

Description of Data Elements
HCUP State Inpatient Databases (SID)

Volume 2 - Data Elements
Beginning with letters N through Z

This document contains cumulative descriptions of data elements across all HCUP Central Distributor states and years of HCUP data from 1988 to the current data year. Please refer to the separate documents on the Availability of Data Elements (1995-1997) and (1998-2002) for specific information on which states and data elements are included in each year of the SID.

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

Table of Contents

Data Elements beginning with letters A through M are located in Volume 1

Data Elements beginning with letters N through Z are located in Volume 2

NDX - Number of diagnoses on this discharge	1
NEOMAT - Neonatal and/or maternal DX and/or PR.....	2
NPR - Number of procedures on this discharge	3
PAY1 - Expected primary payer, uniform.....	4
PAY1_N - Expected primary payer, nonuniform	58
PAY1_X - Expected primary payer, as received from data source	66
PAYER1_X - Expected primary payer identifier, plan specific	67
PAY2 - Expected secondary payer, uniform	82
PAY2_N - Expected secondary payer, nonuniform.....	83
PAY2_X - Expected secondary payer, as received from data source.....	88
PAYER2_X - Expected secondary payer identifier, plan specific.....	89
PAY3_X - Expected tertiary payer, as received from data source	90
PCCHPRn - Clinical Classifications Software: procedure classification.....	91
PL_CBSA - Patient location: Core Based Statistical Area (CBSA)	93
PL_MSA1993 - Patient location: Metropolitan Statistical Area (MSA) 1993.....	95
PL_RUCA - Patient location: Rural-Urban Commuting Area (RUCA) Codes.....	96
PL_RUCA10 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, ten levels.....	98
PL_RUCA4 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, four levels.....	100
PL_RUCC - Patient location: Rural-Urban Continuum (RUCC) Codes.....	102
PL_UIC - Patient location: Urban influence codes	104
PNUM_S - Synthetic person number	106
PRn - Procedure	108
PRCCSn - Clinical Classifications Software (CCS): procedure classification ...	115
PRDATEn - Date of procedure	117
PRDAYn - Number of days from admission to procedure n.....	119
PRMONTHn - Month of procedure.....	124
PROCESS - HCUP processing identification record number.....	125
PRSYS - Procedure coding system	126
PRVn - Validity Flag: Procedure n	127
PRYEARn - Year of procedure	128
PSTCO - Patient state/county FIPS code	129
PSTCO2 - Patient state/county FIPS code, possibly derived from ZIP Code ...	131
RACE - Race	132
RACE_X - Race, as received from data source	142
RATEn - Daily rate.....	143
RDRG - Refined DRG.....	144
RDRGWT - Refined DRG weight	147
READMIT - Readmission.....	149
REVCDn - Revenue code	150

SEQ_SID - HCUP SID sequence number	166
SEX - Sex of the patient.....	167
SURGID_S - Synthetic primary surgeon number.....	168
SURGSPEC - Primary surgeon specialty, as received from source	172
TMDXn - Diagnosis present at admission.....	181
TOTCHG - Total charges, cleaned	182
TOTCHG_X - Total charges, as received from data source	188
TOWN - Patient town of residence, as received from source	194
UNITn - Units of service.....	212
YEAR - Calendar year	223
ZIP - Patient zip code.....	224
ZIP_S - Synthetic patient zip code	228
ZIP3 - Patient ZIP Code, first 3 digits.....	230

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.	

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.	

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

None

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.

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 1995)			
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	
Value	Description	Value	Description
010	Medicare	1	Medicare
011	Medicare (HMO)	1	Medicare
012	Medicare (Managed care - Other)	1	Medicare
013	Medicare (fee for service)	1	Medicare
020	Medi-Cal	2	Medi-Cal
021	Medi-Cal (HMO)	2	Medi-Cal
022	Medi-Cal (Managed care - Other)	2	Medi-Cal
023	Medi-Cal (fee for service)	2	Medi-Cal
030	Private Coverage	3	Private insurance
031	Private Coverage (HMO)	3	Private insurance
032	Private Coverage (Managed care - Other)	3	Private insurance
033	Private Coverage (fee for service)	3	Private insurance
08n, where n=0-3	Self-pay	4	Self-pay

--		5	No charge
04n, where n=0-3	Worker's Compensation	6	Other
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
Any values not documented by the data source		.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 from 1995-1998)			
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	
Value	Description	Value	Description
04	Medicare	1	Medicare
05	Medicaid	2	Medicaid
01	Blue Cross/Blue Shield	3	Private insurance
02	Commercial Ins/Indemnity Plans/Self Insured	3	Private Insurance
03	Other Liability Ins/No Fault/Casualty	3	Private Insurance
08	HMO-PPO/Managed Care/Discounted	3	Private Insurance
12	Self-Pay	4	Self-pay
13	No Charge/Charity Research	5	No charge
06	Worker's Comp	6	Other
09	CHAMPUS		
11	Other Government		
14	Other		
15	Colorado Medically Indigent		
00, Blank	Missing	.	Missing
Any other values		.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	

02, 03	Commercial insurance/Indemnity plans/Self-insured; Other liability insurance/No fault/ Casualty		Private insurance
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 Values		.A	Invalid

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

Florida

Florida			
(Valid beginning in 1998)			
PAY1_X		PAY1	
Value	Description	Value	Description
A	Medicare	1	Medicare
B	Medicare HMO	1	Medicare
C	Medicaid	2	Medicaid
D	Medicaid HMO	2	Medicaid
E	Commercial Insurance	3	Private Insurance
F	Commercial HMO	3	Private Insurance
G	Commercial PPO	3	Private Insurance
L	Self pay/Under-insured (No third party coverage or less than 30% estimated insurance coverage)	4	Self-pay
N	Charity	5	No charge
H	Worker's Compensation	6	Other
I	Champus		
J	VA		
K	Other State/Local Government		
M	Other		
Blank	Missing	.	Missing
Any values not documented by the data source		.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

Iowa

Iowa			
(Valid beginning in 1998)			
PAY1_X		PAY1	
Value	Description	Value	Description
01	Medicare (Title 18)	1	Medicare
11	Medicare Managed Care (Presently no predominant plans in Iowa)	1	Medicare
02	Medicaid (Title 19)	2	Medicaid
12	Medicaid Managed Care (e.g., Medipass, Heritage National, Care Choices, Principal Health Care)	2	Medicaid
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
07	Commercial (private or group plans other than HMO, PPO, ODS)	3	Private Insurance
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
14	PPO (e.g., Alliance Select, Healthcare)	3	Private

	Preferred, Plains Health Network)		Insurance
15	Organized Delivery Systems (ODS) (e.g., SecureCare of Iowa)	3	Private Insurance
08	Self-pay (the patient has no insurance, is ineligible for governmental assistance and is not a "no charge" patient)	4	Self-pay
10	No charge	5	No charge
03	Other State (including State Papers)	6	Other
04	County		
05	CHAMPUS		
09	Workers Compensation		
Blank	Missing	.	Missing
Any values not documented by the data source		.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

Kentucky

Kentucky			
PAY1_X, PAY2_X, PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
C	Medicare	1	Medicare
D	Medicaid	2	Medicaid
F	Commercial - Insurance Company	3	Private insurance
G	Commercial - Blue Cross/Blue Shield	3	Private insurance
J	Commercial - Indemnity	3	Private insurance
K	Commercial - Preferred Provider	3	Private insurance
L	Commercial - HMO	3	Private insurance
M	Commercial - Managed Care	3	Private insurance
A	Self Pay	4	Self-pay
--		5	No charge
B	Workers' Compensation	6	Other
E	Other Federal programs		
H	Champus		
I	Other		
Blank	Missing	.	Missing

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

Maine

Maine			
(Valid beginning in 1999)			
PAY1_X, PAY2_X, PAY3_X		PAY1, PAY 2	
Value	Description	Value	Description
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
05	Blue Cross	3	Private insurance
06	Other commercial carriers	3	Private insurance
10	HMO/PPO	3	Private insurance
08	Self-pay	4	Self-pay
07	Charity	5	No charge
03	U.S. Title V	6	Other
04	CHAMPUS/USVA		
09	Worker's Compensation		
11	Other or Unknown	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid

Maryland

Maryland			
(Valid beginning in 1998)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
01	Medicare	1	Medicare
15	Medicare HMO (payer specified in PAYER1_X/PAYER2_X)	1	Medicare
02	Medicaid	2	Medicaid
14	Medicaid HMO (payer specified in PAYER1_X/PAYER2_X)	2	Medicaid
04	Blue Cross of MD	3	Private Insurance
16	Blue Cross of the National Capital Area	3	Private

	(HMO)		Insurance
17	Blue Cross (other state)	3	Private Insurance
05	Commercial/PPO	3	Private Insurance
12	Managed Care (payer specified in PAYER1_X/ PAYER2_X)	3	Private Insurance
08	Self-pay	4	Self-pay
09	Charity - no charge	5	No charge
03	Title V	6	Other
06	Other government program		
07	Worker's Compensation		
10	Other		
11	Donor	.	Missing
77	Not Applicable (Secondary payer only)		
99	Unknown		
Blank	Missing	.A	Invalid
13	Do not use		
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);	2	Medicaid

	Medicaid HMO		
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

Massachusetts

Massachusetts			
(Valid beginning in 1998)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
3	Medicare	1	Medicare
F	Medicare Managed Care	1	Medicare
4	Medicaid	2	Medicaid
B	Medicaid Managed Care	2	Medicaid
6	Blue Cross	3	Private Insurance
C	Blue Cross Managed Care		
7	Commercial Insurance		
D	Commercial Managed Care		
8	HMO		
E	PPO and Other Managed Care not listed elsewhere		
J	Point of Service Plan		
K	Exclusive Provider Plan	4	Self-pay
1	Self-pay		
9	Free care (no charge)		
2	Worker's Compensation	6	Other

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
Any values not documented by the data source		.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

Michigan

Michigan			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
06	Blue Cross/Blue Shield	3	Private insurance
07	Other commercial insurance company	3	Private insurance
09	Managed care or other	3	Private insurance
08	Self-pay	4	Self-pay
10	No charge	5	No charge
03	Title V	6	Other
04	Other government source		
05	Worker's Compensation		
00, Blank	Missing, invalid or unrecorded	.	Missing
Any values not documented by the data source		.A	Invalid

Nebraska

Nebraska			
PAY1_X, PAY2_X and PAY3_X		PAY1	
Value	Description	Value	Description
02	Medicare	1	Medicare
04	Medicaid	2	Medicaid
12	Medicaid		
01	Commercial Insurance	3	Private Insurance
03	Commercial Insurance		

08	Commercial Insurance		
11	Commercial Insurance		
13	Commercial Insurance		
14	Commercial Insurance		
09	Self-pay	4	Self-pay
--	--	5	No charge
05	Worker's Compensation	6	Other
06	Champus/Champva		
07	Other Federal and State Programs		
10	Other		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

New Jersey

New Jersey			
(Valid beginning in 1998)			
PAY1_X and PAY2_X and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
011	Title XVII (Medicare) Part A	1	Medicare
015	Title XVII (Medicare) Part B	1	Medicare
017	Title XVII (Medicare) Part B - Physician Charges	1	Medicare
012	Title XIX (Medicaid)	2	Medicaid
010	Blue Cross Plan: Alabama	3	Private Insurance
020	Blue Cross Plan: Arkansas	3	Private Insurance
022	Blue Cross Plan: New Jersey - FEP	3	Private Insurance
025	Blue Cross Plan: New Jersey - Garden State	3	Private Insurance
026	Blue Cross Plan: New Jersey - Host	3	Private Insurance
029	Blue Cross Plan: Other Blue Cross	3	Private Insurance
030	Blue Cross Plan: Arizona	3	Private

			Insurance
040	Blue Cross Plan: California - all other groups	3	Private Insurance
041	Blue Cross Plan: Oakland (CA) (1994 only)	3	Private Insurance
042	Blue Cross Plan: San Francisco (CA) (1994 only)	3	Private Insurance
050	Blue Cross Plan: Colorado	3	Private Insurance
060	Blue Cross Plan: Connecticut	3	Private Insurance
070	Blue Cross Plan: Delaware	3	Private Insurance
080	Blue Cross Plan: District of Columbia	3	Private Insurance
090	Blue Cross Plan: Florida	3	Private Insurance
100	Blue Cross Plan: Columbus (GA) (1994 only)	3	Private Insurance
101	Blue Cross Plan: Georgia - all other groups	3	Private Insurance
110	Blue Cross Plan: Idaho	3	Private Insurance
121	Blue Cross Plan: Illinois	3	Private Insurance
130	Blue Cross Plan: Indiana	3	Private Insurance
140	Blue Cross Plan: Iowa - all other groups	3	Private Insurance
141	Blue Cross Plan: Sioux City (IA) (1994 only)	3	Private Insurance
150	Blue Cross Plan: Kansas	3	Private Insurance
160	Blue Cross Plan: Kentucky	3	Private Insurance
170	Blue Cross Plan: Louisiana	3	Private Insurance
180	Blue Cross Plan: Maine	3	Private Insurance
190	Blue Cross Plan: Maryland	3	Private

			Insurance
200	Blue Cross Plan: Massachusetts	3	Private Insurance
210	Blue Cross Plan: Michigan	3	Private Insurance
220	Blue Cross Plan: Minnesota	3	Private Insurance
230	Blue Cross Plan: Mississippi	3	Private Insurance
240	Blue Cross Plan: Missouri - Kansas City	3	Private Insurance
241	Blue Cross Plan: Missouri - St. Louis	3	Private Insurance
250	Blue Cross Plan: Montana	3	Private Insurance
260	Blue Cross Plan: Nebraska	3	Private Insurance
265	Blue Cross Plan: Nevada	3	Private Insurance
270	Blue Cross Plan: New Hampshire	3	Private Insurance
280	Blue Cross Plan: New Jersey - all other groups	3	Private Insurance
281	Blue Cross Plan: New Jersey - Non-Group Line of Business	3	Private Insurance
290	Blue Cross Plan: New Mexico	3	Private Insurance
300	Blue Cross Plan: Albany (NY) (1994 only)	3	Private Insurance
301	Blue Cross Plan: New York - Buffalo	3	Private Insurance
303	Blue Cross Plan: New York - New York	3	Private Insurance
304	Blue Cross Plan: New York - Rochester	3	Private Insurance
305	Blue Cross Plan: New York - Syracuse	3	Private Insurance
306	Blue Cross Plan: New York - Utica	3	Private Insurance
307	Blue Cross Plan: Watertown (NY) (1994)	3	Private

	only)		Insurance
308	Blue Cross Plan: Part A only (NY) (1994 only)	3	Private Insurance
310	Blue Cross Plan: North Carolina	3	Private Insurance
320	Blue Cross Plan: North Dakota	3	Private Insurance
331	Blue Cross Plan: Canton (OH) (1994 only)	3	Private Insurance
332	Blue Cross Plan: Ohio - Cincinnati	3	Private Insurance
333	Blue Cross Plan: Ohio - Cleveland	3	Private Insurance
334	Blue Cross Plan: Columbus (OH) (1994 only)	3	Private Insurance
335	Blue Cross Plan: Lima (OH) (1994 only)	3	Private Insurance
337	Blue Cross Plan: Toledo (OH) (1994 only)	3	Private Insurance
338	Blue Cross Plan: Youngstown (OH) (1994 only)	3	Private Insurance
340	Blue Cross Plan: Oklahoma	3	Private Insurance
350	Blue Cross Plan: Oregon	3	Private Insurance
351	Blue Cross Plan: Portland	3	Private Insurance
360	Blue Cross Plan: Allentown (PA) (1994 only)	3	Private Insurance
361	Blue Cross plan: Pennsylvania - Harrisburg	3	Private Insurance
362	Blue Cross Plan: Pennsylvania - Philadelphia	3	Private Insurance
363	Blue Cross plan: Pennsylvania - Pittsburgh	3	Private Insurance
364	Blue Cross plan: Pennsylvania - Wilkes-Barre	3	Private Insurance
370	Blue Cross plan: Rhode Island	3	Private Insurance
380	Blue Cross plan: South Carolina	3	Private

