



H·CUP
HEALTHCARE COST AND UTILIZATION PROJECT

QUALITY CONTROL PROCEDURES

HCUP QUALITY CONTROL PROCEDURES

Table of Contents

HCUP QUALITY CONTROL PROCEDURES	1
QUALITY CONTROL PHILOSOPHY	1
QUALITY REVIEW	1
AUTOMATED QUALITY CONTROL PROCEDURES	1
HCUP Edit Checks.....	2
HCUP Edit Checks on Data with ICD-10-CM/PCS Coding (Beginning in October 2015)	3
Summary	3
Age and Date of Birth.....	3
Admission Date, Discharge Date, and Length of Stay	5
Procedure Day	6
Total Charge	7
ICD-10-CM Diagnoses.....	8
ICD-10-PCS Procedures.....	9
ICD-10-CM/PCS Diagnoses and Procedures.....	10
External Cause of Morbidity Codes	11
HCPCS/CPT Procedures	11
HCUP Edit Checks on Data with ICD-9-CM Coding (January 1998 – September 2015)	13
Summary	13
Age and Date of Birth.....	13
Admission Date, Discharge Date, and Length of Stay	14
Procedure Day	15
Total Charge	16
Diagnoses.....	17
Procedures	18
Diagnoses and Procedures	19
External Cause of Injury Codes (E Codes).....	20
HCPCS/CPT Procedures	21
HCUP Edit Checks on Data with ICD-9-CM Coding (January 1988 – December 1997)	23
ICD-10-CM/PCS DIAGNOSIS AND PROCEDURE SCREENS.....	28
Maternal.....	28
Neonate	29
Male diagnoses.....	29
Male procedures	30

Female diagnoses.....	30
Female procedures.....	32
ICD-9-CM DIAGNOSIS AND PROCEDURE SCREENS.....	33
Maternal.....	33
Neonate.....	34
Male diagnoses.....	35
Male procedures.....	36
Female diagnoses.....	37
Female procedures.....	40
Injury diagnoses.....	41
Medical misadventure/adverse reaction diagnoses.....	41
Injury external cause of injury code.....	41
Medical misadventure/adverse reaction external cause of injury code ...	41
Perinate.....	41
Long-term-care indication.....	41
HCPCS/CPT PROCEDURE SCREENS.....	43
Male procedures.....	43
Female procedures.....	46

HCUP QUALITY CONTROL PROCEDURES

This document describes the procedures used to assess data quality and perform basic editing for each data source participating in HCUP.

QUALITY CONTROL PHILOSOPHY

Edit procedures were applied to HCUP data. Editing followed explicit rules:

- Make the data usable without extensive further editing.
- Confirm that data values are valid, internally consistent, and consistent with established norms, when feasible.
- Use some edit procedures to set questionable and inconsistent values to inconsistent (.C or negative 6-filled). Use other edit procedures only to tabulate edit failures. Use the latter to evaluate whether systematic problems exist.
- Never "fix" or impute data. Set invalid or inconsistent values to special missing values. This preserves the analyst's ability to investigate data anomalies.
- Some data elements are coded more reliably because they relate to reimbursement. For example, diagnoses, procedures, age, sex, and discharge disposition are part of the algorithm to assign Diagnosis Related Group (DRG) on an inpatient record.
- Tabulate instances of edit failures and use these to assess data quality for each data source.

QUALITY REVIEW

The following statistics were reviewed by an independent contractor for each year and data source (or for each different layout if the source changed file layouts during the year):

- For all numeric data elements - means, number of missing and non-missing values, minimum, and maximum.
- For continuous variables such as length of stay and charges – mean, median, and extreme values
- For all categorical and some continuous data elements - frequency distributions.
- For closely related data elements (e.g., point of origin compared to admission type) - cross-frequencies.

AUTOMATED QUALITY CONTROL PROCEDURES

The following procedures were applied to each discharge record:

- *To assess validity of values -*

For numeric data:

- Verify numeric data as numeric.
- Check the range against legal values documented by the data source.
- Check the range against standard norms (e.g., length of stay is a non-negative value; age in years is between 0 and 124, the maximum allowed by the DRG grouper).
- Check the values against the maximum allowed for the data element (e.g., birth weight less than 20 pounds).

For character data:

- Verify against norms, when feasible (e.g., diagnosis codes and procedure codes).

- *To assess internal consistency –*

Compare values of related data elements (e.g., a procedure of *hysterectomy* should appear with a sex of *female*; admission date should occur *before* discharge date).

