2007	Hillside Twp.
2008	Kenilworth Boro
2009	Linden City
2010	Mountainside Boro
2011	New Providence Boro
2012	Plainfield City
2013	Rahway City
2014	Roselle Boro
2015	Roselle Park Boro
2016	Scotch Plains Twp.
2017	Springfield Twp.
2018	Summit City
2019	Union Twp.
2020	Westfield Twp.
2021	Winfield Twp.
21 = Warren County	
2101	Allamuchy Twp.
2102	Alpha Boro
2103	Belvidere Twp.
2104	Blairstown Twp.

2105	Franklin Twp.
2106	Frelinghuysen Twp.
2107	Greenwich Twp.
2108	Hackettstown Town
2109	Hardwick Twp.
2110	Harmony Twp.
2111	Hope Twp.
2112	Independence Twp.
2113	Knowlton Twp.
2114	Liberty Twp.
2115	Lopatcong Twp.
2116	Mansfield Twp.
2117	Oxford Twp.
2118	Pahaquarry Twp.
2119	Phillipsburg Town
2120	Pohatcong Twp.
2121	Washington Boro
2122	Washington Twp.
2123	White Twp.

Rhode Island

Value of Town	Description
00	Unknown
01	Barrington
02	Bristol
03	Burrillville
04	Central Falls
05	Charlestown
06	Coventry
07	Cranston
08	Cumberland
09	East Greenwich
10	East Providence
11	Exeter
12	Foster

13	Glocester
14	Hopkinton
15	Jamestown
16	Johnston
17	Lincoln
18	Little Compton
19	Middletown
20	Narragansett
21	Newport
22	New Shoreham
23	North Kingstown
24	North Providence
25	North Smithfield
26	Pawtucket
27	Portsmouth
28	Providence
29	Richmond
30	Scituate
31	Smithfield
32	South Kingstown
33	Tiverton
34	Warren
35	Warwick
36	Westerly
37	West Greenwich
38	West Warwick
39	Woonsocket
40	RI, city/town unknown
41	Southeastern MA
42	Rest of MA
43	CT
44	Other states
45	Unknown
50	Attleboro, MA
51	Bellingham, MA

52	Blackstone, MA
53	Franklin, MA
54	Millville, MA
55	N. Attleboro, MA
56	Plainville, MA
57	Rehoboth, MA
58	Seekonk, MA
59	Somerset, MA
60	Swansea, MA
61	Uxbridge, MA
62	Wrentham, MA
69	Other MA
70	N. Stonington, CT
71	Stonington, CT
79	Other CT
89	Other States
99	City/town unknown

Vermont

Prior to 2005 data, an error during HCUP processing mistakenly recoded the township value used for Massachusetts discharges (TOWN = "2400") to a Nw Hampshire county (value 33007) for patient's county (PSTCO). PSTCO should have been set to missing for these Massachusetts discharges.

Vermont

County Code	Town
01 = Addison County	
0101	Addison
0102	Bridport
0103	Bristol
0104	Cornwall
0105	Ferrisburg, Basin Harbor, No. Ferrisburg
0106	Goshen
0107	Granville
0108	Hancock

0109	Leicester
0110	Lincoln, East Middlebury
0111	Middlebury
0112	Monkton
0113	New Haven
0114	Orwell
0115	Panton
0116	Ripton
0117	Salisbury
0118	Shoreham
0119	Starksboro
0120	Vergennes
0121	Waltham
0122	Weybridge
0123	Whiting
02 = Bennington County	
0201	Arlington, East Arlington
0202	Bennington, North Bennington
0203	Dorset, South Dorset, East Dorset
0204	Landgrove, North Landgrove
0205	Manchester, Manchester Center, Manchester Depot
0206	Peru
0207	Pownal, North Pownal
0208	Readsboro, Heartswellville
0209	Rupert, West Rupert
0210	Sandgate
0211	Searsburg
0212	Shaftsbury
0213	Stamford
0214	Sunderland
0215	Winhall, Bondville
0216	Woodford
0217	Glastenbury
03 = Caledonia County	
0301	Barnet, Mcindoe, Passumpsic

0302	Burke, West Burke, East Burke
0303	Danville, West Danville
0304	Groton
0305	Hardwick, East Hardwick
0306	Kirby
0307	Lyndon, Lyndonville, Lyndon Center
0308	Newark
0309	Peacham
0310	Ryegate, South Ryegate, East Ryegate
0311	Sheffield
0312	St. Johnsbury, East St. Johnsbury, St. Johnsbury Center
0313	Stannard
0314	Sutton
0315	Walden
0316	Waterford, Lower Waterford
0317	Wheelock
04 = Chittenden County	
0401	Bolton
0402	Burlington
0403	Charlotte
0404	Colchester, Malletts Bay
0405	Essex, Essex Junction
0406	Hinesburg
0407	Huntington, Hanksville
0408	Jericho
0409	Milton
0410	Richmond, Jonesville
0411	St. George
0412	Shelburne
0413	So. Burlington
0414	Underhill, Underhill Center
0415	Westford
0416	Williston
0417	Winooski
0418	Ft. Ethan Allen

