Description of Data Elements

Nationwide Inpatient Sample (NIS)

This document contains cumulative descriptions of data elements across all states and years of HCUP data from 1988 to the current data year. Please refer to the Overview of the Nationwide Inpatient Sample for specific information on which states are included in each year of the NIS.

AGE - Age in years at admission

General Notes

Age in years (AGE) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGE is set to the supplied age if the age cannot be calculated (ADATE and/or DOB is missing or invalid). Note: If the supplied age is the age at discharge instead of the age at admission, then the supplied age is NOT used.
- AGE is missing (.) if the age cannot be calculated and the supplied age is missing.
- AGE is invalid (.A) if
  - it is out of range (AGE NE 0-124) or
  - the age cannot be calculated and the supplied age is nonnumeric.

  An invalid calculated AGE is not replaced by the supplied age.

- If the data source does not provide the necessary dates to calculate age or the reported age at admission, then beginning in the 1998 data, AGE is not present on the HCUP files. In the 1988-1997 data, AGE is retained on the HCUP files and is set to unavailable from source (.B).
- AGE is set to inconsistent (.C) if one of the HCUP edit checks is triggered. The age edit checks vary by year.
  - Beginning in the 1998 data, AGE is less than 0 (EAGE02), is greater than 124 (EAGE03), is inconsistent with neonatal diagnoses (EAGE04), or is inconsistent with maternal diagnoses/procedures (EAGE05).
  - In the 1988-1997 data, AGE is inconsistent with AGEDAY (ED021), neonatal diagnoses (ED3nn), maternal diagnoses (ED4nn), or maternal procedures (ED5nn).

When processing the 1996 HCUP data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 instead of AGE.

Uniform Values

Variable	Description	Value	Value Description
AGE	Age in years at admission	0-124	Age in years
		.	Missing
		.A	Invalid

		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EAGE02, EAGE03, EAGE04, EAGE05; in 1988-1997 data, ED021, ED3nn, ED4nnn, ED5nn

State Specific Notes

Arizona

The reported age was not used when AGE could not be calculated because Arizona supplied age at discharge.

California

In all years, California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Prior to 1995, California reported ages at discharge. Only the calculated age was used to assign AGE.

Beginning in 1995, California reported ages at admission. When AGE could not be calculated from dates, the reported age was assigned.

Connecticut

Patient age could not be calculated from dates since Connecticut did not report full dates of birth. During HCUP processing, only the reported age could be used to assign AGE.

Florida

In 1997, patient age could not be calculated from dates since Florida did not report admission or birth dates. During HCUP processing, only the reported age could be used to assign AGE.

Beginning in 1998, Florida supplied ADATE and DOB for patients less than 11 years old. Only the reported age in years could be used to assign AGE for patients over 10 years old.

Georgia

Patient age could not be calculated from dates because Georgia did not supply date of birth. During HCUP processing, only the reported age could be used to assign AGE.

Hawaii

Beginning in 1998, Hawaii provided the date of birth (DOB) with a four-digit year.

In prior years, only a two-digit year was available. To compensate for the two-digit birth year, the birth century was assigned as 1800 if the reported date of birth was after the admission date. Birth century was assigned

as 1900 for all other records.

Iowa

AGE may differ by one year from the actual age. When only the year of birth is available, Iowa assigns the day and month of birth to '01', which may cause the age calculated from birth date to be one year less than the actual age.

Illinois

Only the calculated age could be used to assign AGE because Illinois did not supply age in years.

Massachusetts

Prior to October 1998, ages greater than 100 years should be interpreted with caution. Age is calculated using the birth and admission date, but only a two-digit year for date of birth (DOB) was provided by the data source. An additional indicator variable provided by the data source, the "Century Birth date," indicates whether the age of the patient was greater or less than 100 years. HCUP experience has shown that this indicator was often not set when it should have been. Thus, if the century indicator specified 1800 or the birth date occurred after the admit date, the century for the date of birth was set to 1800. If the birth date is erroneously after the admit date, this rule causes the age in years (AGE) to be incorrectly greater than 100. If the age does not agree with neonatal or maternal diagnoses and/or procedures, the age is set to inconsistent (.C).

Beginning in October 1998, Massachusetts provides a four-digit birth year. The birth century indicator and the admission date are not used to modify the date of birth.

New Jersey

Prior to 1994, New Jersey reports age as a two-digit code with a maximum of 99 and provides a birth century indicator. Beginning in 1994, New Jersey provides a four-digit birth year. If age could not be calculated (ADATE or DOB missing or invalid) then age was assigned as follows:

Year of Data	**HCUP processing of AGE**
1988-1991	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age.
1992-1993	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age and add 100 if the birth century flag indicates that the patient is age 100 or older.
Beginning 1994	Assign AGE as the reported age, if the reported AGE was in the range of 1-124 years. Otherwise, assign AGE as invalid (.A).

New York

In the 1988-1997 HCUP New York databases, AGE could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in years could be used to assign AGE.

Beginning with the 1998 data, New York provided complete dates and AGE could be calculated.

Oregon

Oregon reports age at discharge. During HCUP processing, reported age was not used when patient age (AGE) could not be calculated from dates. The appropriate edit check for cosistency of reported and calculated ages could not be performed.

Pennsylvania

Prior to 1995, only the calculated age could be used to assign AGE because Pennsylvania did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning in 1995, the source reported age in years. During HCUP processing, AGE was assigned using the reported age if patient age could not be calculated from the dates provided.

Birth Century

The availability of birth century information varies across years of data.

- Prior to 1996, date of birth (DOB) was supplied with a four-digit year.
- In 1996-1997, only a two-digit year for date of birth (DOB) was provided by the data source.
    - If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).
    - If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).
- Beginning in 1998, the date of birth (DOB) was supplied with a four-digit year.

Pennsylvania

Pennsylvania discharges which are considered as having "sensitive conditions" based on their DRG, diagnoses, and procedures, had AGE set as follows:

If AGE is coded (>= 0), set AGE to the midpoint of 5-year intervals. The age intervals begin with 0-4 and end with 85+. For example,

AGE	New Value
0 - 4	2
5 - 9	7
10 - 14	12
15 - 19	17
20 - 24	22
...5 year increment	...midpoint of 5 year interval
85+	85

The sensitive conditions and the screens for selecting them are listed below. The DRG and ICD-9-CM code screens are separated by "or" operators. The screen for sensitive conditions was updated during the processing of the 1997 HCUP data. Some out-of-date diagnoses and procedures, marked by "(D)", were dropped from the screen. Other diagnoses and procedures were added; these are marked by "(A)."

	DRG's**OR**	Diagnoses**OR**	Procedures
Abortion	380-381	634-634.92 (D)	69.01, 69.02
		635-635.99 (A)	69.09 (A)
		636-636.99	69.5-69.59
		637-637.99	69.93 (D)
		638-638.99	74.91, 75.0
		639-639.99	96.49 (D)
		V61.7	
AIDS	488-490	042	
		043-044.9 (D)	
		795.71 (A)	
		795.8 (D)	
		V08 (A)	
		V65.44 (A)	
Psychiatric	424-432	290-319.99	94.2-94.59 (A)
		E95.0-E95.99	
		E98.0-E98.99	
		V11.0-V11.99 (A)	
Substance Abuse	433-437	303-305.93	94.4-94.69 (A)
		980.0 (A)	
		V65.42 (A)	

South Carolina

The calculation of AGE differs across years.

Beginning in 1996

Only a two-digit year for date (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).
- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

Using only the admission date to determine births in the 1800s causes no patient ages to be greater than 99 years.

In 1993 and 1995

South Carolina reported a two-digit year for date of birth (DOB). During HCUP processing, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the

admission date. Birth century was assigned as 1900 for all other records.

In 1994

South Carolina reported a four-digit year for date of birth (DOB). No adjustments to birth century were made during HCUP processing.

Tennessee

Only the calculated age could be used to assign AGE because Tennessee did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Utah

The reported age was not used when AGE could not be calculated because Utah supplied age at discharge.

Virginia

Patient age could not be calculated from dates since Virginia did not report date of birth. During HCUP processing, only the reported age could be used to assign AGE.

Washington

Availability of Reported Age

During HCUP processing of 1988-1992 discharges, the reported age was not used when AGE could not be calculated because Washington reported age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning with 1993 discharges, Washington reported age at time of admission, consistent with the HCUP definition of AGE. Therefore, if the patient's age could not be calculated from dates, the reported age was assigned to AGE.

Ages Greater Than 99 Years

For 1988-1992 discharges, due to the coding of date of birth, no patient ages are greater than 99 years. Only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB is greater than admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).
- If DOB is less than or equal to ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

For 1993-1996 discharges, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other record. The age range is not truncated at 99.

Beginning in 1997, the reported age was no longer used to indicate ages over 100. This is consistent with the coding of AGE in other states. The coding of AGE in 1997 is the same as specified for 1988-1992.

Beginning in 1998, Washington provided a four-digit birth year with the century. If the reported date of birth was greater than the admission date, then the original date of birth remains unchanged and the age at admission (AGE and AGEDAY) was set to inconsistent (.C).

Wisconsin

An error during HCUP processing of 1989-1992 discharges caused age in years (AGE) and date of birth (DOB) to be set to missing (.) for all patients born in the year 1900. Beginning with 1993 discharges, AGE and DOB were processed correctly.

From 1989-1994, only the calculated age could be used to assign AGE because Wisconsin did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

For 1995 discharges, the source supplied an age in years which was used if the age could not be calculated from date of birth and admission date.

Beginning in 1996, only the calculated age could be used to assign AGE because Wisconsin had truncated ages over 96 years to 96.

AGEDAY - Age in days (when AGE is less than 1 year)

General Notes

Age in days (AGEDAY) is reported for patients less than 1 year old. AGEDAY is calculated from date of birth (DOB) and the admission date (ADATE) with the following execeptions:

- AGEDAY is set to the supplied age in days if the age cannot be calculated (ADATE and/or DOB is missing or invalid).
- AGEDAY is missing (.) if the age cannot be calculated and the reported age in days is missing.
- AGEDAY is missing (.) if the calculated age in years is out of range (AGE NE 0-124).
- AGEDAY is invalid (.A) if the age in days cannot be calculated and the supplied age in days is nonnumeric. An invalid calculated AGEDAY is not replaced by the reported age in days.
- If the data source does not provide the necessary dates to calculate age in days or the reported age in days, then beginning in the 1998 data, AGEDAY is not present on the HCUP files. In the 1988-1997 data, AGEDAY is retained on the HCUP files and is set to unavailable from source (.B).
- AGEDAY is set to inconsistent (.C) if one of the HCUP edit checks is triggered. The age edit checks vary by year.
    - Beginning in the 1998 data, AGEDAY is inconsistent with neonatal diagnoses (EAGE04), or is inconsistent with maternal diagnoses/procedures (EAGE05).
    - In the 1998-1997 data, AGEDAY is inconsistent with AGE (ED021), neonatal diagnoses (ED3nn), maternal diagnoses (ED4nn), or maternal procedures (ED5nn).

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 and AGEDAY = missing (.), instead of AGE=0 and AGEDAY=364.

Uniform Values

Variable	Description	Value	Value Description
AGEDAY	Age in days (when AGE is less than 1 year)	0-364	Days
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EAGE04, EAGE05; in 1988-1997 data, ED021, ED3nn, ED4nnn, ED5nn

State Specific Notes

Arizona

Only the calculated age could be used to assign AGEDAY because Arizona did not supply age in days.

California

California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Connecticut

Patient AGEDAY could not be calculated from dates since Connecticut did not report full dates of birth. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Florida

Prior to 1997, only the calculated age could be used to assign AGEDAY because Florida did not supply age in days. In 1997, Florida provided AGEDAY, but no dates to calculate it. Beginning in 1998, age in days (AGEDAY) could be calculated because Florida supplied ADATE and DOB for patients less than 11 years old.

Georgia

Prior to 1998, AGEDAY is coded differently in Georgia than in the other HCUP states. AGEDAY was assigned from the reported age in days because Georgia did not supply date of birth.

- Patients less than 1 month old are coded in days from 0 to 30 (i.e., 0, 1, 2, 3 etc.).
- Patients between 1 month and 1 year old are coded in 30 day intervals (i.e., 30, 60, 90, 120, etc.)

Beginning in 1998, enough information was provided by the data source that AGEDAY is continuous from 0 to 364.

Hawaii

Only the calculated age could be used to assign AGEDAY. Prior to 1998, Hawaii did not supply age in days. Beginning in 1998, Hawaii reported age in days, but the coding was not consistent with the HCUP standard coding.

Beginning in 1998, Hawaii provided the date of birth (DOB) with a four-digit year. In prior years, only a two-digit year was available.

Iowa

AGEDAY may be incorrectly set to invalid (.A) on newborn records. When only the year of birth is available, Iowa codes the day and month of birth to '01'. This causes the calculated age in days to be negative, and therefore set to invalid (.A).

Only the calculated age could be used to assign AGEDAY. Prior to 1998, Iowa did not supply age in days. Beginning in 1998, Iowa supplied age in days, but the coding was inconsistent with HCUP standards.

Illinois

Only the calculated age could be used to assign AGEDAY because Illinois did not supply age in days.

Massachusetts

Only the calculated age could be used to assign AGEDAY because Massachusetts did not supply age in days.

Maine

Only the calculated age could be used to assign AGEDAY because Maine did not supply age in days.

New Jersey

Only the calculated age could be used to assign AGEDAY because New Jersey did not supply age in days.

New York

In the 1988-1997 HCUP New York databases, AGEDAY could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Beginning with the 1998 data, New York provided complete dates and AGEDAY could be calculated.

Oregon

During HCUP processing, only the calculated age in days could be used to assign AGEDAY because:

- Oregon did not report age in days in the data prior to 1998 and
- Oregon reported age in days at discharge beginning in the 1998 data.

Pennsylvania

Beginning in 1993, only the calculated age in days could be used to assign AGEDAY:

- In 1993, the source used the same code (zero days) to report the age of newborns and missing values.
- Beginning in 1994, the source supplied age group categories rather than reporting age in days.

Pennsylvania

Pennsylvania discharges which are considered as having "sensitive conditions" based on their DRG, diagnoses, and procedures, had AGEDAY set to missing (.) if AGEDAY was coded (AGEDAY >= 0).

The sensitive conditions and the screens for selecting them are listed below. The DRG and ICD-9-CM code screens are separated by "or" operators. The screen for sensitive conditions was updated during the processing of the 1997 HCUP data. Some out-of-date diagnoses and procedures, marked by "(D)", were dropped from the screen. Other diagnoses and procedures were added; these are marked by "(A)."

	DRG's**OR**	Diagnoses**OR**	Procedures
Abortion	380-381	634-634.92 (D)	69.01, 69.02
		635-635.99 (A)	69.09 (A)
		636-636.99	69.5-69.59
		637-637.99	69.93 (D)
		638-638.99	74.91, 75.0
		639-639.99	96.49 (D)
		V61.7	

AIDS	488-490	042	
		043-044.9 (D)	
		795.71 (A)	
		795.8 (D)	
		V08 (A)	
		V65.44 (A)	
Psychiatric	424-432	290-319.99	94.2-94.59 (A)
		E95.0-E95.99	
		E98.0-E98.99	
		V11.0-V11.99 (A)	
Substance Abuse	433-437	303-305.93	94.4-94.69 (A)
		980.0 (A)	
		V65.42 (A)	

South Carolina

Only the calculated age could be used to assign AGEDAY because South Carolina supplied age in days at discharge.

Tennessee

Only the calculated age could be used to assign AGEDAY because Tennessee did not supply age in days.

Utah

Only the calculated age could be used to assign AGEDAY because Utah did not supply age in days.

Virginia

Age in days could not be calculated from dates since Virginia did not report the date of birth. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Washington

Only the calculated age could be used to assign AGEDAY because Washington did not supply age in days.

AMONTH - Admission month

General Notes

Admission month (AMONTH) is derived from either the month of the admission date or the supplied admission month. A valid nonmissing month is assigned to AMONTH even if the admission year or day is invalid or missing. Therefore, it is possible to have a valid AMONTH when the admission date is invalid or missing.

If AMONTH is nonnumeric or out of range (month NE 1-12), then AMONTH is invalid (.A).

If the data source does not provide the admission month, then beginning in the 1998 data, AMONTH is not present on the HCUP files. In the 1988-1997 data, AMONTH is retained on the HCUP files and is set to unavailable from source (.B).

Uniform Values

Variable	Description	Value	Value Description
AMONTH	Admission month	1-12	Admit month
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Florida

Beginning in 1997, Florida did not supply admission month.

ASOURCE - Admission source, uniform coding

General Notes

ASOURCE indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.) recoded into HCUP uniform values. Routine, birth, and other (ASOURCE=5) includes referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals.

If the data source does not provide the admission source, then beginning in the 1998 data, ASOURCE is not present on the HCUP files. In the 1988-1997 data, ASOURCE is retained on the HCUP files and is set to unavailable from source (.B).

Beginning in the 1998 data, the data element ASOURCE_X retains the source of admission as provided by the data source.

Uniform Values

Variable	Description	Value	Value Description
ASOURCE	Admission source, uniform coding	1	Emergency department
		2	Another hospital
		3	Another health facility including long term care
		4	Court/Law enforcement
		5	Routine, birth, and other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Arizona			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement

1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO/AHCCCS health plan referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Information not available, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

California

California			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
nn1	Route was this hospital's emergency room	1	Emergency department
51n, where n = 0 or 2	Acute inpatient care (this hospital)	2	Another hospital
52n, where n = 0 or 2	Acute inpatient care (another hospital)		
2mn, where m = 0-3, n = 0 or 2	Residential care facility	3	Other health facility including long-term care
3mn, where m = 0-3, n = 0 or 2	Ambulatory surgery		
4mn, where m = 0-3, n = 0 or 2	Skilled Nursing/Intermediate care		
5mn, where m = 0 or 3, n = 0 or 2	Acute inpatient hospital care (not a hospital)		
6mn, where m = 0-3, n = 0 or 2	Other inpatient hospital care		
8mn, where m = 0-3, n = 0 or 2	Prison/jail	4	Court/Law enforcement
1mn, where m = 0-3, n = 0 or 2	Home	5	Routine including births and other sources
7mn, where m = 0-3, n = 0 or 2	Newborn		
9mn, where m = 0-3, n = 0 or 2	Other		
000, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
The first digit of ASOURCE_X describes the site from which the patient originated (e.g., home (1), residential care facility (2), ambulatory surgery (3), skilled nursing/intermediate			

care (4), acute inpatient hospital care (5), other inpatient hospital care (6), newborn (7), prison/jail (8), other (9)).

The second digit of ASOURCE_X describes the license of site from which the patient originated (e.g, this hospital (1), another hospital (2), not a hospital (3)).

The third digit describes the route by which the patient was admitted (e.g., this hospital's emergency room (1), not this hospital's emergency room (2). Source value 2 includes patients seen in the emergency room of another hospital and patients not seen in any emergency room.).

Newborns

In all years, California assigned all records containing a principal diagnosis code of "newborn, born in hospital" (defined as DX1 equal to V3x.0x) to an admission source of newborn, regardless of the admission source reported by the hospital. These discharges are included under the uniform category routine, birth, and other (ASOURCE = 5).

Home Health Service

Prior to 1995, the categories coded under routine, birth, and other (ASOURCE = 5) included an admission source of "Home Health Service."

Beginning in 1995, home health service is not reported by California as a separate category. No documentation is available from the source to indicate whether home health service is reported under another source category.

Court/Law Enforcement

Prior to 1995, the source documentation supplied by California does not indicate which source categories are used for "Court/Law Enforcement" (ASOURCE=4).

Beginning in 1995, the source reported a separate category for admissions from "Prison/Jail." These discharges are included under the uniform category "Court/Law Enforcement" (ASOURCE = 4).

Ambulatory Surgery

Beginning in 1995, the source reports a separate category for admissions from ambulatory surgery. These discharges are included under the uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3).

Colorado

Colorado			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from a hospital		

A	Transfer from a rural hospital	2	Another hospital
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, 0, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Connecticut

Connecticut			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
2	Emergency department	1	Emergency department
4	Another hospital	2	Another hospital
3	Outpatient department	3	Other health facility including long-term care
5	SNF/ICF		
--	--	4	Court/Law enforcement
1	Routine from home	5	Routine including births and other sources
6	Newborn		
7	Still born		
8	Same day care		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Georgia

Georgia			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including

6	Transfer from another health care facility		long-term care
8	Court/Law enforcement	4	Court/Law enforcement
1	Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
0, 9, A, B, E, N, P, U, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Hawaii

Hawaii			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural hospital primary care facility		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Admission source information was provided in two fields; one for newborns and one for all other patients. ASOURCE_X was assigned as follows: • If a newborn record (ATYPE=4) then ASOURCE_X = the newborn admission source, Else ASOURCE_X = the admission source for non-newborns.			

Iowa

Iowa			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal birth (if ATYPE=4)		
2	Premature birth (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Illinois

Illinois			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural hospital (beginning in 1997)		
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal Delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		

9, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Massachusetts

Massachusetts			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Outside hospital emergency room	1	Emergency department
4	Transfer from an acute hospital	2	Another hospital
5	Transfer from a skilled nursing home	3	Other health facility including long-term care
6	Transfer from Intermediate Care Facility		
T	Transfer from outside ambulatory surgery (Beginning in October 1997)		
X	Observation (Beginning in October 1993)		
Y	Within hospital ambulatory surgery (Beginning in October 1993)		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Within hospital clinic referral		
3	HMO referral		
9	Other (to include level 4 nursing facility)		
L	Outside hospital clinic referral (Beginning in October 1997)		
M	Walk-in / Self Referral (Beginning in October 1997)		
A	Normal delivery (if ATYPE = 4)		
B	Premature delivery (if ATYPE = 4)		
C	Sick baby (if ATYPE = 4)		
W	Extramural birth (if ATYPE = 4) (Beginning in October 1993)		
D	Extramural birth (if ATYPE = 4)		
0	Newborn, Admission Source Not Available (if ATYPE = 4) (Prior to 1993 only; beginning in 1993 this value was recoded to missing.)		
0, Z, Bland	Information not available, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Maryland

Maryland			
ASOURCE_X		**ASOURCE**	

Value	Description	Value	Description
05	Admitted from home (when the emergency flag provided by MD indicates the record was admitted from the emergency room)	1	Emergency department
9, 99, Blank	Missing (when the emergency flag provided by MD indicates the record was admitted from the emergency room)		
00	Transferred from on-site acute care unit to rehabilitation unit	2	Another hospital
01	Transferred from another hospital to a specialty center		
02	Transferred from another hospital for any other reason		
11	From on-site acute care unit to psychiatric unit		
03	Transferred from a nursing home	3	Other health facility including long-term care
04	Transferred from any other institution		
06	Transferred from Lithotripsy facility		
07	Transferred from on-site ambulatory outpatient surgery unit		
08	Transferred from off-site ambulatory outpatient surgery unit		
12	Admitted from on-site sub-acute facility (beginning in 1996)		
13	Admitted from other sub-acute facility (beginning in 1996)		
--		4	Court/Law enforcement
05	Admitted from home (when the emergency flag provided by MD does not indicate the record was admitted from the emergency room)	5	Routine including births and other sources
10	Newborn		
9, 99, Blank	Missing (when the emergency flag provided by MD does not indicate the record was admitted from the emergency room)	.	Missing
Any values not documented by the data source		.A	Invalid
Maryland flagged admissions through emergency rooms as a separate variable from the source of admission. This separate variable was used to recode the source values for "Admitted from Home" (ASOURCE_X = 05) and "Missing" (ASOURCE_X = 9, 99, or blank).			

New Jersey

New Jersey			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department

4	Transfer from an acute care hospital	2	Another hospital
A	Transfer from a rural primary care hospital		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Outpatient or Clinic		
3	HMO		
1	Normal birth (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	0	Missing
Any values not documented by the data source		.A	Invalid

In 1995-1996, the admission source, "Transfer from a Rural Primary Care Hospital" was erroneously recoded to the HCUP uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3). Beginning in 1997, the admission source "Transfer from a Rural Primary Care Hospital" was correctly recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2). This source value was not available from New Jersey prior to 1995.

New York

Admitted from Outpatient Department

- For 1988-1992, the source category "Admitted From Outpatient Department" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).
- For 1993, New York recoded "Admitted From Outpatient Department" into the source category "Emergency Room" and during HCUP processing, it was assigned to the HCUP category "Emergency Department" (ASOURCE = 1).
- Beginning in 1994, New York does not report "Admitted from Outpatient Department."

Transfer from a Rural Primary Care Hospital

- Beginning in 1995, New York reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Other Source

- For 1988-1992, the source category "Other Source" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).
- For 1993, New York recoded "Other Source" into the source category "Information Not Available" and during HCUP processing, it was assigned to the HCUP category "Missing" (ASOURCE = .).

- Beginning in 1994, New York does not report "Other Source."

New York			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural primary care hospital		
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	0	Missing
Any values not documented by the data source		.A	Invalid

Oregon

Oregon			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
0	Home Health		
11	Normal delivery		
12	Premature delivery		
13	Sick baby		

14	Extramural birth		
21	Admissions office		
22	Newborn		
9, 19, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Pennsylvania

Pennsylvania			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural primary care facility (Beginning in 1995)		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
0, 9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Tennessee

Tennessee			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral		

2	Clinic Referral	5	Routine including births and other sources
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Utah

Utah			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4) (This is not available in the SASD)		
2	Premature delivery (if ATYPE=4) (This is not available in the SASD)		
3	Sick baby (if ATYPE=4) (This is not available in the SASD)		
4	Extramural birth (if ATYPE=4) (This is not available in the SASD)		
0	Newborn		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
SID: Admission source information was provided in two fields; one for newborns and one for all other patients. ASOURCE_X was assigned as follows: If a newborn record (ATYPE=4) then ASOURCE_X = the newborn admission source, Else ASOURCE_X = the admission source for non-newborns. SASD: Only the non-newborn admission source was provided.			