If an inconsistency involves a critical data element (such as discharge date and admission date), retain as much information as reasonable. For example:

- If discharge date falls before admission date, retain discharge date and set admission date and length of stay to inconsistent (.C or negative 6-filled).

- If discharge date is invalid (e.g., February 30), retain discharge quarter and discharge year.

Note: Dates are used only to derive nonsensitive data elements such as length of stay and age and are not included on the HCUP Core files.

- To assess consistency with established norms –

Compare values to an established norm (e.g., maternal diagnoses should occur with an age between 10 and 55 years).

HCUP Edit Checks

The HCUP edit checks have changed over time. The original HCUP edits spanned the data years 1988-1997 and were revised starting with data year 1998 after a review of the editing procedures performed by a number of the HCUP State Partners and Medicare. Because the United States transitioned from using ICD-9-CM to ICD-10-CM/PCS¹ code sets for reporting clinical diagnoses and inpatient procedures on October 1, 2015 (the beginning of the fiscal year 2016), the HCUP edit check were updated to reflect the new coding system. Prior to October 2015, the HCUP edits checks specific to clinical diagnoses and inpatient procedures were based on ICD-9-CM coding. The reporting of outpatient procedures in Healthcare Common Procedure Coding System (HCPCS) Current Procedural Terminology (CPT®) was not affected by the switch to ICD-10-PCS. Edit checks based on HCPCS/CPT were implemented beginning in data year 2000.

For every year and HCUP database, summary counts and percentages of edit failures were calculated and reviewed.

¹ ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification;
ICD-10-CM/PCS: International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System.

HCUP Edit Checks on Data with ICD-10-CM/PCS Coding (Beginning in October 2015)

The following table lists all of the edit checks performed on the HCUP databases beginning with data on October 1, 2015 with ICD-10-CM/PCS and HCPCS/CPT coding. For each edit check there is an edit check value (e.g., EAGE01), a description of the edit check, and a description of the action that is taken if the record fails the edit check. The screens used to define specific conditions employed in the editing procedures are listed separately under ICD-10-CM/PCS Diagnosis and Procedure Screens and HCPCS/CPT Procedure Screens.

Note that starting with the 2016 HCUP Central Distributor databases, data elements created by HCUP tools software will no longer be included on files. This impacts data elements such as Clinical Classifications Software (i.e., data elements I10_DXCCSn and I10_PRCCSn), among others.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
Summary		
EANY	ANY EDIT Summary edit check that indicates that any edit has been triggered.	For tabulation purposes only.
Age and Date of Birth²		
EAGE01	DATE OF BIRTH MISSING OR INVALID The date of birth (DOB) is missing (.) or invalid (.A)	For tabulation purposes only
EAGE02	DATE OF BIRTH IS AFTER ADMISSION DATE (FOR INPATIENT DATA) OR START OF SERVICE DATE (FOR OUTPATIENT DATA) The date of birth (DOB) is greater than the starting date (ADATE) causing the age in years (AGE) to be negative.	Set DOB and AGE to inconsistent (.C). AGEDAY and AGEMONTH are set to missing (.)

² Dates are used only to derive nonsensitive data elements such as patient age and are not included on the HCUP Core files.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
EAGE03	AGE IN YEARS IS GREATER THAN 124 YEARS The age in years (AGE) is greater than 124.	Set AGE to inconsistent (.C). AGEDAY and AGEMONTH are set to missing (.).
EAGE04	NEONATAL DIAGNOSIS INCONSISTENT WITH AGE A diagnosis (I10_DXn) on the record satisfies the NEONATE screen, and the age in years (AGE) is greater than zero. Retain age on a combined neonatal/maternal record.	Set offending I10_DXn to "incn" and for data prior to January 2016 ³ also set the corresponding I10_DXCCSn to inconsistent (.C). If NEOMAT ne 3, set - AGE to inconsistent (.C), - AGEDAY to inconsistent (.C), and - AGEMONTH to inconsistent (.C).
EAGE05	MATERNAL DIAGNOSIS INCONSISTENT WITH AGE A diagnosis (I10_DXn) on the record satisfies the MATERNAL screen, and the nonmissing age in years (AGE) is less than 10 or greater than 55. Retain age on a combined maternal/neonatal record.	Set offending I10_DXn to "incn" and for data prior to 2016 ³ also set the corresponding I10_DXCCSn to inconsistent (.C). If NEOMAT ne 3, set - AGE to inconsistent (.C), - AGEDAY to inconsistent (.C), and - AGEMONTH to inconsistent (.C).