0419	Buell's Gore
05 = Essex County	
0501	Bloomfield
0502	Brighton, Island Pond
0503	Brunswick
0504	Canaan, Beebe Pond, Beecher Falls, Wallace Pond
0505	Concord, East Concord, North Concord
0506	East Haven
0507	Granby
0508	Guildhall
0509	Lemington
0510	Lunenburg, Gilman, South Lunenburg
0511	Maidstone
0512	Norton
0513	Victory
0514	Averill
0515	Avery's Gore
0516	Ferdinand
0517	Lewis
0518	Warner's Grant
0519	Warren Gore
06 = Franklin County	
0601	Bakerfield
0602	Berkshire, East Berkshire, West Birkshire
0603	Enosburg
0604	Fairfax
0605	Fairfield, East Fairfield
0606	Fletcher
0607	Franklin
0608	Georgia
0609	Highgate, Highgate Springs, East Highgate
0610	Montgomery, Montgomery Ctr.
0611	Richford
0612	Sheldon, Sheldon Springs, Sheldon Junction
0613	St. Albans City

0614	St. Albans Town, St. Albans Bay
0615	Swanton
07 = Grande Isle County	
0701	Alburg
0702	Grand Isle
0703	Isle La Motte
0704	North Hero
0705	South Hero
08 = Lamoille County	
0801	Belvidere
0802	Cambridge, Jeffersonville
0803	Eden, Eden Mills
0804	Elmore, Lake Elmore
0805	Hyde Park, North Hyde Park
0806	Johnson
0807	Morristown, Morrisville, Cady's Falls
0808	Stowe, Moscow
0809	Waterville
0810	Wolcott
09 = Orange County	
0901	Bradford
0902	Braintree
0903	Brookfield
0904	Chelsea
0905	Corinth, Cookville, East Corinth
0906	Fairlee, Ely
0907	Newbury, Wells River, Boltonsville, South Newbury, West Newbury
0908	Orange
0909	Randolph, East Randolph, Randolph Center
0910	Strafford, South Strafford
0911	Thetford, Thetford Center, Post Mills, East Thetford, Union Village, North Thetford
0912	Topsham, Waits River, West Topsham
0913	Tunbridge

0914	Vershire
0915	Washington
0916	West Fairlee
0917	Williamstown
10 = Orleans County	
1001	Albany
1002	Barton, Orleans
1003	Brownington, Evansville
1004	Charleston, East Charleston, West Charleston
1005	Coventry
1006	Craftsbury, Craftsbury Common
1007	Derby, Beebe Plains, Derby Line
1008	Glover, West Glover
1009	Greensboro
1010	Holland
1011	Irasburg
1012	Jay
1013	Lowell
1014	Morgan, Morgan Center
1015	Newport City
1016	Newport Town, Newport Center
1017	Troy, North Troy
1018	Westfield
1019	Westmore
11 = Rutland County	
1101	Benson
1102	Brandon, Forest Dale
1103	Castleton, Hydeville, Bomoseen
1104	Chittenden, Holden
1105	Clarendon, North Clarendon
1106	Danby
1107	Fair Haven
1108	Hubbardton
1109	IRA
1110	Mendon

1111	Middletown Springs
1112	Mt. Holly, Healdville, Belmont
1113	Mt. Tabor
1114	Pawlett, West Pawlett
1115	Pittsfield
1116	Pittsford, Florence
1117	Poultney, East Poultney
1118	Proctor
1119	Rutland City
1120	Rutland Town, Rutland Center
1121	Sherburne, Killington
1122	Shrewsbury, Cuttingsville
1123	Sudbury
1124	Tinmouth
1125	Wallingford, East Wallingford, West Wallingford
1126	Wells
1127	West Haven
1128	West Rutland
12 = Washington County	
1201	Barre City
1202	Barre Town, Websterville, South Barre, East Barre, Graniteville, Trow Hill
1203	Berlin, Riverton
1204	Cabot
1205	Calais, Adamant, East Calais
1206	Duxbury
1207	East Montpelier, North Montpelier, Montpelier Center, Fairmorth
1208	Fayston
1209	Marshfield
1210	Middlesex, Putnamville, Wrightsville
1211	Montpelier
1212	Moretown
1213	Northfield, Northfield Falls
1214	Plainfield

1215	Roxbury
1216	Waitsfield
1217	Warren
1218	Waterbury, Colbyville, Watebury Center
1219	Woodbury, South Woodbury
1220	Worcester
13 = Windham County	
1301	Athens
1302	Brattelboro
1303	Brookline
1304	Dover, West Dover, East Dover
1305	Dummerston, West Dummerston
1306	Grafton
1307	Guilford
1308	Halifax, West Halifax
1309	Jamaica, Rawsonville
1310	Londonderry, South Londonderry
1311	Marlsboro
1312	Newfane, Williamsville, South Newfane
1313	Putney
1314	Rockingham, Bellows Falls, Saxtons River, Brockway's Mills, Bartonville, Cambridgeport
1315	Stratton
1316	Townshend, West Townshend
1317	Vernon
1318	Wardsboro, West Wardsboro
1319	Westminster, Westminster Stat.
1320	Whitingham, Jacksonville
1321	Wilmington
1322	Windham - 05301 zips
1323	Somerset
14 = Windsor County	
1401	Andover, Simonsville
1402	Baltimore
1403	Barnard