			Insurance
390	Blue Cross Plan: Tennessee - Chattanooga	3	Private Insurance
392	Blue Cross Plan: Tennessee - Memphis	3	Private Insurance
400	Blue Cross plan: Texas	3	Private Insurance
410	Blue Cross plan: Utah	3	Private Insurance
415	Blue Cross plan: Vermont	3	Private Insurance
423	Blue Cross plan: Virginia - all other groups	3	Private Insurance
424	Blue Cross Plan: Roanoke (VA) (1994 only)	3	Private Insurance
430	Blue Cross Plan: Alaska/Washington	3	Private Insurance
441	Blue Cross Plan: Charleston (WV) (1994 only)	3	Private Insurance
443	Blue Cross Plan: West Virginia - all other groups	3	Private Insurance
444	Blue Cross Plan: Wheeling (WV) (1994 only)	3	Private Insurance
450	Blue Cross Plan: Wisconsin	3	Private Insurance
460	Blue Cross Plan: Wyoming	3	Private Insurance
470	Blue Cross Plan: Puerto Rico	3	Private Insurance
471	Blue Cross Plan: Hawaii - all other groups	3	Private Insurance
865	Blue Cross Plan: Pennsylvania - Camp Hill (effective 1/95)	3	Private Insurance
932	Blue Cross Plan: Seattle (WA/AK) (1994 only)	3	Private Insurance
936	Blue Cross Plan: Spokane (WA/AK) (1994 only)	3	Private Insurance
971	Blue Cross Plan: Blue Shield (HI) (1994 only)	3	Private Insurance
105	Commercial: Aetna	3	Private

			Insurance
106	Commercial: NJ Carpenter's Health Fund	3	Private Insurance
107	Commercial: AARP (effective 4/95)	3	Private Insurance
115	Commercial: Connecticut General	3	Private Insurance
120	Commercial: Continental Assurance	3	Private Insurance
125	Commercial: Equitable	3	Private Insurance
131	Commercial: Guardian Life	3	Private Insurance
135	Commercial: Intercontinental	3	Private Insurance
142	Commercial: John Hancock	3	Private Insurance
145	Commercial: Massachusetts Mutual	3	Private Insurance
151	Commercial: Metropolitan Life	3	Private Insurance
155	Commercial: Mutual of Omaha	3	Private Insurance
161	Commercial: New York Life	3	Private Insurance
165	Commercial: Provident Alliance	3	Private Insurance
171	Commercial: Prudential	3	Private Insurance
175	Commercial: Travelers	3	Private Insurance
181	Commercial: Washington National Insurance	3	Private Insurance
185	Commercial: New Jersey Auto Dealers Association	3	Private Insurance
186	Commercial: Allstate	3	Private Insurance
187	Commercial: Mutual Life of New York	3	Private Insurance
188	Commercial: National Association of Letter	3	Private

	Carriers		Insurance
189	Commercial: Local Union Insurance	3	Private Insurance
191	Commercial: Lincoln National	3	Private Insurance
192	Commercial: New Jersey Turnpike Authority	3	Private Insurance
193	Commercial: Rasmussen	3	Private Insurance
194	Commercial: Inter County Health Plan	3	Private Insurance
195	Commercial: American Postal Workers	3	Private Insurance
196	Commercial: Leader Administrators	3	Private Insurance
197	Commercial: Fred S. James (James Benefit)	3	Private Insurance
198	Commercial: Mail Handlers Benefit Plan	3	Private Insurance
199	Commercial: Other Commercial Insurance	3	Private Insurance
032	HMO: Americaid Inc. (effective 11/96)	3	Private Insurance
033	HMO: American Preferred Provider Plan, Inc. (effective 11/96)	3	Private Insurance
034	HMO: United Health Care (Effective 8/96)	3	Private Insurance
035	HMO: MEDI-Group, Inc. (HMO Blue) (effective 11/95)	3	Private Insurance
036	HMO: Principal HMO (Effective 8/97)	3	Private Insurance
037	HMO: Mission Health Plans (effective 8/97)	3	Private Insurance
043	HMO: Crossroads Health Plan (1994 only)	3	Private Insurance
044	HMO: Cumberland Regional Health Plan (1994 only)	3	Private Insurance
045	HMO: HIP of NJ	3	Private Insurance
046	HMO: HIP of Greater NJ (1994 only)	3	Private

			Insurance
047	HMO: HMO Blue (Medigroup Central)	3	Private Insurance
048	HMO: HMO of PA-NJ (US Healthcare) & (AETNA Health Plans of NJ, Inc.)	3	Private Insurance
049	HMO: Rutgers Community Health Plan (1994 only)	3	Private Insurance
051	HMO: Southern Inter-County Med Assn (1994 only)	3	Private Insurance
052	HMO: Valley Health Plan (1994 only)	3	Private Insurance
053	HMO: AETNA Health Plans of New Jersey, Inc. (discontinued 6/98)	3	Private Insurance
054	HMO: HMO of NJ (1994 only)	3	Private Insurance
055	HMO: Omni Care (1994 only)	3	Private Insurance
056	HMO: CIGNA HealthCare of Northern NJ, Inc.	3	Private Insurance
057	HMO: Bergen County IPA (1994 only)	3	Private Insurance
058	HMO: PruCare of NJ	3	Private Insurance
059	HMO: Other HMO	3	Private Insurance
061	HMO: MetraHealth Care Plan of Upstate New York (discontinued 6/98)	3	Private Insurance
062	HMO: Garden State Health Plan (discontinued 6/98)	3	Private Insurance
063	HMO: HMO of PA (1994 only)	3	Private Insurance
064	HMO: PruCare (1994 only)	3	Private Insurance
065	HMO: MAXICARE (1994 only)	3	Private Insurance
066	HMO: HMO Blue (Medigroup Metro) (discontinued 6/98)	3	Private Insurance
067	HMO: HMO Blue (Medigroup North) (discontinued 6/98)	3	Private Insurance
068	HMO: HMO Blue (Medigroup South)	3	Private

	(discontinued 6/98)		Insurance
069	HMO: HMO Blue (Medigroup Shoreline) (discontinued 6/98)	3	Private Insurance
071	HMO: MetraHealth Care Plan of NJ (discontinued 6/98)	3	Private Insurance
072	HMO: Oxford Health Plan	3	Private Insurance
073	HMO: NYL Care Health Plans of NJ, Inc.	3	Private Insurance
074	HMO: CIGNA Health Care of NJ., Inc. South	3	Private Insurance
075	HMO: Corporate Health Administrators (1994 only)	3	Private Insurance
077	HMO: QUALMED/Greater Atlantic Health Services	3	Private Insurance
078	HMO: Amerihealth HMO, Inc.	3	Private Insurance
081	HMO: Atlanticare Health Plan (effective 11/96)	3	Private Insurance
082	HMO: ChubbHealth Plan (discontinued 6/98)	3	Private Insurance
083	HMO: Community Health Care and Development Corp (discontinued 6/98)	3	Private Insurance
084	HMO: First Option Health Plan (effective 11/96)	3	Private Insurance
085	HMO: Harmony Health Plan (discontinued 6/98)	3	Private Insurance
086	HMO: HMO Blue (Blue Cross/Blue Shield of New Jersey) (discontinued 6/98)	3	Private Insurance
087	HMO: Liberty Health Plan (effective 11/96)	3	Private Insurance
088	HMO: Managed Health Care Systems of New Jersey, Inc. (effective 11/96)	3	Private Insurance
089	HMO: Physician Health Care Plan of New Jersey (discontinued 6/98)	3	Private Insurance
094	HMO: Physician Health Services of New Jersey, Inc. (effective 11/96)	3	Private Insurance
097	HMO: University Health Plans, Inc. (effective 11/96)	3	Private Insurance
076	Miscellaneous: Premier Preferred Care of	3	Private

	New Jersey		Insurance
091	Miscellaneous: Union Insurance	3	Private Insurance
093	Miscellaneous: MAGNET (Magna Care) (effective 1/95)	3	Private Insurance
096	Miscellaneous: QualCare (effective 1/95)	3	Private Insurance
309	No Fault: Allstate	3	Private Insurance
311	No Fault: New Jersey Manufacturers	3	Private Insurance
315	No Fault: State Farm	3	Private Insurance
399	No Fault: Other	3	Private Insurance
095	Miscellaneous: Indigent	4	Self-pay
031	Patient: Direct		
039	Patient: Other Source of Patient Pay		
098	Miscellaneous: Hospital Responsibility	5	No charge
014	Champus	6	Other
016	Department of Vocational Rehabilitation		
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: Aetna		
211	Worker's Compensation: Insurance Company of North America		
215	Worker's Compensation: Liberty Mutual		
221	Worker's Compensation: Employers Mutual		
225	Worker's Compensation: New Jersey Manufacturers		
231	Worker's Compensation: Travelers		
299	Worker's Compensation: Other		
000, Blank	Not Available, Missing	.	Missing

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

New Jersey			
(Valid from 1988-1997)			
PAY1_X and PAY2_X and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
011	Title XVII (Medicare) Part A	1	Medicare
015	Title XVII (Medicare) Part B	1	Medicare
017	Title XVII (Medicare) Part B - Physician Charges	1	Medicare
012	Title XIX (Medicaid)	2	Medicaid
010	Blue Cross: Alabama	3	Private Insurance
020	Blue Cross: Arkansas	3	Private Insurance
022	Blue Cross: New Jersey, FEP	3	Private Insurance
025	Blue Cross: New Jersey; Garden State	3	Private Insurance
026	Blue Cross: New Jersey, Host	3	Private Insurance
029	Blue Cross: Other Blue Cross	3	Private Insurance
030	Blue Cross: Arizona	3	Private Insurance
040	Blue Cross: California	3	Private Insurance
040	Blue Cross: California, all other groups (1994 only)		
040	Blue Cross: California, Woodland Hills (1988-1993 only)		
041	Blue Cross: California, Oakland (1994 only)	3	Private Insurance
042	Blue Cross: California, San Francisco (1994 only)	3	Private Insurance
050	Blue Cross: Colorado	3	Private Insurance
060	Blue Cross: Connecticut	3	Private Insurance

070	Blue Cross: Delaware	3	Private Insurance
080	Blue Cross: District of Columbia	3	Private Insurance
090	Blue Cross: Florida	3	Private Insurance
100	Blue Cross: Georgia	3	Private Insurance
100	Blue Cross: Georgia, all other groups (1994 only)		
100	Blue Cross: Georgia, Atlanta (1988-1993 only)		
101	Blue Cross: Georgia, Columbus (1994 only)	3	Private Insurance
110	Blue Cross: Idaho	3	Private Insurance
121	Blue Cross: Illinois	3	Private Insurance
130	Blue Cross: Indiana	3	Private Insurance
140	Blue Cross: Iowa	3	Private Insurance
140	Blue Cross: Iowa, all other groups (1994 only)		
140	Blue Cross: Iowa, not Sioux City (1988-1993 only)		
141	Blue Cross: Iowa, Sioux City (1994 only)	3	Private Insurance
141	Blue Cross: Iowa, Sioux city South Dakota (1988-1993 only)		
150	Blue Cross: Kansas	3	Private Insurance
160	Blue Cross: Kentucky	3	Private Insurance
170	Blue Cross: Louisiana	3	Private Insurance
180	Blue Cross: Maine	3	Private Insurance
190	Blue Cross: Maryland	3	Private Insurance
200	Blue Cross: Massachusetts	3	Private Insurance

210	Blue Cross: Michigan	3	Private Insurance
220	Blue Cross: Minnesota	3	Private Insurance
230	Blue Cross: Mississippi	3	Private Insurance
240	Blue Cross: Missouri, Kansas City	3	Private Insurance
241	Blue Cross: Missouri, St. Louis	3	Private Insurance
250	Blue Cross: Montana	3	Private Insurance
260	Blue Cross: Nebraska	3	Private Insurance
265	Blue Cross: Nevada	3	Private Insurance
270	Blue Cross: New Hampshire	3	Private Insurance
280	Blue Cross: New Jersey, All Other Groups	3	Private Insurance
281	Blue Cross: New Jersey, Non-Group Line of Business (valid beginning 1/93)	3	Private Insurance
290	Blue Cross: New Mexico	3	Private Insurance
300	Blue Cross: New York, Albany (1994 only)	3	Private Insurance
301	Blue Cross: New York, Buffalo	3	Private Insurance
303	Blue Cross: New York, New York	3	Private Insurance
304	Blue Cross: New York, Rochester	3	Private Insurance
305	Blue Cross: New York, Syracuse	3	Private Insurance
306	Blue Cross: New York, Utica	3	Private Insurance
307	Blue Cross: New York, Watertown (1994 only)	3	Private Insurance
308	Blue Cross: New York, Part A Only (1994 only)	3	Private Insurance

310	Blue Cross: North Carolina	3	Private Insurance
320	Blue Cross: North Dakota	3	Private Insurance
331	Blue Cross: Ohio, Canton (1994 only)	3	Private Insurance
332	Blue Cross: Ohio, Cincinnati	3	Private Insurance
333	Blue Cross: Ohio, Cleveland	3	Private Insurance
334	Blue Cross: Ohio, Columbus (1994 only)	3	Private Insurance
335	Blue Cross: Ohio, Lima (1994 only)	3	Private Insurance
337	Blue Cross: Ohio, Toledo (1994 only)	3	Private Insurance
338	Blue Cross: Ohio, Youngstown (1994 only)	3	Private Insurance
340	Blue Cross: Oklahoma	3	Private Insurance
350	Blue Cross: Oregon	3	Private Insurance
360	Blue Cross: Pennsylvania, Allentown (1994 only)	3	Private Insurance
361	Blue Cross: Pennsylvania, Harrisburg	3	Private Insurance
362	Blue Cross: Pennsylvania, Philadelphia	3	Private Insurance
363	Blue Cross: Pennsylvania, Pittsburgh	3	Private Insurance
364	Blue Cross: Pennsylvania, Wilkes-Barre	3	Private Insurance
370	Blue Cross: Rhode Island	3	Private Insurance
380	Blue Cross: South Carolina	3	Private Insurance
390	Blue Cross: Tennessee, Chattanooga	3	Private Insurance
392	Blue Cross: Tennessee, Memphis	3	Private Insurance

400	Blue Cross: Texas	3	Private Insurance
410	Blue Cross: Utah	3	Private Insurance
415	Blue Cross: Vermont	3	Private Insurance
423	Blue Cross: Virginia, all other groups (formerly Blue Cross: Virginia, Richmond)	3	Private Insurance
424	Blue Cross: Virginia, Roanoke (1994 only)	3	Private Insurance
430	Blue Cross: Alaska/Washington (formerly, Alaska/Washington, all other groups)	3	Private Insurance
441	Blue Cross: West Virginia, Charleston (1994 only)	3	Private Insurance
443	Blue Cross: West Virginia, Parkersburg	3	Private Insurance
444	Blue Cross: West Virginia, Wheeling (1994 only)	3	Private Insurance
450	Blue Cross: Wisconsin	3	Private Insurance
460	Blue Cross: Wyoming	3	Private Insurance
470	Blue Cross: Puerto Rico	3	Private Insurance
471	Blue Cross: Hawaii, all other groups (effective beginning 1/93)	3	Private Insurance
865	Blue Cross: Camp Hill (effective beginning 1/95)	3	Private Insurance
932	Blue Cross: Washington, Seattle (1994 only)	3	Private Insurance
936	Blue Cross: Washington, Spokane (1994 only)	3	Private Insurance
971	Blue Shield: Hawaii (1994 only)	3	Private Insurance
105	Commercial: Aetna	3	Private Insurance
106	Commercial: New Jersey Carpenters' Health Fund	3	Private Insurance
107	AARP (effective beginning 4/1/95)	3	Private Insurance

115	Commercial: Connecticut General	3	Private Insurance
120	Commercial: Continental Assurance	3	Private Insurance
125	Commercial: Equitable	3	Private Insurance
131	Commercial: Guardian Life	3	Private Insurance
135	Commercial: Intercontinental	3	Private Insurance
142	Commercial: John Hancock	3	Private Insurance
145	Commercial: Massachusetts Mutual	3	Private Insurance
151	Commercial: Metropolitan Life	3	Private Insurance
155	Commercial: Mutual of Omaha	3	Private Insurance
161	Commercial: New York Life	3	Private Insurance
165	Commercial: Provident Alliance	3	Private Insurance
171	Commercial: Prudential	3	Private Insurance
175	Commercial: Travelers	3	Private Insurance
181	Commercial: Washington National Insurance	3	Private Insurance
185	Commercial: New Jersey Auto Dealers Association	3	Private Insurance
186	Commercial: Allstate (Formerly Companion Life)	3	Private Insurance
187	Commercial: Mutual Life of New York	3	Private Insurance
188	Commercial: National Association of Letter Carriers	3	Private Insurance
189	Commercial: Local Union Insurance	3	Private Insurance
191	Commercial: Lincoln National	3	Private Insurance