Virginia

Virginia			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Washington

Washington			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from a hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
9	Other		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		

4	Extramural birth (if ATYPE=4)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Wisconsin

Wisconsin			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE = 4)		
2	Premature newborn (if ATYPE = 4)		
3	Sick baby (if ATYPE = 4)		
4	Extramural birth (if ATYPE = 4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

ASOURCE_X - Admission source, as received from source

General Notes

ASOURCE_X retains the source of the admission as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

The data element ASOURCE indicates the source of the admission recoded into HCUP uniform values

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
ASOURCE_X	Admission source, as received from source	n(a)	Source-specific coding

State Specific Notes

Arizona

Arizona			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO/AHCCCS health plan referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Information not available, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

California

California			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
nn1	Route was this hospital's emergency room	1	Emergency department
51n, where n = 0 or 2	Acute inpatient care (this hospital)	2	Another hospital
52n, where n = 0 or 2	Acute inpatient care (another hospital)		
2mn, where m = 0-3, n = 0 or 2	Residential care facility	3	Other health facility including long-term care
3mn, where m = 0-3, n = 0 or 2	Ambulatory surgery		
4mn, where m = 0-3, n = 0 or 2	Skilled Nursing/Intermediate care		
5mn, where m = 0 or 3, n = 0 or 2	Acute inpatient hospital care (not a hospital)		
6mn, where m = 0-3, n = 0 or 2	Other inpatient hospital care		
8mn, where m = 0-3, n = 0 or 2	Prison/jail	4	Court/Law enforcement
1mn, where m = 0-3, n = 0 or 2	Home	5	Routine including births and other sources
7mn, where m = 0-3, n = 0 or 2	Newborn		
9mn, where m = 0-3, n = 0 or 2	Other		
000, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
The first digit of ASOURCE_X describes the site from which the patient originated (e.g., home (1), residential care facility (2), ambulatory surgery (3), skilled nursing/intermediate care (4), acute inpatient hospital care (5), other inpatient hospital care (6), newborn (7), prison/jail (8), other (9)). The second digit of ASOURCE_X describes the license of site from which the patient originated (e.g, this hospital (1), another hospital (2), not a hospital (3)). The third digit describes the route by which the patient was admitted (e.g., this hospital's emergency room (1), not this hospital's emergency room (2). Source value 2 includes patients seen in the emergency room of another hospital and patients not seen in any emergency room.).			

Colorado

Colorado			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**

7	Emergency room	1	Emergency department
4	Transfer from a hospital	2	Another hospital
A	Transfer from a rural hospital		
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Missing	.	Missing
Any other values		.A	Invalid

Connecticut

Connecticut			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
2	Emergency department	1	Emergency department
4	Another hospital	2	Another hospital
3	Outpatient department	3	Other health facility including long-term care
5	SNF/ICF		
--	--	4	Court/Law enforcement
1	Routine from home	5	Routine including births and other sources
6	Newborn		
7	Still born		
8	Same day care		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Georgia

Georgia			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital

5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
0, 9, A, B, E, N, P, U, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Hawaii

Hawaii			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural hospital primary care facility		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Admission source information was provided in two fields; one for newborns and one for all other patients. ASOURCE_X was assigned as follows: • If a newborn record (ATYPE=4) then ASOURCE_X = the newborn admission source,			

Else ASOURCE_X = the admission source for non-newborns.

Iowa

Iowa			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal birth (if ATYPE=4)		
2	Premature birth (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Illinois

Illinois			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural hospital (beginning in 1997)		
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal Delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		

3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Massachusetts

Massachusetts			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Outside hospital emergency room	1	Emergency department
4	Transfer from an acute hospital	2	Another hospital
5	Transfer from a skilled nursing home	3	Other health facility including long-term care
6	Transfer from Intermediate Care Facility		
T	Transfer from outside ambulatory surgery (Beginning in October 1997)		
X	Observation (Beginning in October 1993)		
Y	Within hospital ambulatory surgery (Beginning in October 1993)		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Within hospital clinic referral		
3	HMO referral		
9	Other (to include level 4 nursing facility)		
L	Outside hospital clinic referral (Beginning in October 1997)		
M	Walk-in / Self Referral (Beginning in October 1997)		
A	Normal delivery (if ATYPE = 4)		
B	Premature delivery (if ATYPE = 4)		
C	Sick baby (if ATYPE = 4)		
W	Extramural birth (if ATYPE = 4) (Beginning in October 1993)		
D	Extramural birth (if ATYPE = 4)		
0	Newborn, Admission Source Not Available (if ATYPE = 4) (Prior to 1993 only; beginning in 1993 this value was recoded to missing.)		
0, Z, Bland	Information not available, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Maryland

Maryland			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
05	Admitted from home (when the emergency flag provided by MD indicates the record was admitted from the emergency room)	1	Emergency department
9, 99, Blank	Missing (when the emergency flag provided by MD indicates the record was admitted from the emergency room)		
00	Transferred from on-site acute care unit to rehabilitation unit	2	Another hospital
01	Transferred from another hospital to a specialty center		
02	Transferred from another hospital for any other reason		
11	From on-site acute care unit to psychiatric unit		
03	Transferred from a nursing home	3	Other health facility including long-term care
04	Transferred from any other institution		
06	Transferred from Lithotripsy facility		
07	Transferred from on-site ambulatory outpatient surgery unit		
08	Transferred from off-site ambulatory outpatient surgery unit		
12	Admitted from on-site sub-acute facility (beginning in 1996)		
13	Admitted from other sub-acute facility (beginning in 1996)		
--		4	Court/Law enforcement
05	Admitted from home (when the emergency flag provided by MD does not indicate the record was admitted from the emergency room)	5	Routine including births and other sources
10	Newborn		
9, 99, Blank	Missing (when the emergency flag provided by MD does not indicate the record was admitted from the emergency room)	.	Missing
Any values not documented by the data source other values		.A	Invalid
Maryland flagged admissions through emergency rooms as a separate variable from the source of admission. This separate variable was used to recode the source values for "Admitted from Home" (ASOURCE_X = 05) and "Missing" (ASOURCE_X = 9, 99, or blank).			

New Jersey

New Jersey			
ASOURCE_X		**ASOURCE**	

Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from an acute care hospital	2	Another hospital
A	Transfer from a rural primary care hospital		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Outpatient or Clinic		
3	HMO		
1	Normal birth (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	0	Missing
Any values not documented by the data source		.A	Invalid

New York

New York			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a rural primary care hospital		
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9,			

Blank	Unknown, Missing	0	Missing
Any values not documented by the data source		.A	Invalid

Oregon

Oregon			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from SNF	3	Other health facility including long-term care
6	Transfer from another facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
0	Home Health		
11	Normal delivery		
12	Premature delivery		
13	Sick baby		
14	Extramural birth		
21	Admissions office		
22	Newborn		
9, 19, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Pennsylvania

Pennsylvania			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from a skilled nursing facility		
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral		

2	Clinic referral	5	Routine including births and other sources
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
0, 9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Tennessee

Tennessee			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic Referral		
3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Utah

Utah			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		

8	Court/Law enforcement	4	Court/Law enforcement
1	Physician Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4) (This is not available in the SASD)		
2	Premature delivery (if ATYPE=4) (This is not available in the SASD)		
3	Sick baby (if ATYPE=4) (This is not available in the SASD)		
4	Extramural birth (if ATYPE=4) (This is not available in the SASD)		
0	Newborn		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
SID: Admission source information was provided in two fields; one for newborns and one for all other patients. ASOURCE_X was assigned as follows: If a newborn record (ATYPE=4) then ASOURCE_X = the newborn admission source, Else ASOURCE_X = the admission source for non-newborns. SASD: Only the non-newborn admission source was provided.			

Virginia

Virginia			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		

9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Washington

Washington			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from a hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
9	Other		
1	Normal delivery (if ATYPE=4)		
2	Premature delivery (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Wisconsin

Wisconsin			
ASOURCE_X		**ASOURCE**	
Value	**Description**	**Value**	**Description**
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral		
2	Clinic referral		
3	HMO referral		

1	Normal newborn (if ATYPE = 4)	5	Routine including births and other sources
2	Premature newborn (if ATYPE = 4)		
3	Sick baby (if ATYPE = 4)		
4	Extramural birth (if ATYPE = 4)		
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

ATYPE - Admission type

General Notes

ATYPE indicates the type of admission (emergency, urgent, elective, etc.). Newborn admission types are separated only if that information is available from the data source. No edit check comparing the admission type to diagnosis or procedure codes is performed.

Because it is infrequently available from data sources, the admission type of delivery (ATYPE=5) is discontinued beginning in the 1998 data. If available, deliveries are recoded under urgent (ATYPE=2).

Uniform Values

Variable	Description	Value	Value Description
ATYPE	Admission type	1	Emergency
		2	Urgent
		3	Elective
		4	Newborn
		5	Delivery (coded in 1988-1997 data only)
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Arizona does not separately classify deliveries. The source documentation supplied by Arizona does not indicate which source categories were used for deliveries.

California

In 1995, the source redefined admission type in a way that no longer matches the uniform variable ATYPE. Admission type is not available in the HCUP California data beginning in 1995.

Prior to 1995, California assigned the admission type of "Newborn" to all records that had a principal diagnosis code of "newborn, born in hospital" (defined as DX1 equal to V3x.0x) regardless of the admission type reported by the hospital. These discharges are included under newborn (ATYPE = 4).

California assigned the value "Delivery" to all records that had a principal diagnosis code of delivery (DX1 = 640-676 with a fifth digit of 1 or 2, or 650), regardless of the admission type reported by the hospital. These discharges are included under delivery (ATYPE = 5).

Colorado

In 1995, Colorado began collecting admission type, but it was optional for hospitals to report this data to the hospital association.

Colorado does not separately classify deliveries. The source documentation supplied by Colorado does not indicate which source categories were used for deliveries. Beginning with 1998 data, the HCUP variable for admission type does not include a value for deliveries (ATYPE = 5).

Connecticut

Connecticut does not separately classify deliveries. The source documentation available for Connecticut does not describe which admission type(s) were used for deliveries.

Florida

Florida does not separately classify deliveries. According to the documentation available from the source, most normal deliveries are categorized as urgent (ATYPE = 2), and most cesarean births and some normal deliveries are included under elective (ATYPE = 3).

Georgia

Georgia does not separately classify deliveries nor do they have a separate category for "Other." The source documentation available for Georgia does not describe which admission type(s) were used for these categories.

Hawaii

Hawaii does not separately classify deliveries nor do they have a separate category for "Other." The source documentation available for Hawaii does not describe which admission type(s) were used for these categories.

Iowa

Iowa does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Illinois

Illinois does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Kansas

Kansas does not separately classify deliveries. The source documentation available for Kansas does not indicate which code was used for deliveries.

Massachusetts

Massachusetts does not separately classify deliveries. The source documentation supplied by Massachusetts does not indicate which source categories are used for deliveries.

Maryland

During HCUP processing of 1993 data, the source category "Rehabilitation" was erroneously recoded to the HCUP category "Invalid" (ATYPE = .A) instead of "Other" (ATYPE = 6). During HCUP processing for other years, the source category Rehabilitation was correctly recoded to the HCUP category "Other" (ATYPE=6).

Beginning in 1997, the source reported a separate category for "Psychiatric" admissions. These discharges are included under the uniform category "Other" (ATYPE = 6).

Beginning in 1998, an admission type of "Delivery" was recoded to "Urgent" (ATYPE = 2).

New Jersey

New Jersey does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

New York

New York does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Oregon

Oregon does not separately classify deliveries. No documentation was available about which admission type (s) were used for deliveries.

Pennsylvania

Pennsylvania does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

South Carolina

South Carolina does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Tennessee

Tennessee does not separately classify deliveries. The source documentation supplied by Tennessee does not indicate which source categories were used for deliveries.

Utah

Utah does not separately classify deliveries nor do they have a separate category for "Other." The source documentation available for Utah does not describe which admission type(s) were used for these categories.

Washington

Washington does not separately classify deliveries. No documentation was available about which admission

type(s) were used for deliveries.

Wisconsin

Wisconsin does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

AWEEKEND - Admission day is on a weekend

General Notes

An indicator of whether the admission day is on the weekend (AWEEKEND) is calculated from the admission date (ADATE). If AWEEKEND cannot be calculated (ADATE is missing or invalid), then

- AWEEKEND is missing (.) if ADATE is missing (.) or
- AWEEKEND is invalid (.A) if ADATE is invalid (.A).

Beginning in the 1998 HCUP files, the data element ADAYWK is replaced by admission weekend (AWEEKEND).

Uniform Values

Variable	Description	Value	Value Description
AWEEKEND	Admission day is on a weekend	0	Admitted Monday-Friday
		1	Admitted Saturday-Sunday
		.	Missing
		.A	Invalid

State Specific Notes

Florida

The reported admission day of week was used to assign AWEEKEND. Florida did not provide admission date.

DIED - Died during hospitalization

General Notes

Died during hospitalization (DIED) is coded from disposition of patient. The HCUP data element for disposition of the patient varies across years of data.

Beginning in the 1998 data, the HCUP data element DISPUniform is used to code DIED.

- If DISPUniform indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.
- If DISPUniform indicates that a patient died in the hospital (value 20), then DIED is coded as 1.
- If DISPUniform is missing (.) or invalid (.A), then DIED is also missing (.) or invalid (.A).

Patients that died outside of the hospital are coded as missing (DISPUniform = . and DIED = .).

From 1988-1997 data, the HCUP data element DISP is used to code DIED.

- If DISP indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.
- If DISP indicates that a patient died in or out of the hospital (value 20), then DIED is coded as 1.
- If DISP is missing (.), invalid (.A), or unavailable from the source (.B), then DIED is also missing (.), invalid (.A), or unavailable from the source (.B).

Patients that died outside of the hospital are included in the same category as patients that died in the hospital (DISP = 20), so for these patients DIED is coded as 1.

Uniform Values

Variable	Description	Value	Value Description
DIED	Died during hospitalization	0	Did not die
		1	Died
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

None

DISCWT - Weight to discharges in the universe

General Notes

DISCWT is a discharge-level weight. To produce national estimates, use DISCWT to weight sampled discharges in the Core file to the discharges from all community hospitals located in the U.S. For detailed information about the development and use of discharge and hospital weights, see the year-specific report on the Design of the HCUP Nationwide Inpatient Sample.

Uniform Values

Variable	Description	Value	Value Description
DISCWT	Weight to discharges in the universe	nn.nnnn	Weight to discharges in the universe

State Specific Notes

None

DISCWT10 - 10% sample weight to discharges in the universe

General Notes

DISCWT10 is a discharge-level weight. To produce national estimates, use DISCWT10 to weight sampled discharges in the 10% NIS sample files to the discharges from all community hospitals located in the U.S. For detailed information about the development and use of discharge and hospital weights, see the year-specific report on the Design of the HCUP Nationwide Inpatient Sample.

Uniform Values

Variable	Description	Value	Value Description
DISCWT10	10% sample weight to discharges in the universe	nnn.nnnn	10% sample weight to discharges in the universe

State Specific Notes

None

DISPUB92 - Disposition of patient, UB92 coding

General Notes

DISPUB92 indicates the disposition of the patient at discharge and uses the same coding as the patient status data element on the UB-92 claim form.

DISPUB92 has more detailed categories for transfers and Home Health Care than the HCUP data element DISPUniform. DISP_X retains the disposition of patient as provided by the data source.

DISP_X is not available on the HCUP Nationwide Inpatient Sample (NIS).

Uniform Values

Variable	Description	Value	Value Description
DISPUB92	Disposition of patient, UB92 coding	1	Routine
		2	Short-term hospital
		3	Skilled Nursing Facility (SNF)
		4	Intermediate Care Facility (ICF)
		5	Another type of facility (for inpatient care)
		6	Home Health Care (HHC)
		7	Against medical advice (AMA)
		8	Home IV provider
		20	Died in hospital
		40	Died at home
		41	Died in a medical facility
		42	Died, place unknown
		50	Hospice - home
		51	Hospice - medical facility
		61	Within this institution to a Medicare-approved swing bed, beginning in 2000 data
		71	Another institution for outpatient services, beginning in 2000 data
		72	This institution for outpatient services, beginning in 2000 data
		.	Missing
		.A	Invalid

State Specific Notes

Arizona

Arizona			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
1	Home or self care (routine)	1	Routine
2	Another short term general hospital	2	Short-term hospital
3	Skilled nursing facility	3	Skilled nursing facility
4	Intermediate care facility	4	Intermediate care facility
5	Another type of institution	5	Another type of facility
6	Home under care of organized home health service organization	6	Home health care
7	Left against medical advice	7	Against medical advice
8	Home under care of a Home IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
9	All Other	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Colorado

Colorado			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home/Self-Care/Routine	1	Routine
02	Short Term Hospital	2	Short-term hospital
03	SNF	3	Skilled nursing facility
04	Intermediate Care Facility	4	Intermediate care facility
05	Other Facility	5	Another type of facility
06	Home Health Service	6	Home health care
07	Left Against Medical Advice	7	Against medical advice
08	Home IV Service	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home

--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - Home	50	Hospice - home
51	Hospice - Medical Facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any other values		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Connecticut

Connecticut			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home	1	Routine
02	Other hospital	2	Short-term hospital
09	Admitted to this hospital (SASD and SEDD only)		
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Other facility	5	Another type of facility
06	Home health care	6	Home health care
07	Left AMA	7	Against medical advice
08	Home IV therapy	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - Home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Florida

Florida			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01, 1	Home	1	Routine
02, 2	Short term general hospital	2	Short-term hospital
03, 3	Skilled nursing facility	3	Skilled nursing facility
04, 4	Intermediate care facility	4	Intermediate care facility
05, 5	Another type of institution	5	Another type of facility

06, 6	Home under care of home health care organization	6	Home health care
07, 7	Left against medical advice	7	Against medical advice
08, 8	Home on IV medications	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing		
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Georgia

Georgia			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine)	1	Routine
02	Another short-term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home health care	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of Home IV Provider	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in medical facility	41	Died in other medical facility
42	Expired - place unknown	42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
50, 51, 99, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Hawaii

Hawaii			
DISP_X		DISPUB92	
Value	Description	Value	Description
01	Home or self care (routine)	1	Routine
02	Another short term general hospital	2	short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	another type of facility
06	Home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of Home IV Provider	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in medical facility	41	Died in other medical facility
42	Expired - place unknown	42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Iowa

Iowa			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
1	Home or self-care	1	Routine
3	Other acute hospital	2	Short-term hospital
4	SNF	3	Skilled nursing facility
5	ICF	4	Intermediate care facility
6	Other health care facility	5	Another type of facility
2	Home health service	6	Home health care
7	Against medical advice	7	Against medical advice
--		8	Home IV provider
8	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing	.	Missing

Any values not documented by the data source	.A	Invalid
DISPUniform is coded directly from DISPUB92.		

Illinois

Illinois			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Routine	1	Routine
02	Short-term General Hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of organized home health service	5	Home health care
07	Left gainst medical advice	7	Against medical advice
08	Home under care of a Home IV drug therapy provider	8	Home under IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - Home	50	Hospice - home
51	Hospice - Medical Facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Kansas

Kansas			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
1	Routine	1	Routine
31	Transfer: other hospital	2	Short-term hospital
32	Transfer: skilled nursing facility	3	Skilled nursing facility
33	Transfer: intermediate care facility	4	Intermediate care facility
34	Transfer: Rehabilitation center	5	Another type of facility
35	Transfer: Psychiatric facility		
37	Transfer: Custodial		
38	Transfer: Other		
36	Transfer: Organized home care	6	Home health care

2	Against medical advice	7	Against medical advice
--		8	Home IV provider
4	Expired (no autopsy)	20	Died in the hospital
5	Expired (autopsy)		
6	Coroner's case (no autopsy)		
7	Coroner's case (autopsy)		
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Information on the disposition of the patient was provided in two fields: discharge status and transfer destination. If the discharge status indicated a transfer, then DISP_X is assigned using both the discharge status (value 3) and the transfer destination (values 1-8) to create a two-digit value 31-38. For non-transfers, DISP_X contains one digit discharge status. DISPUniform is coded directly from DISPUB92.			

Massachusetts

Massachusetts			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home (routine)	1	Routine
14	Rest Home (Beginning in 1998)		
02	Another short-term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Further care - Inpatient or OPD	5	Another type of facility
10	Chronic hospital		
11	Mental health facility		
13	Rehab hospital		
14	Rest Home (Prior to 1998)		
06	Home under care of home health agency	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home for IV drug therapy	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown

50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
12	Discharge Other	.	Missing
00, Blank	Missing		
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Maine

Maine			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
1	Home	1	Routine
7	Boarding home		
3	Another acute care hospital	2	Short-term hospital
4	Skilled Nursing Facility	3	Skilled Nursing Facility
5	Intermediate care facility	4	Intermediate care facility
6	Another health care facility	5	Another type of facility
8	Home health care agency	6	Home health care
2	Left against medical advice	7	Against medical advice
--		8	Home IV provider
9	Died	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

New Jersey

New Jersey			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine)	1	Routine
02	Another short term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of organized HHA	6	Home health care

07	Left against medical advice	7	Against medical advice
08	Home with IV therapy	8	Home IV provider
20	Expired, no autopsy	20	Died in the hospital
21	Expired, with autopsy		
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

New York

New York			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine)	1	Routine
90	Plan of care completed (SASD Only)		
91	Pre-admission (SASD Only)		
02	Another acute general hospital	2	Short-term hospital
09	Admitted as an inpatient to this hospital (SASD only)		
10	Neonate discharged another hospital		
13	Another hospital for tertiary aftercare		
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
12	Intermediate care facilities for the mentally retarded		
05	Another type of institution	5	Another type of facility
11	Short-term psychiatric, chronic hospital or long-term specialty hospital providing for psychiatric illnesses		
14	Domiciliary Care Facility		
06	Home under care of organized home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of a Home IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in a medical facility	41	Died in other medical facility

42	Expired, place unknown	42	Died, place unknown
50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Oregon

Oregon			
DISP_X		DISPUB92	
Value	Description	Value	Description
01	Routine discharge (to home of self care)	1	Routine
10	Discharged - no longer covered by Medicaid		
02	Another short term hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
11	Transferred to another category of service		
06	Home health care service	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Discharged home under care of a Home IV Service	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in medical facility	41	Died in other medical facility
42	Expired - place unknown	42	Died, place unknown
50	Hospice - Home	50	Hospice - home
51	Hospice - Medical Facility	51	Hospice - medical facility
00, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Pennsylvania

Pennsylvania			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine discharge)	1	Routine

02	Short-term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of home IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
0, 00, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

South Carolina

South Carolina			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine)	1	Routine
02	Another short term general hospital	2	Short-term hospital
09	Admitted as an inpatient to this hospital (Invalid for the SID, valid for the SASD and SEDD)		
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of Home IV Provider	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in medical facility	41	Died in other medical facility

42	Expired, place unknown	42	Died, place unknown
50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
00, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Tennessee

Tennessee			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
1	Home or self care (routine)	1	Routine
2	Another short term general hospital	2	Short-term hospital
9 (SASD Only)	Admitted as an inpatient to this hospital		
3	Skilled nursing facility	3	Skilled nursing facility
4	Intermediate care facility	4	Intermediate care facility
5	Another type of institution	5	Another type of facility
10	Discharged/transferred to a mental health center		
6	Home under care of organized home health service organization	6	Home health care
7	Left against medical advice	7	Against medical advice
8	Home under care of a Home IV Provider	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Utah

Utah	

DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Discharge to home or self care (routine)	1	Routine
02	Another short term hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of organized home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Discharged home under care of a home IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in a medical facility	41	Died in other medical facility
42	Expired - place unknown	42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
09, 00, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Virginia

Virginia			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care	1	Routine
02	Another hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of home health service organization	6	Home health care
07	Against medical advice	7	Against medical advice
08	Home under IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility

--		42	Died, place unknown
--		50	Hospice - home
--		51	Hospice - medical facility
--		61	Within this institution to a hospital-based Medicare approved swing bed (added for 2000 data)
--		71	Another institution for outpatient services (added for 2000 data)
--		72	This institution for outpatient services (added for 2000 data)
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Washington

Washington			
DISP_X		DISPUB92	
Value	**Description**	**Value**	**Description**
01	Home or self care (routine discharge)	1	Routine
02	Short term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Home under care of a home IV provider	8	Home IV provider
20	Expired	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - Home	50	Hospice - home
51	Hospice - Medical Facility	51	Hospice - medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

Wisconsin

Wisconsin			
DISP_X		DISPUB92	

Value	Description	Value	Description
01	Home or self care (routine)	1	Routine
02	Short-term general hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of facility	5	Another type of facility
06	Home health care	6	Home health care
07	Against medical advice	7	Against medical advice
08	Home intravenous provider	8	Home IV provider
20	Died	20	Died in the hospital
--		40	Died at home
--		41	Died in other medical facility
--		42	Died, place unknown
50	Hospice - Home	50	Hospice - Home
51	Hospice - Medical facility	51	Hospice - Medical facility
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

DISPUniform - Disposition of patient, uniform coding

General Notes

DISPUniform indicates the disposition of the patient at discharge (routine, transfer to another hospital, died, etc.). To ensure uniformity of coding across data sources, DISPUniform combines detailed categories in the more general groups. For example,

- Transfers to facilities other than short-term hospitals (skilled nursing facilities, intermediate care facilities, and other type of facilities) are coded as DISPUniform = 5.
- Transfers to Home Health Care (including IV providers and Hospice home care) are coded as DISPUniform = 6.

Patients that died outside of the hospital are coded as missing (DISPUniform = .).

DISPUB92 has more detailed categories for transfers and Home Health Care and distinguishes patients that died in the hospital from those that died outside of the hospital. DISP_X retains the disposition of patient as provided by the data source.