1404	Bethel
1405	Bridgewater, Bridgewater Corners
1406	Cavendish, Proctorsville
1407	Chester, Gassetts
1408	Hartford, Quechee, Wilder, White River Junction, West Hartford
1409	Hartland, Hartland Four Corners, North Hartland
1410	Ludlow
1411	Norwich, Lewiston
1412	Plymouth, Tyson
1413	Pomfret, North Pomfret, South Pomfret
1414	Reading
1415	Rochester
1416	Royalton, South Royalton
1417	Sharon
1418	Springfield, North Springfield
1419	Stocksbridge, Gaysville
1420	Weathersfield, Perkinsville, Ascutney, Amsden
1421	Weston
1422	West Windsor
1423	Windsor, Brownsville, West Windsor
1424	Woodstock, Taftsville, South Woodstock
1425	Windsor Prison
21 = Belknap County	
2101	Alton
2102	Barnstead
2103	Belmont
2104	Center Harbor
2105	Gilford
2106	Gilmanton
2107	Laconia (Lakeport, The Weirs, Co. Hospital)
2108	Meredith
2109	New Hampton
2110	Sanbornton
2111	Tilton (Lochmere)

22 = Carroll County	
2201	Albany
2202	Bartlett (Glen)
2203	Brookfield
2204	Chatham
2205	Conway (Intervale, Intervale-Readstone, Kearsage)
2206	Eaton (Snowville)
2207	Effingham
2208	Freedom
2209	Hart's Location
2210	Jackson
2211	Madison (Silver Lake)
2212	Moultonborough
2213	Ossipee (Water Village, Moultonville, Co. Hospital)
2214	Sandwich (No. Sandwich)
2215	Tamworth (Wonalancet, Chocorua, Whittier)
2216	Tuftonboro (Melvin Village)
2217	Wakefield (Sanbornville, Union, Woodman Village)
2218	Wolfeboro
23 = Cheshire County	
2301	Alstead
2302	Chesterfield (Spofford, W. Chesterfield)
2303	Dublin
2304	Fitzwilliam (State Line)
2305	Gilsum
2306	Harrisville (Chesham)
2307	Hinsdale
2308	Jaffrey
2309	Keene
2310	Marlboro
2311	Marlow
2312	Nelson (Munsonville)
2313	Richmond
2314	Rindge
2315	Roxbury

2316	Stoddard
2317	Sullivan
2318	Surry
2319	Swanzey (West Port)
2320	Troy
2321	Walpole (Drewville)
2322	Westmoreland
2323	Winchester (Ashuelot)
24 = Goss County	
2401	Atkinson, Gilmanton Academy Grant
2402	Bean's Purchase
2403	Berlin
2404	Cambridge Township
2405	Carroll, Twin Mountain
2406	Clarksville
2407	Colebrook
2408	Columbia
2409	Dalton
2410	Dartmouth College Grant
2411	Dix's Grant
2412	Dixville
2413	Dummer
2414	Errol
2415	Erving's Location
2416	Gorham (Cascade)
2417	Green's Grant
2418	Jefferson (Riverton)
2419	Kilkenny Township
2420	Lancaster
2421	Martin's Location
2422	Milan
2423	Millsfield Township
2424	Northumberland (Groveton)
2425	Odell Township
2426	Pinkham's Grant

2427	Pittsburg
2428	Randolph
2429	Shelburne
2430	Stark (Percy-Crystal)
2431	Stewartstown (Riverside)
2432	Stratford
2433	Success Township
2434	Thompson & Meserve's Purch.
2435	Wentworth's Location
2436	Whitefield
25 = Grafton County	
2501	Alexandria
2502	Ashland
2503	Bath
2504	Benton (State Sanitarium)
2505	Bethlehem
2506	Bridgewater
2507	Bristol
2508	Beebe River (Campton)
2509	Canaan
2510	Dorchester
2511	Easton
2512	Ellsworth
2513	Enfield
2514	Franconia
2515	Grafton
2516	Groton
2517	Hanover (Etna)
2518	Haverhill (Woodsville, Pike Co. Hospital)
2519	Hebron
2520	Holderness
2521	Landaff
2522	Lebanon (Mascoma)
2523	Lincoln
2524	Lisbon

2525	Littleton
2526	Livermore
2527	Lyman
2528	Lyme
2529	Monroe
2530	Orange
2531	Orford
2532	Piermont
2533	Plymouth
2534	Rumney (Stinson Lkquincy)
2535	Thornton
2536	Warren (Glenclyff)
2537	Waterville
2538	Wentworth
2539	Woodstock
2540	Sugar Hill
26 = Hillsborough County	
2601	Amherst
2602	Antrim
2603	Bedford
2604	Bennington
2605	Brookline
2606	Deering
2607	Francestown
2608	Goffstown (Grasmere - Pinardville)
2609	Greenfield
2610	Greenville
2611	Hancock
2612	Hillsborough
2613	Hollis
2614	Hudson
2615	Litchfield
2616	Lyndeborough
2617	Manchester (Goffs Falls)
2618	Mason

2619	Merrimack (Reed's Ferry - Thornton's Ferry)
2620	Milford
2621	Mount Vernon
2622	Nashua
2623	New Boston
2624	New Ipswich
2625	Pelham
2626	Peterborough
2627	Sharon
2628	Temple
2629	Weare
2630	Wilton
2631	Windsor
27 = Merrimack County	
2701	Allenstown (Suncook)
2702	Andover (Potter Place)
2703	Boscawen (Gerrish)
2704	Bow
2705	Bradford
2706	Canterbury
2707	Chichester
2708	Concord (Penacook - Riverhill)
2709	Danbury
2710	Dunbarton
2711	Epsom (Gossville Falls)
2712	Franklin
2713	Henniker
2714	Hill
2715	Hooksett
2716	Hopkinton (Contoocook)
2717	Loudon
2718	Newbury (Blodgett's Landing)
2719	New London (Elkins)
2720	Northfield
2721	Pembroke