³ Starting with data year 2016, data elements derived from the HCUP tools such as Clinical Classification Software (CCS) are not included on the HCUP databases.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
EAGE	ANY AGE EDIT Summary age edit check that indicates that an edit in the range EAGE01-EAGE05 has been triggered.	For tabulation purposes only.
Admission Date, Discharge Date, and Length of Stay⁴		
ELOS01	ADMISSION DATE (FOR INPATIENT DATA) OR START OF SERVICE DATE (FOR OUTPATIENT DATA) IS MISSING OR INVALID The date (ADATE) is missing (.) or invalid (.A)	For tabulation purposes only.
ELOS02	DISCHARGE DATE (FOR INPATIENT DATA) OR END OF SERVICE DATE (FOR OUTPATIENT DATA) IS MISSING OR INVALID The date (DDATE) is missing (.) or invalid (.A)	For tabulation purposes only.
ELOS03	ADMISSION DATE (FOR INPATIENT DATA) OR END OF SERVICE DATE (FOR OUTPATIENT DATA) IS AFTER DISCHARGE DATE The starting date (ADATE) is greater than the ending date (DDATE) causing the length of stay (LOS) to be negative.	Set ADATE and LOS to inconsistent (.C). LOS_X retains uncleaned value.

⁴ Dates are used only to derive nonsensitive data elements such as length of stay and are not included on the HCUP Core files.

HCUP Edit Checks (Beginning in October 2015)

Edit Check	Description	Action
ELOS04	<p>EXCESSIVELY LONG LENGTH OF STAY The length of stay (LOS) is excessively long.</p> <ul style="list-style-type: none"> • For inpatient data, the maximum allowed length of stay is 365 days. • For outpatient data, the maximum allowed length of stay changed over time: <ul style="list-style-type: none"> ○ Prior to December 2016, the maximum is 3 days. The three day limit for outpatient records allows for observation time that would be allowable for Medicare payment. ○ Beginning in January 2017, the maximum is extended to 30 days to allow for the retention of length of stay on outpatient records that represent a span of services such as physical therapy. 	Set LOS to inconsistent (.C). LOS_X retains uncleaned value.
ELOS	<p>ANY LENGTH OF STAY EDIT Summary length of stay edit check that indicates that an edit in the range ELOS01-ELOS04 has been triggered.</p>	For tabulation purposes only.
Procedure Day		

HCUP Edit Checks (Beginning in October 2015)

Edit Check	Description	Action
EPRDAY01	<p>DAY OF PROCEDURE NOT DURING STAY A day of procedure on the record occurred more than 4 days before the stay began or occurred more than 3 days after the stay ended. The limit of four-days prior to the stay allows for pre-operative procedures that are bundled into the payment for the hospital stay. The limit of three-days after the stay allows for observation time that would be allowable for Medicare payment.</p> <p>If the length of stay is excessively long (edit check ELOS04), then EPRDAY01 will also be triggered if the day of procedure is greater than the maximum allowed for length of stay.</p>	Set PRDAYn and PRDATEn to inconsistent (.C).
Total Charge		
ETCHG01	<p>EXCESSIVELY LOW TOTAL CHARGES The total charges (TOTCHG) are less than \$100.</p>	Set TOTCHG to inconsistent (.C). TOTCHG_X retains uncleaned value.
ETCHG02	<p>EXCESSIVELY HIGH TOTAL CHARGES The total charges (TOTCHG) are excessively high.</p> <ul style="list-style-type: none"> • For inpatient data, the maximum total charges allowed are: <ul style="list-style-type: none"> ○ \$10.0 million starting in January 2016 ○ \$5.0 million from October 2015 – December 2016 • For outpatient data, the maximum total charges allowed is \$950,000. 	Set TOTCHG to inconsistent (.C). TOTCHG_X retains uncleaned value.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
ETCHG	ANY TOTAL CHARGE EDIT Summary total charge edit check that indicates that an edit in the range ETCHG01-ETCHG02 has been triggered.	For tabulation purposes only.
ICD-10-CM Diagnoses		
EDX01	NO PRINCIPAL DIAGNOSIS CODED ON THE RECORD There is no principal diagnosis (I10_DX1) coded on the record.	For tabulation purposes only.
EDX02	DIAGNOSIS CODE IS INVALID AS OF THE DISCHARGE DATE The record contains at least one diagnosis code (I10_DXn) that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).	Set I10_DXn to “invl” and for data prior to January 2016 ⁵ also set the corresponding I10_DXCCSn to invalid (.A).
EDX03	DIAGNOSIS INCONSISTENT WITH SEX The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the diagnoses (I10_DXn) coded on the record.	Set I10_DXn to “incn”, FEMALE to inconsistent (.C), and for data prior to January 2016 ⁵ also set the corresponding I10_DXCCSn to inconsistent (.C).
EDX04	PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS (Inpatient data only) The principal diagnosis is invalid as a discharge diagnosis as indicated by the assignment of Diagnosis Related Group (DRG) 998 <i>Principal Diagnosis Invalid as Discharge Diagnosis</i> .	For tabulation purposes only.