DISP_X is not available on the HCUP Nationwide Inpatient Sample (NIS).

Uniform Values

Variable	Description	Value	Value Description
DISPUniform	Disposition of patient, uniform coding	1	Routine
		2	Transfer to short-term hospital
		5	Transfer other: includes Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF), and another type of facility
		6	Home Health Care (HHC)
		7	Against medical advice (AMA)
		20	Died in hospital
		.	Missing
		.A	Invalid

State Specific Notes

California

California			
DISP_X		DISPUniform	
Value	**Description**	**Value**	**Description**
01	Routine (Home)	1	Routine
09	Prison/Jail		

02	Acute care (within this hospital)	2	Transfer to short-term hospital
05	Acute care (another hospital)		
03	Other care (within this hospital)	5	Transfer other: includes skilled nursing facility, intermediate care facility, and other types of facility
04	Skilled nursing/Intermediate care (within this hospital)		
06	Other care (another hospital)		
07	Skilled nursing/Intermediate care (another hospital)		
08	Residential care facility		
13	Other (another hospital)		
12	Home Health Services	6	Home health care
10	Against medical advice	7	Against medical advice
11	Died	20	Died in hospital
00, Blank	Missing	.	Missing (includes died outside of hospital)
Any values not documented by the data source		.A	Invalid
There is not enough detail in the coding of DISP_X to code the HCUP variable DISPUB92.			

Maryland

Maryland			
DISP_X		DISPUniform	
Value	**Description**	**Value**	**Description**
1	Home or self-care	1	Routine
5	Acute care general hospital	2	Transfer to short-term hospital
6	Other health care facility	5	Transfer other: includes skilled nursing facility, intermediate care facility, and other types of facility
10	Rehabilitation facility		
11	Rehabilitation unit of other hospital		
12	On-site distinct rehabilitation unit		
13	Transfer to nursing facility		
14	On-site psychiatric unit (inpatient only)		
15	On-site sub-acute unit (inpatient only)		
16	Other sub-acute care facility (inpatient only)		
3	Home health care	6	Home health care
8	Left against medical advice	7	Against medical advice
7	Died	20	Died

9, 99, Blank	Unknown	.	Missing (includes died outside of hospital)
2	Do not use	.A	Invalid
4	Do not use		
Any values not documented by the data source			
There is not enough detail in the coding of DISP_X to code the HCUP variable DISPUB92.			

DQTR - Discharge quarter

General Notes

Discharge quarter (DQTR) is derived from either the month of the discharge date or the supplied discharge quarter. If both of those fields are invalid or missing, DQTR is set to zero. For these cases, a temporary discharge quarter = 3 was used for the DRG grouper and ICD-9-CM verification routines because these algorithms require a valid discharge quarter.

Uniform Values

Variable	Description	Value	Value Description
DQTR	Discharge quarter	1	First quarter (Jan - Mar)
		2	Second quarter (Apr - Jun)
		3	Third quarter (Jul - Sep)
		4	Fourth quarter (Oct - Dec)
		0	Missing or invalid

State Specific Notes

Connecticut

In 1995, discharges in October are noticeably fewer than in other months by about 25%. This pattern is consistent across all hospitals in the state. No explanation of the shortfall was available from Connecticut Health Information Management and Exchange. This did not occur in other years of data.

Florida

Beginning in 1997, Florida did not supply discharge date. DQTR was assigned from the discharge quarter provided by Florida.

DRG - DRG in use on discharge date

General Notes

The Diagnosis Related Group (DRG) appropriate for the date of discharge is assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in the 1996 data, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedures that are valid on the date of discharge are used by the grouper for DRG assignment.

In the 1988-1995 data, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.
- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a window of time around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. During the 1988-1997 HCUP data processing, a six-month window (three months before and three months after) was allowed. Beginning in the 1998 data, a year window (six months before and six months after) was allowed.

The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and
- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis under HCUP standards, but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is considered valid by HCUP standards because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth DRG version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Beginning in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial data element in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs

independent of the MDC assigned from the principal diagnosis.
- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

The Need for a Valid Discharge Date

The DRG grouper needs a valid discharge date because DRG versions change at specific points in time. If the discharge date was invalid or not available from a data source, a temporary discharge date (for use only by the DRG grouper) was created based on the discharge quarter and year according to the following rules:

- Discharge year (YEAR) is always nonmissing.
- Discharge quarter (DQTR) ranges from zero to 4, where zero indicates that the quarter was missing or invalid.

Discharge Quarter (DQTR)	Temporary Date (MM/DD/YY) passed to DRG Grouper
1	01/01/YY
2	04/01/YY
3	07/01/YY
4	10/01/YY
0	07/01/YY

Labels

Labels for the DRGs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
DRG	DRG in use on discharge date	nnn	DRG value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of

records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

DRG10 - DRG, Version 10

General Notes

The Diagnosis Related Group, Version 10 (DRG10) is assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in the 1996 data, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedures that are valid on the date of discharge are used by the grouper for DRG assignment.

In the 1988-1995 data, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.
- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper and 3M Mapper software.

Logically Mapping ICD-9-CM Codes for DRG Version 10

The diagnoses or procedures selected by the above rules are first passed to the 3M Mapper software so that each ICD-9-CM code can be logically translated into codes in effect during fiscal year 1992, the period associated with DRG Version 10. The translated codes are then passed to the DRG Version 10 HCFA Grouper software. Caution: The 3M Mapper can translate only those codes with a discharge date occurring after September 30, 1988. Therefore, codes which changed definition on October 1, 1988 may not be properly handled.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a window of time around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. During the 1988-1997 HCUP data processing, a six-month window (three months before and three months after) was allowed. Beginning in the 1998 data, a year window (six months before and six months after) was allowed.

The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and
- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis under HCUP standards, but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is considered valid by HCUP standards because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Beginning in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial data element in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.
- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

Labels

Labels for the DRGs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
DRG10	DRG, Version 10	nnn	DRG value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

DRG18 - DRG, Version 18

General Notes

The Diagnosis Related Group, Version 18 (DRG18) is assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in the 1996 data, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedure that are valid on the date of discharge are used by the grouper for DRG assignment.

In the 1988-1995 data, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.
- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper and 3M Mapper software.

Logically Mapping ICD-9-CM Codes for DRG Version 18

The diagnoses or procedures selected by the above rules are first passed to the 3M Mapper software so that each ICD-9-CM code can be logically translated into codes in effect during fiscal year 2000, the period associated with DRG Version 18. The translated codes are then passed to the DRG Version 18 HCFA Grouper software.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a window of time around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. During the 1988-1997 HCUP data processing, a six-month window (three months before and three months after) was allowed. Beginning in the 1998 data, a year window (six months before and six months after) was allowed.

The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and
- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis under HCUP standards, but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is considered valid by HCUP standards because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Beginning in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial data element in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.
- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

Labels

Labels for the DRGs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Formats

A format to label DRG18 is documented in HCUP Tools: Variable Labels and Formats.

Uniform Values

Variable	Description	Value	Value Description
DRG18	DRG, Version 18	nnn	DRG value

State Specific Notes

None

DRGVER - DRG grouper version used on discharge date

General Notes

The DRG Grouper Version (DRGVER) is assigned by the HCFA DRG grouper during HCUP processing. For discharges occurring before October 1, 1991, DRGVER contains the DRG "revision" number. For discharges after that date, DRGVER contains the DRG "version" number (which is one value higher than the revision number). This coding scheme is consistent with the labeling of the DRG reference material, including the DRG coding books. Thus, on September 30, 1991 the DRGVER = 7; but on October 1, 1991 the DRGVER = 9.

Uniform Values

Variable	Description	Value	Value Description
DRGVER	DRG grouper version used on discharge date	4	4th revision, eff. Oct 1, 1987
		5	5th revision, eff. Oct 1, 1988
		6	6th revision, eff. Oct 1, 1989
		7	7th revision, eff. Oct 1, 1990
		9	Version 9, eff. Oct 1, 1991
		10	Version 10, eff. Oct 1, 1992
		11	Version 11, eff. Oct 1, 1993
		12	Version 12, eff. Oct 1, 1994
		13	Version 13, eff. Oct 1, 1995
		14	Version 14, eff. Oct 1, 1996
		15	Version 15, eff. Oct 1, 1997
		16	Version 16, eff. Oct 1, 1998
		17	Version 17, eff. Oct 1, 1999
		18	Version 18, eff. Oct 1, 2000

State Specific Notes

None

DSHOSPID - Data source hospital number

General Notes

There are up to three different hospital identifiers included in the HCUP databases:

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals.

Uniform Values

Variable	Description	Value	Value Description
DSHOSPID	Data source hospital number	Data source hospital number	13(a)

State Specific Notes

California

Prior to 1998, the variable DSHOSPID is length 9 with the first digit indicating the level of care, the next two digits for state "06", and then a 6-digit hospital identifier that included the county code.

Beginning in 1998, DSHOSPID is length 6 and only contains the unique hospital identifier. The level of care indicator is retained in the HCUP variable LEVELCARE.

Regardless of whether the information on the level of care is stored in the first digit of DSHOSPID or variable LEVELCARE, the values are defined as follows:

0=	Type of unit unknown (beginning in 1996)
1=	General acute care
2=	Not a valid code
3=	Skilled nursing and intermediate care (long term care)
4=	Psychiatric care
5=	Alcohol/chemical dependency recovery treatment
6=	Acute physical medicine rehabilitation care.

The reliability of this indicator for the type of care depends on how it was assigned.

Prior to 1995. The type of care was assigned by California based on the hospital's licensed units and the proportion of records in a batch of submitted records that fall into each Major Diagnostic Category (MDC). Hospitals were permitted to submit discharge records in one of two ways: submit separate batches of records for each type of care OR bundle records for all types of care into a single submission. How a hospital submitted its records to California determined the accuracy of the type of care indicated in the first digit of DSHOSPID. Consider a hospital which is licensed for more than one type of care:

- If the hospital submitted one batch of records per type of care, then the distribution of each batch of discharges into MDCs would clearly indicate the type of care (acute, psychiatric, etc.). The data source could then accurately assign the first digit of DSHOSPID.
- If the same hospital submitted all of its records in one batch, then the distribution of discharges into MDCs would be a mixture of acute and other types of care. The first digit of DSHOSPID would be set to "general acute care" (value = 1) on all records and would not distinguish the types of care.

Prior to 1995, most hospitals submitted only one batch of records to California which meant that the type of care indicated in the first digit of DSHOSPID did not distinguish among types of care.

Beginning in 1995. Hospitals were required to assign type of care codes to individual records for certain discharges. These discharges included:

- general acute care (value = 1),
- skilled nursing and intermediate care (value = 3), and
- rehabilitation care (value = 6).

For discharges from facilities licensed as psychiatric care (value = 4) or alcohol/chemical dependency recovery treatment (value = 5), California continued to assign the type of care code to all discharges from the facility.

Oregon

Beginning with 1995 data, Oregon changed the format of the state-specific hospital identification numbers stored in DSHOSPID. The new format is incompatible with the format used in previous years.

Pennsylvania

The coding of DSHOSPID varies by data year.

- Prior to 1995, the hospital identifier supplied by Pennsylvania contained a three character prefix "PAF".
- From 1995-1997, this prefix was not included in the supplied data. For consistency with previous years of HCUP data, the prefix "PAF" was added to the beginning of the Pennsylvania hospital identifier (DSHOSPID) during HCUP processing.
- Beginning in 1998, the prefix "PAF" is not included in the DSHOSPID for Pennsylvania.

Washington

Included with the records of general acute care stays from community hospitals are records from alcohol dependency units, bone marrow transplant units, extended care units, psychiatric units, rehabilitation units, group health units, and swing bed units. Records for these different types of care can be identified by the fourth digit of the supplied hospital identifier (DSHOSPID) on each patient record:

None	General acute care

A=	Alcohol Dependency Unit
B=	Bone Marrow Transplant Unit
E=	Extended Care Unit
H=	Tacoma General/Group Health Combined
I=	Group Health only at Tacoma Hospital
P=	Psychiatric Unit
R=	Rehabilitation Unit
S=	Swing Bed Unit

Washington assigns this value to DSHOSPID based upon the type of unit discharging the patient.

DXn - Diagnosis

General Notes

The original value of the principal diagnosis (DX1), whether blank or coded, is retained in the first position of the diagnosis vector. Starting at the first secondary diagnosis (DX2), the diagnoses are shifted during HCUP processing to eliminate blank secondary diagnoses. For example, if DX2 and DX4 contain nonmissing diagnoses and DX3 is blank, then the value of DX4 is shifted into DX3. Secondary diagnoses are never shifted into the principal position (DX1).

Diagnoses are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). In the 1988-1997 data, a six months window (three months before and three months after) is allowed. Beginning in the 1998 data, a year window (six months before and six months after) is allowed. For example, the code for Single Liveborn changed from "V300 " to "V3000" as of October 1, 1989. Under HCUP validation procedures, "V300 " is classified as valid for discharges on December 31, 1989, and "V3000" is classified as valid for discharges on July 1, 1989. If the diagnosis is not left-justified, contains intermittent blanks, or is zero filled, then the diagnosis will be invalid.

Diagnoses are compared to the sex of the patient (EDX03 beginning in the 1998 data and ED1nn in the 1988-1997 data) and the patient's age (EAGE04 and EAGE05 beginning in the 1998 data and ED3nn and ED4nn in the 1988-1997 data) for checking the internal consistency of the record.

How invalid and inconsistent codes are handled varies by data year.

- Beginning in the 1998 data, invalid and inconsistent diagnoses are masked directly. Validity flags are not included on the HCUP record. Clinical Classifications Software (CCS) data elements are coded with respect to the diagnosis.

	Invalid Diagnosis	**Inconsistent Code**
The value of DXn	"invl"	"incn"
DXCCSn	Set to invalid (.A).	Set to inconsistent (.C)

- From 1988-1997 data, invalid and inconsistent diagnoses are retained on the record. Validity flags (DXVn) indicate invalid, inconsistent diagnosis codes. Clinical Classifications Software (CCS) data elements use the former name (DCCHPRn). The CCS was formerly known as the Clinical Classifications for Health Policy Research (CCHPR). The diagnosis related data elements are coded as follows:

	Invalid Diagnosis	**Inconsistent Code**
The value of DXn	Unchanged	Unchanged
DXVn	Set to 1	Set to inconsistent (.C)
DCCHPRn	Set to invalid (.A).	Retained (values 1-260)

The validity flags (DXVn) need to be used in connection with any analysis of the diagnoses (DXn).

Uniform Values			

Variable	Description	Value	Value Description
DXn	Diagnosis	annnn	Diagnosis code
		Blank	Missing
		invl	Invalid: beginning with 1998 data, EDX02
		incn	Inconsistent: beginning with 1998 data, EAGE04, EAGE05, EDX03

State Specific Notes

Arizona

Beginning with 1995 discharges, Arizona reports two "cause of injury" E-codes in separate variables. During HCUP processing, these E-codes are placed after the last non-missing diagnosis code if they are not already recorded as a secondary diagnosis.

Arizona reports some diagnosis codes with an explicit decimal point. The decimal point was removed during HCUP processing.

California

HIV Test Result Diagnoses

California law prohibits the release of HIV test results in patient-identifiable form to any outside party without the patient's consent. Therefore, records that include certain ICD-9-CM codes that indicate HIV test results were not included in the data supplied for HCUP. California eliminated all occurrences of these codes from the diagnosis fields and packed the diagnosis vectors to cover gaps from such removals.

The following ICD-9-CM codes were affected:

- From January 1988 to October 1, 1994, diagnosis codes of 044.x or 795.8 were removed by the data source prior to submitting data to HCUP.
- Beginning October 1, 1994, diagnosis codes of 795.71 or V08 were removed by the data source prior to submitting data to HCUP. These ICD-9-CM codes replaced the earlier codes.

HIV-related diagnoses 042.x and 043.x were unaffected.

The number of such diagnoses eliminated from the principal diagnosis position will be smaller than it otherwise might have been due to a practice in California that actively discourages the reporting of codes for HIV test results (044.x, 795.8, 795.71, and V08) as a principal diagnosis. During data editing, California flags discharges reporting one of these codes in the principal diagnosis position and then calls the submitting hospital to ask if the principal diagnosis should be changed. Hospitals have the option of deleting the code, changing it, or leaving it in place.

Shriner's Hospitals

Shriner's hospitals do not report diagnoses, procedures or total charges.

Psychiatric Diagnoses

Prior to 1995, some hospitals reported psychiatric diagnoses in DSM III which California then converted into ICD-9-CM diagnosis codes. The ICD-9-CM diagnosis codes are included in the HCUP database.

From 1995-1998, some psychiatric hospitals began submitting data for primary diagnosis according to DSM IV criteria. DSM IV codes are indistinguishable in appearance from ICD-9-CM codes but have substantially different meanings. Because of similarities in the coding structure, the source was unable to convert the DSM IV codes to ICD-9-CM codes. DSM IV codes may occur in the HCUP data. Psychiatric hospitals may be included in the California data; no documentation was available on the use of DSM IV codes in psychiatric units of acute care hospitals.

Beginning in 1999, DSM psychiatric codes are not accepted by OSHPD and are not present in the HCUP databases.

E-Codes

Beginning with 1990 discharges, the source reports five "cause of injury" E-codes as separate variables. During HCUP processing, E-codes were placed after the last non-missing diagnosis code.

California does not require the reporting of E-codes in the range E870-E879 (misadventures and abnormal reactions).

Hawaii

Hawaii reports one "cause of injury" E-code as a separate data element. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Iowa

Beginning in 1994, Iowa reports one "cause of injury" E-codes. Beginning in 1998, Iowa added one "place of injury" E-codes. During HCUP processing, these separately reported E-code variables are placed at the end of the diagnosis vector; since the vector is packed during processing to remove blanks, the position of the E-code for a specific discharge depends on the number of diagnoses reported.

Illinois

Illinois supplied diagnosis codes in a field of length 6. Only the first five characters contained in the left-justified source field were used to assign the HCUP diagnosis codes.

Massachusetts

Beginning in 1993, Massachusetts reported one "cause of injury" E-code. During HCUP processing, the separately reported E-code was placed after the last non-missing secondary diagnosis. E-codes can appear in other secondary diagnosis codes.

Maryland

Maryland reports "cause of injury" E-codes as a separate variable. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

Maryland supplied diagnosis codes in a field of length 7. Only the first five characters contained in the left-

justified source field were used to assign the HCUP diagnosis codes.

The last secondary diagnosis field on the source data was 9-filled instead of blank when no diagnosis was coded. During HCUP processing, the 9-filled diagnosis was set to blank.

New Jersey

Beginning with 1993 discharges, New Jersey reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Before 1994, the diagnosis codes provided by the state were right-padded with zeros (e.g., the diagnosis code ’436’ was supplied as ’43600’). For the HCUP database the following algorithm was used to validate the diagnosis codes:

Check the five-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1. If the five-digit code is valid, set DXn to the five-digit code and set DXVn = 0.
2. If the five-digit code is invalid and the fifth digit is a zero, create a four-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the four-digit code is valid, set DXn to the four-digit code and set DXVn = 0.
3. If the four-digit code is invalid and the fourth digit is a zero, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set DXn to the three-digit code and set DXVn = 0.
4. If the five-, four- and three-digit codes are invalid, save the original five-digit code and set the validity flag to indicate an invalid code (DXVn = 1).

New Jersey

In 1993 only. An error in HCUP processing caused invalid five-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digits created a valid code, then

- DXn was set to the original invalid five digit code,
- DXVn was set 0 to indicate a valid code,
- DCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601 may have been incorrectly assigned based on the stripped valid code.

New York

Beginning in 1993, New York reports "cause of injury" and "place of injury" E-codes. During HCUP processing, these separately reported E-codes were placed after the last nonmissing secondary diagnosis. When a "cause of injury" E-code in the range of E850.0-E869.9 or E880.0-E928.9 was reported, then a "place of injury" E-code was also reported. If the hospital stay involved the possibility of classifying more than one situation or event, only the single cause of injury, poisoning, or adverse effect that was most severe was reported.

Oregon

Prior to 1998, Oregon reports one "cause of injury" E-codes as a separate variable. Beginning in 1998. Oregon reports two "cause of injury" E-codes. During HCUP processing, these separately reported E-codes

are placed after the last non-missing secondary diagnosis.

Oregon supplied diagnosis codes in a field of length 6. Only the first five characters contained the diagnosis code and were used to assign the HCUP diagnosis codes.

Pennsylvania

Beginning with 1993 discharges, Pennsylvania reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Some of the diagnosis codes in the 1989 Pennsylvania data that were flagged as invalid (DXV=1) appear to be valid codes. These diagnosis fields have four digits followed by a fifth digit that is an unprintable null character. The presence of the null character invalidates these otherwise valid diagnosis codes. Only the 1989 Pennsylvania data are affected. The following list includes all diagnosis codes in the 1989 Pennsylvania data that are valid ICD-9-CM codes but are flagged as invalid because they include null characters.

Code	Frequency	Diagnosis
1000	929	Leptospirosis Icterohemmorrhagica
2800	93	Chronic Blood Loss Anemia
5600	89	Intussusception
3200	81	Hemophilus Meningitis
5800	61	Acute Proliferative Nephritis
0600	48	Sylvatic Yellow Fever
6200	29	Follicular Cyst of Ovary
2400	24	Simple Goiter
1600	11	Malignant Neoplasm of Nasal Cavities
2100	8	Benign Neoplasm of Lip
3201	3	Pneumococcal Meningitis
3202	3	Streptococcal Meningitis
3208	2	Bacterial Meningitis
5400	2	Acute Appendicitis with Peritonitis
0601	1	Urban Yellow Fever
2801	1	Iron Deficiency Anemic Dietary
6205	1	Torsion of Ovary
6208	1	Noninflammatory Disorders of Ovary

South Carolina

A small number of discharges explicitly included decimals in the diagnosis field, usually the decimal is implicit. This is problematic because South Carolina supplied diagnoses in a field of length 5. If decimals are included, then a valid 5-digit code would be truncated. For example, the diagnosis for unspecified sickle cell anemia "28260" would be incorrectly reported as "262.6". Prior to 1998, invalid diagnosis codes are marked by a validity flag (DXVn = 1). Beginning in 1998, invalid diagnosis codes are masked (Dxn = "invl").

Tennessee

Tennessee reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Utah

Utah reports one "cause of injury" E-code as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Virginia

Virginia reports one "external injury code" E-code as a separate data element. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Washington

Washington reported diagnosis codes in a field of length 6 for 1988-1992 and, beginning in 1993, in a field of length 7. Only the first five characters contain the diagnosis code and were used to assign the HCUP diagnosis code.

In 1988, Washington did not report "cause of injury" E-codes. From 1989-1992, Washington reports two "cause of injury" E-codes. Beginning in 1993, Washington reports only one "cause of injury" E-code. During HCUP processing, any separately reported E-code was placed after the last non-missing secondary diagnosis. Washington does not require hospitals to report E-codes in the range E870-E879 (misadventures and abnormal reactions) to the state data organization.

Wisconsin

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,
- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

Wisconsin reports one "cause of injury" E-code. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

DXCCSn - Clinical Classifications Software (CCS): diagnosis classification

General Notes

Clinical Classifications Software (CCS) consists of over 260 diagnosis categories. This system is based on ICD-9-CM codes. All diagnosis codes are classified.

DXCCSn is coded as follows:

- 1 to 259 if the diagnosis code (DXn) is valid by the HCUP criteria and not an E-code (External Causes of Injury and Poisoning). The HCUP criteria for diagnosis validation allows a year window (six months before and six months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.
- 2601-2621 if the diagnosis code (DXn) is a valid E-code by the HCUP criteria.
- DXCCSn is missing (.), if there is no diagnosis code (DXn = " ").
- DXCCSn is set to invalid (.A), if the diagnosis code (DXn) is invalid by the HCUP criteria (EDX02).
- DXCCSn is set to inconsistent (.C), if the diagnosis code (DXn) is inconsistent with age (EAGE04 and EAGE05) or sex of the patient (EDX03).

In HCUP databases before 1998, this data element is called DCCHPRn.

Labels

Labels for CCS categories are provided as an ASCII file in HCUP Tools: Labels and Formats.

Formats

Formats to label CCS categories are documented in HCUP Tools: Labels and Formats. A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters.

Uniform Values

Variable	Description	Value	Value Description
DXCCSn	Clinical Classifications Software (CCS): diagnosis classification	1-259	CCS Diagnosis Codes
		2601-2621	CCS E-code Class (beginning with 1998 data)
		.	No diagnosis code
		.A	Invalid diagnosis code: beginning with 1998 data, EDX02
		.C	Inconsistent: beginning with 1998 data, EAGE04, EAGE05, EDX03

State Specific Notes

None

FEMALE - Indicator of sex

General Notes

The sex of the patient (FEMALE) is provided by the data source. All non-male, non-female (e.g., "other") values are set to missing (.).

If FEMALE is inconsistent with diagnoses (EDX03) or procedures (EPR03), FEMALE is set to inconsistent (.C).

In HCUP databases before 1998, this data element is called SEX.

Uniform Values

Variable	Description	Value	Value Description
FEMALE	Indicator of sex	0	Male
		1	Female
		.	Missing
		.A	Invalid
		.C	Inconsistent, EDX03, EPR03

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.

Utah

The source value "E" for "Encrypted patient gender (confidential data)" is recoded to missing (FEMALE = .).

Utah encrypts the patient gender for the following two conditions:

1. Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25) and
2. Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

HOSPID - HCUP hospital identification number

General Notes

For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. The hospital entity as defined by HOSPID may differ from the data source hospital entity (DSHOSPID). For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa.

The HCUP hospital identifier is based on the AHA hospital identifier and is defined as:

- SSnnn, where SS = State FIPS Code, and
- nnn = hospital number unique to state.