2722	Pittsfield
2723	Salisbury
2724	Sutton
2725	Warner (Melvin Mills)
2726	Webster
2727	Wilmot
28 = Rockingham County	
2801	Atkinson
2802	Auburn
2803	Brentwood (County Hospital)
2804	Candia
2805	Chester
2806	Danville
2807	Deerfield
2808	Derry
2809	East Kingston
2810	Epping
2811	Exeter
2812	Fremont
2813	Greenland - Riverside
2814	Hampstead
2815	Hampton
2816	Hampton Falls
2817	Kensington
2818	Kingston
2819	Londonderry
2820	New Castle
2821	Newfields
2822	Newington
2823	Newmarket
2824	Newton
2825	North Hampton
2826	Northwood
2827	Nottingham
2828	Plaistow (Westville)

2829	Portsmouth
2830	Raymond
2831	Rye
2832	Salem
2833	Sandown
2834	Seabrook (Smithtown)
2835	South Hampton
2836	Stratham
2837	Windham
29 = Strafford County	
2901	Barrington
2902	Dover (Co. Hospital)
2903	Durham
2904	Farmington
2905	Lee
2906	Madbury
2907	Middleton
2908	Milton (Milton Mills)
2909	New Durham
2910	Rochester (Gonic)
2911	Rollinsford (Salmon Falls)
2912	Somersworth
2913	Strafford
30 = Sullivan County	
3001	Aceworth
3002	Charlestown
3003	Claremont
3004	Cornish
3005	Croydon
3006	Goshen
3007	Grantham
3008	Langdon
3009	Lempster
3010	Newport (Guild - Kellyville)
3011	Plainfield (Meriden)

3012	Springfield
3013	Sunapee (Wendell - Georges Mills)
3014	Unity (Co. Hospital)
3015	Washington
2400 = Massachusetts	
3500 = New York	
3500	New York (most counties)
3510	Washington County
3511-12816	Cambridge
3512-12865	Salem
3513-12057	White Creek
3514-12057	Eagle Bridge
3515-12811	Mechanicsville
3520	Rensselaer County
3520-12133	N. Hoosick
3521-12090	Hoosick Falls
3522-12028	Buskirk
3523-12138	Petersburg
3524-12022	Berlin
3525-12094	Johnsonville
1600 = Other USA	
1700 = Canada	
1800 = Elsewhere	

UNITn - Units of service

General Notes

The unit of service (UNITn) is retained as provided by the data source. Negative values are set to invalid (.A). If supplied by the data source, fractional values of units of service (UNIT) are rounded, with any non-zero value less than 1 (0.01-0.99) rounded to 1.

Uniform Values

Variable	Description	Value	Value Description
UNITn	Units of service	nnnn	Units of Service
		.	Missing
		.A	Invalid

State Specific Notes

Kentucky

Detailed charges (CHGn) are associated with identified revenue centers (REVCN) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCN1, the units of service specified in UNIT1. Kentucky reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCN. Kentucky does not collapse or redefine ranges of revenue codes.

Information on total charges (revenue center 001) was removed from the detailed charge arrays. (CHGn, REVCN, and UNITn). Information on total charges is available in the HCUP variables TOTCHG and TOTCHG_X.

Maine

Detailed charges (CHG1-CHG33) are associated with the identified revenue centers (REVCN1-REVCN33), and units of service (UNIT1-UNIT3). For example, CHG1 applies to the revenue center in REVCN1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units are available for accommodation charges and are coded in days.

Massachusetts

The charge and unit detail provided by Massachusetts varies across years.

- *Starting in 1999:* Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have an associated charge (CHGn) = .). During HCUP processing, the array of revenue codes, charges, and units are condensed so that only the revenue codes that have non-missing charges are retained. No information is lost.
- *In 1998:* Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have a charge (CHGn = .). The revenue codes are constant across records. For example, REVCD1 = 111 on all discharges even if there is not charge (CHG1 = .) and units (UNIT1 = .) for the revenue center.
- *1994-1997:* Massachusetts reported charge details and units by specific UB-92 revenue centers. The detailed charges and units are retained on the HCUP files in assigned positions. For example, CHG1 is always for UB-92 revenue code 111 "Routine Medical/Surgical." Refer to the tables below for UNITn revenue center definitions for 1994-1997 files. Definitions of detail charges (CHGn) and units (UNITn) in the HCUP Massachusetts files do not necessarily match definitions in earlier years.
- *1988-1993:* Massachusetts reported charge details and units by aggregated revenue center categories. Hospitals were responsible for mapping UB-82 revenue center codes into Massachusetts' revenue center categories. For example, all laboratory charges that would be charged to UB-82 revenue codes 300-312, 314, 319, and 971 were aggregated and reported to Massachusetts under one category. The detailed charges and units are retained on the HCUP files in assigned positions. Refer to the tables below for UNITn revenue center definitions for 1988-1993 files.

The HCUP Massachusetts files for 1988-1993 include an "unknown revenue center" charge (UNIT43) that is not included for subsequent years. Detailed charges, excluding the "unknown revenue center" charges, can be summed to the total charges (TOTUNIT and TOTUNIT_X).