⁵ Starting with data year 2016, data elements derived from the HCUP tools such as Clinical Classification Software (CCS) are not included on the HCUP databases.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
EDX	ANY DIAGNOSIS EDIT Summary diagnosis edit check that indicates that an edit in the range EDX01-EDX04 has been triggered.	For tabulation purposes only.
ICD-10-PCS Procedures		
EPR01	RECORDS IN THE STATE AMBULATORY SURGERY AND SERVICES DATABASES FLAGGED AS AMBULATORY SURGERY RECORDS BY THE STATE, BUT WITHOUT A PROCEDURE CODE No procedures (ICD-10-PCS or HCPCS/CPT) are reported on the record.	For tabulation purposes only.
EPR02	PROCEDURE CODE IS INVALID AS OF THE DISCHARGE DATE The record contains at least one procedure code (I10_PRn) that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).	Set I10_PRn to “invl” and for data prior to January 2016 ⁶ also set the corresponding I10_PRCCSn to invalid (.A).
EPR03	PROCEDURE INCONSISTENT WITH SEX The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the procedures (I10_PRn) coded on the record.	Set PRn to “incn”, FEMALE to inconsistent (.C), and for data prior to January 2016 ⁶ also set the corresponding I10_PRCCSn to inconsistent (.C).
EPR	ANY PROCEDURE EDIT Summary procedure edit check that indicates that an edit in the range EPR01-EPR03 has been triggered.	For tabulation purposes only.

⁶ Starting with data year 2016, data elements derived from the HCUP tools such as Clinical Classification Software (CCS) are not included on the HCUP databases.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
ICD-10-CM/PCS Diagnoses and Procedures		
EDXPR01	MIXED MATERNAL AND NEONATAL RECORD Codes in the diagnosis vector satisfy both the maternal and neonatal screens. The neonatal-maternal flag (NEOMAT) is set to 3.	For tabulation purposes only.
EDXPR02	PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS (Inpatient data only) The procedure is unrelated to the principal diagnosis as indicated by DRGs 981–989 <i>O.R. procedure unrelated to principal diagnosis.</i>	For tabulation purposes only.
EDXPR03	DISCHARGE RECORD IS UNGROUPABLE (Inpatient data only) Inpatient discharge is ungroupable as indicated by DRG equals 999 <i>Ungroupable.</i>	For tabulation purposes only.
EDXPR	ANY DIAGNOSIS AND PROCEDURE EDIT Summary diagnosis and procedure edit check that indicates that an edit in the range EDXPR01-EDXPR03 has been triggered.	For tabulation purposes only.

HCUP Edit Checks (Beginning in October 2015)		
Edit Check	Description	Action
External Cause of Morbidity Codes		
ECODE01	<p>EXTERNAL CAUSE OF MORBIDITY CODE IS INVALID AS OF THE DISCHARGE DATE (October 2015 – December 2016)</p> <p>The record contains at least one external cause of morbidity code (codes starting with the letters “V” through “Y”) that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).</p> <p>Starting in data year 2017, the external cause of morbidity codes are included in the diagnosis array I10_DXn and will be evaluated by the diagnosis-specific edits checks EDXnn.</p>	<p>Set I10_ECAUSEn to “invl” and for data prior to January 2016⁷ also set the corresponding I10_EcauseCCSn to invalid (.A).</p>
ECODE	<p>ANY EXTERNAL CAUSE OF MORBIDITY CODE EDIT (October 2015 – December 2016)</p> <p>Summary external cause of morbidity code edit check that indicates that edit EECODE01 has been triggered.</p> <p>Starting in data year 2017, the external cause of morbidity codes are included in the diagnosis array I10_DXn and will be evaluated by the diagnosis-specific edits checks EDXnn.</p>	<p>For tabulation purposes only.</p>
HCPCS/CPT Procedures		

⁷ Starting with data year 2016, data elements derived from the HCUP tools such as Clinical Classification Software (CCS) are not included on the HCUP databases.