HOSPID is missing for some hospitals because an AHA hospital identifier can not be determined. Hospitals may not be registered with the AHA or the source-provided information can not be matched to the AHA.

Uniform Values

Variable	Description	Value	Value Description
HOSPID	HCUP hospital identification number	HCUP hospital identification number	5(n)
		Missing	Blank

State Specific Notes

None

HOSPST - Hospital State postal code

General Notes

HOSPST indicates the hospital’s two-character state postal code (e.g., "CA" for California).

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
HOSPST	Hospital State postal code	Hospital State postal code	aa

State Specific Notes

None

HOSPSTCO - Hospital modified FIPS state/county code

General Notes

HOSPSTCO indicates the five-digit state and county modified FIPS code listed for that hospital in the American Hospital Association Annual Survey of Hospitals. Each hospital has only one unique state/county code. If multiple hospital units are in different counties, HOSPSTCO is the county code of the primary facility (as indicated by American Hospital Association Annual Survey information).

HOSPSTCO can be used to link HCUP data to any other data set that uses the modified FIPS county code, such as the Area Resource File and the American Hospital Association Annual Survey of Hospitals. In these modified FIPS county codes, Baltimore City is included in Baltimore County, St. Louis City in St. Louis County, and the independent cities of Virginia in the contiguous counties, Kalawao county, Hawaii is included in Maui County. The four Alaska Judicial Divisions are used as counties.

HOSPSTCO is missing for some hospitals because an AHA hospital identifier can not be determined. Hospitals may not be registered with the AHA or the source-provided information can not be matched to the AHA.

Uniform Values

Variable	Description	Value	Value Description
HOSPSTCO	Hospital modified FIPS state/county code	Hospital modified FIPS State/County code	5(n)
		Missing	Blank

State Specific Notes

None

KEY - Unique record identifier

General Notes

KEY contains a unique record identifier. Beginning in the 1998 data, all HCUP databases are sorted by KEY.

KEY can be used to link within a HCUP database, such as linking records in the Core and Charges files in the SID.

KEY can be used to link across HCUP databases within a data type, i.e., link records in the SID to records in the NIS.

KEY is a unique record identifier and not a person identifier. KEY cannot be used to link records between HCUP inpatient and ambulatory surgery files.

KEY replaces the database-specific record identifiers used in the 1988-1997 HCUP databases (SEQ, SEQ_SID, and SEQ_ASD).

Uniform Values

Variable	Description	Value	Value Description
KEY	Unique record identifier	14(n)	Unique record identifier

State Specific Notes

None

LOS - Length of stay, cleaned

General Notes

Length of stay (LOS) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained.

LOS is not equal to the calculated value in the following cases:

- LOS is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS is invalid (.A) if
  - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
  - - or -
  - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS is not present on the HCUP files. In the 1988-1997 data, LOS is retained on the HCUP files and is set to unavailable from source (.B).
- LOS is inconsistent (.C) if
  - LOS is negative (ELOS03 beginning in the 1998 data and ED011 in the 1988-1997 data),
  - Excessively long (ELOS04 beginning in the 1998 data and ED601 in the 1988-1997 data), or
  - Charges per day are unjustifiably low (ED911) or high (ED921).

Edit checks ED911 and ED921 are only performed on the 1988-1997 data. No charge per day edit checks are performed on the HCUP data beginning in the 1998 data.

Uniform Values

Variable	Description	Value	Value Description
LOS	Length of stay, cleaned	0 - 365	Days
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ELOS03, ELOS04; in 1988-1997 data, ED011, ED601, ED911n, ED921

State Specific Notes

Arizona

Beginning in 1995, the source reports same-day stays as zero days so the supplied length of stay was used to assign LOS when length of stay could not be calculated from dates. Prior to 1995, the reported length of stay was not used when LOS could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS.

Colorado

The reported length of stay was not used when LOS could not be calculated because Colorodo:

- coded same-day stays with the value 1 and
- subtracted days of absence

Connecticut

Length of stay could not be calculated from dates since Connecticut did not report full admission and discharge dates. During HCUP processing, the reported length of stay and a flag which indicates same-day stays were used to assign LOS.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS. Florida codes same-day stays as LOS=1; the HCUP standard coding of same-day stays is LOS=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the reported length of stay was not used when LOS could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Georgia

The reported length of stay was not used when LOS could not be calculated because Georgia coded same-day stays with a value of 1.

Hawaii

Only the calculated length of stay could be used to assign LOS because Hawaii did not supply reported length of stay.

Iowa

The reported length of stay was not used when LOS could not be calculated because Iowa coded same-day stays with a value of 1.

Illinois

The reported length of stay was not used when LOS could not be calculated because Illinois coded same-day stays with a value of 1.

Kansas

The reported length of stay was not used when LOS could not be calculated because Kansas coded same-day stays with a value of 1.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Maine

The supplied length of stay was not used when length of stay could not be calculated because Maine coded same-day stays with a value of 1.

Missouri

The reported length of stay was not used when LOS could not be calculated because Missouri coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

New York

In the 1988-1997 HCUP New York databases, LOS could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS. Beginning in the 1993 data, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS was assigned.

Beginning with the 1998 data, New York provided complete dates and LOS could be calculated.

Oregon

Prior to 1994, the reported length of stay was assigned to LOS if dates were not available. However, the coding of same day stay varies: some Oregon hospitals report discharges on the day of admission as one day stay (LOS=1), in addition to reporting same day stay as zero days (LOS=0).

Beginning in 1994, the reported length of stay was not used when LOS could not be calculated from dates because Oregon coded all same-day stays as one day (LOS=1).

South Carolina

The reported length of stay was not used when LOS could not be calculated because South Carolina coded same-day stays with a value of 1.

Tennessee

The reported length of stay was not used when LOS could not be calculated because Tennessee coded same-day stays with a value of 1 and subtracted days of absence from LOS.

Utah

The reported length of stay was not used when LOS could not be calculated because Utah coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when LOS could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Wisconsin

Only the calculated length of stay was used to assign LOS and LOS_X. For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin subtracted leave days and coded length of stay greater than 999 days as 999 days. Beginning with 1995, length of stay was not supplied.

LOS_X - Length of stay, uncleaned

General Notes

Length of stay (LOS_X) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained. LOS_X may contain negative or excessively large values.

LOS_X is not equal to the calculated value in the following cases:

- LOS_X is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS_X is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS_X is invalid (.A) if
  - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
  - - or -
  - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS_X is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS_X is not present on the HCUP files. In the 1988-1997 data, LOS_X is retained on the HCUP files and is set to unavailable from source (.B).

Uniform Values

Variable	Description	Value	Value Description
LOS_X	Length of stay, uncleaned	+/- 7,305	Days
		.	Missing
		.A	Invalid (nonumeric or out of range)
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Beginning in 1995, the source reports same-day stays as zero days so the supplied length of stay was used to assign LOS_X when length of stay could not be calculated from dates. Prior to 1995, the reported length of stay was not used when LOS_X could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS.

Colorado

The reported length of stay was not used when LOS_X could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Connecticut

Length of stay could not be calculated from dates since Connecticut did not report full admission and discharge dates. During HCUP processing, the reported length of stay and a flag which indicates same-day stays were used to assign LOS_X.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS_X. Florida codes same-day stays as LOS_X=1; the HCUP standard coding of same-day stays is LOS_X=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the supplied length of stay was not used when length of stay could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Georgia

The reported length of stay was not used when LOS_X could not be calculated because Georgia coded same-day stays with a value of 1.

Hawaii

Only the calculated length of stay could be used to assign LOS_X because Hawaii did not supply reported length of stay.

Iowa

The reported length of stay was not used when length of stay could not be calculated because Iowa coded same-day stays with a value of 1.

Illinois

The supplied length of stay was not used when length of stay could not be calculated because Illinois coded same-day stays with a value of 1.

Kansas

The reported length of stay was not used when length of stay could not be calculated because Kansas coded same-day stays with a value of 1.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and

- subtracted days of absence.

Maine

The supplied length of stay was not used when length of stay could not be calculated because Maine coded same-day stays with a value of 1.

Missouri

The reported length of stay was not used when LOS_X could not be calculated because Missouri coded same-day stays with a value of 1.

New York

In the 1988-1997 HCUP New York databases, LOS_X could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS_X. Beginning in the 1993 data, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS_X was assigned.

Beginning with the 1998 data, New York provided complete dates and LOS_X could be calculated.

Oregon

Prior to 1994, the reported length of stay was assigned to LOS_X if dates were not available. However, the coding of same day stay varies: some Oregon hospitals report discharges on the day of admission as one day stay (LOS_X=1), in addition to reporting same day stays as zero days (LOS_X=0).

Beginning in 1994, the reported length of stay was not used when length of stay could not be calculated from dates because Oregon coded all same-day stays as one day (LOS_X=1).

South Carolina

The reported length of stay was not used when LOS_X could not be calculated because South Carolina coded same-day stays with a value of 1.

Tennessee

The reported length of stay was not used when LOS_X could not be calculated because Tennessee coded same-day stays with a value of 1 and subtracted days of absence from LOS_X.

Utah

The reported length of stay was not used when LOS_X could not be calculated because Utah coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when length of stay could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Wisconsin

Only the calculated length of stay was used to assign LOS and LOS_X. For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin subtracted leave days and coded length of stay greater than 999 days as 999 days. Beginning with 1995, length of stay was not supplied.

MDC - MDC in effect on discharge date

General Notes

The Major Diagnostic Category appropriate for the date of discharge (MDC) is assigned by the HCFA DRG grouper during HCUP processing. Refer to the notes for the data element DRG for complete details.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
MDC	MDC in effect on discharge date	nn	MDC value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

MDC10 - MDC, Version 10

General Notes

The Major Diagnostic Category, Version 10 (MDC10) is assigned by the HCFA DRG Grouper algorithm during HCUP processing. Refer to the notes for the data element DRG10 for complete details.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
MDC10	MDC, Version 10	nn	MDC value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

MDC18 - MDC, Version 18

General Notes

The Major Diagnostic Category, Version 18 (MDC18) is assigned by the HCFA DRG Grouper algorithm during HCUP processing. Refer to the notes for the data element DRG18 for complete details.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values

Variable	Description	Value	Value Description
MDC18	MDC, Version 18	nn	MDC value

State Specific Notes

None

MDID_S - Synthetic attending physician number

General Notes

MDID_S contains a fixed-key (one-to-one) encryption of the supplied attending physician number (MDID), 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 MDID in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDID_S is the same.

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

Beginning with the 1993 NIS, 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 inpatient data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, no null characters were found in the 1994 identifiers, and they were rare in prior years.

Uniform Values

Variable	Description	Value	Value Description
MDID_S	Synthetic attending physician number	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal attending 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 attending physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The attending physician identification number 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 attending physician identification number (MDID_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 from the data source about the prevalence of this practice.

Florida

Florida reports state license numbers as physician identifiers. During HCUP processing, physician identifiers were encrypted (MDID_S).

Iowa

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

Maine

Maine provides state-specific encrypted physician identifiers that allow for tracking physicians across hospitals. During HCUP processing, physician identifiers were re-encrypted (MDID_S).

Maryland

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

Missouri

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. Missouri accepts Universal Physician Identification Numbers (UPINs), state license numbers, and hospital-assigned physician identification numbers as attending physician numbers (MDID_S). According to the source, the majority of physician identifiers are UPINs.

New Jersey

The coding of attending physician identification number (MDID_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 attending physician did not possess a valid New York state license number, the license number of the 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.

Oregon

Beginning in the 1997 data files, Oregon supplied the attending physician number (MDID_S). This identifier may not accurately track physicians across hospitals. Oregon encourages hospitals to use Universal Physician Identification Numbers (UPINs), but not all hospitals do. Information was not available from the data source about the prevalence of this practice.

Pennsylvania

Pennsylvania reports the state license number for attending physicians (MDID_S).

South Carolina

South Carolina reports six-character state license numbers as physician identifiers. When the source values were shorter than six characters, the HCUP value was padded to bring it into conformity with South Carolina's format.

Tennessee

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. Tennessee collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Tennessee prefers Universal Physician Identification Numbers (UPINs) but also accepts state license numbers.

Virginia

Virginia reports Universal Physician Identification Numbers (UPINs). During HCUP processing, physician identifiers were encrypted (MDID_S).

Washington

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.

Wisconsin

Beginning in 1995, physician identifiers were not reported in the source data.

Prior to 1995, the Wisconsin physician identifiers may not accurately track physicians across hospitals. Wisconsin collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Most hospitals provide Wisconsin Medical License Numbers, but Universal Physician Identification Numbers (UPINs) are provided by some hospitals.

Only doctors of medicine and osteopathy are coded in this field. If the primary responsibility for the patient is in the hands of a non-physician care giver, this field is missing. Examples of non-physician care givers include dentists, podiatrists, and nurse midwives.

NDX - Number of diagnoses on this discharge

General Notes

NDX indicates the total number of diagnoses (valid and invalid) coded on the discharge record. In assigning NDX, the principal diagnosis is included in the count, even if it is blank, so long as there is a secondary diagnosis present (see table below).

Value	Description
0	No diagnoses are coded on the record.
1	Only the principal diagnosis (DX1) is coded. All secondary diagnoses are blank.
2	One secondary diagnosis (DX2) is coded. The principal diagnosis (DX1) may be coded or blank.
3	The second and third diagnoses (DX2 and DX3) are coded. The principal diagnosis (DX1) may be coded or blank.
etc.	

A maximum of 15 diagnoses has been retained on a NIS inpatient record. States that provide fewer than 15 diagnoses have had the diagnosis vector padded with blank values. For example, if a state supplied 5 diagnoses, DX6 through DX15 are blank (" ") on all records from that state.

If an inpatient record from these states had more than 15 non-missing diagnoses, diagnoses in positions 16 through 30 were not included in the NIS file. If NDX is greater than 15, secondary diagnoses have been truncated from the record.

Since NDX can be greater than the number of diagnoses available on the inpatient record, caution needs to be taken when using NDX to loop through the diagnoses. A counter for the loop should not extend past 15. Programming code such as the following example SAS statement is needed to take this into account:

DO I = 1 to MIN(15,NDX); Followed by code to process all diagnoses. END;

Uniform Values

Variable	Description	Value	Value Description
NDX	Number of diagnoses on this discharge	0 - 30	Number of diagnoses

State Specific Notes

None

NEOMAT - Neonatal and/or maternal DX and/or PR

General Notes

NEOMAT identifies discharges with neonatal and/or maternal diagnoses and procedures.

Uniform Values			
Variable	**Description**	**Value**	**Value Description**
NEOMAT	Neonatal and/or maternal DX and/or PR	0	No neonatal or maternal diagnosis or procedure on record
		1	Maternal diagnosis or procedure on record
		2	Neonatal diagnosis on record
		3	Neonatal diagnosis and maternal diagnoses or procedures on the same record

State Specific Notes

None

NPR - Number of procedures on this discharge

General Notes

NPR indicates the total number of ICD-9-CM procedures (valid and invalid) coded on the discharge record. In assigning NPR, the principal procedure is included in the count, even if it is blank, so long as there is a secondary procedure present (see table below).

Value	Description
0	No procedures are coded on the record.
1	Only the principal procedure (PR1) is coded. All secondary procedures are blank.
2	One secondary procedure (PR2) is coded. The principal procedure (PR1) may be coded or blank.
3	The second and third procedures (PR2 and PR3) are coded. The principal procedure (PR1) may be coded or blank.
etc.	

A maximum of 15 procedures have been retained on a NIS inpatient record. States that provide fewer than 15 procedures have had the procedure vector padded with blank values. For example, if a state supplied 5 procedures, PR6 through PR15 are blank (" ") on all records from that state.

If an inpatient record from these states had more than 15 non-missing procedures, any procedures in positions 16 through 25 were not included in the NIS file. If NPR is greater than 15, secondary procedures have been truncated from the record.

Since NPR can be greater than the number of procedures available on the inpatient record, caution needs to be taken when using NPR to loop through the procedures. A counter for the loop should not extend past 15. Programming code such as the following example SAS statement is needed to take this into account:

DO I = 1 to MIN(15,NPR); Followed by code to process all procedures. END;

Uniform Values

Variable	Description	Value	Value Description
NPR	Number of procedures on this discharge	0 - 30	Number of procedures

State Specific Notes

Pennsylvania

For 1995-1996 data only, some discharges have NPR greater than 0, and yet all procedure codes are missing. This is due to constraints of the HCUP processor in handling CPT and HCPCS codes. Pennsylvania reports ICD-9-CM procedure codes on most of their discharges, but some use CPT and HCPCS procedure codes. CPT and HCPCS procedure codes could not be retained in the HCUP data because they are 5

characters and the HCUP procedure fields are 4 characters in length. Discharges with CPT and HCPCS procedure codes were processed by HCUP as follows:

- PRSYS identifies the procedure coding system as CPT or HCPCS.
- NPR is the number of non-missing CPT or HCPCS procedure codes supplied by Pennsylvania.
- The HCUP procedure codes are set to missing (PRn = blank).

In other years, CPT and HCPCS codes are either masked or were handled differently in other years. See the Pennsylvania note on procedures (PRn) for specific details.

PAY1 - Expected primary payer, uniform

General Notes

PAY1 indicates the expected primary payer (Medicare, Medicaid, private insurance, etc.). To ensure uniformity of coding across data sources, PAY1 combines detailed categories in the more general groups. For example,

- Medicare includes both fee-for-service and managed care Medicare patients.
- Medicaid includes both fee-for-service and managed care Medicaid patients.
- Private insurance (PAY1 = 3) includes Blue Cross, commercial carriers, and private HMOs and PPOs.
- Other (PAY1 = 6) includes Worker's Compensation, CHAMPUS, CHAMPVA, Title V, and other government programs.

In the 1988-1997 data, the data element PAY1_N provides more detailed categories for private insurance and other payers. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

The HCUP data element PAY1_X retains the expected primary payer as provided by the data source. The State Specific Notes for PAY1 include information on how the source values contained in the PAY1_X are recoded into the HCUP uniform values of PAY1.

If information on secondary or tertiary payers is provided by the data source, the coding of the associated HCUP variables (PAY2, PAY2_X, and PAY3_X) is included under the State Specific Notes for PAY1.

HCUP is in the process of defining two new uniform payer variables that identify HMO and PPO payers (HMOPPO1 and HMOPPO2). These variables are under development and are not yet available on the HCUP Nationwide Inpatient Sample (NIS).

Uniform Values

Variable	Description	Value	Value Description
PAY1	Expected primary payer, uniform	1	Medicare
		2	Medicaid
		3	Private insurance
		4	Self-pay
		5	No charge
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Arizona					
(Valid beginning in 1998)					
PAY1_X		PAY1		HMOPPO1	
Value	Description	Value	Description	Value	Description
05, 5	Medicare	1	Medicare	0	Neither HMO nor PPO
11	Medicare Risk	1	Medicare	1	HMO only
04	Arizona Health Care Cost Containment System (AHCCCS) Health Care Group	2	Medicaid	3	Mixture of HMO and PPO (or POS)
06	AHCCCS/Medicaid	2	Medicaid	0	Neither HMO nor PPO
01	Commercial (Indemnity)	3	Private Insurance	0	Neither HMO nor PPO
02	HMO	3	Private Insurance	1	HMO only
03, 3	PPO	3	Private Insurance	2	PPO only
00	Self pay	4	Self pay	.N	Not applicable
12	Charity	5	No charge	.N	Not applicable
07	CHAMPUS/MEDEXCEL	6	Other	.N	Not applicable
08	Children’s Rehab Services				
09	Worker’s Compensation				
10	Indian Health Services				
13	Foreign National				
14	Other				
15	Tobacco Tax (Beginning in 1998)				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Arizona			
(Valid from 1995-1997)			
PAY1_X		PAY1	
Value	Description	Value	Description
05, 5	Medicare	1	Medicare
11	Medicare Risk		
04	Arizona Health Care Cost Containment System (AHCCCS) Health Care Group	2	Medicaid

06	AHCCCS/Medicaid		
01	Commercial (Indemnity)	3	Private Insurance
02	HMO		
03, 3	PPO		
00	Self pay	4	Self pay
12	Charity	5	No charge
07	CHAMPUS/MEDEXCEL	6	Other
08	Children's Rehab Services		
09	Worker's Compensation		
10	Indian Health Services		
13	Foreign National		
14	Other		
15	Tobacco Tax (Beginning in 1998)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Arizona			
(Valid from 1989-1994)			
PAY1_X		**PAY1**	
Value	**Description**	**Value**	**Description**
3	Medicare	1	Medicare
4	AHCCCS/Medicaid	2	Medicaid
1	Commercial	3	Private Insurance
2	HMO/PHP/Blue Cross		
--		4	Self-pay
--		5	No charge
5	Other (self-pay, unknown, charity, etc.)	6	Other
Blank		.	Missing
Other Values		.A	Invalid

California

California					
(Valid beginning in 1999)					
PAY1_X		**PAY1**		**HMOPPO1**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
010	Medicare	1	Medicare	0	Fee for service (FFS)
011	Medicare (HMO)	1	Medicare	1	HMO only
	Medicare (Managed care -				

012	Other)	1	Medicare	2	PPO only
013	Medicare (fee for service)	1	Medicare	0	Fee for service (FFS)
020	Medi-Cal	2	Medi-Cal	0	Fee for service (FFS)
021	Medi-Cal (HMO)	2	Medi-Cal	1	HMO only
022	Medi-Cal (Managed care - Other)	2	Medi-Cal	2	PPO only
023	Medi-Cal (fee for service)	2	Medi-Cal	0	Fee for Service (FFS)
030	Private Coverage	3	Private insurance	0	Fee for Service (FFS)
031	Private Coverage (HMO)	3	Private insurance	1	HMO only
032	Private Coverage (Managed care - Other)	3	Private insurance	2	PPO only
033	Private Coverage (fee for service)	3	Private insurance	0	Fee for service (FFS)
08n, where n=0-3	Self-pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
04n, where n=0-3	Worker's Compensation	6	Other	.N	Not applicable
05n, where n=0-3	County Indigent Programs				
06n, where n=0-3	Other Government				
07n, where n=0-3	Other Indigent (includes charity care)				
09n, where n=0-3	Other				
0, 000	Not reported	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

The first two digits of PAY1_X describes the payer category (e.g., Medicare (01), Medi-Cal (02), Private coverage (03), Workers' Compensation (04), County Indigent Programs (05), Other Government (06), Other Indigent (07), Self Pay (08), and Other Payer (09)).

The third digit of PAY1_X describes the type of coverage (e.g., Knox-Keene (HMO)* or Medi-Cal County Organized Health Systems (MCOHS) plan (1), Managed Care Other (PPO, IPO, POS, etc.) (2), traditional coverage (fee for service) (3), and no coverage (0).

* HMOs are regulated in California under the Knox-Keene Health Care Service Plan Act of 1975.