192	Commercial: New Jersey Turnpike Authority	3	Private Insurance
193	Commercial: Rasmussen	3	Private Insurance
194	Commercial: InterCounty Health Plan	3	Private Insurance
195	Commercial: American Postal Workers	3	Private Insurance
196	Commercial: Leader Administrators	3	Private Insurance
197	Commercial: Fred S. James (James Benefit)	3	Private Insurance
198	Commercial: Mail Handlers Benefit Plan	3	Private Insurance
199	Commercial: Other Commercial Insurance	3	Private Insurance
032	HMO: Americaid Inc. (effective beginning 11/8/96)	3	Private Insurance
033	HMO: Americaid Preferred Provider Plan, Inc. (effective beginning 11/8/96)	3	Private Insurance
034	HMO: United Healthcare (Effective beginning 1/1/97)	3	Private Insurance
035	HMO: MediGroup, Inc. (effective beginning 1/1/97)	3	Private Insurance
043	HMO: Crossroads Health Plan (1994 only)	3	Private Insurance
044	HMO: Cumberland Regional Health Plan (1994 only)	3	Private Insurance
045	HMO: HIP/RHP of New Jersey (formerly Health Care Plan of New Jersey)	3	Private Insurance
046	HMO: HIP of Greater New Jersey (1994 only)	3	Private Insurance
047	HMO: HMO Blue (Medigroup-Central) (Formerly Mercer Regional Medical Group)	3	Private Insurance
048	HMO: HMO of PA/NJ (US Healthcare)	3	Private Insurance
049	HMO: Rutgers Community Health Plan (1994 only)	3	Private Insurance
051	HMO: Southern Inter-County Med Association (1994 only)	3	Private Insurance

052	HMO: Valley Health Plan (1994 only)	3	Private Insurance
053	HMO: Aetna Health Plans of New Jersey	3	Private Insurance
054	HMO: HMO of New Jersey (1994 only)	3	Private Insurance
055	HMO: OmniCare (1994 only)	3	Private Insurance
056	HMO: CIGNA Health Plan of New Jersey (Formerly Co. Med., Inc.)	3	Private Insurance
057	HMO: Bergen County IPA (1994 only)	3	Private Insurance
058	HMO: South Shore Health Plan	3	Private Insurance
059	HMO: Other HMO	3	Private Insurance
061	HMO: Travelers Health Plan	3	Private Insurance
062	HMO: Garden State Health Plan	3	Private Insurance
063	HMO: HMO of Pennsylvania (1994 only)	3	Private Insurance
064	HMO: PruCare (1994 only)	3	Private Insurance
065	HMO: Maxicare (1994 only)	3	Private Insurance
066	HMO: HMO Blue Medigroup - Metro, Inc.	3	Private Insurance
067	HMO: HMO Blue Medigroup - North, Inc.	3	Private Insurance
068	HMO: HMO Blue Medigroup - South, Inc.	3	Private Insurance
069	HMO: HMO Blue Medigroup - Shoreline, Inc.	3	Private Insurance
071	HMO: Metlife Health Care Network	3	Private Insurance
072	HMO: Oxford Health Plan	3	Private Insurance
073	HMO: Sanus of New Jersey	3	Private Insurance

074	HMO: CIGNA Health Plan of Southern New Jersey (Formerly CIGNA Health Plan)	3	Private Insurance
075	HMO: Corporate Health Administrators (1994 only)	3	Private Insurance
076	HMO: Premier Preferred Care of New Jersey (effective beginning 1/93)	3	Private Insurance
077	HMO: Greater Atlantic Health Services (effective beginning 1/95)	3	Private Insurance
078	HMO: Delaware Valley HMO (effective beginning 1/95)	3	Private Insurance
081	HMO: Atlanticare Health Plan (effective beginning 11/8/96)	3	Private Insurance
082	HMO: ChubbHealth Plan (effective beginning 11/8/96)	3	Private Insurance
083	HMO: Community Health Care and Development Corp (effective beginning 11/8/96)	3	Private Insurance
084	HMO: First Option Health Plan (effective beginning 11/8/96)	3	Private Insurance
085	HMO: Harmony Health Plan (effective beginning 11/8/96)	3	Private Insurance
086	HMO: HMO Blue (Blue Cross/Blue Shield of New Jersey) (effective beginning 11/8/96))	3	Private Insurance
087	HMO: Liberty Health Plan (effective beginning 11/8/96)	3	Private Insurance
088	HMO: Managed Health Care Systems of New Jersey, Inc. (effective beginning 11/8/96)	3	Private Insurance
089	HMO: Physician Health Care Plan of New Jersey (effective beginning 11/8/96)	3	Private Insurance
093	Misc: Magnet (Magna Care) (effective beginning 1/95)	3	Private Insurance
094	HMO: Physician Health Services of New Jersey, Inc. (effective beginning 11/8/96)	3	Private Insurance
096	Misc: Qual Care (effective beginning 11/8/96)	3	Private Insurance
097	HMO: University Health Plans, Inc. (effective beginning 11/8/96)	3	Private Insurance
091	Misc: Union Insurance	3	Private Insurance

309	No Fault: Allstate	3	Private Insurance
311	No Fault: New Jersey Manufacturers	3	Private Insurance
315	No Fault: State Farm	3	Private Insurance
399	No Fault: Other No Fault	3	Private Insurance
095	Miscellaneous: Indigent (effective beginning 1/93)	4	Self-pay
031	Patient: Direct		
039	Patient: Other Source of Patient Pay		
098	Misc: Hospital Responsibility	5	No charge
014	CHAMPUS	6	Other
016	Department of Vocational Rehabilitation		
092	Misc: Personal Health Program		
099	Misc: Other		
018	New Jersey State Health Benefits Plan		
019	Other Government		
013	Title V (Material and Child Health)		
205	Workers' Comp: Aetna		
211	Workers' Comp: Insurance Company of North America		
215	Workers' Comp: Liberty Mutual		
221	Workers' Comp: Employers Mutual		
225	Workers' Comp: New Jersey Manufacturers		
231	Workers' Comp: Travelers		
299	Workers' Comp: Other Workers' Compensation		
095	Misc: Indigent (effective from 1988-1992)		
000, Blank	Not Available, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

New York

New York

(Valid beginning in 1993)			
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	6	Other
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
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	3	Private Insurance
08	Commercial 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

North Carolina

North Carolina

PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
M	Medicare	1	Medicare
D	Medicaid	2	Medicaid
B	Blue Cross	3	Private insurance
H	HMO - PPO		
I	Other Insurance Companies		
S	Self-Insured (administered plan)		
P	Self-pay		
--		4	Self-pay
		5	No charge
C	Champus	6	Other
E	Other Government		
N	Other Government		
O	Other		
W	Workers' Compensation		
0, 1, 3, 8, 9, A, F, G, J, K, L, R, T, U, Y, Z, Blank	Documented by source as unknown values	.	Missing
Any values not documented by the data source		.A	Invalid

Oregon

Oregon			
(Valid beginning in 1998)			
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
M	Medicare	1	Medicare
D	Medicaid	2	Medicaid
X	HMO/Oregon Health Plan (Medicaid)		
B	Blue Cross/Blue Shield	3	Private Insurance
I	Commercial Insurance		
S	Self-Insured		
H	HMO/Managed Care		
K	Kaiser Permanente		

Y	PPO		
P	Self Pay	4	Self-pay
Z	Medically Indigent, Free, Research	5	No charge
W	Workers Compensation	6	Other
C	CHAMPUS		
E	County or State		
L	Managed Assistance		
N	Division of Health Services		
O	Other		
T	Title V		
Blank	Missing	.	Missing
Any values not documented by the data source		.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

South Carolina

South Carolina			
(Valid beginning in 2000)			
PAY1_X, PAY2_X, and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
1	Medicare	1	Medicare
13	Medicare managed care (Prior to 2002)		
2	Medicaid	2	Medicaid
14	Medicaid managed care (Prior to 2002)		
4	Commercial, PPO	3	Private insurance
5	HMO	3	Private insurance
6	Self-Pay	4	Self-pay
--		5	No charge
9	Workers' Compensation	6	Other
10	CHAMPUS, CHAMPVA (Prior to 2002)		
10	Tricare (Beginning in 2002)		

12	Other Agency		
13	Other (Beginning in 2002)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

South Carolina					
(Valid from 1998-1999)					
PAY1_X and PAY2_X		PAY1 and PAY2			
Value	Description	Value	Description		
6	Medicare	1	Medicare		
7	Medicaid	2	Medicaid		
12	Commercial, unspecified	3	Private insurance		
13	Commercial, unspecified	3	Private insurance		
14	Commercial, unspecified	3	Private insurance		
16	HMO	3	Private Insurance		
1	Self-pay	4	Self-pay		
--		5	No charge		
2	State or county indigent program, unspecified	6	Other		
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

Any values not documented by the data source	.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

Utah

In Utah, hospitals report plan-specific expected payer codes. The data organization that provides the Utah source files to HCUP (the Office of Health Care Statistics, Utah of Department of Health) maps the plan-specific payer codes into grouped payer categories. The data source reports that self-pay/uninsured are not identified very effectively since the original data are mostly based on billing information and they do not have any way to determine whether the payer declined to pay. There is a field for "patient as payer" on the source file, but it is not reliable coded and is only submitted by a small number of hospitals. HCUP receives only the grouped payer code.

Utah			
(Valid beginning in 1998)			
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	3	Private

			Insurance
06	Managed care (HMO and PPO)	3	Private Insurance
07	Self pay	4	Self-pay
--		5	No charge
03	Other government	6	Other
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
Any values not documented by the data source		.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		
Any values not documented by the data source		.A	Invalid

Washington

Washington			
(Valid beginning in 1998)			
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)	3	Private Insurance
610	Health Care Service Contractors (e.g., Blue Cross, county medical bureaus, Washington Physicians Service)	3	Private Insurance
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
625	Other Sponsored Patients (e.g., CHAMPUS, Indian Health)		
Blank	Missing	.	Missing
Any values not documented by the data source		.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)		
610	Health Care Service Contractors (e.g., Blue Cross, county 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)		
610	Health Care Service Contractors (e.g., Blue Cross, county medical bureaus, Washington Physicians Service) (Prior to 1994)	6	Other
625	Other Sponsored Patients (e.g., CHAMPUS, Indian Health)		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

West Virginia

West Virginia			
(Valid beginning in 2000)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
1	Medicare	1	Medicare
2	Medicaid	2	Medicaid
3	Public Employee Insurance Agency (PEIA)		
8	Commercial	3	Private Insurance
9	Nonprofit		
10	Employer/Union		
11	Self-pay	4	Self-pay
12	Charity	5	No charge
4	Workers Compensation		
5	Other Federal Government		
6	Other West Virginia Government	6	Other
7	Other States Government		
14	Not elsewhere classified		

13	Unknown	.	Missing
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
<p>For Medicare, Medicaid, and private insurance payers (PAY1/PAY2 = 1, 2, or 3), information on fee for service and HMO payment is available. This information can be extracted from the detailed payment information available in the HCUP variables PAYER1_X and PAYER2_X. The first 2 digits of PAYER1_X/PAYER2_X identify the payment program; the third digit identifies the modality (e.g., fee for service, HMO, point of service, etc.); and the fourth digit specifies the HMO plan. See documentation under PAYER1_X and PAYER2_X for additional information.</p>			
PAYER1_X and PAYER2_X			
3rd digit = "1"		Fee for Service/Indemnity	
3rd digit = "2"		DRG Prospective Payment System	
3rd digit = "3"		Point of Service	
3rd digit = "3"		Point of Service	
3rd digit = "4"		HMO	
3rd digit = "5"		Other Managed Care (including PPO)	
3rd digit not equal 1-5		Unknown or not elsewhere classified	

Wisconsin

Wisconsin			
(Valid beginning in 1998)			
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.)	1	Medicare
MED09	Medicare - Unable to determine insurance type	1	Medicare
T1901	Wisconsin Medicaid - Fee for	2	Medicaid

	service		
T1902	Wisconsin Medicaid - Alternative health care insurance plans	2	Medicaid
T1909	Wisconsin Medicaid - type unknown	2	Medicaid
OTH51	Non-Wisconsin Medicaid	2	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	Blue Cross - type unknown	3	Private

nnn is a 3-digit code			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		
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
bbb00, where b is a blank	Unknown		
Blank	Missing		
Any values not documented by the data source		.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	Blue Cross - Fee for service	3	Private

nnn is a 3-digit code			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)	.	Missing
OTH99	Unknown		
bbb00, where b is a blank	Unknown		
Blank	Missing	.A	Invalid
Any values not documented by the data source			

PAY1_N - Expected primary payer, nonuniform

General Notes

PAY1_N (where _N indicates nonuniform) preserves much of the original expected primary payer detail from the various data sources. However, some categories of PAY1_N are not available from some sources because not all sources have the same level of detail available.

The HCUP data element PAY1 contains more general categories for commercial and other payers. PAY1_X retains the expected primary payer as provided by the data source. The data element PAY1_N was discontinued in 1998.

Uniform Values

Variable	Description	Value	Value Description
PAY1_N	Expected primary payer, nonuniform	1	Medicare (mixed)
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO (mixed)
		5	Private HMO
		6	Self-pay
		7	No charge
		8	Title V
		9	Worker's Comp
		10	CHAMPUS, CHAMPVA
		11	Other Government
		12	Other
		.	Missing
		.A	Invalid
.B	Unavailable from source (coded in 1988-1997 data only)		

State Specific Notes

Arizona

Arizona's coding of expected primary payer changes across years. For 1989-1994, PAY1_N is missing (.) for all discharges even though PAY1 is coded. This is because Arizona payer codes lacked the detail necessary to map them accurately to the nonuniform PAY1_N codes.

Beginning in 1995, Arizona reported enough detail to assign the nonuniform PAY1_N codes. Unusual pay sources were recoded as follows

<u>Pay Source</u>	<u>Recoded to HCUP uniform value</u>
"Medicare Risk"	Medicare (PAY1_N = 1)
"AHCCCS Health Care Group"	Medicaid (PAY1_N = 2)
MEDEXCEL	CHAMPUS/CHAMPVA (PAY1_N = 10)
"Children's Rehabilitation Services"	Other Government (PAY1_N = 11)
"Indian Health Services"	Other Government (PAY1_N = 11)
"Foreign National"	Other (PAY1_N = 12)

The Arizona category "HMO/Prepaid Health Plans/Blue Cross" was recoded into the HCUP category "Alternative Delivery Systems, HMO" (PAY1_N = 5), but it represents a mix of plans that are usually divided into:

- Blue Cross, Blue Cross PPO (PAY1_N = 3),
- Commercial, PPO (PAY1_N = 4), and
- Alt. delivery systems, HMO (PAY1_N = 5).

Arizona does not separately classify Title V (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

California

HMO Payers

The source reports "Medicare HMO payers" as "Medicare". These payers are included in the HCUP uniform category "Medicare" (PAY1_N = 1).

The source reports "Medi-Cal HMO payers" as "Medi-Cal". These payers are included in the HCUP uniform category "Medicaid" (PAY1_N = 2).

The source reports "Blue Cross/Blue Shield HMO payers" as "Blue Cross/Blue Shield." These payers are included in the HCUP uniform category "Blue Cross/Blue Shield" (PAY1_N = 3).

Title V

Beginning in 1995, the source does not separately classify "Title V" (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

CHAMPUS/CHAMPVA

Prior to 1995, California did not separately classify CHAMPUS/CHAMPVA payers. No documentation was available about which payer type(s) were used for CHAMPUS/CHAMPVA.

Beginning in 1995, the source reports CHAMPUS/CHAMPVA as a separate category. These records are included in the uniform category "CHAMPUS/CHAMPVA" (PAY1_N = 10).

Medically Indigent Services

A pay source of "Medically Indigent Services" is included in the HCUP uniform category "Other Government" (PAY1_N = 11).