HCUP Edit Checks (Beginning in October 2015)

Edit Check	Description	Action
ECPT01	<p>HCPCS/CPT PROCEDURE IS INVALID AS OF THE DISCHARGE DATE (Outpatient data only) The record contains at least one HCPCS/CPT procedure code (CPTn) that is invalid as of the discharge date plus or minus 6 months (to allow for anticipation of or lags in response to official HCPCS/CPT coding changes). HCUP validates Level I (numeric) and Level II codes (A0000-V9999) but does not validate the Level III codes (W0000-Z9999).</p>	Set CPTn to “invl” and for data prior to January 2016 also set the corresponding CPT_CCSn to invalid (.A).
ECPT02	<p>HCPCS/CPT PROCEDURE INCONSISTENT WITH SEX (Outpatient data only) The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the HCPCS/CPT procedures (CPTn) coded on the record.</p>	Set CPTn to “incn” and for data prior to January 2016 also set the corresponding CPT_CCSn to inconsistent (.C).
ECPT03	<p>HCPCS/CPT PROCEDURE INCONSISTENT WITH AGE (Outpatient data only) The age of the patient (AGE) does not agree with the age of at least one of the HCPCS/CPT procedures (CPTn) coded on the record.</p>	Set CPTn to “incn” and for data prior to January 2016 also set the corresponding CPT_CCSc to inconsistent (.C).
ECPT	<p>ANY HCPCS/CPT PROCEDURE EDIT (Outpatient data only) Summary HCPCS/CPT procedure edit check that indicates that an edit in the range ECPT01-ECPT03 has been triggered.</p>	For tabulation purposes only.

HCUP Edit Checks on Data with ICD-9-CM Coding (January 1998 – September 2015)

The following table lists all of the edit checks performed on the HCUP databases from January 1998 through September 2015 with ICD-9-CM and HCPCS/CPT coding. For each edit check there is an edit check number (e.g., EAGE01), a description of the edit check, and a description of the action that is taken if the record fails the edit check. The screens used to define specific conditions employed in the editing procedures are listed separately under ICD-9-CM Diagnosis and Procedure Screens and HCPCS/CPT Procedure Screens.

HCUP Edit Checks (January 1998 – September 2015)		
Edit Check	Description	Action
Summary		
EANY	ANY EDIT Summary edit check that indicates that any edit has been triggered.	For tabulation purposes only.
Age and Date of Birth		
EAGE01	DATE OF BIRTH MISSING OR INVALID The date of birth (DOB) is missing (.) or invalid (.A)	For tabulation purposes only
EAGE02	DATE OF BIRTH IS AFTER ADMISSION DATE (FOR INPATIENT DATA) OR START OF SERVICE DATE (FOR OUTPATIENT DATA) The date of birth (DOB) is greater than the starting date (ADATE) causing the age in years (AGE) to be negative.	Set DOB and AGE to inconsistent (.C). AGEDAY and AGEMONTH are set to missing (.)
EAGE03	AGE IN YEARS IS GREATER THAN 124 YEARS The age in years (AGE) is greater than 124.	Set AGE to inconsistent (.C). AGEDAY and AGEMONTH are set to missing (.)

HCUP Edit Checks (January 1998 – September 2015)		
Edit Check	Description	Action
EAGE04	NEONATAL DIAGNOSIS INCONSISTENT WITH AGE A diagnosis (DXn) on the record satisfies the NEONATE screen, and the age in years (AGE) is greater than zero. Retain age on a combined neonatal/maternal record.	Set offending DXn to “incn” and corresponding DXCCSn to inconsistent (.C). If NEOMAT ne 3, set - AGE to inconsistent (.C), - AGEDAY to inconsistent (.C), and - AGEMONTH to inconsistent (.C).
EAGE05	MATERNAL DIAGNOSIS OR PROCEDURE INCONSISTENT WITH AGE A diagnosis (DXn) or procedure (PRn) on the record satisfies the MATERNAL screen, and the nonmissing age in years (AGE) is less than 10 or greater than 55. Retain age on a combined maternal/neonatal record.	Set offending DXn/PRn to “incn” and corresponding DXCCSn/PRCCSn to inconsistent (.C). If NEOMAT ne 3, set - AGE to inconsistent (.C), - AGEDAY to inconsistent (.C), and - AGEMONTH to inconsistent (.C).
EAGE	ANY AGE EDIT Summary age edit check that indicates that an edit in the range EAGE01-EAGE05 has been triggered.	For tabulation purposes only.
Admission Date, Discharge Date, and Length of Stay		
ELOS01	ADMISSION DATE (FOR INPATIENT DATA) OR START OF SERVICE DATE (FOR OUTPATIENT DATA) IS MISSING OR INVALID The date (ADATE) is missing (.) or invalid (.A)	For tabulation purposes only.