California					
(Valid in 1998)					
PAY1_X		PAY1		HMOPPO1	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
01	Medicare (Even if HMO or PPO)	1	Medicare	.	Can not distinguish HMO/PPO from FFS
02	Medi-Cal (even if HMO or PPO)	2	Medicaid	.	Can not distinguish HMO/PPO from FFS
07	HMO	3	Private insurance	1	HMO only
08	PPO	3	Private insurance	2	PPO only
09	Private Insurance Company (not HMO, not PPO)	3	Private insurance	0	Fee for service (FFS)
10	Blue Cross/Blue Shield (not HMO, not PPO)	3	Private insurance	0	Fee for service (FFS)
11	Self-pay	4	Self-pay	.N	Not applicable
12	Charity	5	No charge	.N	Not applicable
13	No Charge				
03	Worker’s Compensation	6	Other	.N	Not applicable
04	County Indigent Programs				
05	CHAMPUS/CHAMPVA/VA				
06	Other Governmental				
14	Other Non-Governmental				
00, Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

California			
(Valid from 1995-1997)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
01	Medicare (Even if HMO or PPO)	1	Medicare
02	Medi-Cal (even if HMO or PPO)	2	Medicaid
07	HMO	3	Private insurance
08	PPO		
09	Private Insurance Company (not HMO, not PPO)		
10	Blue Cross/Blue Shield (not HMO, not PPO)		

11	Self-pay	4	Self-pay
12	Charity	5	No charge
13	No Charge		
03	Worker's Compensation	6	Other
04	County Indigent Programs		
05	CHAMPUS/CHAMPVA/VA		
06	Other Governmental		
14	Other Non-Governmental		
00, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

California			
(Valid from 1988-1994)			
PAY1_X		**PAY1**	
Value	**Description**	**Value**	**Description**
01	Medicare	1	Medicare
02	Medi-Cal	2	Medicaid
06	Blue Cross/Blue Shield	3	Private insurance
07	Insurance Company		
08	HMO/PHP		
09	Self-pay	4	Self-pay
10	No-charge (free charity, special research, or teaching)	5	No charge
04	Title V	6	Other
03	Workers' Compensation		
05, 12	Other government; Medically indigent services under Section 17000		
11	Other non-government		
Blank	**Valid before 1994:**	.	Missing
00	**Valid in 1994:**	.	Missing
Other Values		.A	Invalid

Colorado

Colorado					
(Valid beginning in 1998)					
PAY1_X		**PAY1**		**HMOPPO1**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
04	Medicare	1	Medicare	.	Can not distinguish HMO/PPO

05	Medicaid	2	Medicaid	.	Can not distinguish HMO/PPO
01	Blue Cross/Blue Shield	3	Private insurance	.	Can not distinguish HMO/PPO
02	Commercial Ins/Indemnity Plans/Self Insured	3	Private Insurance	0	Neither HMO nor PPO
03	Other Liability Ins/No Fault/Casualty	3	Private Insurance	0	Neither HMO nor PPO
08	HMO-PPO/Managed Care/Discounted	3	Private Insurance	3	Mixture of HMO and PPO
12	Self-Pay	4	Self-pay	.N	Not applicable
13	No Charge/Charity Research	5	No charge	.N	Not applicable
06	Worker's Comp	6	Other	.N	Not applicable
09	CHAMPUS				
11	Other Government				
14	Other				
15	Colorado Medically Indigent				
00, Blank	Missing	.	Missing	.	Missing
Any other values		.A	Invalid	.A	Invalid

Colorado			
(Valid from 1993-1997)			
PAY1_X		**PAY1**	
Value	**Description**	**Value**	**Description**
04	Medicare	1	Medicare
05	Medicaid	2	Medicaid
01	Blue Cross/Blue Shield	3	Private insurance
02, 03	Commercial insurance/Indemnity plans/Self-insured; Other liability insurance/No fault/ Casualty		
08	HMO-PPO/Managed Care/Discounted		
12	Self-Pay	4	Self-pay
13	No Charge/Charity/Research	5	No charge
06	Workers' Comp	6	Other
09	CHAMPUS		
11, 15	Other government; Colorado Medically Indigent		
14	1993-1996: Other		
Blank	Unknown	.	Missing
00	Starting in 1996: Missing	.	Missing
Other		.A	Invalid

Values			

Colorado			
(Valid from 1988-1992)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
3	Medicare	1	Medicare
4	Medicaid	2	Medicaid
7	Blue Cross/Blue Shield	3	Private insurance
8	Commercial insurance		
B	HMO-PPO		
1	Self-Pay	4	Self-pay
9	No Charge	5	No charge
5	Title V	6	Other
2	Workers' Compensation		
6	Other government		
A, C	Other; Other non-gov		
"00", blank	Unknown	.	Missing
Other Values		.A	Invalid

Connecticut

Connecticut					
(Valid beginning in 1998)					
PAY1_X and PAY2_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
C	Medicare	1	Medicare	0	Fee for Service (FFS)
M	Medicare managed care	1	Medicare	1	HMO Only
D	Medicaid	2	Medicaid	0	Fee for Service (FFS)
J	Medicaid managed care	2	Medicaid	1 (SID and SASD)	HMO Only
				3 (SEDD)	Mixture of HMO and PPO (or POS)
F	Commercial Insurance	3	Private insurance	0	Fee for Service (FFS)
G	Blue Cross (Blue Cross PPOs are coded as PPOs, value "T")	3	Private insurance	0	Fee for Service (FFS)
S	HMO	3	Private	1	HMO only

			insurance		
T	PPO	3	Private insurance	2	PPO only
A	Self-pay	4	Self-pay	.N	Not applicable
R	No charge	5	No charge	.N	Not applicable
B	Worker's Comp	6	Other	.N	Not applicable
E	Federal Program				
H	Champus				
I	Other				
Q	Title V				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Connecticut			
(Valid from 1993-1997)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
C, M (1997 only)	Medicare	1	Medicare
D	Medicaid	2	Medicaid
G	Blue Cross	3	Private Insurance
F, T	Commercial Insurance: PPO		
S	HMO		
A	Self-pay	4	Self-pay
R	No charge	5	No charge
Q	Title V	6	Other
B	Workers' Compensation		
H	CHAMPUS		
E	Other federal programs		
I	Other		
Blank		.	Missing
Other Values		.A	Invalid

Florida

Florida					
(Valid beginning in 1998)					
PAY1_X		**PAY1**		**HMOPPO1**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
A	Medicare	1	Medicare	0	Fee for service

					(FFS)
B	Medicare HMO	1	Medicare	1	HMO only
C	Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
D	Medicaid HMO	2	Medicaid	1	HMO Only
E	Commercial Insurance	3	Private Insurance	0	Fee for service (FFS)
F	Commercial HMO	3	Private Insurance	1	HMO Only
G	Commercial PPO	3	Private Insurance	2	PPO only
L	Self pay/Under-insured (No third party coverage or less than 30% estimated insurance coverage)	4	Self-pay	.N	Not applicable
N	Charity	5	No charge	.N	Not applicable
H	Worker's Compensation	6	Other	.N	Not applicable
I	Champus				
J	VA				
K	Other State/Local Government				
M	Other				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Florida			
(Valid for 1997)			
PAY1_X		**PAY1**	
Value	**Description**	**Value**	**Description**
A, B	Medicare, Medicare HMO	1	Medicare
C, D	Medicaid, Medicaid HMO	2	Medicaid
E, G	Commercial insurance (includes self-insured and Blue Cross/Blue Shield); Commercial PPO	3	Private Insurance
F	Commercial HMO		
L	Self-pay, charity, underinsured	4	Self-pay
N	Charity	5	No charge
H	Workers' Compensation	6	Other
I, J	CHAMPUS; VA		
K	Other state/local government		
M	Other		

Blank		.	Missing
Other values		.A	Missing

Florida			
(Valid from 1992-1996)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
A, B	Medicare, Medicare HMO	1	Medicare
C, D	Medicaid, Medicaid HMO	2	Medicaid
E, G	Commercial insurance (includes self-insured and Blue Cross/Blue Shield); Commercial PPO	3	Private Insurance
F	Commercial HMO		
L	Self-pay, charity, underinsured	4	Self-pay
--		5	No charge
H	Workers' Compensation	6	Other
I, J	CHAMPUS; VA		
K	Other state/local government		
M	Other		
Blank		.	Missing
Other values		.A	Invalid

Florida			
(Valid from 1988-1991)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
A	Medicare	1	Medicare
C	Medicaid	2	Medicaid
E	Commercial insurance (includes self-insured and Blue Cross/Blue Shield)	3	Private Insurance
--		4	Self-pay
--		5	No charge
M	Other	6	Other
Blank		.	Missing
Other values		.A	Invalid

Georgia

Georgia					
(Valid beginning in 1998)					
PAY1_X		PAY1		HMOPPO1	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
M	Medicare	1	Medicare	0	Neither HMO nor PPO
U	Medicare Managed Care	1	Medicare	1	HMO only
D	Medicaid	2	Medicaid	0	Neither HMO nor PPO
A	Medicaid Managed Care	2	Medicaid	1	HMO only
F	Medicaid Applicants	2	Medicaid	0	Neither HMO nor PPO
G	Georgia Better Health	2	Medicaid	0	Neither HMO nor PPO
B	Blue Cross/Blue Shield	3	Private Insurance	.	Can not distinguish HMO/PPOS from FFS
H	HMO	3	Private Insurance	1	HMO only
I	Commercial Insurance	3	Private Insurance	0	Neither HMO nor PPO
K	Other Non-Specific Managed Care	3	Private Insurance	1	HMO only
X	PPO	3	Private Insurance	2	PPO only
6	POS (Point of Service)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
P	Self-pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
C	Champus	6	Other	.N	Not applicable
E	County or State				
N	Other Government Assistance				
W	Workers Compensation				
O, S, Y, Z, 8, Blank	Unknown, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Georgia			
(Valid for 1997)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**

M	Medicare	1	Medicare
D	Medicaid	2	Medicaid
B	Blue Cross and Blue Shield	3	Private Insurance
I, S	Other Insurance Companies; Self Insured		
H	HMO-PPO		
P	Self-pay	4	Self-pay
Z	Free	5	No charge
W	Workers' Comp	6	Other
C	CHAMPUS		
E, N	Other Government		
L, O	Other		
3, 5, A, F, G, J, K, Y	Unknown	.	Missing
Other values		.A	Invalid

Hawaii

Hawaii					
(Valid beginning in 1998)					
PAY1_X		**PAY1**		**HMOPPO1**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
1	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
2	Medicaid	2	Medicaid	0	Neither HMO nor PPO
13	QUEST	2	Medicaid	1	HMO only
4	HMSA (Blue Cross/Blue Shield affiliate that provides HMO, PPO and Fee for Service plans)	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
5	Kaiser	3	Private Insurance	1	HMO only
6	Other Insurance	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
8	No Fault	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
7	Self pay	4	Self pay	.N	Not applicable
--		5	No charge	.N	Not applicable
9	Worker's Compensation	6	Other	.N	Not applicable
10	CHAMPUS/VA/Other Government				
12	Department of Defense				
11,					

Blank	Unknown, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Hawaii			
(Valid from 1996-1997)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
"Medicare"	Medicare	1	Medicare
"Medicaid", "SHIP", "Quest"	Medicaid; SHIP; Quest	2	Medicaid
"Other Insurance", "HMSA", "No Fault"	Other Insurance, HMSA, No Fault	3	Private Insurance
"Kaiser"	Kaiser		
"Self Pay"	Self-pay	4	Self-pay
--		5	No charge
"Workers Comp"	Worker's Comp	6	Other
"Champus", "DOD"	CHAMPUS/VA/Other Government; Department of Defense		
"Unknown", Blank	Unknown	.	Missing
Other values		.A	Invalid

Iowa

Iowa					
(Valid beginning in 1998)					
PAY1_X		PAY1		HMOPPO1	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
01	Medicare (Title 18)	1	Medicare	0	Neither HMO or PPO
11	Medicare Managed Care (Presently no predominant plans in Iowa)	1	Medicare	1	HMO only
02	Medicaid (Title 19)	2	Medicaid	0	Neither HMO nor PPO
12	Medicaid Managed Care (e.g., Medipass, Heritage National, Care Choices, Principal Health Care)	2	Medicaid	3	Mixture of HMO and PPO (or POS)
06	Blue Cross (e.g., Blue Cross Alliance Select should be recorded as PPO; Blue Cross Unity Choice should be recorded as HMO)	3	Private Insurance	0	Neither HMO nor PPO
07	Commercial (private or group plans other than HMO, PPO, ODS)	3	Private Insurance	0	Neither HMO nor PPO

13	HMO (e.g., Care Choices, Medical Associates Health Plan, Inc., Principal Health Care of Iowa, Heritage National Healthplan, Inc., John Deere Family Health Plan, Principal Health Care of Nebraska, United Healthcare of the Midlands, Unity Choice)	3	Private Insurance	1	HMO only
14	PPO (e.g., Alliance Select, Healthcare Preferred, Plaines Health Network)	3	Private Insurance	2	PPO only
15	Organized Delivery Systems (ODS) (e.g., SecureCare of Iowa)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
08	Self-pay (the patient has no insurance, is ineligible for governmental assistance and is not a "no charge" patient)	4	Self-pay	.N	Not applicable
10	No charge	5	No charge	.N	Not applicable
03	Other State (including State Papers)	6	Other	.N	Not applicable
04	County				
05	CHAMPUS				
09	Workers Compensation				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Iowa			
(Valid from 1991-1997)			
PAY1_X		**PAY1**	
Value	**Description**	**Value**	**Description**
01	Medicare (Title 18)	1	Medicare
02	Medicaid (Title 19)	2	Medicaid
06	Blue Cross (of Iowa, Western Iowa, or other state Blue Cross plans)	3	Private Insurance
08	Self-pay or relative	4	Self-pay
--		5	No charge
09	Workers' Compensation	6	Other
03, 04, 05	Other state; county (including state papers); Other federal government (including CHAMPUS, Veterans, Title V, Railroad, Hill-Burton, Crippled Children, etc.)		
Blank		.	Missing
Other Values		.A	Invalid

Iowa			
(Valid from 1988-1990)			
PAY1_X		PAY1	
Value	Description	Value	Description
01	Medicare (Title 18)	1	Medicare
02	Medicaid (Title 19)	2	Medicaid
06	Blue Cross (of Iowa, Western Iowa, or other state Blue Cross plans)	3	Private Insurance
07	Commercial (private or group)		
08	Self-pay or relative	4	Self-pay
--		5	No charge
09	Workers' Compensation	6	Other
03, 04, 05	Other state government; Other county government; Other federal government		
10	Other non-government		
Blank		.	Missing
Other Values		.A	Invalid

Illinois

Illinois					
(Valid beginning in 1998)					
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	Description	Value	Description	Value	Description
A98910	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO
B98916	Illinois Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO
B98917	Other Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO
Cnnn, where nnn is a 3-digit number	Blue Cross Insurance	3	Private Insurance	.	Cannot distinguish HMO/PPO
Cnnnnnnnnn, where nnnnnnnnn is a 9-digit number	Commercial Insurance (may include TPA and Worker's Compensation coverage)	3	Private Insurance	.	Cannot distinguish HMO/PPO
C98920	Other Commercial Insurance	3	Private Insurance	.	Cannot distinguish HMO/PPO

Dnnnnnnnnn, where nnnnnnnnn is a 9-digit number	Commercial HMO	3	Private Insurance	1	HMO only
Ennnnnnnnn, where nnnnnnnnn is a 9-digit number	Self-administered or Self-insured plans	3	Private Insurance	.	Cannot distinguish HMO/PPO
E98930	Other Self-administered or Self-insured plans	3	Private Insurance	.	Cannot distinguish HMO/PPO
F98918	Self-pay	4	Self-pay	.N	Not applicable
H98912	Charity	5	No charge	.N	Not applicable
H98913	Hill Burton Free Care				
H98911	Black Lung	6	Other	.N	Not applicable
H98914	CHAMPUS				
H98915	CHAMPVA				
H98919	Miscellaneous				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Primary, secondary, and tertiary expected payer information was provided in two fields: a one character payer category ("A" through "H") and detailed payer identifier of 3, 5, or 9 digits. The 3-digit identifiers refer to Blue Cross plans, but no source documentation was available to link the 3-digit identifier to a Blue Cross plan name. The 9-digit identifiers refer to commercial, HMO, and self-administered plans, but no source documentation was available to link the 9-digit identifier to a plan name. The Illinois Department of Insurance may have a list of the plan names for the 9-digit codes. All 5-digit identifiers were named. This information is included in the above table.

The one-character payer category and the detailed payer identifier were concatenated together to create the HCUP variables PAY1_X, PAY2_X, and PAY3_X.

During HCUP processing, PAY1/PAY2 and HMOPPO1/HMOPPO2 were assigned using the first character of PAY1_X/PAY2_X (e.g., "A", "B", "C", etc.) with the following exception. When PAY1_X/PAY2_X started with "H", PAY1/PAY2 and HMOPPO1/HMOPPO2 were assigned using the 6 character code.

Illinois			
(Valid from 1995-1997)			
PAY1_X, PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
A98910	Medicare	1	Medicare
B98916	Illinois Medicaid	2	Medicaid
B98917	Other Medicaid	2	Medicaid
Cnnn, where nnn is a 3-			

digit number	Blue Cross Insurance	3	Private Insurance
Cnnnnnnnnn, where nnnnnnnnn is a 9-digit number	Commercial Insurance (may include TPA and Worker's Compensation coverage)		
C98920	Other Commercial Insurance		
Dnnnnnnnnn, where nnnnnnnnn is a 9-digit number	Commercial HMO		
Ennnnnnnnn, where nnnnnnnnn is a 9-digit number	Self-administered or Self-insured plans		
E98930	Other Self-administered or Self-insured plans		
F98918	Self-pay	4	Self-pay
H98912	Charity	5	No charge
H98913	Hill Burton Free Care		
H98911	Black Lung	6	Other
H98914	CHAMPUS		
H98915	CHAMPVA		
H98919	Miscellaneous		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Primary, secondary, and tertiary expected payer information was provided in two fields: a one character payer category ("A" through "H") and detailed payer identifier of 3, 5, or 9 digits. The 3-digit identifiers refer to Blue Cross plans, but no source documentation was available to link the 3-digit identifier to a Blue Cross plan name. The 9-digit identifiers refer to commercial, HMO, and self-administered plans, but no source documentation was available to link the 9-digit identifier to a plan name. The Illinois Department of Insurance may have a list of the plan names for the 9-digit codes. All 5-digit identifiers were named. This information is included in the above table.

The one-character payer category and the detailed payer identifier were concatenated together to create the HCUP variables PAY1_X, PAY2_X, and PAY3_X.

During HCUP processing, PAY1/PAY2 were assigned using the first character of PAY1_X/PAY2_X (e.g., "A", "B", "C", etc.) with the following exception. When PAY1_X/PAY2_X started with "H", PAY1/PAY2 were assigned using the 6 character code.

Illinois			
(Valid from 1993-1994)			
PAY1_X, PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
A	Medicare	1	Medicare

B	Medicaid	2	Medicaid
C, E	Commercial, PPO; Self-administered	3	Private Insurance
D	HMO		
F	Self-pay	4	Self-pay
--		5	No charge
H	Other	6	Other
Blank		.	Missing
Other Values		.A	Invalid

Illinois			
(Valid from 1988-1992)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
98910	Medicare	1	Medicare
98916	Illinois Medicaid	2	Medicaid
98917	Other Medicaid		
3-digit codes	Blue Cross Insurance	3	Private Insurance
061055955	HMO/PHP	3	Private Insurance
232312490	HMO/PHP	3	Private Insurance
237137598	HMO/PHP	3	Private Insurance
361236610	HMO/PHP	3	Private Insurance
362171705	HMO/PHP	3	Private Insurance
362302593	HMO/PHP	3	Private Insurance
362748320	HMO/PHP	3	Private Insurance
362835382	HMO/PHP	3	Private Insurance
362858588	HMO/PHP	3	Private Insurance
363050287	HMO/PHP	3	Private Insurance
363156930	HMO/PHP	3	Private Insurance
363208585	HMO/PHP	3	Private Insurance
363232147	HMO/PHP	3	Private Insurance
363242084	HMO/PHP	3	Private Insurance
363251800	HMO/PHP	3	Private Insurance
363257067	HMO/PHP	3	Private Insurance
363261533	HMO/PHP	3	Private Insurance
363280214	HMO/PHP	3	Private Insurance
363290114	HMO/PHP	3	Private Insurance
363293099	HMO/PHP	3	Private Insurance
363300107	HMO/PHP	3	Private Insurance

363303922	HMO/PHP	3	Private Insurance
363303927	HMO/PHP	3	Private Insurance
363333675	HMO/PHP	3	Private Insurance
363334929	HMO/PHP	3	Private Insurance
363346492	HMO/PHP	3	Private Insurance
363357619	HMO/PHP	3	Private Insurance
363359925	HMO/PHP	3	Private Insurance
363363036	HMO/PHP	3	Private Insurance
363379945	HMO/PHP	3	Private Insurance
363385638	HMO/PHP	3	Private Insurance
363387762	HMO/PHP	3	Private Insurance
363410844	HMO/PHP	3	Private Insurance
363426222	HMO/PHP	3	Private Insurance
363447577	HMO/PHP	3	Private Insurance
363464332	HMO/PHP	3	Private Insurance
363513970	HMO/PHP	3	Private Insurance
363576982	HMO/PHP	3	Private Insurance
36361797l	HMO/PHP	3	Private Insurance
363617971	HMO/PHP	3	Private Insurance
363784962	HMO/PHP	3	Private Insurance
363807756	HMO/PHP	3	Private Insurance
363837523	HMO/PHP	3	Private Insurance
363864486	HMO/PHP	3	Private Insurance
371076964	HMO/PHP	3	Private Insurance
371105481	HMO/PHP	3	Private Insurance
371139917	HMO/PHP	3	Private Insurance
371153402	HMO/PHP	3	Private Insurance
371190216	HMO/PHP	3	Private Insurance
371192892	HMO/PHP	3	Private Insurance
371216698	HMO/PHP	3	Private Insurance
371221007	HMO/PHP	3	Private Insurance
371241037	HMO/PHP	3	Private Insurance
371260731	HMO/PHP	3	Private Insurance
376000511	HMO/PHP	3	Private Insurance
421172640	HMO/PHP	3	Private Insurance
421282065	HMO/PHP	3	Private Insurance
431131852	HMO/PHP	3	Private Insurance
431141117	HMO/PHP	3	Private Insurance
431361841	HMO/PHP	3	Private Insurance
431372307	HMO/PHP	3	Private Insurance

431386495	HMO/PHP	3	Private Insurance
541252797	HMO/PHP	3	Private Insurance
611013183	HMO/PHP	3	Private Insurance
611056884	HMO/PHP	3	Private Insurance
741844335	HMO/PHP	3	Private Insurance
953762261	HMO/PHP	3	Private Insurance
954053288	HMO/PHP	3	Private Insurance
963762261	HMO/PHP	3	Private Insurance
98920	Other commercial insurance	3	Private Insurance
98930	Other self-administered or self-insured plans	3	Private Insurance
98918	Self-pay	4	Self-pay
98912	Charity	5	No charge
98913	Hill Burton Free Care	5	No Charge
020140690	Workers’ Compensation	6	Other
020172170	Workers’ Compensation	6	Other
020177030	Workers’ Compensation	6	Other
020304627	Workers’ Compensation	6	Other
020308052	Workers’ Compensation	6	Other
020311919	Workers’ Compensation	6	Other
020342937	Workers’ Compensation	6	Other
020349547	Workers’ Compensation	6	Other
030316876	Workers’ Compensation	6	Other
041027270	Workers’ Compensation	6	Other
041282020	Workers’ Compensation	6	Other
041288420	Workers’ Compensation	6	Other
041543470	Workers’ Compensation	6	Other
041590940	Workers’ Compensation	6	Other
041924000	Workers’ Compensation	6	Other
042177185	Workers’ Compensation	6	Other
042475442	Workers’ Compensation	6	Other
042656602	Workers’ Compensation	6	Other
042680300	Workers’ Compensation	6	Other
042739160	Workers’ Compensation	6	Other
042794993	Workers’ Compensation	6	Other
042974375	Workers’ Compensation	6	Other
043058503	Workers’ Compensation	6	Other
043058504	Workers’ Compensation	6	Other
046017710	Workers’ Compensation	6	Other
050303803	Workers’ Compensation	6	Other
050393243	Workers’ Compensation	6	Other

060237820	Workers' Compensation	6	Other
060291290	Workers' Compensation	6	Other
060294398	Workers' Compensation	6	Other
060303275	Workers' Compensation	6	Other
060303520	Workers' Compensation	6	Other
060336212	Workers' Compensation	6	Other
060383030	Workers' Compensation	6	Other
060464510	Workers' Compensation	6	Other
060480695	Workers' Compensation	6	Other
060529570	Workers' Compensation	6	Other
060566050	Workers' Compensation	6	Other
060640218	Workers' Compensation	6	Other
060732738	Workers' Compensation	6	Other
060848755	Workers' Compensation	6	Other
060876835	Workers' Compensation	6	Other
060907370	Workers' Compensation	6	Other
060949141	Workers' Compensation	6	Other
061008026	Workers' Compensation	6	Other
061008792	Workers' Compensation	6	Other
061010609	Workers' Compensation	6	Other
061024360	Workers' Compensation	6	Other
061053492	Workers' Compensation	6	Other
061055955	Workers' Compensation	6	Other
061067463	Workers' Compensation	6	Other
061092819	Workers' Compensation	6	Other
061117063	Workers' Compensation	6	Other
061182357	Workers' Compensation	6	Other
061206728	Workers' Compensation	6	Other
061222527	Workers' Compensation	6	Other
061325038	Workers' Compensation	6	Other
066032187	Workers' Compensation	6	Other
066033504	Workers' Compensation	6	Other
066033509	Workers' Compensation	6	Other
066105395	Workers' Compensation	6	Other
131675535	Workers' Compensation	6	Other
131941868	Workers' Compensation	6	Other
131941984	Workers' Compensation	6	Other
131963495	Workers' Compensation	6	Other
131963496	Workers' Compensation	6	Other
131988169	Workers' Compensation	6	Other

132559805	Workers’ Compensation	6	Other
132611663	Workers’ Compensation	6	Other
132653231	Workers’ Compensation	6	Other
132661002	Workers’ Compensation	6	Other
132669000	Workers’ Compensation	6	Other
132673100	Workers’ Compensation	6	Other
132758523	Workers’ Compensation	6	Other
132781282	Workers’ Compensation	6	Other
132791458	Workers’ Compensation	6	Other
132832845	Workers’ Compensation	6	Other
135277930	Workers’ Compensation	6	Other
135283360	Workers’ Compensation	6	Other
135303710	Workers’ Compensation	6	Other
135316370	Workers’ Compensation	6	Other
135339725	Workers’ Compensation	6	Other
135358230	Workers’ Compensation	6	Other
135379820	Workers’ Compensation	6	Other
135459190	Workers’ Compensation	6	Other
135460208	Workers’ Compensation	6	Other
135481330	Workers’ Compensation	6	Other
135539046	Workers’ Compensation	6	Other
135540698	Workers’ Compensation	6	Other
135616275	Workers’ Compensation	6	Other
135617450	Workers’ Compensation	6	Other
135669461	Workers’ Compensation	6	Other
136081895	Workers’ Compensation	6	Other
136104845	Workers’ Compensation	6	Other
136107326	Workers’ Compensation	6	Other
136108722	Workers’ Compensation	6	Other
150476880	Workers’ Compensation	6	Other
156020948	Workers’ Compensation	6	Other
160366830	Workers’ Compensation	6	Other
220731810	Workers’ Compensation	6	Other
221608585	Workers’ Compensation	6	Other
221708002	Workers’ Compensation	6	Other
221721944	Workers’ Compensation	6	Other
221721950	Workers’ Compensation	6	Other
221964135	Workers’ Compensation	6	Other
221964136	Workers’ Compensation	6	Other
222005057	Workers’ Compensation	6	Other