Colorado

Colorado redefined payer codes and categories in 1993. Several of the HCUP payer recodes are affected:

<u>HMO/PPO</u>	
1988 - 1992	The source reports only one distinct HMO/PPO payer category (PAY1_N = 5). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability", no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.
Beginning 1993	The source reports separate categories for HMO/PPO (PAY1_N = 5), Medicare HMO (PAY1_N = 1), Medicaid HMO (PAY1_N = 2), and HMO/PPO service provided by other payers "Other Liability, No Fault Auto, and Home

	Casualty Insurance" (PAY1_N = 4).
<u>CHAMPUS/CHAMPVA</u>	
1988 - 1992	The source does not separately classify CHAMPUS/CHAMPVA. The documentation supplied by the data source does not indicate how these payers are coded.
Beginning 1993	The data source reports CHAMPUS/CHAMPVA as a distinct category (PAY1_N = 10).
<u>Colorado Medically Indigent Program</u>	
1988 - 1992	The source does not separately classify Colorado Medically Indigent Program. The documentation supplied by the data source does not indicate how these payers are reported.
Beginning 1993	The data source reports Colorado Medically Indigent Program as a distinct category, which is recoded to the HCUP category "Other Government" (PAY1_N = 11).
<u>Title V</u>	
1988 - 1992	The source reports a distinct category for Title V (PAY1_N = 8).
Beginning 1993	The source reports Title V as "Other Government" (PAY1_N = 11).

Florida

Medicare

In addition to the usual categories coded under Medicare (PAY1_N = 1), a pay source of "Medicare HMO" is included.

Medicaid

In addition to the usual categories coded under Medicaid (PAY1_N = 2), a pay source of "Medicaid HMO" is included.

Blue Cross

Florida does not separately classify Blue Cross. Blue Cross payers are categorized under Commercial, PPO (PAY1_N = 4).

Self-pay, Charity, and Underinsured

From 1988-1991, the payers self-pay, charity, and underinsured were categorized under Other (PAY1_N = 12), because Florida did not separately identify them.

From 1992-1996, Florida provided one payer category for "Self-pay, Charity, and Underinsured" which was categorized under the Self pay (PAY1_N = 6).

Beginning in 1997, "Charity" is identified by Florida with a separate source value and is recoded to "No Charge" (PAY1_N = 7). Self-pay and Underinsured continue to be categorized under Self pay (PAY1_N = 6).

Iowa

Iowa data do not separately classify:

- Alternative Delivery System (PAY1_N = 5),
- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The documentation indicates that Alternative Delivery Systems are included in Commercial (PAY1_N = 4). Title V and CHAMPUS, CHAMPVA are included in Other Government (PAY1_N = 11). No documentation was available about which payer type(s) were used for No Charge

Some hospitals assign the same payer source to all discharges. Examination of the data indicates that these sources are either Medicare (PAY1_N = 1), Commercial Insurance (PAY1_N = 4), or both (PAY1_N=1 and PAY1_N = 4).

Maryland

The HCUP category "Medicare" (PAY1_N = 1) includes the source code "Medicare HMO".

The HCUP category "Medicaid" (PAY1_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO".

In addition to the usual categories coded under the HCUP category "Other" (PAY1_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY1_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA".

Massachusetts

For all years, Massachusetts does not separately classify Title V (PAY1_N = 8) or CHAMPUS/CHAMPVA (PAY1_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY1_N
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY1_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY1_N = 12).

Beginning in 1997, the source code "Point of Service" was included in the HCUP uniform category "Alternative Delivery Systems" (PAY1_N = 5).

New Jersey

Unusual pay sources were recoded as follows:

<u>Pay source</u>	<u>Recoded to HCUP uniform value</u>
"No Fault"	Private Insurance, PPO (PAY1_N = 4)
"Personnel Health Plan"	Other (PAY1_N = 12)
"Indigent"	1988 1992: Other (PAY1_N = 11), From 1993: Self Pay (PAY1_N = 6)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY1_N = 11) during HCUP processing of 1988-1992 data.

New Jersey

Misreported Medicare Payers

Beginning in April 1994 and continuing through 1995, Memorial Hospital of Burlington County (DSHOSPID = 00570) incorrectly reported some Medicare Payers as other payer groups:

1994	1995	Reported As:
846	959	Medicaid
20	18	Maternal and Child Health
1	5	CHAMPUS

New York

New York does not separately classify Title V (PAY1_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault", "Self Insured", and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY1_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local". All of these source values were recoded to the HCUP uniform category "Other Government" (PAY1_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO". This is assigned to the HCUP category "Medicare" (PAY1_N = 1).
- The source separately classifies "Medicaid HMO". This is assigned to the HCUP category "Medicaid" (PAY1_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY1_N = 5),
- "No Charge" (PAY1_N = 7),
- "TITLE V" (PAY1_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY1_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- The source category "Self insured" is included in the HCUP category "Commercial insurance" (PAY1_N = 4), and
- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY1_N = 11).

Utah

Utah does not separately classify:

- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The source documentation indicates that No Charge is included in Other (PAY1_N = 12). No documentation was available about which payer type(s) were used for Title V or CHAMPUS.

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY1_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients", which are included in the HCUP category "Other" (PAY1_N = 12).

Washington does not separately classify Blue Cross payers (PAY1_N = 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY1_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY1_N = 7), or
- Title V (PAY1_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

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)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

PAYER1_X - Expected primary payer identifier, plan specific

General Notes

PAYER1_X retains the expanded, detailed expected primary payer plan codes provided by the data source. PAY1_X contains payer categories (e.g., commercial insurance); more detailed, plan-specific codes are reported in PAYER1_X (e.g., AETNA and United Healthcare). The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values			
Variable	Description	Value	Value Description
PAYER1_X	Expected primary payer identifier, plan specific	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

California

The 4-digit plan code numbers provided by California represent the name of the Knox-Keene licensed plan or Medi-Cal County Organized Health System. In California, HMOs are regulated under the Knox-Keene Health Care Service Plan Act of 1975.

If the plan code numbers are the same and the plan names are different, it means they belong to the same "parent" plan.

Knox-Keene Licensed Plans and Plan Code Numbers	
<u>Plan Code Numbers</u>	<u>Plan Code Names</u>
0000	Plan Code not applicable
0176	Aetna Health Plans of California, Inc.
0328	Alameda Alliance for Health
0322	American Family Care
0303	Blue Cross of California

0043	Blue Shield of California
0314	BPS HMO
0352	Brown and Toland Medical Group
0365	Calaveras Provider Network
0326	Care 1st Health Plan
0234	Careamerca-Southern California, Inc.
0278	Chinese Community Health Plan
0152	Cigna Healthcare of California, Inc.
0200	Community Health Group
0248	Community Health Plan (County of Los Angeles)
0360	Concentrated Care, Inc.
0054	Contra Costa Health Plan
0350	FPA Medical Management of California, Inc.
0327	Great American Health Plan
0317	Greater Pacific HMO, Inc.
0292	HAI
0277	Healthmax America
0300	Health Net
0126	Health Plan of America (HPA)
0159	Health Plan of the Redwoods
0357	Heritage Provider Network, Inc.
0346	Inland Empire Health Plan
0151	Inter Valley Health Plan
0289	Kaiser Foundation Added Choice Health Plan
0055	Kaiser Foundation Health Plan, Inc.
0335	Kern Health Systems, Inc.
0343	Key Health Plan of California
0142	Lifeguard, Inc.
0355	LA Care Health Plan
0196	Managed Health Network
0002	Maxicare
0298	MCC Behavioral Care of California, Inc.
0345	MedPartners Provider Network, Inc.
0266	Metrahealth Care Plan
0288	Merit Behavioral Care of California, Inc.

0270	Monarch Plan, Inc.
0222	National Health Plans
0222	National HMO
0235	Occupational Health Services (OHS)
0238	Omni Healthcare, Inc.
0325	One Health Plan of California, Inc.
0301	Pacificare Behavioral Health of California, Inc.
0126	Pacificare of California
0237	Priorityplus of California
0296	Prucare Plus
0300	Qualmed Plans for Health
0354	Regents of the University of California
0349	San Francisco Health Plan
0351	Santa Clara County Family Health Plan
0126	Secure Horizons
0310	Sharp Health Plan
0212	Smartcare Health Plan
0338	The Health Plan of San Joaquin
0324	Tower Health Service
0266	UHC Healthcare
0008	UHP Healthcare
0209	Universal Care
0236	Valley Health Plan
0293	Value Behavioral Health of California, Inc.
0344	Ventura County Health Care Plan
0102	Vista Behavioral Health Plan
0348	Western Health Advantage
8000	Other

Medi-Cal County Organized Health Systems and Plan Code Numbers	
<u>Plan Code Numbers</u>	<u>Plan Code Names</u>
0000	Plan Code not applicable
9030	Cal Optima (Orange County)
9041	Health Plan of San Mateo (San Mateo County)

9042	Santa Barbara Health Authority (Santa Barbara County)
9044	Santa Cruz County Health Options (Santa Cruz County)
9048	Solano Partnership Health Plan (Solano County)

Maryland

PAYER1_X includes the plan name of the managed care payer. This includes the health maintenance organizations (HMO), managed care organizations (MCO), and provider sponsored organizations (PSO). Source definitions are:

Code	Description
01	AETNA Health Plan Atlantic
02	CapitalCare (Blue Cross National Capital Area)
03	CFS Health Group (Carefirst, Freestate, Potomac Health)
04	Chesapeake Health Plan
05	CIGNA Healthcare MidAtlantic Inc.
06	Columbia Medical Plan
07	Delmarva Health Plan
08	Humana Group Health Plan
09	GWU Health Plans
10	NYL Care (HealthPlus, Inc., Sanus, New York Life Care, New York Life)
11	Kaiser Permanente
12	MAMSI (MDIPA, Optimum Choice, Alliance)
13	Total Health Care
14	U.S. Healthcare
15	Prudential Healthcare Plan - Mid Atlantic
16	Principal Health Care of Mid Atlantic
17	Preferred Health Network of MD
18	Physicians Health Plan Inc.
19	Principal Health\Care of Delaware, Inc.
20	Marland Physicians Care
21	Helix Family Health
22	JAI Medical
23	Priority Partners

24	United HealthCare
25	New American Health
26	Prime Health
29	Other HMO/MCO/PSO

Source values for "Not Applicable" and "Unknown" are recoded to missing (PAYER1_X = " ").

Massachusetts

PAYER1_X includes specific payment plan identifiers. Source definitions follow.

<u>Pay Code</u>	<u>Source of Payment</u>
1	Harvard Community Health Plan
2	Bay State - a product of HMO Blue
3	Network Blue (PPO)
4	Fallon Community Health Plan (includes Fallon Plus, Fallon Affiliates, Fallon UMass)
5	Invalid (replaced by #9)
6	Invalid (replaced by #251)
7	Tufts Associated Health Plan
8	Pilgrim Health Care
9	United Health Plan of New England (Ocean State)
10	Pilgrim Advantage - PPO
11	Blue Care Elect
12	Invalid (replaced by #49)
13	Community Health Plan Options (New York)
14	Health New England Advantage POS
15	Invalid (replaced by #158)
16	Invalid (replaced by #172)
17	Prudential Healthcare POS
18	Prudential Healthcare PPO
19	Matthew Thornton
20	HCHP of New England (formerly RIGHA)
21	Commonwealth PPO

22	Aetna Open Choice PPO
23	Guardian Life Insurance Company PPO
24	Health New England, Inc.
25	Pioneer Plan
26	Invalid (replaced by #75)
27	First Allmerica Financial Life Insurance PPO
28	Great West Life PPO
29	Invalid (replaced by #171 and 250)
30	CIGNA (Indemnity)
31	One Health Plan HMO (Great West Life)
32	Invalid (replaced by #157 and 158)
33	Mutual of Omaha PPO
34	New York Life Care PPO
35	United Healthcare Insurance Company - HMO (New for 1997)
36	United Healthcare Insurance Company - PPO (New for 1997)
37	HCHP-Pilgrim HMO (integrated product)
38	Health New England Select (self-funded)
39	Pilgrim Direct
40	Kaiser Foundation
41	Invalid (replaced by #157)
42	ConnectiCare of Massachusetts
43	MEDTAC
44	Community Health Plan
45	Health Source New Hampshire
46	Blue CHiP (BCBS Rhode Island)
47	Neighborhood Health Plan
48	US Healthcare
49	Healthsource CMHC Plus PPO
50	Blue Health Plan for Kids
51	Aetna Life Insurance
52	Boston Mutual Insurance
53	Invalid (no replacement)
54	Continental Assurance Insurance
55	Guardian Life Insurance
56	Hartford L&A Insurance

57	John Hancock Life Insurance
58	Liberty Life Insurance
59	Lincoln National Insurance
60	Invalid (replaced by #97)
61	Invalid (replaced by #96)
62	Mutual of Omaha Insurance
63	New England Mutual Insurance
64	New York Life Care Indemnity (New York Life Insurance)
65	Paul Revere Life Insurance
66	Prudential Insurance
67	First Allmercia Financial Life Insurance
68	Invalid (replaced by #96)
69	Corporate Health Insurance Liberty Plan
70	Union Labor Life Insurance
71	ADMAR
72	Healthsource New Hampshire
73	United Health and Life (subsidiary of United Health Plans of NE)
74	United Healthcare Insurance Company (New for 1997)
75	Prudential HMO
76	Invalid (replaced by #270)
77	Options for Healthcare PPO
78	Phoenix Preferred PPO
79	Pioneer Health Care PPO
80	Tufts Total Health Plan PPO
81	HMO Blue
82	John Hancock Preferred
83	US Healthcare Quality Network Choice-PPO
84	Private Healthcare Systems PPO
85	Liberty Mutual
86	United Health & Life PPO (Subsidiary of United Health Plans of NE)
87	CIGNA PPO
88	Freedom Care
89	Great West/NE Care
90	Healthsource Preferred (self-funded)

91	New England Benefits
92	Invalid (replaced by #84, 166, 184)
93	Psychological Health Plan
94	Time Insurance Co.
95	Pilgrim Select - PPO
96	Metrahealth (United Health Care of NE)
97	UniCare
98	Healthy Start
99	Other POS (not listed elsewhere)
100	Transport Life Insurance
101	Quarto Claims
102	Wausau Insurance Company
103	Medicaid
104	Medicaid Managed Care-Primary Care Clinician (PCC)
105	Invalid (replaced by #111)
106	Medicaid Managed Care-Central Mass Health Care
107	Medicaid Managed Care-Community Health Plan
108	Medicaid Managed Care-Fallon Community Health Plan
109	Medicaid Managed Care-Harvard Community Health Plan
110	Medicaid Managed Care-Health New England
111	Medicaid Managed Care-HMO Blue
112	Medicaid Managed Care-Kaiser Foundation Plan
113	Medicaid Managed Care-Neighborhood Health Plan
114	Medicaid Managed Care-United Health Plans of NE (Ocean State Physician's Plan)
115	Medicaid Managed Care-Pilgrim Health Care
116	Medicaid Managed Care-Tufts Associated Health Plan
117	Invalid (no replacement)
118	Medicaid Mental Health & Substance Abuse Plan - Mass Behavioral Health Partnership
119	Medicaid Managed Care Other (not listed elsewhere) ***
120	Out-of-State Medicaid
121	Medicare
122	Invalid (replaced by #235)
123	Invalid (no replacement)

124	Invalid (replaced by #230)
125	Medicare HMO - Fallon Senior Plan
126	Invalid (replaced by #230)
127	Medicare HMO - Health New England Medicare Wrap **
128	Medicare HMO - HMO Blue for Seniors **
129	Medicare HMO - Kaiser Medicare Plus Plan **
130	Invalid (replaced by #232 and 233)
131	Medicare HMO - Pilgrim Enhance 65 **
132	Medicare HMO - Matthew Thornton Senior Plan
133	Medicare HMO - Tufts Medicare Supplement (TMS)
134	Medicare HMO - Other (not listed elsewhere) ***
135	Out-of-State Medicare
136	BCBS Medex **
137	AARP/Medigap supplement **
138	Banker's Life and Casualty Insurance **
139	Bankers Multiple Line **
140	Combined Insurance Company of America **
141	Other Medigap (not listed elsewhere) ***
142	Blue Cross Indemnity
143	Free Care
144	Other Government
145	Self-Pay
146	Worker's Compensation
147	Other Commercial (not listed elsewhere) ***
148	Other HMO (not listed elsewhere) ***
149	PPO and Other Managed Care (not listed elsewhere) ***
150	Other Non-Managed care (not listed elsewhere) ***
151	CHAMPUS
152	Foundation
153	Grant
154	BCBS Other (not listed elsewhere) ***
155	Blue Cross Managed Care Other (not listed elsewhere) ***
156	Out of state BCBS
157	Metrahealth - PPO (United Health Care of NE)
158	Metrahealth - HMO (United Health Care of NE)