Unit Categories in 1994-1997

In 1994-1997, Massachusetts provided 81 charge and unit categories. Beginning in the 4th quarter of 1997, seven more unit categories (UNIT82-UNIT88) were added. Data quality problems often appear in the first year that data elements are added, so use

these data elements with caution. The following are the UB-92 revenue centers associated with each variable:

<u>Included UB-92 Category</u>	<u>Variable</u>	<u>Revenue Center</u>
Routine Medical/Surgical	UNIT1	111
Routine Obstetrics	UNIT2	112
Routine Pediatrics	UNIT3	113
Routine Psychiatric	UNIT4	114
Routine Hospice	UNIT5	115
Routine Detoxification	UNIT6	116
Routine Oncology	UNIT7	117
Routine Rehabilitation	UNIT8	118
Other Routine Accommodation	UNIT9	119
Routine Newborn	UNIT10	170
Neo-Natal ICU	UNIT11	175
Medical/Surgical ICU	UNIT12	200
Pediatric ICU	UNIT13	203
Psychiatric ICU	UNIT14	204
Post Care ICU	UNIT15	206
Burn Unit	UNIT16	207
Trauma ICU	UNIT17	208
Other Special Care ICU	UNIT18	209
Coronary Care Unit	UNIT19	210
Myocardial Infarction Unit	UNIT20	211
Pulmonary Care Unit	UNIT21	212
Heart Transplant Unit	UNIT22	213
Post Coronary Care Unit	UNIT23	214
Other Coronary Care Unit	UNIT24	219
Special Charges	UNIT25	220
Incremental Nursing Charge Rate	UNIT26	230
All Inclusive Ancillary	UNIT27	240
Pharmacy	UNIT28	250
IV Therapy	UNIT29	260
Medical/Surgical Supplies	UNIT30	270
Oncology	UNIT31	280
Durable Medical Equipment	UNIT32	290

Laboratory	UNIT33	300
Laboratory Pathological	UNIT34	310
Diagnostic Radiology	UNIT35	320
Therapeutic Radiology	UNIT36	330
Nuclear Medicine	UNIT37	340
CAT Scan	UNIT38	350
Surgical Service (OR)	UNIT39	360
Anesthesia	UNIT40	370
Blood	UNIT41	380
Blood Storage/Processing	UNIT42	390
Other Imaging Services	UNIT43	400
Respiratory Services	UNIT44	410
Physical Therapy	UNIT45	420
Occupational Therapy	UNIT46	430
Speech-Language Pathology	UNIT47	440
Emergency Room	UNIT48	450
Pulmonary Function	UNIT49	460
Audiology	UNIT50	470
Cardiology	UNIT51	480
Ambulatory Surgical Care	UNIT52	490
Outpatient Services before Admission (Invalid for Inpatient Services)	UNIT53	500
Clinic (Invalid for Inpatient Purposes)	UNIT54	510
Ambulance	UNIT55	540
Medical Social Services	UNIT56	560
MRI	UNIT57	610
Med./Surg. Supplies (extends 270)	UNIT58	620
Drugs Req. Specific Identification	UNIT59	630
Hospice Services	UNIT60	650
Cast Room	UNIT61	700
Recovery Room	UNIT62	710
Labor Room/Delivery	UNIT63	720
EKG/ECG	UNIT64	730
EEG	UNIT65	740
Gastro-Intestinal Services	UNIT66	750

Treatment or Observation Room	UNIT67	760
Lithotripsy	UNIT68	790
Inpatient Renal Dialysis	UNIT69	800
Organ Acquisition	UNIT70	810
Dialysis (National Assignment)	UNIT71	860
Miscellaneous Dialysis	UNIT72	880
Other Donor Bank	UNIT73	890
Psychiatric/Psycholog. Treatments	UNIT74	900
Psychiatric/Psychological Services	UNIT75	910
Other Diagnostic Services	UNIT76	920
Other Therapeutic Services	UNIT77	940
Other Ancillary Services	UNIT78	950
Professional Fees	UNIT79	960
Professional Fees	UNIT80	970
Professional Fees	UNIT81	980
Chronic	UNIT82	192 (Available 4th qtr 1997)
Sub-Acute	UNIT83	196 (Available 4th qtr 1997)
TCU	UNIT84	197 (Available 4th qtr 1997)
SNF	UNIT85	198 (Available 4th qtr 1997)
Treatment Room	UNIT86	761 (Available 4th qtr 1997)
Observation Room	UNIT87	762 (Available 4th qtr 1997)
Other Observation Room	UNIT88	769 (Available 4th qtr 1997)

Charge Categories in 1988-1993

For 1988-1993, Massachusetts provided 43 charge categories. The following are the revenue centers associated with each variable:

<u>Included UB-92 Category</u>	<u>Variable</u>	<u>Revenue Center</u>
--------------------------------	-----------------	-----------------------