HCUP Edit Checks (January 1998 – September 2015)

Edit Check	Description	Action
ELOS02	DISCHARGE DATE (FOR INPATIENT DATA) OR END OF SERVICE DATE (FOR OUTPATIENT DATA) IS MISSING OR INVALID The date (DDATE) is missing (.) or invalid (.A)	For tabulation purposes only.
ELOS03	ADMISSION DATE (FOR INPATIENT DATA) OR END OF SERVICE DATE (FOR OUTPATIENT DATA) IS AFTER DISCHARGE DATE The starting date (ADATE) is greater than the ending date (DDATE) causing the length of stay (LOS) to be negative.	Set ADATE and LOS to inconsistent (.C). LOS_X retains uncleaned value.
ELOS04	EXCESSIVELY LONG LENGTH OF STAY The length of stay (LOS) is excessively long. <ul style="list-style-type: none"> • For inpatient data, the maximum allowed length of stay is 365 days. • For outpatient data, the maximum allowed length of stay is 3 days. The three-day limit for outpatient records allows for observation time that would be allowable for Medicare payment. 	Set LOS to inconsistent (.C). LOS_X retains uncleaned value.
ELOS	ANY LENGTH OF STAY EDIT Summary length of stay edit check that indicates that an edit in the range ELOS01-ELOS04 has been triggered.	For tabulation purposes only.
Procedure Day		

HCUP Edit Checks (January 1998 – September 2015)

Edit Check	Description	Action
EPRDAY01	<p>DAY OF PROCEDURE NOT DURING STAY A day of procedure on the record occurred more than 4 days before the stay began or occurred more than 3 days after the stay ended. The three day limit allows for observation time that would be allowable for Medicare payment. If the length of stay is excessively long (edit check ELOS04), then EPRDAY01 will also be triggered if the day of procedure is greater than the maximum allowed for length of stay (365 days for inpatient data and 3 days for outpatient data).</p>	Set PRDAYn and PRDATEn to inconsistent (.C).
Total Charge		
ETCHG01	<p>EXCESSIVELY LOW TOTAL CHARGES The total charges (TOTCHG) are less than \$100 for data from 2007–September 2015) and less than \$25 for data from 1998 – 2006.</p>	Set TOTCHG to inconsistent (.C). TOTCHG_X retains uncleaned value.
ETCHG02	<p>EXCESSIVELY HIGH TOTAL CHARGES The total charges (TOTCHG) are excessively high.</p> <ul style="list-style-type: none"> • For inpatient data, the maximum total charges allowed are: <ul style="list-style-type: none"> ○ \$5.0 million from 2011–2015 ○ \$1.5 million from 2007–2010 ○ \$1.0 million from 1998–2006 • For outpatient data, the maximum total charges allowed are: <ul style="list-style-type: none"> ○ \$950,000 from 2011–2015 ○ \$75,000 from 2007–2010 ○ \$50,000 from 1998–2006. 	Set TOTCHG to inconsistent (.C). TOTCHG_X retains uncleaned value.

HCUP Edit Checks (January 1998 – September 2015)		
Edit Check	Description	Action
ETCHG	ANY TOTAL CHARGE EDIT Summary total charge edit check that indicates that an edit in the range ETCHG01-ETCHG02 has been triggered.	For tabulation purposes only.
Diagnoses		
EDX01	NO PRINCIPAL DIAGNOSIS CODED ON THE RECORD There is no principal diagnosis (DX1) coded on the record.	For tabulation purposes only.
EDX02	DIAGNOSIS CODE IS INVALID AS OF THE DISCHARGE DATE The record contains at least one diagnosis code (DXn) that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).	Set DXn to “invl” and DXCCSn to invalid (.A).
EDX03	DIAGNOSIS INCONSISTENT WITH SEX The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the diagnoses (DXn) coded on the record.	Set DXn to “incn”, FEMALE to inconsistent (.C), and DXCCSn to inconsistent (.C).