159	None (valid only for secondary source of payment)
160	Blue Choice (includes Healthflex Blue) - POS
161	Aetna Managed Choice POS
162	Great West Life POS
163	United Healthcare Insurance Company - POS (New for 1997)
164	Healthsource CMHC Plus POS
165	Healthsource New Hampshire POS (self-funded)
166	Private Healthcare Systems POS
167	Fallon POS
168	Reserved
169	Kaiser Added Choice
170	US Healthcare Quality POS
171	CIGNA POS
172	Metrahealth - POS (United Health Care of NE)
173-180	Reserved
181	First Allmercia Financial Life Insurance EPO
182	UniCare Preferred Plus Managed Access EPO
183	Pioneer Health Care EPO
184	Private Healthcare Systems EPO
185-198	Reserved
199	Other EPO (not listed elsewhere) ***
200	Hartford Life Insurance Co.
201	Mutual of Omaha **
202	New York Life Insurance **
203-209	Reserved
210	Medicare HMO - Pilgrim Preferred 65 **
211	Medicare HMO - Neighborhood Health Plan Senior Health Plus **
212	Medicare HMO - Healthsource CMHC Central Care Supplement **
213-219	Reserved
220	Medicare HMO - Blue Care 65
221	Medicare HMO - Harvard Community Health Plan 65
222	Medicare HMO - Healthsource CMHC
223	Medicare HMO - Harvard Pilgrim Health Care of New England Care Plus

224	Medicare HMO - Tufts Secure Horizons
225	Medicare HMO - US Healthcare
226-229	Reserved
230	Medicare HMO - HCHP First Seniority
231	Medicare HMO - Pilgrim Prime
232	Medicare HMO - Seniorcare Direct
233	Medicare HMO - Seniorcare Plus
234	Medicare HMO - Managed Blue for Seniors
235-249	Reserved
250	CIGNA HMO
251	Healthsource CMHC HMO
252-269	Reserved
270	UniCare Preferred Plus PPO
127	Medicare HMO - Health New England Medicare Wrap
128	Medicare HMO - HMO Blue for Seniors
129	Medicare HMO - Kaiser Medicare Plus Plan
131	Medicare HMO - Pilgrim Enhance 65
133	Medicare HMO - Tufts Medicare Supplement (TMS)
136	BCBS Medex
137	AARP/Medigap Supplement
138	Banker's Life and Casualty Insurance
139	Bankers Multiple Line
140	Combined Insurance Company of America
141	Other Medigap (not listed elsewhere) ***
200	Hartford Life Insurance Co.
201	Mutual of Omaha
202	New York Life Insurance Company
210	Medicare HMO - Pilgrim Preferred 65
211	Neighborhood Health Plan Senior Health Plus
212	Medicare HMO - Healthsource CMHC Central Care Supplement

West Virginia

Detailed payer information is available in the 4-digit payer variable PAYER1_X.

The first digit indicates the type of payer:

1st Digit - Type of Payer	Description
1	Federal Government
2	West Virginia State Government
3	Other States' Government
4	Commercial
5	Non-profit
6	Employer/ERISA/Union
7	Uninsured
8	Unknown
9	NEC

The payment program is indicated by the second digit.

1st Digit - Type of Payer	2nd Digit - Payment Program	Description
1	1	Medicare
1	2	DOL - Black Lung
1	3	Railroad Workers
1	4	UMWA Trusts
1	5	Veterans Administration
1	6	Federal Bureau Corrections
1	7	CHAMPUS
1	8	(Reserved)
1	9	Federal NEC
2	1	West Virginia Medicaid
2	2	West Virginia Workers' Compensation
2	3	West Virginia Rehabilitation
2	4	West Virginia PEIA
2	5	West Virginia Maternal & Child Health

2	6	West Virginia Department of Corrections
2	7	West Virginia County/Local Corrections
2	8	(Reserved)
2	9	West Virginia Government NEC
3	1	Other States' Medicaid
3	2	Other States' Workers' Compensation
3	3-7	(Unassigned)
3	8	(Reserved)
3	9	Other States' Government NEC
4	1	Acordia
4	2	Advantage
4	3	Aetna
4	4	Health Plan of the Upper Ohio Valley
4	5	Prudential
4	6-7	(Unassigned)
4	8	(Reserved)
4	9	Commercial NEC
5	1	AARP
5	2	Blue Cross of Virginia
5	3	Mountain State Blue Cross
5	4	Other Blues
5	5-7	Unassigned
5	8	(Reserved)
5	9	Non-Profit NEC
6	1	Camcare
6	2	National Association Letter Carriers
6	3	Teamsters
6	4	UMWA

6	5-7	(Unassigned)
6	8	(Reserved)
6	9	Employer/ERISA/Union NEC
7	1	Self-pay
7	2	Charity
7	3-9	(Reserved)
8	8	Unknown
9	9	NEC

The payment modality is indicated by the third digit.

3rd Digit - Payment Modality	Description
1	Fee for Service/Indemnity (FFS)
2	DRG Prospective Payment System (PPS)
3	Point of Service (POS)
4	HMO
5	Other Managed Care
6	(Unassigned)
7	(Unassigned)
8	Unknown
9	NEC

The HMO information is indicated by the fourth digit

4th Digit - HMO	Description
0	None
1	Acordia - Primeone
2	Advantage - Healthguard
3	Carelink
4	Coventry Health Plan (OH)

5	Health Plan of the Upper Ohio Valley (OH)
6	Optimum Choice - (MD)
7	(Unassigned)
8	Unknown
9	NEC

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	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

PAY2_N - Expected secondary payer, nonuniform

General Notes

PAY2_N (where _N indicates nonuniform) preserves much of the original expected secondary payer detail from the various data sources. However, some categories of PAY2_N are not available from some sources because not all sources have the same level of detail available. The data element PAY2_N was discontinued in 1998.

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

In the 1988-1997 HCUP databases, the secondary pay source (PAY2_N) was set to inconsistent (.C) if the primary pay source and the secondary pay source are the same and the source is one of the following:

- Medicare (ED951),
- Medicaid (ED951),
- CHAMPUS (ED952),
- Worker's Compensation (ED952), and
- Title V (ED952).

No edit checks were performed on the payer data elements beginning in the 1998 databases.

Uniform Values			
Variable	Description	Value	Value Description
PAY2_N	Expected secondary payer, nonuniform	1	Medicare (mixed)
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO (mixed)
		5	Private HMO
		6	Self-pay
		7	No charge
		8	Title V
		9	Worker's Comp
		10	CHAMPUS, CHAMPVA
		11	Other Government

		12	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: in 1998-1997 data, ED951, ED952

State Specific Notes

Maryland

The HCUP category "Medicare" (PAY2_N = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY2_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY2_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY2_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA."

Massachusetts

For all years:

- Massachusetts does not separately classify Title V (PAY2_N = 8) or CHAMPUS/CHAMPVA (PAY2_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.
- The source payer codes for "Other or principal source covered payment in full" were included in the HCUP category "Other" (PAY2_N = 12).

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY2_N
Medicare Managed Care	Medicare	1

Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY2_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY2_N = 12).

Beginning in the 4th quarter of 1997, the source code "Point of Service" was included in the HCUP uniform category "Alternative Delivery Systems" (PAY2_N = 5).

New Jersey

Unusual pay sources were recoded as follows:

Pay Source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY2_N = 4)
"Personnel Health Plan"	Other (PAY2_N = 12)
"Indigent"	1988 1992: Other (PAY2_N = 11), From 1993: Self Pay (PAY2_N = 6)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY2_N = 11) during HCUP processing of 1988 1992 data.

New Jersey

Misreported Medicare Payers

Beginning in April 1994 and continuing through 1995, Memorial Hospital of Burlington County (DSHOSPID = 00570) incorrectly reported some Medicare Payers as other payer groups:

1994	1995	Reported As
846	959	Medicaid
20	18	Maternal & Child Health
1	5	CHAMPUS

New York

New York does not separately classify Title V (PAY2_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY2_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY2_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other Government" (PAY2_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO." This is assigned to the HCUP category "Medicare" (PAY2_N = 1).
- The source separately classifies "Medicaid HMO." This is assigned to the HCUP category "Medicaid" (PAY2_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY2_N = 5),
- "No Charge" (PAY2_N = 7),
- "TITLE V" (PAY2_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY2_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- the source category "Self insured" is included in the HCUP category "Commercial insurance" (PAY2_N = 4), and
- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY2_N = 11).

Utah

Utah does not separately classify:

- No Charge (PAY2_N = 7),

- Title V (PAY2_N = 8), or
- CHAMPUS, CHAMPVA (PAY2_N = 10).

The source documentation indicates that No Charge is included in Other (PAY2_N = 12). No documentation was available about which payer type(s) were used for Title V or CHAMPUS.

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY2_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients," which are included in the HCUP category "Other" (PAY2_N = 12).

Washington does not separately classify Blue Cross payers (PAY2_N= 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY2_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY2_N = 7), or
- Title V (PAY2_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

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)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

PAYER2_X - Expected secondary payer identifier, plan specific

General Notes

PAYER2_X retains the expanded, detailed expected secondary payer plan codes provided by the data source. PAY2_X contains payer categories (e.g., commercial insurance); more detailed, plan-specific codes are reported in PAYER2_X (e.g., AETNA and United Healthcare). The original values have not been recoded into uniform HCUP values and are source-specific.

Information on the definition of the source values contained in PAYER2_X is available under the variable note for PAYER1_X.

Uniform Values			
Variable	Description	Value	Value Description
PAYER2_X	Expected secondary payer identifier, plan specific	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAYER1_X.

PAY3_X - Expected tertiary payer, as received from data source

General Notes

PAY3_X retains the expected tertiary payer as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. There are no HCUP data elements that contain uniformly coded information about the expected tertiary payer.

Because the coding of expected primary and tertiary payer is the same, information on the coding of PAY3_X is available under the note for expected primary payer (PAY1).

Uniform Values

Variable	Description	Value	Value Description
PAY3_X	Expected tertiary payer, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

PCCHPRn - Clinical Classifications Software: procedure classification

General Notes

Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR), consists of 231 procedure categories. This system is based on ICD-9-CM codes. All procedure codes are classified.

PCCHPRn is coded as follows:

- PCCHPRn ranges from 1 to 231 if the procedure code (PRn) is valid by the HCUP criteria, which allows a six-month window (three months before and three 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.
- PCCHPRn is missing (.), if there is no procedure code (PRn = " ").
- PCCHPRn is set to invalid (.A), if the procedure code (PRn) is invalid (PRVn = 1).
- PCCHPRn is retained (values 1-231) when a valid procedure is flagged as inconsistent with age or sex (PRVn = .C). For best results, use PCCHPRn only when the procedure is valid and consistent (PRVn = 0).

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

Labels

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

Formats

Formats for CCS, formerly known as CCHPR, categories are provided 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. These formats are also provided in HCUP Tools: Labels and Formats.

Uniform Values			
Variable	Description	Value	Value Description
PCCHPRn	Clinical Classifications	1 - 231	CCS procedure class
		.	No procedure code

	Software: procedure classification	.A	Invalid procedure code
--	--	----	------------------------

State Specific Notes

None

PL_CBSA - Patient location: Core Based Statistical Area (CBSA)

General Notes

Core-Based Statistical Areas (CBSA) partition counties into three categories: Metropolitan, Micropolitan, and Outside Core-Based Statistical Areas. Metropolitan and Micropolitan areas are composed of a core containing a population nucleus and adjacent communities that have a high degree of integration with the core. In this system, counties with cities or urbanized areas of over 50,000 residents are classified as Metropolitan, while counties with urban areas of 10,000 to 49,999 residents are classified as Micropolitan. Outlying counties are added to one of these urban classes when they are adjacent and when at least 25 percent of their resident labor force commutes to them. Although the remaining, Outside Core-Based Statistical Areas are often considered to be rural, this is not entirely correct, because these counties may include substantial population concentrations.

A county-based system such as CBSA, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an informative depiction. A county may be designated as Metropolitan even though only a small portion is urbanized and the rest is distinctly rural. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

CBSA were developed by the Office of Management and Budget (OMB). They are based on population and commuting information from the 2000 census and are defined according to the OMB 2003 Metropolitan definitions. CBSA are an updated replacement for MSA. Additional information about the CBSA classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/rurality/NewDefinitions/>.

Uniform Values			
Variable	Description	Value	Value Description
PL_CBSA	Patient location: Core Based Statistical Area (CBSA)	0	Non-CBSA
		1	Micropolitan Statistical Area
		2	Metropolitan Statistical Area
		.	Missing

State Specific Notes

None

PL_MSA1993 - Patient location: Metropolitan Statistical Area (MSA) 1993

General Notes

Metropolitan Statistical Areas (MSA) partition counties into two categories: Metropolitan and non-Metropolitan. Metropolitan areas are composed of a core containing a large population nucleus and adjacent communities that have a high degree of integration with the core. In this system, counties with cities or urbanized areas of over 50,000 residents and a total population of at least 100,000 are classified as Metropolitan. Outlying counties meeting a complex set of commuting and population characteristics are also designated Metropolitan. Although the remaining, non-Metropolitan areas are often considered to be rural, this is not entirely correct, because these counties may include substantial population concentrations.

A county-based system such as MSA, that attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an informative depiction. A county may be designated as Metropolitan even though only a small portion is urbanized and the rest is distinctly rural. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

MSA were developed at the Office of Management and Budget (OMB). They are based on population and commuting information from the 1990 census and are defined according to the OMB 1993 Metropolitan definitions. PL_MSA1993 is included on the HCUP file because of the widespread use of this measure in the past, but it has now been superseded by Core-Based Statistical Areas (CBSA), which are available as PL_CBSA.

Uniform Values			
Variable	Description	Value	Value Description
PL_MSA1993	Patient location: Metropolitan Statistical Area (MSA) 1993	0	Non-MSA
		1	MSA
		.	Missing

State Specific Notes

None

PL_RUCA - Patient location: Rural-Urban Commuting Area (RUCA) Codes

General Notes

Rural Urban Commuting Areas (RUCA) form a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

The thirty categories defined by the full RUCA scheme must generally be aggregated in some manner to avoid excessively small cell sizes. HCUP provides two alternative data elements that have collapsed the RUCAs -- PL_RUCA10 and PL_RUCA4. RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the U.S. Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the Washington, Wyoming, Alaska, Montana, & Idaho (WWAMI) Rural Health Research Center. Additional information about this classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhrc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. Suggested alternatives for collapsing the RUCA are provided at http://www.fammed.washington.edu/wwamirhrc/rucas/use_healthcare.html.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCA	Patient location: Rural-Urban Commuting Area (RUCA) Codes	n.n	RUCA code
		.	Missing

State Specific Notes

None

PL_RUCA10 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, ten levels

General Notes

Rural Urban Commuting Areas (RUCA) form a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

PL_RUCA10 is one method of combining the thirty categories defined by the full RUCA into broader categories. The 10 categories are created by truncating the digit after the decimal in PL_RUCA. This approach produces ten categories by focusing on the population size of the origins and destinations of the primary commuting flow. The secondary commuting flows that provide additional refinements concerning the connection between areas are discounted.

RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the U.S. Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the Washington, Wyoming, Alaska, Montana, & Idaho (WWAMI) Rural Health Research Center. Additional information about the RUCA classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhrc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. Alternative methods of collapsing the RUCA are suggested at http://www.fammed.washington.edu/wwamirhrc/rucas/use_healthcare.html.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCA10	Patient location: Rural-Urban Commuting Area (RUCA) Codes, ten	1	Metro core
		2	Metro area, commuting to urban areas
		3	Metro area, low commuting
		4	Large town core (10,000-50,000)

	levels	5	Large town, commuting to large towns
		6	Large towns, low commuting
		7	Small town core (2,500-10,000)
		8	Small town, commuting to small towns
		9	Small town, low commuting
		10	Rural
		.	Missing

State Specific Notes

None

PL_RUCA4 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, four levels

General Notes

Rural Urban Commuting Areas (RUCA) form a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

PL_RUCA4 is a method recommended by RUCA's developers for combining the thirty categories defined by the full RUCA into a few broader categories suitable for health care analysis. This approach produces four classes by combining categories defined by the population and primary destination of commuting flows of a ZIP Code. This definition is especially sensitive to commuting as a measure of urban influence. If large secondary commuting flows (> 30%) connect it with a more heavily urbanized area, a more urbanized category is assigned than the ZIP Code's population alone would dictate.

RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the WWAMI Rural Health Research Center. Additional information about the RUCA classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. A discussion of this and alternative methods of collapsing the RUCA is provided at http://www.fammed.washington.edu/wwamirhc/rucas/use_healthcare.html.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCA4	Patient location: Rural-Urban Commuting	1	Urban
		2	Large town (rural)
		3	Small town (rural)

	Area (RUCA) Codes, four levels	4	Isolated rural
		.	Missing

State Specific Notes

None

PL_RUCC - Patient location: Rural-Urban Continuum (RUCC) Codes

General Notes

Rural-Urban Continuum Codes (RUCC) subdivide counties into 10 categories distinguished by population size in census-defined urbanized areas and by adjacency to metropolitan areas. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as RUCC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

RUCC were developed at the U.S. Department of Agriculture's, Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Metropolitan Statistical Area (MSA) definition. They are based on population and commuting information from the 1990 census and the OMB 1993 Metropolitan definitions. Additional information about the RUCC classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/rurality/RuralUrbCon>.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCC	Patient location: Rural-Urban Continuum (RUCC) Codes	0	Metro-Central counties of metro areas, population >= 1 million
		1	Metro-Fringe counties of metro areas, population >= 1 million
		2	Metro-Central counties of metro areas, population 250,000 to 1 million
		3	Metro-Counties of metro areas, population < 250,000
		4	Non-Metro - Urban population of 20,000 or more, adjacent to a metro area
		5	Non-Metro - Urban population of 20,000 or more, not adjacent to a metro area
		6	Non-Metro - Urban population of 2,500 to 19,999, adjacent to a metro area

		7	Non-Metro - Urban population of 2,500 to 19,999, not adjacent to a metro area
		8	Non-Metro - Completely rural or less than 2,500 urban population, adjacent to a metro area
		9	Non-Metro - Completely rural or less than 2,500 urban population, not adjacent to a metro area
		.	Missing

State Specific Notes

None

PL_UIC - Patient location: Urban influence codes

General Notes

Urban Influence Codes (UIC) emphasizes the relationship of outlying counties to major metropolitan areas. Counties are subdivided into nine categories distinguished by three features: population size in census-defined urbanized areas, adjacency to metropolitan areas, and the size of those adjacent communities. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as UIC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

UIC were developed at the U.S. Department of Agriculture's Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Metropolitan Statistical Area (MSA) definition. They are based on population and commuting information from the 1990 census and from the OMB 1993 Metropolitan definitions. Additional information about the UIC classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rurality/UrbanInf/>.

Uniform Values			
Variable	Description	Value	Value Description
PL_UIC	Patient location: Urban influence codes	1	Metro-Large, metro area with \geq 1 million residents
		2	Metro-Small, metro area with $<$ 1 million residents
		3	Non-Metro - Adjacent to large metro area and contains city of \geq 10,000 residents
		4	Non-Metro - Adjacent to large metro area and contains city of $<$ 10,000 residents
		5	Non-Metro - Adjacent to small metro area and contains city of \geq 10,000 residents
		6	Non-Metro - Adjacent to small metro area and contains city of $<$ 10,000 residents
		7	Non-Metro - Not adjacent to metro area and contains city of \geq 10,000 residents

		8	Non-Metro - Not adjacent to metro area and contains town of 2,500 - 9,999 residents
		9	Non-Metro - Not adjacent to metro area and contains town with < 2,500 residents
		.	Missing

State Specific Notes

None

PNUM_S - Synthetic person number

General Notes

PNUM_S is specific to patients (persons) so that multiple admissions by the same patient can be linked within and across institutions.

PNUM_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges and the number of different hospitals per nonmissing PNUM_S.
- State-level counts of the number of unique nonmissing PNUM_Ss, the number of discharges associated with these PNUM_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a PNUM_S.

PNUM_S contains a fixed-key (one-to-one) encryption of the supplied person number (PNUM), 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 retained. If the data source codes the same person number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP person numbers are different.
- When the PNUM in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, PNUM_S is the same.

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

Uniform Values			
Variable	Description	Value	Value Description
PNUM_S	Synthetic person number	17(a)	Person number
		Blank	Missing

c State Specific Notes

Arizona

The encrypted person identifier (PNUM_S) may not accurately track patients across hospitals. Arizona accepts social security numbers, health insurance claim numbers, and certificate numbers as person identifiers. No documentation was available about the consistency of coding within and across hospitals.

California

California reports encrypted social security numbers as person numbers.

North Carolina

North Carolina provides an encrypted social security number. Reporting of the patient's social security number is optional for hospitals in North Carolina. Beginning in the 2000 data, this data element is frequently missing. During HCUP processing, this identifier is re-encrypted.

Washington

More than one person may have the same value of PNUM_S. Washington derives the identifier from the first two letters of patients' first and last names as well as the date of birth. People with similar names and the same birth date may have the same identifier.

In addition, one person may have the two different values of PNUM_S across time. The state reports that before 1990 some hospitals did not follow the patient number convention and assigned this identifier based on the last two letters of patients' first and last names, rather than the first two letters. Starting in 1990, all hospitals followed the same conventions.

Beginning in 1993, Washington included the patient's century of birth as a component of the unencrypted patient identifier (PNUM). Prior to 1993, the birth century is not included as part of PNUM. Beginning with 1993 processing of HCUP data, birth century was removed from PNUM_S before encryption to allow linkage of patient discharges across years. The reported person identifier was assigned to PNUM.

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 six month window (three months before and three 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).

The maximum number of procedures reported varies by state. HCUP retains all procedure fields provided by the data source.

Number of Procedures Provided by the Data Source					
State	1998	1999	2000	2001	2002
Arizona	6	6	6	6	-
California	21	21	21	21	21
Colorado	15	15	15	15	15
Connecticut	30	30	30	30	30
Florida	10	10	10	10	6
Georgia	6	6	6	6	6
Hawaii	10	10	10	10	10
Illinois	6	6	6	6	6
Iowa	6	6	6	6	6
Kansas	25	25	25	25	25
Kentucky	n/a	n/a	6	6	6
Maine	n/a	10	6	6	6
Maryland	15	15	15	15	15
Massachusetts	10	15	15	15	15
Michigan	n/a	n/a	n/a	30	30
Minnesota	n/a	n/a	n/a	6	6
Missouri	25	25	25	25	25
Nebraska	n/a	n/a	n/a	6	6
Nevada	n/a	n/a	n/a	n/a	6
New Jersey	8	8	8	8	8

New York	15	15	15	15	15
North Carolina	n/a	n/a	10	11	6
Ohio	n/a	n/a	n/a	n/a	9
Oregon	6	6	6	6	6
Pennsylvania	6	6	6	6	6
Rhode Island	n/a	n/a	n/a	11	11
South Carolina	10	10	10	10	10
South Dakota	n/a	n/a	n/a	n/a	6
Tennessee	6	6	6	6	6
Texas	n/a	n/a	6	6	6
Utah	6	6	6	6	6
Vermont	n/a	n/a	n/a	20	10
Virginia	n/a	6	6	6	6
Washington	6	6	6	6	6
West Virginia	n/a	n/a	6	6	6
Wisconsin	6	6	6	6	6

Uniform Values			
Variable	Description	Value	Value Description
PRn	Procedure	nxxx	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 are 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.

Florida

In 1992 only, the hospitals identified below have erroneous procedure information when a patient had more than one operative episode during a stay. The first operative episode, which can be defined by one or more procedure codes, is correctly reported. The procedure codes for any subsequent operative episodes were not reported. The following hospitals, identified by the HCUP hospital identifier (HOSPID), are affected:

- 390530
- 390170
- 391000
- 390067
- 390622
- 390870
- 390060
- 391060
- 390727
- 390515
- 390034

Kentucky

Kentucky supplied procedure codes in a field length of 7. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

Maryland

Maryland supplied procedure codes in a field of length 5. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

Massachusetts

Due to an error in HCUP processing, the procedure verification table for 1988-1992 incorrectly accepted some codes as valid, on year beyond the date when these codes were deleted or superseded by more detailed codes. With the three-month grace period built into the processor, these codes were mistakenly accepted for one full year beyond the year in which they became invalid.

Examination of frequencies from the HCUP Massachusetts files found a small number of records were affected. The procedures not flagged as invalid procedure codes (PRVn = 1) are:

Procedure	Year
9971	1988
9972	1988
9974	1988
9975	1988
9978	1988
9979	1988
432	1990
493	1990
5996	1990
8141	1990
8187	1990
8899	1990

Beginning in 1993, procedures were validated correctly.

Nebraska

Nebraska supplied procedure codes in a field of length 7. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

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.

South Carolina

Prior to 2000 data, 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 were 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").

Beginning in 2000 data this was no longer a problem; explicit decimals were not included in the procedure codes.

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.

West Virginia

West Virginia supplied procedure codes in a field length of 7. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

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 supplied ICD-9-CM procedure codes in a field length of 5. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

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	1 - 231	CCS procedure class
		.	No procedure code
		.A	Invalid procedure code: beginning with 1998 data, EPR02

	classification	.C	Inconsistent: beginning with 1998 data, EAGE05, EPR03
--	----------------	----	---

State Specific Notes

None

PRDATE_n - Date of procedure

General Notes

Date of procedure performed (PRDATE_n) is assigned a valid nonmissing date, with the following exceptions:

- If a procedure date is supplied by the data source, but one or more of the components of the procedure date (year, month, day) is
 - Blank or a documented missing value, PRDATE_n = missing (.).
 - - or -
 - Nonnumeric or out of range (year NE 00-99, month NE 1-12, day NE 1-31), PRDATE_n = invalid (.A).
- PRDATE_n = invalid (.A) if the procedure day is inconsistent with the month (e.g., February 30).
- If the data source does not supply procedure date, then beginning in the 1998 data, PRDATE_n is not present on the HCUP files. In the 1988-1997 data, PRDATE_n is retained on the HCUP files and is set to unavailable from source (.B).
- PRDATE_n 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 (PRDATE_n) is shifted with the ICD-9-CM procedure codes (PR_n) when the procedure vector is packed.

Some sources do not require procedure dates 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.

To ensure the confidentiality of patients on the HCUP Central Distributor files, full dates are not released. Beginning in the 1998 data, PRDATE_n is replaced by procedure month (PRMONTH_n) and procedure year (PRYEAR_n). In databases before 1998, the

day portion of the date stored in PRDATE_n is overwritten with "01" during the creation of the Distributor files. The month and year portion of the date remains unchanged. HCUP data elements that are calculated from PRDATE_n are computed before PRDATE_n is masked.

Uniform Values			
Variable	Description	Value	Value Description
PRDATE _n	Date of procedure	YYMMDD	Date of procedure
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EPRDAY01; in 1997 data, ED7nn, ED8nn

State Specific Notes

Colorado

Beginning in 1997, Colorado provided the procedure dates (PRDATE_n) with a four-digit year. In prior years, only a two-digit year was available.

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.

In 1998 and 1999, 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 = " ").

Beginning in 2000, procedure dates were provided by the data source and used to calculate day of procedure.

Colorado

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

Florida

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.

Florida also 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.

Iowa

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

Maine

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

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.

Michigan

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

Nebraska

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

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.

North Carolina

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

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.

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

PRMONTHn - Month of procedure

General Notes

Month of procedure (PRMONTHn) is derived from the procedure date (PRDATEn). If PRDATEn is missing, then PRMONTHn is missing (.). If PRDATEn is invalid, then PRMONTHn is invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
PRMONTHn	Month of procedure	1-12	Procedure month
		.	Missing
		.A	Invalid

State Specific Notes

None

PROCESS - HCUP processing identification record number

General Notes

The HCUP processing number (PROCESS) is coded YYSSnnnnnnn, where:

- YY = discharge year,
- SS = state FIPS code, and
- nnnnnnn = a 7-digit sequence number.

PROCESS is assigned to each discharge record in the earliest stage of HCUP processing, so that it can be used to track records throughout production. PROCESS is kept on the HCUP files to facilitate the tracking of specific discharges back to the original raw data, should that be necessary. The data element PROCESS was discontinued in 1998.

Uniform Values

Variable	Description	Value	Value Description
PROCESS	HCUP processing identification record number	11(n)	Processing Number

State Specific Notes

None

PRSYS - Procedure coding system

General Notes

PRSYS indicates the coding system for the procedures:

- Almost all HCUP inpatient stays use ICD-9-CM procedure codes (PRSYS = 1)
- If Physicians' Current Procedural Terminology (CPT) or HCFA Common Procedure Coding System (HCPCS) procedure codes are indicated (PRSYS = 2 or 3), then the procedure codes 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 (PRn) are 4 characters in length.
- If the procedure coding system was not specified by the data source, then PRSYS is missing (PRSYS =I .)

The data element PRSYS was discontinued in 1998.

Uniform Values			
Variable	Description	Value	Value Description
PRSYS	Procedure coding system	1	ICD-9-CM
		2	CPT-4
		3	HCPCS/CPT-4
		.	Missing
		.A	Invalid

State Specific Notes

None

PRVn - Validity Flag: Procedure n

General Notes

PRVn are validity flags that identify invalid or inconsistent ICD-9-CM procedures in the data elements PRn. There is one validity flag for each procedure, i.e., PRV1 is the validity flag for PR1.

The following are acceptable values for PRVn:

0	Indicates a valid and consistent procedure code.
1	Indicates an invalid code for the discharge date. A six-month window around the discharge date (three months before and three months after) is allowed for anticipation of or lags in response to official ICD-9-CM coding changes.
.	Indicates a missing (blank) procedure code.
.C	Indicates that the code is inconsistent with sex of the patient (ED2nn) or the patient's age (ED5nn).

This data element was discontinued in 1998. Information on the validity of a procedure code is retained within the data element PRn.

Uniform Values

Variable	Description	Value	Value Description
PRVn	Validity Flag: Procedure n	0	Valid code
		1	Invalid code
		.	No procedure code
		.C	Inconsistent: in 1988-1997 data, ED2nn, ED5nn

State Specific Notes

None

PRYEARNn - Year of procedure

General Notes

Year of procedure (PRYEARNn) is derived from the procedure date (PRDATEn). If PRDATEn is missing, then PRYEARNn is missing (.). If PRDATEn is invalid, then PRYEARNn is invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
PRYEARNn	Year of procedure	yyyy	Procedure year
		.	Missing
		.A	Invalid

State Specific Notes

None

PSTCO - Patient state/county FIPS code

General Notes

The patient State/county FIPS code (PSTCO) is coded from county supplied by the data source only when that information was not derived from the patient's zip code. Nonnumeric values are set to invalid (.A).

Uniform Values			
-----------------------	--	--	--

Variable	Description	Value	Value Description
PSTCO	Patient state/county FIPS code	nnnnn	State/County FIPs Code
		.	Missing
		.A	Invalid

State Specific Notes

Colorado

In 1993, Colorado began collecting patient county code, but it was optional for hospitals to report this data to the hospital association. The hospital association reports PSTCO for Colorado counties only.

Iowa

Beginning in 1993, FIPS state and county codes are available, but for Iowa counties only.

New Jersey

New Jersey classifies patient state and county codes for residents of New Jersey. The patient state and county codes are available for residents of New York and Pennsylvania in some years. For patients from states other than New Jersey, New York and Pennsylvania, PSTCO contains a valid FIPS state code (first two digits) and "000" for the county code (last three digits).

New York

Patient state/county code (PSTCO) is reported for New York counties only. PSTCO is missing (PSTCO = .) for homeless patients.

South Carolina

South Carolina separately classifies patient state and county codes for residents of South Carolina, North Carolina, and Georgia. Residents of Georgia and North Carolina may have a specific county code or the county code may be missing (000).

For patients classified by the data source as residents of states other than South Carolina, North Carolina, or Georgia, and patients whose state and county codes are missing:

- PSTCO is assigned to invalid (.A) in the 1993 data, and
- PSTCO is assigned to missing (.) beginning in the 1994 data.

PSTCO2 - Patient state/county FIPS code, possibly derived from ZIP Code

General Notes

PSTCO2 (Patient State and County 2) provides the most complete enumeration of patient state and county FIPS codes available on this file. As such, it is the variable that should be used to link other county-based data to the HCUP discharge files.

PSTCO2 contains the county coded in PSTCO, when the patient reported a county of residence. When PSTCO is missing, county is imputed, when possible, from the patient ZIP Code (ZIP) variable. ZIP Codes were translated into counties by assigning the county located at the center of the ZIP Code area, as of 2001, from a translation list provided by Claritas.