222053189	Workers’ Compensation	6	Other
222227328	Workers’ Compensation	6	Other
222227331	Workers’ Compensation	6	Other
222342710	Workers’ Compensation	6	Other
230342560	Workers’ Compensation	6	Other
230580680	Workers’ Compensation	6	Other
230723970	Workers’ Compensation	6	Other
230959220	Workers’ Compensation	6	Other
230961349	Workers’ Compensation	6	Other
231330959	Workers’ Compensation	6	Other
231471444	Workers’ Compensation	6	Other
231502700	Workers’ Compensation	6	Other
231614367	Workers’ Compensation	6	Other
231620527	Workers’ Compensation	6	Other
231624911	Workers’ Compensation	6	Other
231641984	Workers’ Compensation	6	Other
231642962	Workers’ Compensation	6	Other
231740414	Workers’ Compensation	6	Other
231742051	Workers’ Compensation	6	Other
231892289	Workers’ Compensation	6	Other
231903575	Workers’ Compensation	6	Other
232182777	Workers’ Compensation	6	Other
232640501	Workers’ Compensation	6	Other
232643432	Workers’ Compensation	6	Other
250410420	Workers’ Compensation	6	Other
250687550	Workers’ Compensation	6	Other
251118791	Workers’ Compensation	6	Other
310396250	Workers’ Compensation	6	Other
310501234	Workers’ Compensation	6	Other
310542366	Workers’ Compensation	6	Other
310708754	Workers’ Compensation	6	Other
310826946	Workers’ Compensation	6	Other
310926059	Workers’ Compensation	6	Other
310970750	Workers’ Compensation	6	Other
311160863	Workers’ Compensation	6	Other
311241230	Workers’ Compensation	6	Other
314177100	Workers’ Compensation	6	Other
314177110	Workers’ Compensation	6	Other
314316080	Workers’ Compensation	6	Other
314423946	Workers’ Compensation	6	Other

340368340	Workers' Compensation	6	Other
340438190	Workers' Compensation	6	Other
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341172650	Workers' Compensation	6	Other
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341532771	Workers' Compensation	6	Other
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346516838	Workers' Compensation	6	Other
350145400	Workers' Compensation	6	Other
350198580	Workers' Compensation	6	Other
350293728	Workers' Compensation	6	Other
350293730	Workers' Compensation	6	Other
350410010	Workers' Compensation	6	Other
350410420	Workers' Compensation	6	Other
350913391	Workers' Compensation	6	Other
350988041	Workers' Compensation	6	Other
351044900	Workers' Compensation	6	Other
351288885	Workers' Compensation	6	Other
351372324	Workers' Compensation	6	Other
351492884	Workers' Compensation	6	Other
351495207	Workers' Compensation	6	Other
351495208	Workers' Compensation	6	Other
351524574	Workers' Compensation	6	Other
356018566	Workers' Compensation	6	Other
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360719665	Workers' Compensation	6	Other
360727430	Workers' Compensation	6	Other
360727470	Workers' Compensation	6	Other
360810360	Workers' Compensation	6	Other
360901240	Workers' Compensation	6	Other
361022580	Workers' Compensation	6	Other
361236610	Workers' Compensation	6	Other
361404320	Workers' Compensation	6	Other
361410470	Workers' Compensation	6	Other
361412255	Workers' Compensation	6	Other
361475332	Workers' Compensation	6	Other
361649210	Workers' Compensation	6	Other
361877247	Workers' Compensation	6	Other
361999760	Workers' Compensation	6	Other

362114545	Workers' Compensation	6	Other
362349119	Workers' Compensation	6	Other
362403971	Workers' Compensation	6	Other
362467238	Workers' Compensation	6	Other
362489372	Workers' Compensation	6	Other
362490086	Workers' Compensation	6	Other
362512064	Workers' Compensation	6	Other
362542404	Workers' Compensation	6	Other
362545393	Workers' Compensation	6	Other
362594678	Workers' Compensation	6	Other
36260579	Workers' Compensation	6	Other
362661515	Workers' Compensation	6	Other
362661954	Workers' Compensation	6	Other
362663083	Workers' Compensation	6	Other
362667627	Workers' Compensation	6	Other
362674180	Workers' Compensation	6	Other
362678778	Workers' Compensation	6	Other
362690333	Workers' Compensation	6	Other
362694846	Workers' Compensation	6	Other
362704643	Workers' Compensation	6	Other
362704802	Workers' Compensation	6	Other
362705935	Workers' Compensation	6	Other
362709121	Workers' Compensation	6	Other
362711653	Workers' Compensation	6	Other
362719165	Workers' Compensation	6	Other
362722478	Workers' Compensation	6	Other
362738349	Workers' Compensation	6	Other
362742183	Workers' Compensation	6	Other
362748320	Workers' Compensation	6	Other
362748795	Workers' Compensation	6	Other
362753986	Workers' Compensation	6	Other
362755546	Workers' Compensation	6	Other
362756532	Workers' Compensation	6	Other
362759195	Workers' Compensation	6	Other
362760101	Workers' Compensation	6	Other
362763106	Workers' Compensation	6	Other
362781080	Workers' Compensation	6	Other
362789296	Workers' Compensation	6	Other
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362797074	Workers' Compensation	6	Other

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362874262	Workers' Compensation	6	Other
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362944577	Workers' Compensation	6	Other
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362999368	Workers' Compensation	6	Other
362999370	Workers' Compensation	6	Other
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363028761	Workers' Compensation	6	Other
363030511	Workers' Compensation	6	Other
363040078	Workers' Compensation	6	Other
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363078103	Workers' Compensation	6	Other
363101262	Workers' Compensation	6	Other
363105508	Workers' Compensation	6	Other
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363141762	Workers' Compensation	6	Other
363155373	Workers' Compensation	6	Other
363186541	Workers' Compensation	6	Other
363230348	Workers' Compensation	6	Other
363312218	Workers' Compensation	6	Other
363316692	Workers' Compensation	6	Other
363341779	Workers' Compensation	6	Other
363423817	Workers' Compensation	6	Other
363426425	Workers' Compensation	6	Other
363432551	Workers' Compensation	6	Other
363441652	Workers' Compensation	6	Other
363468793	Workers' Compensation	6	Other
363492700	Workers' Compensation	6	Other
363510294	Workers' Compensation	6	Other
363522250	Workers' Compensation	6	Other
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363530161	Workers' Compensation	6	Other
363579407	Workers' Compensation	6	Other
363585968	Workers' Compensation	6	Other
363586255	Workers' Compensation	6	Other
363614264	Workers' Compensation	6	Other
363649555	Workers' Compensation	6	Other

363672824	Workers' Compensation	6	Other
363714287	Workers' Compensation	6	Other
363715387	Workers' Compensation	6	Other
363765116	Workers' Compensation	6	Other
363774557	Workers' Compensation	6	Other
363789786	Workers' Compensation	6	Other
363789787	Workers' Compensation	6	Other
363806723	Workers' Compensation	6	Other
366033855	Workers' Compensation	6	Other
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366049887	Workers' Compensation	6	Other
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366084669	Workers' Compensation	6	Other
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370344310	Workers' Compensation	6	Other
370396180	Workers' Compensation	6	Other
370420520	Workers' Compensation	6	Other
370530080	Workers' Compensation	6	Other
370533080	Workers' Compensation	6	Other
370533100	Workers' Compensation	6	Other
370558630	Workers' Compensation	6	Other
370637646	Workers' Compensation	6	Other
370807507	Workers' Compensation	6	Other
370815476	Workers' Compensation	6	Other
370855395	Workers' Compensation	6	Other
370915434	Workers' Compensation	6	Other
371054042	Workers' Compensation	6	Other
371111076	Workers' Compensation	6	Other
371184187	Workers' Compensation	6	Other
371277771	Workers' Compensation	6	Other
376028411	Workers' Compensation	6	Other

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380828980	Workers' Compensation	6	Other
380829210	Workers' Compensation	6	Other
380865250	Workers' Compensation	6	Other
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381630841	Workers' Compensation	6	Other
381869912	Workers' Compensation	6	Other
382145898	Workers' Compensation	6	Other
382312731	Workers' Compensation	6	Other
382430150	Workers' Compensation	6	Other
390264050	Workers' Compensation	6	Other
390273710	Workers' Compensation	6	Other
390301590	Workers' Compensation	6	Other
390333950	Workers' Compensation	6	Other
390475300	Workers' Compensation	6	Other
390712210	Workers' Compensation	6	Other
390941450	Workers' Compensation	6	Other
390972608	Workers' Compensation	6	Other
391190263	Workers' Compensation	6	Other
391338397	Workers' Compensation	6	Other
391341459	Workers' Compensation	6	Other
391401314	Workers' Compensation	6	Other
396058596	Workers' Compensation	6	Other
396062860	Workers' Compensation	6	Other
410299900	Workers' Compensation	6	Other
410406690	Workers' Compensation	6	Other
410417460	Workers' Compensation	6	Other
410729473	Workers' Compensation	6	Other
410881659	Workers' Compensation	6	Other
410963301	Workers' Compensation	6	Other
410986076	Workers' Compensation	6	Other
411232071	Workers' Compensation	6	Other
411353943	Workers' Compensation	6	Other
520976199	Workers' Compensation	6	Other
521050076	Workers' Compensation	6	Other
420111280	Workers' Compensation	6	Other
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420234980	Workers' Compensation	6	Other
420245990	Workers' Compensation	6	Other
420301440	Workers' Compensation	6	Other

420594770	Workers' Compensation	6	Other
420618271	Workers' Compensation	6	Other
420645088	Workers' Compensation	6	Other
420645088	Workers' Compensation	6	Other
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421019055	Workers' Compensation	6	Other
421234898	Workers' Compensation	6	Other
426054959	Workers' Compensation	6	Other
430613000	Workers' Compensation	6	Other
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431139865	Workers' Compensation	6	Other
431245798	Workers' Compensation	6	Other
431249228	Workers' Compensation	6	Other
436028696	Workers' Compensation	6	Other
440194612	Workers' Compensation	6	Other
440237557	Workers' Compensation	6	Other
440307890	Workers' Compensation	6	Other
440648645	Workers' Compensation	6	Other
440652707	Workers' Compensation	6	Other
440666926	Workers' Compensation	6	Other
460368854	Workers' Compensation	6	Other
470159155	Workers' Compensation	6	Other
470355979	Workers' Compensation	6	Other
470360368	Workers' Compensation	6	Other
470444314	Workers' Compensation	6	Other
470490411	Workers' Compensation	6	Other
470498866	Workers' Compensation	6	Other
470574325	Workers' Compensation	6	Other
470698507	Workers' Compensation	6	Other
476022701	Workers' Compensation	6	Other
476024508	Workers' Compensation	6	Other
480470690	Workers' Compensation	6	Other
480921045	Workers' Compensation	6	Other
510098159	Workers' Compensation	6	Other
520266645	Workers' Compensation	6	Other
520403120	Workers' Compensation	6	Other
520515280	Workers' Compensation	6	Other
520616768	Workers' Compensation	6	Other
521137203	Workers' Compensation	6	Other
586020487	Workers' Compensation	6	Other

590733942	Workers' Compensation	6	Other
591027412	Workers' Compensation	6	Other
591320184	Workers' Compensation	6	Other
591847174	Workers' Compensation	6	Other
610904881	Workers' Compensation	6	Other
621101490	Workers' Compensation	6	Other
630598629	Workers' Compensation	6	Other
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741296673	Workers' Compensation	6	Other
750620550	Workers' Compensation	6	Other
751444207	Workers' Compensation	6	Other
751670124	Workers' Compensation	6	Other
756013587	Workers' Compensation	6	Other
756013697	Workers' Compensation	6	Other
756017952	Workers' Compensation	6	Other
756020448	Workers' Compensation	6	Other
760154296	Workers' Compensation	6	Other
840513811	Workers' Compensation	6	Other
840583213	Workers' Compensation	6	Other
840982643	Workers' Compensation	6	Other
850165753	Workers' Compensation	6	Other
850277191	Workers' Compensation	6	Other
850282785	Workers' Compensation	6	Other
860274508	Workers' Compensation	6	Other
880119246	Workers' Compensation	6	Other
910341780	Workers' Compensation	6	Other
910449750	Workers' Compensation	6	Other
910895822	Workers' Compensation	6	Other
911115311	Workers' Compensation	6	Other
920040526	Workers' Compensation	6	Other
940781581	Workers' Compensation	6	Other
941032958	Workers' Compensation	6	Other
941390273	Workers' Compensation	6	Other
941517098	Workers' Compensation	6	Other
941610280	Workers' Compensation	6	Other
942532388	Workers' Compensation	6	Other
946078058	Workers' Compensation	6	Other
951077060	Workers' Compensation	6	Other
951078160	Workers' Compensation	6	Other
951429618	Workers' Compensation	6	Other

951479095	Workers' Compensation	6	Other
951542353	Workers' Compensation	6	Other
952371728	Workers' Compensation	6	Other
952575892	Workers' Compensation	6	Other
956016640	Workers' Compensation	6	Other
980032627	Workers' Compensation	6	Other
980033230	Workers' Compensation	6	Other
990041610	Workers' Compensation	6	Other
98914	CHAMPUS	6	Other
98915	CHAMPVA	6	Other
98911	Black Lung	6	Other
98919	Miscellaneous	6	Other
Blank, "000000000"	Unknown	.	Missing
Other Values		.A	Invalid

Kansas

Kansas			
(Valid beginning in 1993)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
1	Medicare	1	Medicare
2	Medicaid	2	Medicaid
3	Blue Cross	3	Private Insurance
4	Commercial		
5	Self-pay	4	Self-pay
--		5	No charge
6	Other	6	Other
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on HMO and PPO providers is not provided.			

Massachusetts

Massachusetts					
(Valid beginning in 1998)					
PAY1_X and PAY2_X		**PAY1 and PAY2**		**HMOPPO1 and HMOPPO2**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
3	Medicare	1	Medicare	0	Fee for Service (FFS)
F	Medicare Managed Care	1	Medicare	1	HMO only
4	Medicaid	2	Medicaid	0	Fee for Service (FFS)
B	Medicaid Managed Care	2	Medicaid	3	Mixture of HMO and

					PPO (or POS)
6	Blue Cross	3	Private Insurance	0	Fee for Service (FFS)
C	Blue Cross Managed Care	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
7	Commercial Insurance	3	Private Insurance	0	Fee for Service (FFS)
D	Commercial Managed Care	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
8	HMO	3	Private Insurance	1	HMO Only
E	PPO and Other Managed Care not listed elsewhere	3	Private Insurance	2	PPO Only
J	Point of Service Plan	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
K	Exclusive Provider Plan	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
1	Self-pay	4	Self-pay	.N	Not applicable
9	Free care (no charge)	5	No charge	.N	Not applicable
2	Worker's Compensation	6	Other	.N	Not applicable
5	Other government payment				
0	Other non-managed care plans				
A	Other or principal source of payment covered in full				
N, Blank	None, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Massachusetts			
(Valid from 1996-1997)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
3, F	Medicare; Medicare managed care	1	Medicare
4, B	Medicaid; Medicaid managed care	2	Medicaid
6, C	Blue Cross; Blue Cross managed care	3	Private Insurance
7, D, E	Commercial Insurance; Commercial managed care; PPO and other managed care not listed elsewhere		
8, J	HMO; Point of Service (added 4th Qtr 1997)		
1	Self-pay	4	Self-pay

9	Free care (no charge)	5	No charge
2	Worker's Compensation	6	Other
5	Other government payment		
0	**Primary Payer:** Other non-managed care		
0, A	**Secondary Payer:**Other non-managed care; Other or principal source of payment covered in full		
Blank	**Primary Payer:**	.	Missing
Blank	**Secondary Payer:**	.	Missing
Other values		.A	Invalid

Massachusetts			
(Valid from Quarter 4 1993 through 1995)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
3, F	Medicare; Medicare managed care	1	Medicare
4, B	Medicaid; Medicaid managed care	2	Medicaid
6, C	Blue Cross; Blue Cross managed care	3	Private Insurance
7, D	Commercial Insurance; Commercial managed care		
8, J	HMO		
1	Self-pay	4	Self-pay
9	Free care (no charge)	5	No charge
2	Workers' Compensation	6	Other
5	Other government payment		
0, E	**Primary Payer:** Other non-managed care; PPO and other managed care not listed elsewhere		
0, A, E	**Secondary Payer:**Other non-managed care; Other or principal source of payment covered in full; PPO and other managed care not listed elsewhere		
Blank	**Primary Payer:**	.	Missing
"N",Blank	**Secondary Payer:**None	.	Missing
Other values		.A	Invalid

Massachusetts			
(Valid from 1988 through Quarters1-3, 1995)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**

3	Medicare	1	Medicare
4	Medicaid	2	Medicaid
6	Blue Cross	3	Private Insurance
7	Commercial Insurance		
8	HMO		
1	Self-pay	4	Self-pay
9	Free care (no charge)	5	No charge
2	Workers' Compensation	6	Other
5	Other government payment		
0	**Primary Payer:** Other		
0, A	**Secondary Payer:**Other; Other or principal source of payment covered in full		
Blank	**Primary Payer:**	.	Missing
"N",Blank	**Secondary Payer:**None	.	Missing
Other values		.A	Invalid

Maine

Maine					
(Valid beginning in 1999)					
PAY1_X		**PAY1**		**HMOPPO1**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
01	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
02	Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
05	Blue Cross	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
06	Other commercial carriers	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
10	HMO	3	Private insurance	1	HMO Only
08	Self-pay	4	Self-pay	.N	Not applicable
07	Charity	5	No charge	.N	Not applicable
03	U.S. Title V	6	Other	.N	Not applicable
04	CHAMPUS/USVA				
09	Worker's Compensation				
11	Other or Unknown	.	Missing	.N	Not applicable
Blank	Missing				
Any values not documented by the data source		.A	Invalid	.A	Invalid

Maryland

Maryland					
(Valid beginning in 1998)					
PAY1_X and PAY2_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
1	Medicare	1	Medicare	0	Neither HMO nor PPO
15	Medicare managed care (payer specified in PAYER1_X/PAYER2_X)	1	Medicare	1	HMO only
2	Medicaid	2	Medicaid	0	Neither HMO nor PPO
14	Medicaid managed care (payer specified in PAYER1_X/PAYER2_X)	2	Medicaid	1	HMO only
4	Blue Cross of MD	3	Private Insurance	0	Neither HMO nor PPO
16	Blue Cross of the National Capital Area (HMO)	3	Private Insurance	1	HMO only
17	Blue Cross (other state)	3	Private Insurance	.	Cannot distinguish HMO/PPO
5	Commercial/PPO	3	Private Insurance	.	Cannot distinguish HMO/PPO
12	Managed Care (payer specified in PAYER1_X/ PAYER2_X)	3	Private Insurance	1	HMO only
8	Self-pay	4	Self-pay	.N	Not applicable
9	Charity - no charge	5	No charge	.N	Not applicable
3	Title V	6	Other	.N	Not applicable
6	Other government program				
7	Worker’s Compensation				
10	Other				
11	Donor				
77	Not Applicable (Secondary payer only)	.	Missing	.	Missing
99	Unknown				
Blank	Missing				
13	Do not use	.A	Invalid	.A	Invalid
Any values not documented by the data source					

Maryland			
(Valid from 1996-1997)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
1, 15	Medicare; Medicare HMO	1	Medicare
2,14	Medicaid; Medicaid HMO	2	Medicaid
4, 16, 17	Blue Cross; Blue Cross NCA; Blue Cross - other State	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other
7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	**Primary Payer** Unknown; missing	.	Missing
99, 77, blank	**Secondary Payer** Unknown; not applicable; missing	.	Missing
Other Values		.A	Invalid

Maryland			
(Valid from 1993-1995)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
1	Medicare	1	Medicare
2, 13,14	Medicaid; Medicaid (state only); Medicaid HMO	2	Medicaid
4	Blue Cross	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other
7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	**Primary Payer** Unknown; missing	.	Missing
99, 77, blank	**Secondary Payer** Unknown; not applicable; missing	.	Missing
Other Values		.A	Invalid

Maryland			
(Valid from 1990-1992)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	**Description**	**Value**	**Description**
1	Medicare	1	Medicare
2, 13,14	Medicaid; Medicaid (state only); Medicaid HMO	2	Medicaid
4	Blue Cross	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other
7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	Unknown; missing	.	Missing
Other Values		.A	Invalid

Missouri

Missouri			
(Valid beginning in 1995)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	**Description**	**Value**	**Description**
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
04	Blue Cross/Blue Shield	3	Private Insurance
07	Commercial/Private Insurance		
06	Self-pay	4	Self-pay
08	No charge (charity)	5	No charge
03	Maternal and Child Health	6	Other
05	Worker's Compensation		
09	Other government (CHAMPUS)		
10	Other		
99, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on HMO and PPO providers is not provided.			

New Jersey

New Jersey					
(Valid beginning 1998)					
PAY1_X and PAY2_X and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	Description	Value	Description	Value	Description
011	Title XVII (Medicare) Part A	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
015	Title XVII (Medicare) Part B	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
017	Title XVII (Medicare) Part B - Physician Charges	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
012	Title XIX (Medicaid)	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
010	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
020	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
022	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
025	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
026	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
029	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
030	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
040	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
041	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
042	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
050	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
060	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
070	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
080	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
090	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
100	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
			Private		Cannot distinguish

101	Blue Cross Plan	3	Insurance	.	HMO/PPO from FFS
110	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
121	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
130	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
140	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
141	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
150	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
160	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
170	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
180	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
190	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
200	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
210	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
220	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
230	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
240	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
241	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
250	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
260	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
265	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
270	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
280	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
281	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS

290	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
300	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
301	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
303	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
304	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
305	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
306	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
307	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
308	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
310	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
320	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
331	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
332	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
333	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
334	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
335	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
337	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
338	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
340	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
350	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
351	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
360	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
361	Blue Cross plan	3	Private	.	Cannot distinguish

			Insurance		HMO/PPO from FFS
362	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
363	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
364	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
370	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
380	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
390	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
392	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
400	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
410	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
415	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
423	Blue Cross plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
424	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
430	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
441	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
443	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
444	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
450	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
460	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
470	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
471	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
865	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
932	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS

936	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
971	Blue Cross Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
105	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
106	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
107	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
115	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
120	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
125	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
131	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
135	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
142	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
145	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
151	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
155	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
161	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
165	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
171	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
175	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
181	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
185	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
186	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
187	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
188	Commercial	3	Private	.	Cannot distinguish

			Insurance		HMO/PPO from FFS
189	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
191	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
192	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
193	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
194	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
195	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
196	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
197	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
198	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
199	Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
032	HMO	3	Private Insurance	1	HMO Only
033	HMO	3	Private Insurance	1	HMO Only
034	HMO	3	Private Insurance	1	HMO Only
035	HMO	3	Private Insurance	1	HMO Only
036	HMO	3	Private Insurance	1	HMO Only
037	HMO	3	Private Insurance	1	HMO Only
043	HMO	3	Private Insurance	1	HMO Only
044	HMO	3	Private Insurance	1	HMO Only
045	HMO	3	Private Insurance	1	HMO Only
046	HMO	3	Private Insurance	1	HMO Only
047	HMO	3	Private Insurance	1	HMO Only
048	HMO	3	Private Insurance	1	HMO Only

049	HMO	3	Private Insurance	1	HMO Only
051	HMO	3	Private Insurance	1	HMO Only
052	HMO	3	Private Insurance	1	HMO Only
053	HMO	3	Private Insurance	1	HMO Only
054	HMO	3	Private Insurance	1	HMO Only
055	HMO	3	Private Insurance	1	HMO Only
056	HMO	3	Private Insurance	1	HMO Only
057	HMO	3	Private Insurance	1	HMO Only
058	HMO	3	Private Insurance	1	HMO Only
059	HMO	3	Private Insurance	1	HMO Only
061	HMO	3	Private Insurance	1	HMO Only
062	HMO	3	Private Insurance	1	HMO Only
063	HMO	3	Private Insurance	1	HMO Only
064	HMO	3	Private Insurance	1	HMO Only
065	HMO	3	Private Insurance	1	HMO Only
066	HMO	3	Private Insurance	1	HMO Only
067	HMO	3	Private Insurance	1	HMO Only
068	HMO	3	Private Insurance	1	HMO Only
069	HMO	3	Private Insurance	1	HMO Only
071	HMO	3	Private Insurance	1	HMO Only
072	HMO	3	Private Insurance	1	HMO Only
073	HMO	3	Private Insurance	1	HMO Only
074	HMO	3	Private	1	HMO Only

			Insurance		
075	HMO	3	Private Insurance	1	HMO Only
077	HMO	3	Private Insurance	1	HMO Only
078	HMO	3	Private Insurance	1	HMO Only
081	HMO	3	Private Insurance	1	HMO Only
082	HMO	3	Private Insurance	1	HMO Only
083	HMO	3	Private Insurance	1	HMO Only
084	HMO	3	Private Insurance	1	HMO Only
085	HMO	3	Private Insurance	1	HMO Only
086	HMO	3	Private Insurance	1	HMO Only
087	HMO	3	Private Insurance	1	HMO Only
088	HMO	3	Private Insurance	1	HMO Only
089	HMO	3	Private Insurance	1	HMO Only
094	HMO	3	Private Insurance	1	HMO Only
097	HMO	3	Private Insurance	1	HMO Only
076	Miscellaneous: Premier Preferred Care of New Jersey	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
091	Miscellaneous: Union Insurance	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
093	Miscellaneous: MAGNET (Magna Care) (effective 1/95)	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
096	Miscellaneous: QualCare (effective 1/95)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
309	No Fault: Allstate	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
311	No Fault: New Jersey Manufacturers	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
315	No Fault: State Farm	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
399	No Fault: Other	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS

095	Miscellaneous: Indigent	4	Self-pay	.N	Not applicable
031	Patient: Direct				
039	Patient: Other Source of Patient Pay				
098	Miscellaneous: Hospital Responsibility	5	No charge	.N	Not applicable
014	Champus	6	Other	.N	Not applicable
016	Other Government				
092	Miscellaneous: Personal Health Program				
099	Miscellaneous: Other				
018	New Jersey State Health Benefits Plan				
019	Other Government				
013	Title V (Material and Child Health)				
205	Worker's Compensation				
211	Worker's Compensation				
215	Worker's Compensation				
221	Worker's Compensation				
225	Worker's Compensation				
231	Worker's Compensation				
299	Worker's Compensation				
000, Blank	Not Available, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

New York

New York					
(Valid beginning 1998)					
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
03	Medicare	1	Medicare	0	Neither HMO/PPO
16	Medicare HMO	1	Medicare	.	HMO Only
04	Medicaid	2	Medicaid	0	Neither HMO or PPO
17	Medicaid HMO	2	Medicaid	1	HMO Only
06	Blue Cross	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
08	Commercial Insurance Company	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
11	HMO (Other)	3	Private	1	HMO Only