Routine Medical/Surgical	UNIT1	111, 121, 131, 141, 151
Routine Obstetrics	UNIT2	112, 122, 132, 142, 152
Routine Pediatrics	UNIT3	113, 123, 133, 143, 153
Routine Psychiatric	UNIT4	114, 124, 134, 144, 154
Routine Other	UNIT5	119, 129, 139, 149, 159
Routine Newborn	UNIT6	170, 171, 172, 179
Neo-Natal ICU	UNIT7	175
Medical/Surgical ICU	UNIT8	201, 202
Pediatric ICU	UNIT9	203
Psychiatric ICU	UNIT10	204
Burn Unit	UNIT11	207
Other ICU	UNIT12	209
Coronary Care Unit	UNIT13	210
Pharmacy	UNIT14	250-259
IV Therapy	UNIT15	260
Medical/Surg Supplies	UNIT16	270, 272-275, 277-279, 290-292, 299
Laboratory	UNIT17	300-307, 309-312, 314, 319, 971
Diagnostic Radiology	UNIT18	320-321, 324, 329, 400-402, 409, 972
Therapeutic Radiology	UNIT19	330-333, 335, 339, 973
Nuclear Medicine	UNIT20	340-342, 349, 974
CAT Scanner	UNIT21	350-352, 359
Surgical Service (OR)	UNIT22	360-362, 367, 369, 975
Anesthesiology	UNIT23	370, 374, 379, 963-964
Blood	UNIT24	380-382, 389
Blood Storage Proc & Adm	UNIT25	390-391, 399
Respiratory Therapy	UNIT26	410, 412-413, 419, 976
Physical Therapy	UNIT27	420, 429, 977
Occupational Therapy	UNIT28	430, 439, 978
Speech Therapy	UNIT29	440, 449, 979
Emergency Room	UNIT30	450, 459, 981
Pulmonary Function	UNIT31	460, 469
Audiology	UNIT32	470-472, 479
Cardiac Catheterization	UNIT33	480-482, 489

Ambulance	UNIT34	540-545, 549
Recovery Room	UNIT35	710, 719
Labor and Delivery	UNIT36	720-724, 729
EKG	UNIT37	730-731, 739, 985
EEG	UNIT38	740, 749, 922, 986
Renal Dialysis	UNIT39	800-802, 805-814, 880-881
Kidney Acquisition	UNIT40	860-866
Psychology/Psychiatry	UNIT41	900-903, 909-919, 961
Other Ancillary	UNIT42	280, 490, 499, 510-512, 519, 530-531, 539, 560, 700, 709, 750, 759, 890-893, 899, 920-921, 929, 940-943, 949, 960, 962, 969, 984, 987, 988, 989
Unknown Revenue Center	UNIT43	Includes charges for which the UB-82 revenue center was invalid, not used by Massachusetts Rate Setting Commission, or unspecified.

Nebraska

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes and units are available for accommodation and ancillary charges. Rates are available only for accommodation charges.

Nebraska provided the charge detail in a separate, linkage file that was not edited. During HCUP processing, the source file was manipulated to be consistent with the format of detail charge information in other states. The source file had one record per service, multiple records per discharge. The HCUP file has one record per patient that includes all of the provided detail.

Nevada

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

In the rare event that there were more revenue charges than could be retained in the array of revenue codes, charges, and units, Nevada set the revenue code to "9999", the charge to the sum of the remaining charges, and the units to the sum of the remaining units.

New Jersey

The unit categories from New Jersey are:

UNIT1	Medical-Surgical Days
UNIT2	Obstetric Days
UNIT3	Pediatric Days
UNIT4	Psychiatric Days
UNIT5	Burn Care Unit Days
UNIT6	Intensive Care Unit Days
UNIT7	Coronary Care Unit Days
UNIT8	Neonatal Intensive Care Unit Days
UNIT9	Newborn Nursery Days
UNIT10	Emergency Room Visits
UNIT11	Clinic Visits
UNIT12	Home Health Visits
UNIT13	Anesthesiology Minutes Used
UNIT14	Cardiac Catheterization Procedures
UNIT15	Delivery and/or Gyn Procedures
UNIT16	Dialysis Treatments
UNIT17	Times Drugs or Pharmacy Used
UNIT18	Electrocardiograms
UNIT19	Laboratory Tests
UNIT20	Number of Medical Surgical Supplies
UNIT21	Number of EEGs and EMGs
UNIT22	Nuclear Medicine Procedures
UNIT23	Occupational Therapy Visits
UNIT24	Operating Room Procedures
UNIT25	Organ Transplants
UNIT26	Physical Therapy Visits
UNIT27	Psychiatric Hours (Spent with Patient)
UNIT28	Times Radiology Used
UNIT29	Respiratory Therapy Treatments
UNIT30	Speech Pathology Visits
UNIT31	Therapeutic Radiology Procedures
UNIT32	Same Day Surgery Visits
UNIT33	Excluded Revenue Codes

UNIT34	Non-Acute Ancillary Revenue Codes
UNIT35	Medicare, Part B, Non-Acute Codes

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

- UNIT1-UNIT5 contains accommodation units of service.

See note under revenue codes (REVCDn) for definitions of revenue codes associated with these accommodation rates (UNITn).

Adjustment to Charges for Interim Bills

- For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

North Carolina

Beginning in 2002, detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn), and daily rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1, and the rate in RATE1. North Carolina reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn.

For 2002-2003 data, charge detail was incorrect for about 1% of the discharges. Some facilities in North Carolina reused their record identifiers across fiscal years (starting each October). This means that two distinct discharges share an identical state-supplied record identifier. The charge detail for the different discharges were erroneously combined because of the identical record identifiers. There is no way to determine which HCUP records have this problem.

Prior to 2002, North Carolina provided 10 detail charges.