Uniform Values			
-----------------------	--	--	--

Variable	Description	Value	Value Description
PSTCO2	Patient state/county FIPS code, possibly derived from ZIP Code	nnnnn	State/county FIPS code
		.	Missing

State Specific Notes

None

RACE - Race

General Notes

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

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

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

Not all data sources provide information on race and ethnicity.

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
<p>Information on ethnicity was provided by California and used to code RACE beginning in 1995. The variable HISPANIC_X was retained on the HCUP databases beginning in 1998.</p> <p>There are a small number of discharges with undocumented values in HISPANIC_X that are not considered valid by the data source.</p>	

Colorado

Colorado			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
5	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
4	Native American	5	Native American
6	Other	6	Other
7,0, Blank	Missing	.	Missing
Any other values		.A	Invalid
<p>Separate information on ethnicity is not provided. HISPANIC_X is not available.</p>			

Florida

Florida			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
5	Hispanic - White	3	Hispanic
6	Hispanic - Black		
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian/Eskimo/Aleut	5	Native American
7	Other	6	Other

8, Blank	No Response, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Iowa

Iowa			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
--		3	Hispanic
4	Asian or Pacific Islander	4	Asian or Pacific Islander
3	American Indian or Alaskan native	5	Native American
--		6	Other
9, Blank	Other/Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Iowa does not separately classify Hispanic (RACE = 3). No documentation was available about how these were coded. HISPANIC_X is not available.			
Iowa uses one category for "Other" and "Unknown", which is assigned to the HCUP category for missing (.).			
Some Iowa hospitals report "Other" race for all or a high percentage of their discharges. Some hospitals report "White" race for all discharges.			

Maryland

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

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

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

Massachusetts

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

available.

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

Michigan

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

1	Hispanic origin
2	Other
0	Unknown or not stated

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	4	Asian or Pacific Islander
5	Japanese		
6	Hawaiian (including part Hawaiian)		
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		
<p><i>Beginning in 1993.</i> New Jersey reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, Other or Unknown Hispanic),</p>			

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

North Carolina

North Carolina			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
--		3	Hispanic

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

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.			

Wisconsin

Wisconsin			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPANIC_X = 1		3	Hispanic

2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian or Alaskan Native	5	Native American
5	Other	6	Other
6, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
	1	Hispanic origin	
	2	Not of Hispanic origin	
	6	Unknown	

RACE_X - Race, as received from data source

General Notes

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

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

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

Uniform Values

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

State Specific Notes

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

RATEn - Daily rate

General Notes

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

New York

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

- RATE1-RATE5 contain accommodation rates.

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

Adjustment to Charges for Interim Bills

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

RDRG - Refined DRG

General Notes

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

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

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

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

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

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

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

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

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

State Specific Notes

Kentucky

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

North Carolina

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

Oregon

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

Washington

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

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

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

RDRGWT - Refined DRG weight

General Notes

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

Washington

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

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

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

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

READMIT - Readmission

General Notes

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

Uniform Values

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

State Specific Notes

New Jersey

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

REVCDn - Revenue code

General Notes

Revenue codes (REVCDn) are retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. No validity checks are performed.

Uniform Values

Variable	Description	Value	Value Description
REVCDn	Revenue code	4(a)	Revenue Code
		Blank	Missing or Invalid

State Specific Notes

Kentucky

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

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

Maine

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

Massachusetts

The charge detail provided by Massachusetts varies across years.

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

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

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

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

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

Nebraska

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

REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes and units are available for accommodation and ancillary charges. Rates are available only for accommodation charges.

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

New York

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

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

Adjustment to Charges for Interim Bills

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

Revenue Codes for Accommodations (REVCD1-REVCD5)

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

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

All other codes are only valid before 1994.

	203x Detoxification Unit - Alcohol Acute
-	204x Alcohol Rehabilitation - Acute Care
	205x Mental Retardation - Acute Care
	208x Detoxification Unit - Drug Acute

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

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

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

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

3310	Medical/Surgical Intensive Care
3330	Coronary Care
3350	Pediatric Intensive Care
3370	Neonatal Intensive Care

3380	Burn Care
3410	Other Intensive Care
3510	Newborn Nursery
3520	Premature Nursery
3711	Secured Room Charge (correctional facility inmates)

Revenue Codes for Ancillary Services (REVCD6-REVCD25)

- Ancillary Revenue Codes: Beginning in 1994

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

- Ancillary Revenue Codes: 1988-1993

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

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

116	Electroshock Therapy
117	Intravenous Therapy
119	Pulmonary Function, Other
120	Diagnostic Services, Other
127	Lithotripsy
136	Gastro-Intestinal Services
137	Gastro-Intestinal Services, other
138	Urology
139	Oncology
234	Ambulance Service
235	Clinic
236	Emergency Room
401	Labor and Delivery Services
404	Operating Room Services
406	Recovery Room

408	Anesthesiology
411	Medical/Surgical Supplies
415	Pharmacy
421	Laboratory Services - Clinical
423	Laboratory Services - Pathology
426	Blood Processing and Storage
429	Electrocardiography (EKG/ECG)
431	Cardiac Catheterization Laboratory
432	Radiology Diagnostic
434	CT Scanner
436	Radiology Therapeutic
438	Nuclear Medicine
442	Respiratory Therapy
444	Pulmonary Function Testing
446	Neurology - Diagnostic (EEG)
451	Physical Therapy
453	Occupational Therapy
455	Speech - Language Pathology
457	Recreational Therapy
458	Audiology
459	Physical Medicine, other
467	Psychiatric/Psychological Service
471	Renal Dialysis - General
473	Organ Acquisition - General
475	Organ Acquisition - Other Donor Bank
476	Hemodialysis (Inpatient)
477	Peritoneal Dialysis (Inpatient)
478	Continuous Ambulatory Peritoneal Dialysis (CAPD) Inpatient
479	Continuous Cycling Peritoneal Dialysis (CCPD) Inpatient
491	Ancillary Services, other
561	Telephone and Telegraph Revenue
584	Television/Radio Rentals
990	Outpatient Services, Other

Washington

Overview

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

Caveats

Beginning in 2000, if total charges are identified in the detail charges (REVCDn = "001"), the corresponding detail charge, unit, and revenue code are set to missing.

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

Invalid Revenue Codes

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

Revenue Codes and Associated Units

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

MEDICARE REQUIRED

ROOM AND BOARD, PRIVATE UNITS OF SERVICE

110 = General Classification	DAYS
111 = Medical/Surgical/GYN	DAYS
112 = OB	DAYS
113 = Pediatric	DAYS
114 = Psychiatric	DAYS
115 = Hospice	DAYS
116 = Detoxification	DAYS

117 = Oncology	DAYS
118 = Rehabilitation	DAYS
119 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE TWO BEDS

120 = General Classification	DAYS
121 = Medical/Surgical/GYN	DAYS
122 = OB	DAYS
123 = Pediatric	DAYS
124 = Psychiatric	DAYS
125 = Hospice	DAYS
126 = Detoxification	DAYS
127 = Oncology	DAYS
128 = Rehabilitation	DAYS
129 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE THREE AND FOUR BEDS

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

PRIVATE (DELUXE)

140 = General Classification	DAYS
141 = Medical/Surgical/GYN	DAYS
142 = OB	DAYS
143 = Pediatric	DAYS

144 = Psychiatric	DAYS
145 = Hospice	DAYS
146 = Detoxification	DAYS
147 = Oncology	DAYS
148 = Rehabilitation	DAYS
213 = Heart Transplant	DAYS
214 = Post CCU	DAYS
219 = Other Coronary Care	DAYS

SPECIAL CHARGES

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

INCREMENTAL NURSING CHARGE RATE

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

ALL INCLUSIVE ANCILLARY

240 = General Classification
249 = Other Inclusive Ancillary

PHARMACY

250 = General Classification
251 = Generic Drug

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

IV THERAPY (HOME IV THERAPY)

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

RADIOLOGY - THERAPEUTIC

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

NUCLEAR MEDICINE

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

CT SCAN

350 = General Classifications	# Scans
351 = Head Scan	# Scans

352 = Body Scan	# Scans
359 = Other CT Scan	# Scans

OPERATING ROOM SERVICES

360 = General Classification
361 = Minor Surgery
362 = Organ Transplant - Other than Kidney
367 = Kidney Transplant
369 = Other Operating Room Services

ANESTHESIA

370 = General Classification
371 = Anesthesia Incident to Radiology
372 = Anesthesia Incident to Other Diag. Srvs.
374 = Acupuncture
379 = Other Anesthesia

BLOOD

380 = General Classification
381 = Packed Red Cells
382 = Whole Blood
383 = Plasma
384 = Platelets
385 = Leucocytes
386 = Other Components
387 = Other Derivatives (cryoprecipitates)
389 = Other Blood

BLOOD STORAGE AND PROCESSING

390 = General Classification
391 = Blood Administration
399 = Other Blood Storage and Processing

OTHER IMAGING SERVICES

480 = General Classification
481 = Cardiac Catheterization Lab
482 = Stress Test
489 = Other Cardiology

AMBULATORY SURGICAL CARE

490 = General Classification
499 = Other Ambulatory Surgical Care

OUTPATIENT SERVICES

500 = General Classification
509 = Other

CLINIC

510 = General Classification
511 = Chronic Pain Center
512 = Dental Clinic
513 = Diabetic Counseling
514 = OB-GYN Clinic
515 = Pediatric Clinic
519 = Other Clinic

FREESTANDING CLINIC

520 = General Classification
521 = Rural Health Clinic
522 = Rural Home Health
523 = Family Practice
529 = Other Clinic

OSTEOPATHIC SERVICES

530 = General Classification

531 = Osteopathic Therapy
539 = Other Osteopathic Services

AMBULANCE

540 = General Classification	# Miles
541 = Supplies	# Miles
542 = Medical Transport	# Miles
543 = Heart Mobile	# Miles
544 = Oxygen	# Miles
545 = Air Ambulance	# Miles
546 = NeoNatal Amb, Support Crews	# Miles
547 = Pharmacy	
548 = EKG (Telephonic Transmission)	
549 = Other Ambulance	# Miles

SKILLED NURSING

550 = General Classification	DAYS
551 = Visit Charge	DAYS

CAST ROOM

700 = General Classification
702 = Other Cast Room

RECOVERY ROOM

710 = General Classification
712 = Other Recovery Room

LABOR ROOM/DELIVERY

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

729 = Other Labor Room/Delivery	DAYS
---------------------------------	------

EKG/ECG (ELECTROCARDIOGRAM)

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

EEG (ELECTROENCEPHALOGRAM)

740 = General Classification
749 = Other EEG

GASTRO-INTESTINAL SERVICES

750 = General Classification
759 = Other Gastro-Intestinal Services

TREATMENT OR OBSERVATION ROOM

760 = General Classification
769 = Other Treatment Room

LITHOTRIPSY

790 = General Classification
799 = Other Lithotripsy

INPATIENT RENAL DIALYSIS

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

ORGAN ACQUISITION

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

PATIENT CONVENIENCE ITEMS

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

PROFESSIONAL FEES

960 = General Classification
961 = Psychiatric
962 = Ophthalmology
963 = Anesthesiologist (MD)
964 = Anesthetist (CRNA)

969 = Other Professional Fees
971 = Laboratory
972 = Radiology - Diagnostic
973 = Radiology - Therapeutic
974 = Radiology - Nuclear Medicine
975 = Operating Room
976 = Respiratory Therapy
977 = Physical Therapy
978 = Occupational Therapy
979 = Speech Pathology
981 = Emergency Room
982 = Outpatient Service
983 = Clinic
984 = Medical Social Services
985 = EKG
986 = EEG
987 = Hospital Visit
988 = Consultation
989 = Private Duty Nurse

West Virginia

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

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

SEQ_SID - HCUP SID sequence number

General Notes

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

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

Uniform Values

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

State Specific Notes

None

SEX - Sex of the patient

General Notes

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

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

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

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

State Specific Notes

Colorado

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

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

Florida

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

SURGID_S - Synthetic primary surgeon number

General Notes

Beginning in 2001, this data element is called MDNUM2_S.

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

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

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

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

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

State Specific Notes

Arizona

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

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

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

Colorado

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

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

Florida

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

Iowa

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

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

Kentucky

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

Maryland

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

Michigan

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

New Jersey

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

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

New York

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

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

Source physician identifiers are encrypted during HCUP processing.

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

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

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

North Carolina

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

Washington

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

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

West Virginia

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

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

SURGSPEC - Primary surgeon specialty, as received from source

General Notes

Beginning in 2001, this data element is called MDSPEC2.

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

Maine

In Maine, SURGSPEC is coded as follows:

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

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

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

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

South Carolina

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

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

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

Source Value	Description
0AA	Pediatric Endocrinology (PDE)

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

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

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

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

110

Periodontics Dentist (PERIO-DENT)

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

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

TMDXn - Diagnosis present at admission

General Notes

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

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

Uniform Values

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

State Specific Notes

New York

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

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

TOTCHG - Total charges, cleaned

General Notes

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

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

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

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

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

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

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

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

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. 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).

Arizona

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

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days, cleaned total charges, TOTCHG, was set to missing (.) and uncleaned total charges, TOTCHG_X, retained the supplied total charge. Due to an error in HCUP processing, cleaned total charges, TOTCHG, were not set to missing in the 1998-1999 HCUP files.

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

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

No Charges

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

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

Colorado

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

Iowa

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

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

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

Maine

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

Maryland

Maryland excluded the following from total charges:

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

Massachusetts

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

Massachusetts

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

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

New York

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

1988	77.2%
1989	26.3%
1990	62.8%

1991	93.7%
1992	91.8%
1993	95.5%.

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

Adjustment to Charges for Interim Bills

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

Oregon

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

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

South Carolina

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

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

Utah

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

means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG_X).

West Virginia

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

Wisconsin

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

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

Wisconsin

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

TOTCHG_X - Total charges, as received from data source

General Notes

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

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

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

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

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. 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).

Arizona

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

California

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

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

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

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

No Charges

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

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

Colorado

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

Iowa

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

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

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

Maine

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

Maryland

Maryland excluded the following from total charges:

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

Massachusetts

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

Massachusetts

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

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

Michigan

Michigan provides Total Charges beginning in 2001.

New York

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

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

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

Adjustment to Charges for Interim Bills

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

Oregon

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

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

South Carolina

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

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

Utah

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

West Virginia

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

Wisconsin

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

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

Wisconsin

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

TOWN - Patient town of residence, as received from source

General Notes

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

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

State Specific Notes

Nebraska

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

New Jersey

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

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

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

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

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

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

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

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

901	Bayonne City
902	East Newark Boro
903	Guttenberg Town
904	Harrison Town
905	Hoboken City
906	Jersey City
907	Kearny Town
908	North Bergen Twp.
909	Secaucus Town
910	Union City
911	Weehawken Twp.
912	West New York Town
10 = Hunterdon County	
1001	Alexandria Twp.
1002	Bethlehem Twp.
1003	Bloomsbury Boro
1004	Califon Boro
1005	Clinton Town
1006	Clinton Twp.
1007	Delaware Twp.
1008	East Amwell Twp.
1009	Flemington Boro
1010	Franklin Twp.
1011	Frenchtown Boro
1012	Glen Gardner Boro
1013	Hampton Boro
1014	High Bridge Boro
1015	Holland Twp.
1016	Kingwood Twp.
1017	Lambertville City
1018	Lebanon Boro
1019	Lebanon Twp.
1020	Milford Boro
1021	Raritan Twp.
1022	Readington Twp.