			Insurance		
13	No-fault	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
15	Self-insured, Self-administered plans	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
01	Self-pay	4	Self-pay	.N	Not applicable
09	No charge	5	No charge	.N	Not applicable
02	Worker's Compensation	6	Other	.N	Not applicable
07	Other Government				
10	Other				
12	CHAMPUS/VA				
14	Corrections (federal, state, or local) (1993-1995 only)				
18	Corrections Federal (beginning in 1996)				
19	Corrections State (beginning in 1996)				
20	Corrections Local (beginning in 1996)				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

New York			
(Valid from 1993-1997)			
PAY1_X, PAY2_X, and PAY3_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
03	Medicare	1	Medicare
16	Medicare HMO		
04	Medicaid	2	Medicaid
17	Medicaid HMO		
06	Blue Cross	3	Private Insurance
08	Commercial Insurance Company		
11	HMO (Other)		
13	No-fault		
15	Self-insured, Self-administered plans		
01	Self-pay	4	Self-pay
09	No charge	5	No charge
02	Worker's Compensation		
07	Other Government		

10	Other	6	Other
12	CHAMPUS/VA		
14	Corrections (federal, state, or local) (1993-1995 only)		
18	Corrections Federal (beginning in 1996)		
19	Corrections State (beginning in 1996)		
20	Corrections Local (beginning in 1996)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

New York			
(Valid for 1992)			
PAY1_X, PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
03	Medicare	1	Medicare
04	Medicaid	2	Medicaid
06	Blue Cross	3	Private Insurance
08, 13, 15	Commercial Insurance; no-fault; self-insured, self-administered plan		
11	Other HMO		
01	Self-pay	4	Self-pay
09	No charge	5	No charge
02	Workers' Compensation	6	Other
12	CHAMPUS/VA		
07, 14	Other government; Corrections (state, county, or city)		
10	Other		
Blank	**Primary:**	.	Missing
Blank, 00	**Secondary:**	.	Missing
Other Values		.A	Invalid

New York			
(Valid from 1988-1991)			
PAY1_X, PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
03	Medicare	1	Medicare
04	Medicaid	2	Medicaid
06	Blue Cross		Private

08	Commercial Insurance	3	Insurance
11	Other HMO		
01	Self-pay	4	Self-pay
09	No charge	5	No charge
02	Workers' Compensation	6	Other
07	Other government; Corrections (state, county, or city)		
10	Other		
Blank	**Primary:**	.	Missing
Blank, 00	**Secondary:**	.	Missing
Other Values		.A	Invalid

Oregon

Oregon					
(Valid beginning in 1998)					
PAY1_X, PAY2_X, and PAY3_X		**PAY1 and PAY2**		**HMOPPO1 and HMOPPO2**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
M	Medicare	1	Medicare	.	Can not distinguish HMO/PPO
D	Medicaid	2	Medicaid	.	Can not distinguish HMO/PPO
X	HMO/Oregon Health Plan (Medicaid)	2	Medicaid	1	HMO Only
B	Blue Cross/Blue Shield	3	Private Insurance	.	Can not distinguish HMO/PPO
I	Commercial Insurance	3	Private Insurance	.	Can not distinguish HMO/PPO
S	Self-Insured	3	Private Insurance	.	Can not distinguish HMO/PPO
H	HMO/Managed Care	3	Private Insurance	1	HMO Only
P	Self Pay	4	Self-pay	.N	Not applicable
Z	Medically Indigent, Free, Research	5	No charge	.N	Not applicable
W	Workers Compensation	6	Other	.N	Not applicable
C	CHAMPUS				
E	County or State				
L	Managed Assistance				
N	Division of Health Services				
O	Other				
Blank	Missing	.	Missing	.	Missing

Any values not documented by the data source	.A	Invalid	.A	Invalid

Oregon			
(Valid from 1995-1997)			
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2	
Value	**Description**	**Value**	**Description**
M	Medicare	1	Medicare
D, X	Medicaid: HMO/Oregon Health Plan (Medicaid)	2	Medicaid
B	Blue Cross/Blue Shield	3	Private Insurance
I, Y, S	Commercial Insurance; PPO; Self-insured		
H, K	HMO/Managed Care; Kaiser Permanente		
P	Self Pay	4	Self-pay
Z	Medically Indigent/Free/Research	5	No charge
T	Title V	6	Other
W	Workers' Compensation		
C	CHAMPUS		
E, L, N	County of State; Managed Assistance; Division of Health Services		
O	Other		
Blank	Missing	.	Missing
Other Values		.A	Invalid

Oregon			
(Valid from 1993-1994)			
PAY1_X		PAY1	
Value	**Description**	**Value**	**Description**
1	Medicare	1	Medicare
2	Medicaid	2	Medicaid
6	Blue Cross	3	Private Insurance
7	Other commercial insurance		
8	Self-pay	4	Self-pay
--		5	No charge
3	Title V	6	Other
5	Workers' Compensation		
4	Other government		

9	Other		
0, blank	Missing	.	Missing
Other Values		.A	Invalid

Pennsylvania

Pennsylvania					
(Valid beginning in 1998)					
PAY1_X, PAY2_X and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
10	Medicare - Other (Discontinued 12/99)	1	Medicare	0	Fee for Service (FFS)
12	Medicare - PPO (Beginning in 7/99)	1	Medicare	2	PPO only
14	Medicare Part A - Fee for Service (Beginning in 7/99)	1	Medicare	0	Fee for Service (FFS)
15	Medicare - HMO/PPO (Discontinued 12/99) Medicare - HMO (Beginning in 7/99)	1	Medicare	3	Mixture of HMO and PPO (or POS)
20	Medicaid - Other (Discontinued 12/99)	2	Medicaid	0	Fee for Service (FFS)
22	Medicaid - PPO (Beginning in 7/99)	2	Medicaid	2	PPO only
24	Medicaid - Fee for Service (Beginning in 7/99)	2	Medicaid	0	Fee for Service (FFS)
25	Medicaid - HMO/PPO (Discontinued 12/99) Medicaid - HMO (Beginning in 7/99)	2	Medicaid	3	Mixture of HMO and PPO (or POS)
30	Blue Cross - Other (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
32	Blue Cross - PPO (Beginning in 7/99)	3	Private Insurance	2	PPO only
33	Blue Cross - POS (Beginning in 7/99)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
34	Blue Cross - Fee for Service (Beginning in 7/99)	3	Private Insurance	0	Fee for Service (FFS)
35	Blue Cross - HMO/PPO (Discontinued 12/99) Blue Cross - HMO (Beginning in 7/99)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
36	BC - union health & welfare fund (1994-1997 only)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
38	Blue Cross - United Health & Welfare Fund (Discontinued 10/98)	3	Private Insurance	0	Fee for Service (FFS)

39	Blue Cross - Association (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
40	Commercial - Other (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
42	Commercial - PPO (Beginning in 7/99)	3	Private Insurance	2	PPO only
43	Commercial - POS (Beginning in 7/99)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
44	Commercial - Fee for Service (Beginning in 7/99)	3	Private Insurance	0	Fee for Service (FFS)
45	Commercial - HMO/PPO (Discontinued 12/99) Commercial - HMO (Beginning in 7/99)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
46	Commercial - Union Health & Welfare Fund (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
48	Commercial - Automobile	3	Private Insurance	0	Fee for Service (FFS)
49	Commercial - Association (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
50	Employer Funded Plans - Other (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
55	Employer Funded Plans - HMO/PPO (Discontinued 12/99)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
56	Employer Funded Plans - Union Health & Welfare Fund (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
59	Employer Funded Plans - Association Group (Discontinued 12/99)	3	Private Insurance	0	Fee for Service (FFS)
05	Patient direct bill - HMO/PPO (1994-1997 only)	3	Private Insurance	0	Fee for Service (FFS)
00	Patient Direct Bill (Discontinued 12/99) Uninsured - Self Pay or Charity/Indigent Care	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
47	Commercial - Workers' Compensation				
57	Employer Funded Plans - Workers' Compensation (Discontinued 12/99)				
80	Other government - Other/Unknown (Discontinued 12/99)				
82	Government - PPO (Beginning in				

	7/99)	6	Other	.N	Not applicable
84	Government - Fee for Service (Beginning in 7/99)				
85	Government - HMO (Beginning in 7/99)				
87	Other Government - State Workers Insurance Fund (Discontinued 12/99)				
88	Other Government - Catastrophic Loss Fund (Discontinued 12/99)				
89	Government - Unknown/Not Listed (Beginning in 7/99)				
90, 99, Blank	Unknown, Not Listed, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Pennsylvania			
(Valid from 1994-1997)			
PAY1_X, PAY2_X and PAY3_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
10	Medicare - Other	1	Medicare
15	Medicare - HMO/PPO		
20	Medicaid - Other	2	Medicaid
25	Medicaid - HMO/PPO		
30	Blue Cross - Other	3	Private Insurance
35	Blue Cross - HMO/PPO		
36	BC - union health & welfare fund (1994-1997 only)		
38	Blue Cross - United Health & Welfare Fund		
39	Blue Cross - Association		
40	Commercial - Other		
45	Commercial - HMO/PPO		
46	Commercial - Union Health & Welfare Fund		
48	Commercial - Automobile		
49	Commercial - Association		
50	Employer Funded Plans - Other		
55	Employer Funded Plans - HMO/PPO		
56	Employer Funded Plans - Union Health & Welfare Fund		
59	Employer Funded Plans - Association Group		

05	Patient direct bill - HMO/PPO (1994-1997 only)		
00	Patient Direct Bill; Uninsured - Self Pay or Charity/Indigent Care	4	Self-pay
--		5	No charge
47	Commercial - Workers' Compensation	6	Other
57	Employer Funded Plans - Workers' Compensation		
80	Other government - Other/Unknown		
87	Other Government - State Workers Insurance Fund		
88	Other Government - Catastrophic Loss Fund		
90, 99, Blank	Unknown, Not Listed, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Pennsylvania			
(Valid from 1990-1993)			
PAY1_X, PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
02	Medicare	1	Medicare
01	Medicaid	2	Medicaid
03	Blue on Blue	3	Private Insurance
04,10, 11, 12	Commercial; Employers; Associations; Auto Insurance		
05	HMO/PPO		
00 (not "0")	Self-pay	4	Self-pay
--		5	No charge
07	Workers' Compensation	6	Other
06, 08, 09	Health and Welfare; CAT fund; Other government programs		
99, blank	Unknown	.	Missing
(includes "0")	Other values	.A	Invalid

South Carolina

South Carolina					
(Valid beginning in 1998)					
PAY1_X and PAY2_X		**PAY1 and PAY2**		**HMOPPO1 and HMOPPO2**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
6	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
7	Medicaid	2	Medicaid	.	Cannot distinguish

					HMO/PPO from FFS
12	Commercial, unspecified	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
13	Commercial, unspecified	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
14	Commercial, unspecified	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
16	HMO	3	Private Insurance	1	HMO only
1	Self-pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
2	State or county indigent program, unspecified	6	Other	.N	Not applicable
3	State or county indigent program, unspecified				
4	State or county indigent program, unspecified				
5	Champus				
8	State or county indigent program, unspecified				
9	Worker's Compensation				
10	State or county indigent program, unspecified				
11	State or county indigent program, unspecified				
15, Blank	Not Stated, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

South Carolina			
(Valid from 1993-1997)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
02	Medicare	1	Medicare
03	Medicaid	2	Medicaid
04, 16	Blue Cross/Commercial; HMO	3	Private insurance
01	Self-pay	4	Self-pay
--		5	No charge
05, 06, 07	Workers' Comp; Indigent/Charity; Other government	6	Other
08, Blank	Missing	.	Missing

--	Other	.A	Invalid

Tennessee

Tennessee					
(Valid beginning in 1998)					
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
M	Medicare	1	Medicare	0	Fee for Service (FFS)
1	Medicare Managed Care	1	Medicare	1	HMO Only
D	Medicaid	2	Medicaid	0	Fee for Service (FFS)
T	TennCare Plan: Unspecified	2	Medicaid	1	HMO Only
2	TennCare Plan: Access-Med Plus				
3	TennCare Plan: Blue Cross				
4	TennCare Plan: Advantage Care/Phoenix				
5	TennCare Plan: Omni Care				
6	TennCare Plan: Health Net				
7	TennCare Plan: Unspecified				
8	TennCare Plan: John Deere/Heritage				
9	TennCare Plan: Preferred Health Partnership				
A	TennCare Plan: Prudential Community Care				
F	TennCare Plan: TLC Family Care Healthplan				
G	TennCare Plan: Tennsource				
J	TennCare Plan: Blue Care				
U	TennCare Behavioral: Tennessee Behavioral Health, Inc.				
X	TennCare Behavioral: Premier Behavioral Systems of TN				
B	Blue Cross/Blue Shield	3	Private Insurance	0	Fee for Service (FFS)
I	Commerical Insurance (Indemnity Carrier)	3	Private Insurance	0	Fee for Service (FFS)
S	Self Insured	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
H	HMO/Managed Care	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
P	Self-pay	4	Self-pay	.N	Not applicable

Z	Medically Indigent/Free	5	No charge	.N	Not applicable
W	Workers/State Compensation	6	Other	.N	Not applicable
C	Federal, Champus (Military)				
E	County or state employee				
L	Managed Assistance				
N	Division of Health Services (Voc. Rehab.)				
O	Other, Unknown	.	Missing	.	Missing
Blank	Missing				
Any values not documented by the data source		.A	Invalid	.A	Invalid

Utah

Utah					
(Valid beginning in 1998)					
PAY1_X, PAY2_X and PAY3_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
01	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
02	Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
04	Blue Cross/Blue Shield	3	Private Insurance	0	Fee for service (FFS)
05	Other commercial	3	Private Insurance	0	Fee for service (FFS)
06	Managed care (HMO and PPO)	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
07	Self pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
03	Other government	6	Other	.N	Not applicable
08	Industrial and Worker's compensation				
09	Unclassified				
12	Other				
13	Children's Health Insurance Plan (CHIP)				
10, 99, Blank	Unknown, Not reported, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Utah			
(Valid for 1997)			
PAY1_X, PAY2_X and PAY3_X		PAY1 and PAY2	
Value	**Description**	**Value**	**Description**
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
04	Blue Cross/Blue Shield	3	Private Insurance
05	Other commercial		
06	Managed care (HMO and PPO)		
07	Self pay	4	Self-pay
--		5	No charge
03	Other government	6	Other
08	Industrial and Worker's compensation		
09	Unclassified		
12	Other		
10, 99, Blank	Unknown, Not reported, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Virginia

Virginia					
PAY1_X		PAY1		HMOPPO1	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
1	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
2	Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
31	Medicaid - Out of State	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
3	Trigon/BC/BS	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
6	Aetna/US Healthcare	3	Private insurance	.	Cannot distinguish HMO/PPO from FFS
7	United Healthcare	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
8	Cigna	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
9	Other Commercial	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
13	Prudential	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
14	State Farm	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS

24	All State	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
28	John Hancock	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
29	HMO/PPO - Unspecified	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
32	BC/BS Out of State	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
33	GWU Health Plan	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
34	Kaiser Permanente	3	Private Insurance	1	HMO Only
35	MAMSI	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
36	NYLCare	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
37	Qualchoice	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
38	Sentara	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
39	Southern Health	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
5	Self Pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
4	Tricare/Champus	6	Other	.N	Not applicable
10	Indigent/Charity				
11	Worker's Comp				
16	Local Government				
17	State Government				
18	Other Government				
19	Government Assistance				
20	Jail/Detention				
21	Black Lung				
25	Research/Donor				
26	Foreign				
27	Hospice - Unspecified				
99, Blank	Unknown, Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Washington

Washington		
(Valid beginning in 1998)		

PAY1_X and PAY2_X		PAY1 and PAY2		HMOPPO1 and HMOPPO2	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
001	Medicare	1	Medicare	.	Cannot distinguish HMO/PPO from FFS
002	Medicaid (DSHS)	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
004	Health Maintenance Organization (HMO) (e.g., Group Health, Kaiser Foundation, Good Health)	3	Private Insurance	1	HMO Only
006	Commercial insurance (e.g., AETNA, Mutual of Omaha, Safeco)	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
610	Health Care Service Contractors (e.g., Blue Cross, county medical bureaus, Washington Physicians Service)	3	Private Insurance	.	Cannot distinguish HMO/PPO from FFS
009	Self-pay	4	Self-pay	.N	Not applicable
630	Charity Care as defined in WAC 246-453-010	5	No charge	.N	Not applicable
008	Workers Compensation (includes state fund, self insured employers, and Labor and Industries crime victims claims)	6	Other	.N	Not applicable
625	Other Sponsored Patients (e.g., CHAMPUS, Indian Health)				
Blank	Missing	.	Missing	.	Missing
Any values not documented by the data source		.A	Invalid	.A	Invalid

Washington			
(Valid from 1988-1997)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	**Description**	**Value**	**Description**
001	Medicare	1	Medicare
002	Medicaid (DSHS)	2	Medicaid
004	Health Maintenance Organization (HMO) (e.g., Group Health, Kaiser Foundation, Good Health)	3	Private Insurance
006	Commercial insurance (e.g., AETNA, Mutual of Omaha, Safeco)		
	Health Care Service Contractors (e.g., Blue Cross, county		

610	medical bureaus, Washington Physicians Service) (Beginning in 1994)		
009	Self-pay	4	Self-pay
630	Charity Care as defined in WAC 246-453-010	5	No charge
008	Workers Compensation (includes state fund, self insured employers, and Labor and Industries crime victims claims)	6	Other
610	Health Care Service Contractors (e.g., Blue Cross, county medical bureaus, Washington Physicians Service) (Prior to 1994)		
625	Other Sponsored Patients (e.g., CHAMPUS, Indian Health)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Wisconsin

Wisconsin					
(Valid beginning in 1998)					
PAY1_X and PAY2_X		**PAY1 and PAY2**		**HMOPPO1 and HMOPPO2**	
Value	**Description**	**Value**	**Description**	**Value**	**Description**
MED01	Medicare - Fee for service, non-HMO Medicare, or non-HMO Medicaid	1	Medicare	0	Neither HMO nor PPO
MED02	Medicare - Alternative health care insurance plans (HMO, PPO, PPA, etc.)	1	Medicare	3	Mixture of HMO and PPO (or POS)
MED09	Medicare - Unable to determine insurance type	1	Medicare	.	Can not distinguish HMO/PPO from FFS
T1901	Wisconsin Medicaid - Fee for service	2	Medicaid	0	Neither HMO nor PPO
T1902	Wisconsin Medicaid - Alternative health care insurance plans	2	Medicaid	3	Mixture of HMO and PPO (or POS)
T1909	Wisconsin Medicaid - type unknown	2	Medicaid	3	Mixture of HMO and PPO (or POS)
OTH51	Non-Wisconsin Medicaid	2	Medicaid	.	Cannot distinguish HMO/PPO from FFS
WPS01	Wisconsin Physicians Service - Fee for service	3	Private Insurance	0	Neither HMO nor PPO
WPS02	Wisconsin Physicians Service - Alternative health care insurance plans	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
					Can not

WPS09	Wisconsin Physicians Service - type unknown	3	Private Insurance	.	distinguish HMO/PPO from FFS
OTH11	Commercial or private insurance - Fee for service	3	Private Insurance	0	Neither HMO nor PPO
OTH12	Commercial or private insurance - Alternative health care insurance plans	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
OTH19	Commercial or private insurance - type unknown	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
OTH21	Employer self-funded - Fee for service	3	Private Insurance	0	Neither HMO nor PPO
OTH22	Employer self-funded - Alternative health care insurance plans	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
OTH29	Employer self-funded - type unknown	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
OTH31	Other organization self-funded - Fee for service	3	Private Insurance	0	Neither HMO nor PPO
OTH32	Other organization self-funded - Alternative health care insurance plans	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
OTH39	Other organization self-funded - type unknown	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
nnn01, where nnn is a 3-digit code	Blue Cross - Fee for service	3	Private Insurance	0	Neither HMO nor PPO
nnn02, where nnn is a 3-digit code	Blue Cross - Alternative health care insurance plans	3	Private Insurance	3	Mixture of HMO and PPO (or POS)
nnn09, where nnn is a 3-digit code	Blue Cross - type unknown	3	Private Insurance	.	Can not distinguish HMO/PPO from FFS
OTH61	Self-pay	4	Self-pay	.N	Not applicable
--		5	No charge	.N	Not applicable
CHA01	CHAMPUS, CHAMPVA (effective beginning in 1994)				
CHA02	CHAMPUS, CHAMPVA (effective beginning in 1994)				
	CHAMPUS, CHAMPVA				

CHA03	(effective beginning in 1994)	6	Other	.N	Not applicable
OTH41	Worker's Compensation				
OTH52	51.42 / 51.437 / 46.23 Board				
OTH53	General Relief				
OTH54	WisconsinCare				
OTH55	CHAMPUS Supplement				
OTH56	HIRSP				
OTH59	Other government				
OTH98	Other				
bbb01, where b is a blank	Other - Fee for service (beginning in 1998)				
OTH01	Other - Fee for service (effective from 1989-1997)				
OTH99	Unknown	.	Missing	.	Missing
bbb00, where b is a blank	Unknown				
Blank	Missing				
Any values not documented by the data source		.A	Invalid	.A	Invalid

Wisconsin			
(Valid from 1989-1997)			
PAY1_X and PAY2_X		**PAY1 and PAY2**	
Value	**Description**	**Value**	**Description**
MED01	Medicare - Fee for service, non-HMO Medicare, or non-HMO Medicaid	1	Medicare
MED02	Medicare - Alternative health care insurance plans (HMO, PPO, PPA, etc.)		
MED09	Medicare - Unable to determine insurance type		
T1901	Wisconsin Medicaid - Fee for service	2	Medicaid
T1902	Wisconsin Medicaid - Alternative health care insurance plans		
T1909	Wisconsin Medicaid - type unknown		
OTH51	Non-Wisconsin Medicaid		
WPS01	Wisconsin Physicians Service - Fee for service	3	Private Insurance
WPS02	Wisconsin Physicians Service - Alternative health care insurance plans	3	Private Insurance
WPS09	Wisconsin Physicians Service - type unknown	3	Private Insurance

OTH11	Commercial or private insurance - Fee for service	3	Private Insurance
OTH12	Commercial or private insurance - Alternative health care insurance plans	3	Private Insurance
OTH19	Commercial or private insurance - type unknown	3	Private Insurance
OTH21	Employer self-funded - Fee for service	3	Private Insurance
OTH22	Employer self-funded - Alternative health care insurance plans	3	Private Insurance
OTH29	Employer self-funded - type unknown	3	Private Insurance
OTH31	Other organization self-funded - Fee for service	3	Private Insurance
OTH32	Other organization self-funded - Alternative health care insurance plans	3	Private Insurance
OTH39	Other organization self-funded - type unknown	3	Private Insurance
nnn01, where nnn is a 3-digit code	Blue Cross - Fee for service	3	Private Insurance
nnn02, where nnn is a 3-digit code	Blue Cross - Alternative health care insurance plans	3	Private Insurance
nnn09, where nnn is a 3-digit code	Blue Cross - type unknown	3	Private Insurance
OTH61	Self-pay	4	Self-pay
--		5	No charge
CHA01	CHAMPUS, CHAMPVA (effective beginning in 1994)	6	Other
CHA02	CHAMPUS, CHAMPVA (effective beginning in 1994)		
CHA03	CHAMPUS, CHAMPVA (effective beginning in 1994)		
OTH41	Worker's Compensation		
OTH52	51.42 / 51.437 / 46.23 Board		
OTH53	General Relief		
OTH54	WisconsinCare		
OTH55	CHAMPUS Supplement		
OTH56	HIRSP		
OTH59	Other government		
OTH98	Other		
OTH01	Other - Fee for service (effective from 1989-1997)		
OTH99	Unknown		
bbb00, where b is a			

blank	Unknown	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid

PAY1_X - Expected primary payer, as received from data source

General Notes

PAY1_X retains the expected primary payer 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 uniformly coded information about the expected primary payer:

- PAY1 has general categories for Medicare, Medicaid, private insurance, and other payers.
- PAY1_N has more detailed categories for private insurance and other payers. PAY1_N is only available in the 1988-1997 HCUP databases. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

Information on the definition of the source values contained in PAY1_X and how the source values are recoded into the HCUP uniform variable PAY1 is available under the note for expected primary payer PAY1.

Uniform Values

Variable	Description	Value	Value Description
PAY1_X	Expected primary payer, as received from data source	n(a)	Source-specific coding

State Specific Notes

None

PAY2 - Expected secondary payer, uniform

General Notes

PAY2 indicates the expected secondary payer (Medicare, Medicaid, private insurance, etc.). To ensure uniformity of coding across data sources, PAY2 combines detailed categories in the more general groups. For example,

- Medicare includes both fee-for-service and managed care Medicare patients.
- Medicaid includes both fee-for-service and managed care Medicaid patients.
- Private insurance (PAY2 = 3) includes Blue Cross, commercial carriers, and private HMOs and PPOs.
- Other (PAY2 = 6) includes Worker's Compensation, CHAMPUS, CHAMPVA, Title V, and other government programs.

In the 1988-1997 data, the data element PAY2_N provides more detailed categories for private insurance and other payers. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

The HCUP data element PAY2_X retains the expected primary payer as provided by the data source.

Because the coding of expected primary and secondary payer is the same, information on the coding of PAY2 is available under the note for expected primary payer (PAY1).