HCUP Edit Checks (January 1998 – September 2015)

Edit Check	Description	Action
EDX04	<p>PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS (Inpatient data only, beginning in 2000) The principal diagnosis is invalid as a discharge diagnosis.</p> <ul style="list-style-type: none"> January 2000 to September 30, 2007: The Diagnosis Related Group (DRG) equals 469 <i>Principal Diagnosis Invalid as Discharge Diagnosis</i>. Starting October 1, 2007: The DRG equals 998 <i>Principal Diagnosis Invalid as Discharge Diagnosis</i>. 	For tabulation purposes only.
EDX	<p>ANY DIAGNOSIS EDIT Summary diagnosis edit check that indicates that an edit in the range EDX01-EDX04 has been triggered.</p>	For tabulation purposes only.
Procedures		
EPR01	<p>RECORDS IN THE STATE AMBULATORY SURGERY AND SERVICES DATABASES FLAGGED AS AMBULATORY SURGERY RECORDS BY THE STATE, BUT WITHOUT A PROCEDURE CODE No procedures (ICD-9-CM, ICD-10-CM, CPT, or HCPCS) are coded.</p>	For tabulation purposes only.
EPR02	<p>PROCEDURE CODE IS INVALID AS OF THE DISCHARGE DATE The record contains at least one procedure code (PRn) that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).</p>	Set PRn to "invl" and PRCCSn to invalid (.A).

HCUP Edit Checks (January 1998 – September 2015)		
Edit Check	Description	Action
EPR03	PROCEDURE INCONSISTENT WITH SEX The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the procedures (PRn) coded on the record.	Set PRn to “incn”, FEMALE to inconsistent (.C), and PRCCSn to inconsistent (.C).
EPR	ANY PROCEDURE EDIT Summary procedure edit check that indicates that an edit in the range EPR01-EPR03 has been triggered.	For tabulation purposes only.
Diagnoses and Procedures		
EDXPR01	MIXED MATERNAL AND NEONATAL RECORD Codes in the diagnosis vector or the procedure vector satisfy both the maternal and neonatal screens. The neonatal-maternal flag (NEOMAT) is set to 3.	For tabulation purposes only.
EDXPR02	PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS (Inpatient data only) <ul style="list-style-type: none"> • January 2000 to September 30, 2007: DRG equals 468 <i>Extensive O.R. Procedure Unrelated to Principal Diagnosis</i>, or 476 <i>Prostatic O.R. Procedure Unrelated to Principal Diagnosis</i>, or 477 <i>Non-extensive O.R. Procedure Unrelated to Principal Diagnosis</i>. • Starting October 1, 2007: The DRG equals 981-989 <i>O.R. procedure unrelated to principal diagnosis</i>. 	For tabulation purposes only.

HCUP Edit Checks (January 1998 – September 2015)		
Edit Check	Description	Action
EDXPR03	<p>DISCHARGE RECORD IS UNGROUPABLE (Inpatient data only)</p> <ul style="list-style-type: none"> January 2000 to September 30, 2007: The DRG equals 470 <i>Ungroupable</i>. Starting October 1, 2007: The DRG equals 999 <i>Ungroupable</i>. 	For tabulation purposes only.
EDXPR	<p>ANY DIAGNOSIS AND PROCEDURE EDIT</p> <p>Summary diagnosis and procedure edit check that indicates that an edit in the range EDXPR01-EDXPR03 has been triggered.</p>	For tabulation purposes only.
External Cause of Injury Codes (E Codes)		
EEOCODE01	<p>EXTERNAL CAUSE OF INJURY CODE IS INVALID AS OF THE DISCHARGE DATE (Beginning in 2003)</p> <p>The record contains at least one external cause of injury code that is invalid as of the discharge date, plus or minus six months (to allow for anticipation of or lags in response to official coding changes).</p>	Set ECODEn to “invl” and E_CCSn to invalid (.A).
EEOCODE02	<p>INJURY DIAGNOSIS WITHOUT AN EXTERNAL CAUSE OF INJURY CODE (Beginning in 2003)</p> <p>At least one diagnosis indicates an injury and no injury-related external cause of injury code is reported on the record.</p>	For tabulation purposes only.