1023	Stockton Boro
1024	Tewksbury Twp.
1025	Union Twp.
1026	West Amwell Twp.
11 = Mercer County	
1101	East Windsor Twp.
1102	Ewing Twp.
1103	Hamilton Twp.
1104	Hightstown Boro
1105	Hopewell Boro
1106	Hopewell Twp.
1107	Lawrence Twp.
1108	Pennington Boro
1109	Princeton Boro
1110	Princeton Twp.
1111	Trenton City
1112	Washington Twp.
1113	West Windsor Twp.
120 = Middlesex County	
1201	Carteret Boro
1202	Cranbury Twp.
1203	Dunellen Boro
1204	East Brunswick Twp.
1205	Edison Twp.
1206	Helmetta Boro
1207	Highland Park Boro
1208	Jamesburg Boro
1209	Old Bridge Twp.
1210	Metuchen Boro
1211	Middlesex Boro
1212	Milltown Boro
1213	Monroe Twp.
1214	New Brunswick City
1215	North Brunswick Twp.
1216	Perth Amboy City

1217	Piscataway Twp.
1218	Plainsboro Twp.
1219	Sayreville Boro
1220	South Amboy City
1221	South Brunswick Twp.
1222	South Plainfield Boro
1223	South River Boro
1224	Spotswood Boro
1225	Woodbridge Twp.
13 = Monmouth County	
1301	Allenhurst Boro
1302	Allentown Boro
1303	Asbury Park City
1304	Atlantic Highlands Boro
1305	Avon-By-The-Sea Boro
1306	Belmar Boro
1307	Bradley Beach Boro
1308	Brielle Boro
1309	Colts Neck Twp.
1310	Deal Boro
1311	Eatontown Boro
1312	Englishtown Boro
1313	Fair Haven Boro
1314	Farmingdale Boro
1315	Freehold Boro
1316	Freehold Twp.
1317	Highlands Boro
1318	Holmdel Twp.
1319	Howell Twp.
1320	Interlaken Boro
1321	Keansburg Boro
1322	Keyport Boro
1323	Little Silver Boro
1324	Loc Arbour Village
1325	Long Branch City

1326	Manalapan Twp.
1327	Manasquan Boro
1328	Marlboro Twp.
1329	Matawan Boro
1330	Aberdeen Twp.
1331	Middletown Twp.
1332	Millstone Twp.
1333	Monmouth Beach Boro
1334	Neptune Twp.
1335	Neptune City Boro
1336	Tinton Falls Boro
1337	Ocean Twp.
1338	Oceanport Boro
1339	Hazlet Twp.
1340	Red Bank Boro
1341	Roosevelt Boro
1342	Rumson Boro
1343	Sea Bright Boro
1344	Sea Girt Boro
1345	Shrewsbury Boro
1346	Shrewsbury Twp.
1347	South Belmar Boro
1348	Spring Lake Boro
1349	Spring Lake Heights Boro
1350	Union Beach Boro
1351	Upper Freehold Twp.
1352	Wall Twp.
1353	West Long Branch Boro
14 = Morris County	
1401	Boonton Town
1402	Boonton Twp.
1403	Butler Boro
1404	Chatham Boro
1405	Chatham Twp.
1406	Chester Boro

1407	Chester Twp.
1408	Denville Twp.
1409	Dover Town
1410	East Hanover Twp.
1411	Florham Park Boro
1412	Hanover Twp.
1413	Harding Twp.
1414	Jefferson Twp.
1415	Kinnelon Boro
1416	Lincoln Park Boro
1417	Madison Boro
1418	Mendham Boro
1419	Mendham Twp.
1420	Mine Hill Twp.
1421	Montville Twp.
1422	Morris Twp.
1423	Morris Plains Boro
1424	Morristown Town
1425	Mountain Lakes Boro
1426	Mount Arlington Boro
1427	Mount Olive Twp.
1428	Netcong Boro
1429	Parsippany-Troy Hills Twp.
1430	Passaic Twp.
1431	Pequannock Twp.
1432	Randolph Twp.
1433	Riverdale Boro
1434	Rockaway Boro
1435	Rockaway Twp.
1436	Roxbury Twp.
1437	Victory Gardens Boro
1438	Washington Twp.
1439	Wharton Boro
15 = Ocean County	
1501	Barneget Light Boro

1502	Bay Head Boro
1503	Beach Haven Boro
1504	Beachwood Boro
1505	Berkeley Twp.
1506	Brick Twp.
1507	Dover Twp.
1508	Eagleswood Twp.
1509	Harvey Cedars Boro
1510	Island Heights Boro
1511	Jackson Twp.
1512	Lacey Twp.
1513	Lakehurst Boro
1514	Lakewood Twp.
1515	Lavallette Boro
1516	Little Egg Harbor Twp.
1517	Long Beach Twp.
1518	Manchester Twp.
1519	Mantaloking Boro
1520	Ocean Twp.
1521	Ocean Gate Boro
1522	Pine Beach Boro
1523	Plumsted Twp.
1524	Point Pleasant Boro
1525	Point Pleasant Beach Boro
1526	Seaside Heights Boro
1527	Seaside Park Boro
1528	Ship Bottom Boro
1529	South Toms River Boro
1530	Stafford Twp.
1531	Surf City Boro
1532	Tuckerton Boro
1533	Barneгат Twp.
16 = Passaic County	
1601	Bloomingdale Boro
1602	Clifton City

1603	Haledon Boro
1604	Hawthorne Boro
1605	Little Falls Twp.
1606	North Haledon Boro
1607	Passaic City
1608	Paterson City
1609	Pompton Lakes Boro
1610	Prospect Park Boro
1611	Ringwood Boro
1612	Totowa Boro
1613	Wanaque Boro
1614	Wayne Twp.
1615	West Milford Twp.
1616	West Paterson Boro
17 = Salem County	
1701	Alloway Twp.
1702	Elmer Boro
1703	Elsinboro Twp.
1704	Lower Alloways Creek Twp.
1705	Mannington Twp.
1706	Oldsman Twp.
1707	Penns Grove Boro
1708	Pennsville Twp.
1709	Pilesgrove Twp.
1710	Pittsgrove Twp.
1711	Quinton Twp.
1712	Salem City
1713	Carneys Point Twp.
1714	Upper Pittsgrove Twp.
1715	Woodstown Boro
18 = Somerset County	
1801	Bedminister Twp.
1802	Bernards Twp.
1803	Bernardsville Boro
1804	Bound Brook Boro

1805	Branchburg Twp.
1806	Bridgewater Twp.
1807	Far Hills Boro
1808	Franklin Twp.
1809	Green Brook Twp.
1810	Hillsborough Twp.
1811	Manville Boro
1812	Millstone Boro
1813	Montgomery Twp.
1814	North Plainfield Boro
1815	Peapack Gladstone Boro
1816	Raritan Boro
1817	Rocky Hill Boro
1818	Somerville Boro
1819	South Bound Brook Boro
1820	Warren Twp.
1821	Watchung Boro
19 = Sussex County	
1901	Andover Boro
1902	Andover Twp.
1903	Branchville Boro
1904	Byram Twp.
1905	Frankford Twp.
1906	Franklin Boro
1907	Fredon Twp.
1908	Green Twp.
1909	Hamburg Boro
1910	Hampton Twp.
1911	Hardyston Twp.
1912	Hopatcong Boro
1913	Lafayette Twp.
1914	Montague Twp.
1915	Newton Town
1916	Ogdensburg Boro
1917	Sandyston Twp.

1918	Sparta Twp.
1919	Stanhope Boro
1920	Stillwater Twp.
1921	Sussex Boro
1922	Vernon Twp.
1923	Walpack Twp.
1924	Wantage Twp.
20 = Union County	
2001	Berkeley Heights Twp.
2002	Clark Twp.
2003	Cranford Twp.
2004	Elizabeth City
2005	Fanwood Boro
2006	Garwood Boro
2007	Hillside Twp.
2008	Kenilworth Boro
2009	Linden City
2010	Mountainside Boro
2011	New Providence Boro
2012	Plainfield City
2013	Rahway City
2014	Roselle Boro
2015	Roselle Park Boro
2016	Scotch Plains Twp.
2017	Springfield Twp.
2018	Summit City
2019	Union Twp.
2020	Westfield Twp.
2021	Winfield Twp.
21 = Warren County	
2101	Allamuchy Twp.
2102	Alpha Boro
2103	Belvidere Twp.
2104	Blairstown Twp.
2105	Franklin Twp.

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

UNITn - Units of service

General Notes

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

Kentucky

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

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

Maine

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

Massachusetts

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

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

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

Unit Categories in 1994-1997

In 1994-1997, Massachusetts provided 81 charge and unit categories. Beginning in the 4th quarter of 1997, seven more unit categories (UNIT82-UNIT88) were added. Data quality problems often appear in the first year that data elements are added, so use these data elements with caution. The following are the UB-92 revenue centers associated with each variable:

<u>Included UB-92 Category</u>	<u>Variable</u>	<u>Revenue Center</u>
Routine Medical/Surgical	UNIT1	111
Routine Obstetrics	UNIT2	112
Routine Pediatrics	UNIT3	113
Routine Psychiatric	UNIT4	114
Routine Hospice	UNIT5	115
Routine Detoxification	UNIT6	116
Routine Oncology	UNIT7	117
Routine Rehabilitation	UNIT8	118
Other Routine Accommodation	UNIT9	119
Routine Newborn	UNIT10	170
Neo-Natal ICU	UNIT11	175
Medical/Surgical ICU	UNIT12	200
Pediatric ICU	UNIT13	203
Psychiatric ICU	UNIT14	204
Post Care ICU	UNIT15	206
Burn Unit	UNIT16	207
Trauma ICU	UNIT17	208
Other Special Care ICU	UNIT18	209
Coronary Care Unit	UNIT19	210
Myocardial Infarction Unit	UNIT20	211
Pulmonary Care Unit	UNIT21	212
Heart Transplant Unit	UNIT22	213
Post Coronary Care Unit	UNIT23	214
Other Coronary Care Unit	UNIT24	219
Special Charges	UNIT25	220
Incremental Nursing Charge Rate	UNIT26	230
All Inclusive Ancillary	UNIT27	240
Pharmacy	UNIT28	250
IV Therapy	UNIT29	260
Medical/Surgical Supplies	UNIT30	270
Oncology	UNIT31	280
Durable Medical Equipment	UNIT32	290
Laboratory	UNIT33	300
Laboratory Pathological	UNIT34	310

Diagnostic Radiology	UNIT35	320
Therapeutic Radiology	UNIT36	330
Nuclear Medicine	UNIT37	340
CAT Scan	UNIT38	350
Surgical Service (OR)	UNIT39	360
Anesthesia	UNIT40	370
Blood	UNIT41	380
Blood Storage/Processing	UNIT42	390
Other Imaging Services	UNIT43	400
Respiratory Services	UNIT44	410
Physical Therapy	UNIT45	420
Occupational Therapy	UNIT46	430
Speech-Language Pathology	UNIT47	440
Emergency Room	UNIT48	450
Pulmonary Function	UNIT49	460
Audiology	UNIT50	470
Cardiology	UNIT51	480
Ambulatory Surgical Care	UNIT52	490
Outpatient Services before Admission (Invalid for Inpatient Services)	UNIT53	500
Clinic (Invalid for Inpatient Purposes)	UNIT54	510
Ambulance	UNIT55	540
Medical Social Services	UNIT56	560
MRI	UNIT57	610
Med./Surg. Supplies (extends 270)	UNIT58	620
Drugs Req. Specific Identification	UNIT59	630
Hospice Services	UNIT60	650
Cast Room	UNIT61	700
Recovery Room	UNIT62	710
Labor Room/Delivery	UNIT63	720
EKG/ECG	UNIT64	730
EEG	UNIT65	740
Gastro-Intestinal Services	UNIT66	750
Treatment or Observation Room	UNIT67	760
Lithotripsy	UNIT68	790

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

Charge Categories in 1988-1993

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

<u>Included UB-92 Category</u>	<u>Variable</u>	<u>Revenue Center</u>
Routine Medical/Surgical	UNIT1	111, 121, 131, 141, 151
Routine Obstetrics	UNIT2	112, 122, 132, 142, 152

Routine Pediatrics	UNIT3	113, 123, 133, 143, 153
Routine Psychiatric	UNIT4	114, 124, 134, 144, 154
Routine Other	UNIT5	119, 129, 139, 149, 159
Routine Newborn	UNIT6	170, 171, 172, 179
Neo-Natal ICU	UNIT7	175
Medical/Surgical ICU	UNIT8	201, 202
Pediatric ICU	UNIT9	203
Psychiatric ICU	UNIT10	204
Burn Unit	UNIT11	207
Other ICU	UNIT12	209
Coronary Care Unit	UNIT13	210
Pharmacy	UNIT14	250-259
IV Therapy	UNIT15	260
Medical/Surg Supplies	UNIT16	270, 272-275, 277-279, 290-292, 299
Laboratory	UNIT17	300-307, 309-312, 314, 319, 971
Diagnostic Radiology	UNIT18	320-321, 324, 329, 400-402, 409, 972
Therapeutic Radiology	UNIT19	330-333, 335, 339, 973
Nuclear Medicine	UNIT20	340-342, 349, 974
CAT Scanner	UNIT21	350-352, 359
Surgical Service (OR)	UNIT22	360-362, 367, 369, 975
Anesthesiology	UNIT23	370, 374, 379, 963-964
Blood	UNIT24	380-382, 389
Blood Storage Proc & Adm	UNIT25	390-391, 399
Respiratory Therapy	UNIT26	410, 412-413, 419, 976
Physical Therapy	UNIT27	420, 429, 977
Occupational Therapy	UNIT28	430, 439, 978
Speech Therapy	UNIT29	440, 449, 979
Emergency Room	UNIT30	450, 459, 981
Pulmonary Function	UNIT31	460, 469
Audiology	UNIT32	470-472, 479
Cardiac Catheterization	UNIT33	480-482, 489
Ambulance	UNIT34	540-545, 549
Recovery Room	UNIT35	710, 719

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

Nebraska

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

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

New Jersey

The unit categories from New Jersey are:

UNIT1	Medical-Surgical Days
UNIT2	Obstetric Days
UNIT3	Pediatric Days
UNIT4	Psychiatric Days
UNIT5	Burn Care Unit Days
UNIT6	Intensive Care Unit Days
UNIT7	Coronary Care Unit Days
UNIT8	Neonatal Intensive Care Unit Days

UNIT9	Newborn Nursery Days
UNIT10	Emergency Room Visits
UNIT11	Clinic Visits
UNIT12	Home Health Visits
UNIT13	Anesthesiology Minutes Used
UNIT14	Cardiac Catheterization Procedures
UNIT15	Delivery and/or Gyn Procedures
UNIT16	Dialysis Treatments
UNIT17	Times Drugs or Pharmacy Used
UNIT18	Electrocardiograms
UNIT19	Laboratory Tests
UNIT20	Number of Medical Surgical Supplies
UNIT21	Number of EEGs and EMGs
UNIT22	Nuclear Medicine Procedures
UNIT23	Occupational Therapy Visits
UNIT24	Operating Room Procedures
UNIT25	Organ Transplants
UNIT26	Physical Therapy Visits
UNIT27	Psychiatric Hours (Spent with Patient)
UNIT28	Times Radiology Used
UNIT29	Respiratory Therapy Treatments
UNIT30	Speech Pathology Visits
UNIT31	Therapeutic Radiology Procedures
UNIT32	Same Day Surgery Visits
UNIT33	Excluded Revenue Codes
UNIT34	Non-Acute Ancillary Revenue Codes
UNIT35	Medicare, Part B, Non-Acute Codes

New York

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

- UNIT1-UNIT5 contain accommodation units of service.

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

Adjustment to Charges for Interim Bills

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

South Carolina

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

Starting in 1996

South Carolina supplied 19 unit categories:

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

UNIT19	Coronary Care - Intermediate CCU units
--------	--

Prior to 1995

South Carolina supplied 11 unit categories:

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

Washington

Units of service (UNITn) refer to the revenue centers (REVCDn) and are reflected in the detailed charges (CHGn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

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

Beginning in 2000, if total charges are identified in the detail charges (REVCDn = "001"), the corresponding detail charge, unit, and revenue code are set to missing.

West Virginia

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

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

YEAR - Calendar year

General Notes

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

Uniform Values

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

State Specific Notes

None

ZIP - Patient zip code

General Notes

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

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

Uniform Values			
-----------------------	--	--	--

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

State Specific Notes

Arizona

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

Arizona provides a source category for transients and homeless ("TRANS"). Beginning in 2000, this code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this code was recoded to blank (ZIP = " ").

Colorado

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

Florida

Florida masked zip codes of areas in Florida where the population is less than 500 people. These masked codes were set to missing (ZIP = " ") during HCUP processing.

Florida masks zip codes for patients who reside out-of-state. These masked codes were set to missing (ZIP = " ") during HCUP processing.

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

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

Iowa

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

Kentucky

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

Michigan

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

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

Nebraska

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

New Jersey

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

New York

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

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

North Carolina

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

Oregon

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

West Virginia

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

Wisconsin

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

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

ZIP_S - Synthetic patient zip code

General Notes

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

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

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

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

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

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

State Specific Notes

Maine

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

Utah

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

Utah masks zip codes under the following conditions:

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

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

ZIP3 - Patient ZIP Code, first 3 digits

General Notes

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

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

Uniform Values

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

State Specific Notes

None