Uniform Values

Variable	Description	Value	Value Description
PAY2	Expected secondary payer, uniform	1	Medicare
		2	Medicaid
		3	Private insurance
		4	Self-pay
		5	No charge
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent in 1988-1997 data, ED951, ED952

State Specific Notes

None

PAY2_X - Expected secondary payer, as received from data source

General Notes

PAY2_X retains the expected secondary payer 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 uniformly coded information about the expected secondary payer:

- PAY2 has general categories for Medicare, Medicaid, private insurance, and other payers.
- PAY2_N has more detailed categories for private insurance and other payers. PAY2_N is only available in the 1988-1997 HCUP databases. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

Because the coding of expected primary and secondary payer is the same, information on the coding of PAY2_X is available under the note for expected primary payer (PAY1).

Uniform Values

Variable	Description	Value	Value Description
PAY2_X	Expected secondary payer, as received from data source	n(a)	Source-specific coding

State Specific Notes

None

PRn - Procedure

General Notes

The original value of the ICD-9-CM principal procedure (PR1), whether blank or coded, is retained in the first position of the procedure vector. Starting at the first secondary procedure (PR2), the procedures are shifted during HCUP processing to eliminate blank secondary procedures. For example, if PR2 and PR4 contain nonmissing procedures and PR3 is blank, then the value of PR4 is shifted into PR3. Secondary procedures are never shifted into the principal position (PR1).

Procedures are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). In the 1988-1997 data, a six months window (three months before and three months after) is allowed. Beginning in the 1998 data, a year window (six months before and six months after) is allowed. For example, the code for Bone Marrow Transplant changed from "410 " to "4100" as of October 1, 1988. Under HCUP validation procedures, "410 " is classified as valid for discharges as late as December 31, 1988, and "4100" is classified as valid for discharges as early as July 1, 1988.

Procedures are compared to the sex of the patient (EPR03 beginning in the 1998 data and ED2nn in the 1988-1997 data) and the patient's age (EAGE05 beginning in the 1998 data and ED5nn in the 1988-1997 data) for checking the internal consistency of the record.

How invalid and inconsistent codes are handled varies by data year.

- Beginning in the 1998 data, invalid and inconsistent procedures are masked directly. Validity flags are not included on the HCUP record. Clinical Classifications Software (CCS) data elements are coded with respect to the procedure.

	Invalid Procedure	**Inconsistent Code**
The value of PRn	"invl"	"incn"
PRCCSn	Set to invalid (.A).	Set to inconsistent (.C)

- From 1988-1997 data, invalid and inconsistent procedures are retained on the record. Validity flags (PRVn) indicate invalid, inconsistent procedure codes. Clinical Classifications Software (CCS) data elements use the former name (PCCHPRn). The CCS was formerly known as the Clinical Classifications for Health Policy Research (CCHPRn). The procedure related data element are coded as follows:

	Invalid Procedure	**Inconsistent Code**
The value of PRn	Unchanged	Unchanged
PRVn	Set to 1	Set to inconsistent (.C)
PCCHPRn	Set to invalid (.A).	Retained (values 1-260)

The validity flags (PRVn) need to be used in connection with any analysis of the procedures (PRn).

Uniform Values			

Variable	Description	Value	Value Description
PRn	Procedure	nnnn	Procedure code
		Blank	Missing
		invl	Invalid: beginning with 1998 data, EPR02
		incn	Inconsistent: beginning with EAGE05, EPR03

State Specific Notes

Arizona

Beginning in 1998, a few hospitals reported 5-digit codes in the procedure fields. Since ICD-9-CM procedures have either 3 or 4 digits, these five digit codes were set to invalid.

Beginning in 1993, Arizona procedure codes were not right-padded with zeros. Arizona reported procedure codes with an explicit decimal point. The decimal point was removed during HCUP processing.

Prior to 1993, the procedure codes provided by Arizona were right-padded with zeros (e.g., the procedure code '403 ' was supplied as '4030'). The following algorithm was used during HCUP processing to validate the procedure codes:

Check four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1. If four-digit code is valid, set PR1 to the four-digit code and set PRV1 = 0.
2. If the four-digit code is invalid and fourth digit is a zero, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set PR1 to the three-digit code and set PRV1 = 0.
3. If both the four-digit and three-digit codes are invalid, save the original four-digit code PR1 and set the validity flag to indicate an invalid code (PRV1 = 1).

California

Shriner's hospitals do not report diagnoses, procedures or total charges.

New Jersey

Before 1994, the procedure codes provided by the state were right-padded with zeros (e.g., the procedure code '403' was supplied as '4030'). For the HCUP database the following algorithm was used to validate the procedure codes:

Check the four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1. If the four-digit code is valid, set PRn to the four-digit code and set PRVn = 0.
2. If the four-digit code is invalid and the fourth digit is a zero**, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If valid, set PRn to the three-digit code and set PRVn = 0.

3. If both the four-digit and the three-digit codes are invalid, save the original four-digit code PRn and set the validity flag to indicate an invalid code (PRVn = 1).

New Jersey

In 1993 only. Due to an error in HCUP processing, the invalid three-digit code was saved in PRn instead of the invalid four-digit code.

** *In 1993 only.* An error in HCUP processing caused invalid four-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digit created a valid code, then

- PRn was set to the stripped valid code,
- PRVn was set 0 to indicate a valid code,
- PCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED2nn, and ED5nn may have been incorrectly assigned based on the stripped valid code.

Oregon

Oregon supplied procedure codes in a field of length 7. only the first four characters contained the procedure code and were used to assign the HCUP procedure codes.

Pennsylvania

The reporting and handling of CPT and HCPCS procedure codes varies by year:

- Prior to 1995, Pennsylvania supplied only ICD-9-CM procedure codes.
- From 1995-1996, Pennsylvania supplied a mixture of ICD-9-CM, CPT and HCPCS codes. If the procedure coding system indicates CPT or HCPCS codes on the record, then the codes are set to missing. Details are provided below.
- In 1997, Pennsylvania source documentation indicated that all procedure codes were ICD-9-CM codes. Any procedure codes that were suspected of being CPT or HCPCS codes were masked during HCUP processing. Details are provided below.
- Beginning in 1998, Pennsylvania supplied only ICD-9-CM procedure codes.

<u>Handling CPT and HCPCS Codes in 1995-1996</u>

In 1995-1996, Pennsylvania reports ICD-9-CM procedure codes on most of their discharges, but some use CPT and HCPCS procedure codes.

HCUP processed the Pennsylvania procedure codes as follows:

1. PRSYS which identifies the procedure coding system was assigned based on the value reported by the data source.
2. NPR is the number of non-missing procedure codes supplied by Pennsylvania, regardless of coding system.
3. How HCUP processing handles the procedure codes depends on the coding system.
    - ICD-9-CM procedure codes (PRSYS = 1) are retained as supplied by the data source in the PRn variables and validated. Results from the validation are indicated by the PRVn variables. No changes are made to the procedure codes.
    - CPT or HCPCS procedure codes (PRSYS=2 or 3) are set to missing (PRn = blank). CPT and

HCPCS procedure codes could not be retained in the HCUP data because they are 5 characters, and the HCUP procedure fields are 4 characters in length.
    - If the procedure coding system was invalid (PRSYS = .A) or missing (PRSYS = .), then the procedures are handled like ICD-9-CM procedure codes. Any non-missing procedure codes are retained in the PRn variables and validated. Results from the validation are indicated by the PRVn variables. Source documentation indicates that missing values for PRSYS are only allowed when no procedures are coded.

*Warning:*If a CPT or HCPCS procedure code was reported on a discharge in which the procedure coding system was missing, or invalid, or indicated as ICD-9-CM, then only the first four characters of the five-digit code would be retained in the PRn variable.

Handling Suspected CPT and HCPCS Codes in 1997

Even though the Pennsylvania source documentation reported that all procedures in 1997 were coded in ICD-9-CM, there were a small percentage of codes that looked suspiciously like CPT or HCPCS codes which are length 5 and start with an alphabetic character. ICD-9-CM procedure codes have no more than 4 digits and do not contain alphabetic characters (A-Z). To ensure that no CPT and HCPCS procedure codes were included in the 1997 Pennsylvania data, procedure codes were "screened" during HCUP processing.

If a procedure code was longer than 4 digits or started with an alphabetic character (A-Z), then the procedure was suspected of being a CPT or HCPCS procedure code and handled as follows:

- the procedure (PRn) was set to "PPPP"
- the validity flag (PRVn) was set to 1, and
- the classification system (PCCHPRn) was set to invalid (.A)

Otherwise, the procedure code was validated against a list of ICD-9-CM procedure codes with respect to discharge date.

South Carolina

A small number of discharges explicitly included decimals in the procedure field, usually the decimal is implicit. This is problematic because South Carolina supplied procedures in a field of length 4. If decimals are included, then a valid 4-digit code would be truncated. For example, the procedure for a simple mastoidectomy "2041" would be incorrectly reported as "20.4". Prior to 1998, invalid procedure codes are marked by a validity flag (PRVn = 1). Beginning in 1998, invalid procedure codes are masked (PRn = "invl").

Washington

Washington supplied procedure codes in a field of length 5. Only the first four characters of five contained the procedure code and were used to assign the HCUP procedure code.

Wisconsin

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,

- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

PRCCSn - Clinical Classifications Software (CCS): procedure classification

General Notes

Clinical Classifications Software (CCS) consists of 231 procedure categories. This system is clinically based on ICD-9-CM codes. All procedure codes are classified.

PRCCSn is coded as follows:

- 1 to 231 if the procedure code (PRn) is valid by the HCUP criteria. The HCUP criteria for procedure validation allows a year window (six months before and six months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.
- PRCCSn is missing (.), if there is no procedure code (PRn = " ").
- PRCCSn is set to invalid (.A), if the procedure code (PRn) is invalid by the HCUP criteria (EPR02).
- PRCCSn is set to inconsistent (.C), if the procedure code (PRn) is inconsistent with age (EAGE05) or sex of the patient (EPR03).

In HCUP databases before 1998, this data element is called PCCHPRn.

Labels

Labels for CCS categories are provided as an ASCII file in HCUP Tools: Labels and Formats.

Formats

Formats to label CCS categories are documented in HCUP Tools: Labels and Formats. A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters.

Uniform Values

Variable	Description	Value	Value Description
PRCCSn	Clinical Classifications Software (CCS): procedure classification	1 - 231	CCS procedure class
		.	No procedure code
		.A	Invalid procedure code: beginning with 1998 data, EPR02
		.C	Inconsistent: beginning with 1998 data, EAGE05, EPR03

State Specific Notes

None

PRDAYn - Number of days from admission to procedure n

General Notes

The day on which the procedure is performed (PRDAYn) is calculated from the procedure date (PRDATEn) and the admission date (ADATE) with the following exceptions:

- PRDAYn is set to the supplied day of principal procedure if the procedure day cannot be calculated (ADATE and/or PRDATEn is missing or invalid). Note: the supplied day of procedure is used only if it distinguishes between a procedure performed on the first day (procedure day = 0) and no procedure day (procedure day is missing).
- PRDAYn is missing (.) if the procedure day cannot be calculated and the supplied procedure day is missing.
- PRDAYn is invalid (.A) if the procedure day cannot be calculated and the supplied procedure day is nonnumeric.
- If the data source does not supply either admission date (ADATE) and procedure date (PRDATEn), or the day of procedure, then beginning in the 1998 data PRDAYn is not present on the HCUP files. In the 1988-1997 data, PRDAYn is retained on the HCUP files and is set to unavailable from source (.B).
- PRDAYn is inconsistent (.C) if
  - there is a day of procedure without a coded procedure (ED7nn), or
  - the day of procedure is not during the stay (EPRDAY01 beginning in the 1998 data and ED8nn in the 1988-1997 data).

Edit checks ED7nn are only performed on the 1988-1997 data. Beginning in the 1998 data, the procedure date without a coded procedure is discarded.

The procedure date vector (PRDATEn) is shifted with the ICD-9-CM procedure codes (PRn) when the procedure vector is packed.

Some sources do not require procedure dates/days for minor or diagnostic procedures which are considered UHDDS class 3 and class 4 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

Uniform Values

Variable	Description	Value	Value Description
PRDAYn	Number of days from admission to procedure n	-4 - -1	Days prior to admission
		0	Day of admission
		1 - LOS+3	Days after admission
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data

			only)
		.C	Inconsistent: beginning with 1998 data, EPRDAY01; in 1998-1997 data, ED7nn, ED8nn

State Specific Notes

Arizona

Beginning in 1995, only the calculated day of procedure could be used to assign PRDAY because Arizona did not supply the day of procedure. Prior to 1995, no procedure dates or days were reported.

California

Prior to 1998, the supplied day of procedure was not used when PRDAY could not be calculated because California used the same value to indicate no procedure performed and procedure performed on the day of admission.

Beginning in 1998, only the supplied day of procedure could be used to assign PRDAY because the date of procedure was not provided. A source value of 0 days was set to missing (PRDAYn = .) if there was no corresponding procedure (PRn = " ").

Colorado

Only the calculated day of principal procedure could be used to assign PRDAY1 because Colorado did not supply principal procedure day.

Connecticut

Procedures performed up to 72 hours before admission are reported as zero (0) days.

Florida

For 1988-1992, PRDAY1 is assigned from the supplied day of procedure. Florida did not supply the procedure date. A missing value (.) was assigned from either of the following values supplied by the data source: 998 an indicator that the number of days to procedure is greater than or equal to 998 days; and 999 an indicator of unable-to-compute days, or that no procedure was performed.

Starting in 1993, Florida used zeros to code both missing values and a procedure performed on the day of admission. During HCUP processing, PRDAY1 was set to missing (.) if

- the reported procedure day = 0, and
- no principal procedure was reported.

Georgia

Only the reported day of procedure could be used to assign PRDAYn because Georgia did not supply procedure dates.

Hawaii

Only the calculated day of procedure could be used to assign PRDAYn because Hawaii did not supply the day of procedure.

Iowa

Only the calculated day of procedure could be used to assign PRDAY because Iowa did not supply the day of procedure.

Massachusetts

The supplied day of procedure was not used when PRDAYn could not be calculated because Massachusetts used the same value to indicate no procedure performed and procedure performed on the day of admission.

Maine

Only the calculated day of procedure could be used to assign PRDAYn because Maine did not supply procedure days.

New Jersey

Only the calculated day of procedure could be used to assign PRDAY because New Jersey did not supply the day of procedure.

New York

In the 1988-1997 HCUP New York databases, PRDAYn could not be calculated because New York did not report full admission and procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn. For 1988-1992, the source miscalculated procedure days for records with admission dates in the year prior to discharge, resulting in procedure days that were not during the stay. These records failed the appropriate edit check. Beginning in 1993, the source correctly calculated procedure days for all procedures.

Beginning with the 1998 data, New York provided complete dates and PRDAYn could be calculated.

Oregon

Only the calculated day of procedure could be used to assign PRDAYn because Oregon did not supply procedure days.

South Carolina

Only the calculated day of procedure could be used to assign PRDAYn because South Carolina did not supply the day of procedure.

Tennessee

Only the calculated day of procedure could be used to assign PRDAYn because Tennessee did not supply the day of procedure.

Virginia

Day of procedure could not be calculated from dates because Virginia did not report procedure dates. During HCUP processing, only the reported day of procedure could be used to assign PRDAY1.

Wisconsin

Until 1997, PRDAYn could not be calculated because Wisconsin did not report procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn. Beginning in 1997, Wisconsin provided the date of principal procedure (PRDATE1).

Principal procedure day is only required for major procedures (defined below). Procedure days are set to missing for all other cases.

Major procedures are defined as Class 1 or 2 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data

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 ethnicity.

RACE_X and HISPANIC_X are not available on the HCUP Nationwide Inpatient Sample (NIS).

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			
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		
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Hispanic	
2		Non-Hispanic	
3		Unknown	
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. There are a small number of discharges with undocumented values in HISPANIC_X that are not considered valid by the data source.			

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.

Connecticut

Connecticut			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
If HISPANIC_X=1		3	Hispanic
5	Spanish/Hispanic		
3	Oriental/Asian	4	Asian or Pacific Islander
7	Pacific Islander/Hawaiian		
4	American Indian	5	Native American
6	Other	6	Other
8	Other non-white		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Spanish/Hispanic origin	
2		Non-Spanish/Non-Hispanic	

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.			

Hawaii

In the source data files provided by Hawaii, the coding of race of the patient was different for each Hawaiian hospital. During HCUP processing, the hospital-specific values were recoded into the values of RACE_X described below.

Hawaii			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
3	Hispanic	3	Hispanic
4	Hawaiian	4	Asian or Pacific Islander
5	Chinese		
6	Filipino		
7	Japanese		
8	Other Asian		
9	Other Pacific Islander		
10	Native American	5	Native American
11	Mixed or Other	6	Other
Blank	Missing	.	Missing
A	Any values not documented by the data source	.A	Invalid
One hospital (DSHOSPID = "120014") provides only one category for Asian patients, instead of distinguishing Chinese, Filipino, and Japanese races. For this hospital, the one category for Asian was recoded to "Other Asian" (RACE_X = "8"). One hospital (DSHOSPID = "12001F") provides only one category for Asian/Pacific Islander patients, instead of distinguishing Hawaiian, Chinese, Filipino, Japanese and other Asian and Pacific Islander races. For this hospital, the one category for Asian/Pacific Islander was recoded to "Other Asian" (RACE_X = "8"). Separate information on ethnicity is not provided by any Hawaiian hospital. 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.

Kansas

Kansas			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
4	Hispanic	3	Hispanic
5	Asian/Pacific Islander	4	Asian or Pacific Islander
3	American Indian/Eskimo	5	Native American
6	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.			

Massachusetts

Massachusetts			
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.			

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	

Missouri

Missouri			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
4	Hispanic	3	Hispanic
5	Asian/Pacific Islander	4	Asian or Pacific Islander
3	American Indian/Eskimo	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.			

New Jersey

New Jersey			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
If HISPANIC_X = 1, 2, 3, 4, or 5		3	Hispanic
4	Chinese		Asian or Pacific
5	Japanese		

6	Hawaiian (including part Hawaiian)	4	Islander
7	Filipino		
8	Other Asian or Pacific Islander		
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	
Beginning in 1993. 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. *Prior to 1993.* 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).			

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 or Pacific Islander	5	Native American
03	Native American (American Indian, Eskimo, Aleut)	4	Asian or Pacific Islander
88	Other	6	Other
99, Blank	Not Available, Missing	.	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	

Pennsylvania

Pennsylvania			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
W	White	1	White
B	Black	2	Black
If HISPANIC_X = 1		3	Hispanic
A	Asian or Pacific Islander	4	Asian or Pacific Islander
I	Native American or Eskimo	5	Native American
N	Other	6	Other
U, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Hispanic/Latino origin or descent	
2		Not of Hispanic/Latino origin or descent	

South Carolina

South Carolina			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
1	White	1	White
2	Black	2	Black
6	Hispanic	3	Hispanic
3	Oriental 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.			

Tennessee

Tennessee			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
0	White, not Hispanic	1	White
7	White, Hispanic origin unknown		
1	Black, not Hispanic	2	Black
8	Black, Hispanic origin unknown		
5	White, Hispanic	3	Hispanic
6	Black, Hispanic		

3	Asian or Pacific Islander	4	Asian or Pacific Islander
4	American Indian/Alaskan Native	5	Native American
2	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.			

Utah

Utah			
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.			

Virginia

Virginia			
RACE_X		**RACE**	
Value	**Description**	**Value**	**Description**
0	White	1	White
1	Black	2	Black
5	Hispanic	3	Hispanic
6	Black Hispanic		
3	Asian	4	Asian or Pacific Islander
4	American Indian	5	Native American
2	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.			

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	

SURGID_S - Synthetic primary surgeon number

General Notes

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.

Beginning with 1993 NIS, supplied surgeon 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 inpatient data, the encrypted surgeon identifiers from 1993 on may not match those in earlier years. However, no null characters were found in the 1994 identifiers, and they were rare in prior years.

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 as 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.

Maine

Maine provides state-specific encrypted physician identifiers that allow for tracking physicians across hospitals. During HCUP processing, physician identifiers were re-encrypted (SURGID_S).

Maryland

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

Missouri

The primary surgeon identification number (SURGID_S) may not accurately track physicians across hospitals. Missouri accepts Universal Physician Identification Numbers (UPINs), state license numbers, and hospital-assigned physician identification numbers as primary surgeon numbers. According to the source, the majority of physician identifiers are UPINs.

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 attending physician or Chief of Service should have been reported.

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

Pennsylvania

Pennsylvania reports the PA state license number for the operating physician.

South Carolina

South Carolina reports six-character state license numbers as Other Physician identifiers. When the source values were shorter than six characters, the HCUP value was padded to bring it into conformity with South Carolina's format.

Tennessee

The primary surgeon identification number (SURGID_S) may not accurately track physicians across hospitals. Tennessee collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Tennessee prefers Universal Physician Identification Numbers (UPINs) but also accepts state license numbers.

Virginia

Virginia reports the physician performing first procedure using Universal Physician Identification Numbers (UPINs). During HCUP processing, physician identifiers were encrypted (SURGID_S).

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.

Wisconsin

Beginning in 1995, physician identifiers were not reported in the source data.

Prior to 1995, the Wisconsin physician identifiers may not accurately track physicians across hospitals. Wisconsin collects Wisconsin Medical License Numbers as its physician identifier from most hospitals, but Unique Physician Identifiers (UPINs) are accepted from those hospitals that do not code Wisconsin License Numbers.

Only doctors of medicine and osteopathy are coded in this field. If the primary responsibility for the patient is in the hands of a non-physician care giver, this field is missing. Examples of non-physician care givers include dentists, podiatrists, and nurse midwives.

Even if a procedure was performed, SURGID_S may be missing because:

- Wisconsin specifications require that identifiers for non-physicians performing a procedure be removed and
- Wisconsin requires a valid license number only if a physician performed a UHDDS class 1 or class 2 procedure.

The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

SURGID_S may be coded with the consulting physician license number even if the record has no procedure.

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 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)
		.	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. 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.

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

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.

<u>No Charges</u>

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).

Connecticut

Connecticut includes non-covered charges in the total charges if they are reported by hospitals, but does not report non-covered charges separately. The HCUP uniform total charges (TOTCHG) could not be adjusted to exclude non-covered charges. (Non-covered charges include items such as telephone and television).

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.

Kansas

It was optional for hospitals to provide total charges to the hospital association. Approximately one fifth to one quarter of the discharges are missing total charges.

Some hospitals report total charges of $1.00 for all discharges. For 1993-1994, the $1.00 charges are included in the HCUP data. Beginning with 1995, total charges of $1.00 in the Kansas inpatient data were set to missing (.).

Due to an error in 1994 HCUP processing, TOTCHG values of "invalid" (.A) were recoded to TOTCHG values of "missing" (.).

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.

Maine

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).

Missouri

According to the Missouri Hospital Association, most hospitals excluded professional fees from total charges (TOTCHG and TOTCHG_X).

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 are 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, 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.

Pennsylvania

Prior to 1997, non-covered charges and professional charges were subtracted from the supplied total charge during HCUP processing to make Pennsylvania total charges (TOTCHG) comparable to data from other states.

Beginning in 1997, Pennsylvania supplied total charges that did not include non-covered and professional charges.

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.

Virginia

The maximum value allowed for total charges in the Virgina source files is $9,999,999.

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 (nonumeric 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. 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.

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

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).

Connecticut

Connecticut includes non-covered charges in the total charges if they are reported by hospitals but, does not report non-covered charges separately. The HCUP uniform total charges (TOTCHG_X) could not be adjusted to exclude non-covered charges. (Non-covered charges include items such as telephone and television).

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.

Illinois

Due to an error in HCUP processing, a few zero charges occur in the Illinois 1990-1991 HCUP Illinois files. Input values of zero were set to missing (.) before TOTCHG was rounded. If the input charge was between $0.01 and $0.49, then the rounded TOTCHG is 0.

Kansas

It was optional for hospitals to provide total charges to the hospital association. Approximately one fifth to one quarter of the discharges are missing total charges.

Some hospitals report total charges of $1.00 for all discharges. For 1993-1994, the $1.00 charges are included in the HCUP data. Beginning with 1995, total charges of $1.00 in the Kansas inpatient data were set to missing (.).

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.

Maine

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).

Missouri

According to the Missouri Hospital Association, most hospitals excluded professional fees from total charges (TOTCHG and TOTCHG_X).

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 are 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, 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.

Pennsylvania

Prior to 1997, non-covered charges and professional charges were subtracted from the supplied total charge during HCUP processing to make Pennsylvania total charges (TOTCHG_X) comparable to data from other states.

Beginning in 1997, Pennsylvania supplied total charges that did not include non-covered and professional charges.

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.

Tennessee

Prior to 1998 data, negative total charges were erroneously set to invalid (.A). Beginning in 1998, negative total charges are retained in TOTCHG_X and set to inconsistent (.C) in TOTCHG.

Virginia

The maximum value allowed for total charges in the Virgina source files is $9,999,999.

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.

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	2-digit calendar year in 1988-1997 data	yy
		4-digit calendar year beginning with 1998 data	yyyy

State Specific Notes

None

ZIPINC - Median household income for patient’s zip code

General Notes

This is a categorical variable indicating the median household income of the patient’s zip code of residence. The median income values are 1999 estimates derived from projections from 1990 Census values for block groups. The categories are defined so that the maximum for category 1 ($25,000) is approximately 150% of the 1999 poverty level and the boundary between the second and third categories ($35,000) is approximately the national median household income.

To protect patient confidentiality, precautions are taken to mask zip codes with unique ZIPINC values within a state. When only one ZIP code was represented in a particular category in ZIPINC for a state, ZIPINC was set to missing.

ZIPINC is missing (.) when the patient’s ZIP code was missing, did not exist in 1999, was invalid in 1999, or outside of the United States.

Uniform Values

Variable	Description	Value	Value Description
ZIPINC	Median household income for patient's zip code	1	$1-24,999
		2	$25,000-34,999
		3	$35,000-44,999
		4	45,000 or more
		.	Missing

State Specific Notes

None