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue

center in REVCD1, the units of service specified in UNIT1, and the rate in RATE1. Arkansas reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. Arkansas does not collapse or redefine ranges of revenue codes.

In rare instances, Arkansas reported total charges in the detailed charge arrays (REVCDn = "0001 "). When this occurred, the corresponding revenue code, detail charge, rate, and unit were retained as detailed charges. For all records, Arkansas reported a separate total charges field which is available in the HCUP variables TOTCHG and TOTCHG_X.

South Carolina

Negative values were set to invalid (.A) during HCUP processing.

Starting in 1996

South Carolina supplied 19 unit categories:

<u>Unit Category</u>	<u>Description</u>
UNIT1	All Inclusive Rate units
UNIT2	Room & Board - General medical units
UNIT3	Room & Board - Psych units
UNIT4	Room & Board - Hospice units
UNIT5	Room & Board - Detox units
UNIT6	Room & Board - Oncology units
UNIT7	Room & Board - Rehab units
UNIT8	Room & Board - Other units
UNIT9	Nursery - Levels I & Other units
UNIT10	Nursery - Level II units
UNIT11	Nursery - Level III units
UNIT12	Nursery - Level IV units
UNIT13	ICU units
UNIT14	ICU - Pediatric units
UNIT15	ICU - Psych units
UNIT16	ICU - Intermediate ICU units
UNIT17	ICU - Burn Unit units
UNIT18	Coronary Care units
UNIT19	Coronary Care - Intermediate CCU units

Prior to 1995

South Carolina supplied 11 unit categories:

<u>Unit Category</u>	<u>Description</u>
UNIT1	Room & Board - general medical units
UNIT2	Room & Board - psychology units
UNIT3	Room & Board - detoxification units
UNIT4	Room & Board - oncology units
UNIT5	Room & Board - rehabilitation units
UNIT6	Room & Board - other units
UNIT7	Nursery units
UNIT8	Premature nursery units
UNIT9	Neonatal ICU units
UNIT10	ICU units
UNIT11	CCU units

Washington

Units of service (UNITn) refer to the revenue centers (REVCn) and are reflected in the detailed charges (CHGn). For example, CHG1 applies to the revenue center in REVC1 and the units of service specified in UNIT1.

Units are not required for all revenue sources; the units field may be coded as missing (.) or zero. See notes under revenue codes (REVCn) for the associated units.

for 2000-2004, if total charges are identified in the detail charges (REVCn = "001"), the corresponding detail charge, unit, and revenue code are set to missing. Beginning with 2005, total charges are kept in the detailed charges.

West Virginia

Detailed charges (CHGn) are associated with identified revenue centers (REVCn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVC1 and the units of service specified in UNIT1. West Virginia reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCn. West Virginia does not collapse or redefine ranges of revenue codes.

The first 12 variables in each array (CHG1-CHG12, REVC1-REVC12, and UNIT1-UNIT12) are reserved for room and board services; the remaining variables are used for ancillary services.

UNITS - Line item units as received from source

General Notes

Line item units (UNITS) are retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

UNITS are contained in a line item charge detail file. There may be multiple observations in the file with the same revenue code for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

Uniform Values

Variable	Description	Value	Value Description
UNITS	Line item units as received from source	n	Units of Service
		.	Missing
		.A	Invalid

State Specific Notes

None

YEAR - Calendar year

General Notes

The discharge year (YEAR) is always coded. In the 1988-1997 HCUP databases, YEAR is two-digits (e.g., if the discharge year is 1990, then YEAR = 90). Beginning in the 1998 HCUP databases, YEAR is four-digits (e.g., 1998).

Uniform Values

Variable	Description	Value	Value Description
YEAR	Calendar year	yy	2-digit calendar year in 1988-1997 data
		yyyy	4-digit calendar year beginning with 1998 data

State Specific Notes

None

ZIP - Patient zip code

General Notes

The patient's zip code (ZIP) is retained as provided by the data source with the following exceptions:

- Foreign zip codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign zip codes.
- Invalid zip codes are identified (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- The zip code for homeless patients is set to missing (ZIP = " ") in the 1988-1999 HCUP databases. Beginning in the 2000 HCUP databases, ZIP is set to "H".

Uniform Values

Variable	Description	Value	Value Description
ZIP	Patient zip code	nnnnn	Zip codes
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless (beginning with 2000 data)
		Blank	Missing
		A	Invalid
		B	Unavailable from source (coded 1988-1997 data only)

State Specific Notes

Arizona

Arizona codes a five-digit abbreviation for the country of foreign residents. Canadian residents are coded to "Canada" (ZIP="C"), Mexican residents are coded to "Mexico" (ZIP="M"), and all others are coded to "Foreign" (ZIP="F").

For discharges through 2000, Arizona provided a source category for transients and homeless ("TRANS"). In 2000, this code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this code was recoded to blank (ZIP = " ").

Colorado

In 1993, Colorado redefined zip code categories and included a separate category for foreign and homeless patients. Colorado used only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F"). Colorado used the zip code "00003" for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP = " ").

Florida

Prior to 2004, Florida masked zip codes of areas in Florida where the population is less than 500 people and also for patients who reside out of state. These masked codes were set to missing (ZIP = " ") during HCUP processing. Beginning in 2004, Florida provides HCUP with unmasked zip codes for all records.

Florida reports a single "Foreign Country" category which includes Canada and Mexico. During HCUP processing, "Foreign Country" was assigned to the uniform category for "Other/Unspecified Foreign" (ZIP = "F").

Beginning in 1997, Florida reports a separate zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP=" ").

Due to an error in HCUP data processing, the Florida 1990 supplemental file is missing ZIP_S.

Iowa

Iowa does not code foreign zip codes. Any non-U.S. zip codes would appear as missing (' ') or invalid ('A').

Kentucky

Kentucky uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Michigan

Michigan reports four separate ZIP Code categories for Sault Ste. Marie, Sarnia, Windsor, and "All other Canada." For 2001-2002, the ZIP Code category for "All other Canada" was recoded to blank (ZIP=" "). Beginning in 2003, this ZIP Code was also assigned to the HCUP category for Canada (ZIP="C").

Beginning in 2001, Michigan supplies a five digit patient ZIP Code and identifies foreign residents. Canadian residents are coded to "Canada" (ZIP="C") and all others are coded to "Foreign" (ZIP="F").

Prior to 2001, Michigan only supplied the first three digits of the patient's ZIP Code, ZIP is blank ("").

Nebraska

Nebraska does not separately classify Canadian, Mexican, or other foreign zip codes.

New Jersey

New Jersey does not report foreign, Canadian or Mexican zip postal codes. In the source data, these ZIP codes are blank. During HCUP processing, blank values were assigned to missing (" ").

New York

For 1988-1992, New York uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Beginning in 1993, New York separately classifies Canadian, but not Mexican zip codes. Mexican zip codes are included in the HCUP category for Other/Unspecified Foreign (ZIP = "F").

North Carolina

North Carolina does not separately classify Canadian, Mexican, or other foreign zip codes.

Oregon

Oregon does not report foreign, Canadian, or Mexican postal codes, but instead reports them as "missing" or "invalid" ZIP code values. During HCUP processing, these were assigned as missing (ZIP = blank) or invalid (ZIP = .A).

Rhode Island

Rhode Island does not separately classify Canadian, Mexican, or other foreign zip codes.

Utah

Utah uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Utah masks zip codes under the following conditions:

- Patients in Utah or non-Utah zip codes with less than 30 discharges in a calendar year,
- Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25), and
- Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

During HCUP processing, the masked zip code is recoded as missing (ZIP = blank).

Utah reports a zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP = " ").

Vermont

Canadian residents are coded to "Canada" (ZIP="C") and all other foreign discharges are coded to "Foreign" (ZIP="F"). Homeless patients are not identified.

Washington

Due to an error in 2004 HCUP processing of the Washington SID, the ZIP Code for less than 100 foreign discharges was set to invalid ("A") instead of set to unspecified foreign ("F").

Wisconsin

Wisconsin uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Wisconsin suppressed zip codes with low frequency (less than 30 discharges per quarter) or low population (less than 1000 people). These zip codes will appear as missing (" ") in the HCUP Wisconsin data.

West Virginia

West Virginia does not separately classify Canadian, Mexican, or other foreign zip codes.

ZIP_S - Synthetic patient zip code

General Notes

ZIP_S contains a fixed-key (one-to-one) encryption of the patient's residential zip code (ZIP). To prevent inadvertent or intentional identification of specific patients based on the patient's residential zip code, the last 2 digits were encrypted. While it is still possible to identify the state of a patient's residence using the first three unencrypted zip code digits, ZIP_S does not allow placement of a specific patient within a narrower, zip code-based geography.

If the zip code in the HCUP outpatient surgery databases and the inpatient databases are the same, the synthetic identifier, ZIP_S is the same.

Users of the encrypted zip code data element are strictly forbidden to identify the actual zip code associated with the encrypted zip code.

The encrypted zip code (ZIP_S) contains the following special values:

- Canadian, Mexican, and other or unspecified foreign zip codes (ZIP_S = "C", "M", or "F", respectively).
- Invalid zip codes (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- Homeless patients. In the 1988-1999 HCUP databases, (ZIP_S = " ") . Beginning in the 2000 HCUP databases, ZIP_S = "H".

Uniform Values

Variable	Description	Value	Value Description
ZIP_S	Synthetic patient zip code	nnnnn	Synthetic zip codes
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless (beginning with 2000 data)
		Blank	Missing
		A	Invalid
		B	Unavailable from source (coded 1988-1997 data only)

State Specific Notes

Maine

Maine does not separately classify Canadian, Mexican, or other foreign zip codes.

Utah

Utah uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP_S = "F").

Utah masks zip codes under the following conditions:

- Patients in Utah or non-Utah zip codes with less than 30 discharges in a calendar year,
- Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25), and
- Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

Utah reports a zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP_S = "H"). Prior to 2000, this zip code was recoded to blank (ZIP_S = " ").

ZIP3 - Patient ZIP Code, first 3 digits

General Notes

The first three digits of the patient's ZIP Code (ZIP3) provides sufficient information to identify the location of a patient's residence within a broad region within a state. ZIP3 is retained as provided by the data source with the following exceptions:

- Foreign ZIP Codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign ZIP Codes.
- Non-numeric ZIP Codes are identified (ZIP = "A").
- The ZIP Code for homeless patients is set to "H".

Uniform Values

Variable	Description	Value	Value Description
ZIP3	Patient ZIP Code, first 3 digits	nnn	First 3 digits of patient ZIP Code
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless
		Blank	Missing
		A	Invalid

State Specific Notes

None