HCUP Edit Checks (January 1998 – September 2015)

Edit Check	Description	Action
EECODE03	<p>MEDICAL MISADVENTURE OR ADVERSE REACTION (MM/AR) DIAGNOSIS WITHOUT A MM/AR EXTERNAL CAUSE OF INJURY CODE (Beginning in 2003)</p> <p>At least one diagnosis indicates a medical misadventure or adverse reaction and no MM/AR external cause of injury code is reported on the record.</p>	For tabulation purposes only.
EECODE04	<p>INJURY EXTERNAL CAUSE OF INJURY CODE WITHOUT AN INJURY DIAGNOSIS (Beginning in 2003)</p> <p>At least one external cause of injury code indicates an injury and no injury-related diagnosis is reported on the record.</p>	For tabulation purposes only.
EECODE05	<p>MEDICAL MISADVENTURE OR ADVERSE REACTION (MM/AR) EXTERNAL CAUSE OF INJURY CODE WITHOUT A MM/AR DIAGNOSIS (Beginning in 2003)</p> <p>At least one external cause of injury code indicates a medical misadventure or adverse reaction and no MM/AR diagnosis is reported on the record.</p>	For tabulation purposes only.
EECODE	<p>ANY EXTERNAL CAUSE OF INJURY CODE EDIT (Beginning in 2003)</p> <p>Summary external cause of injury code edit check that indicates that an edit in the range EECODE01-EECODE05 has been triggered.</p>	For tabulation purposes only.

HCPCS/CPT Procedures

HCUP Edit Checks (January 1998 – September 2015)

Edit Check	Description	Action
ECPT01	<p>HCPCS/CPT PROCEDURE IS INVALID AS OF THE DISCHARGE DATE (Outpatient data only, beginning in 2000)</p> <p>The record contains at least one HCPCS/CPT procedure code (CPTn) that is invalid as of the discharge date plus or minus 6 months (to allow for anticipation of or lags in response to official HCPCS/CPT coding changes). HCUP validates Level I (numeric) and Level II codes (A0000-V9999), but does not validate the Level III codes (W0000-Z9999).</p>	Set CPTn to “invl” and CPT_CCSn to invalid (.A).
ECPT02	<p>HCPCS/CPT PROCEDURE INCONSISTENT WITH SEX (Outpatient data only, beginning in 2000)</p> <p>The reported sex of the patient (FEMALE) does not agree with the sex of at least one of the HCPCS/CPT procedures (CPTn) coded on the record.</p>	Set CPTn to “incn2” and CPT_CCSn to inconsistent (.C).
ECPT03	<p>HCPCS/CPT PROCEDURE INCONSISTENT WITH AGE (Outpatient data only, beginning in 2000)</p> <p>The age of the patient (AGE) does not agree with the age of at least one of the HCPCS/CPT procedures (CPTn) coded on the record.</p>	Set CPTn to “incn3” and CPT_CCS to inconsistent (.C).
ECPT	<p>ANY HCPCS/CPT PROCEDURE EDIT (Outpatient data only, beginning in 2000)</p> <p>Summary HCPCS/CPT procedure edit check that indicates that an edit in the range ECPT01-ECPT03 has been triggered.</p>	For tabulation purposes only.

HCUP Edit Checks on Data with ICD-9-CM Coding (January 1988 – December 1997)

Edit checks for the 1988–1997 HCUP databases were developed during the HCUP Feasibility Study (*AHCPR Hospital Cost Database Feasibility Study*, Contract No. 282-90-0029). Binary data elements that identify inconsistencies between related data elements on the same record were retained on some HCUP databases. The edit check data elements (EDnnn) have the following values:

- 0 The problem was not found, or the edit check was not applicable.
- 1 The record failed the edit check.

To conserve space on the restricted access public release HCUP files, the edit check data elements were not included.

The following table lists all of the edit checks performed on the HCUP databases in the 1988–1997 data. For each edit check the edit check number (e.g., E010) corresponds to the edit check data element. Included in the table is a description of the edit check and the action that is taken if the record fails the edit check. HCUP uses many diagnosis and procedure screens to define specific conditions employed in the editing procedures. These screens are defined in the section ICD-9-CM Diagnosis and Procedure Screens.

HCUP Edit Checks (1988–1997)		
Edit Check	Description	Action
ED010	REPORTED LOS IS NOT EQUAL TO CALCULATED LOS (Inpatient data only) The length of stay calculated from admission date and discharge date does not equal the reported length of stay.	For tabulation purposes only.
ED011	ADMIT DATE IS AFTER DISCHARGE DATE The length of stay is negative.	Set ADATE and LOS to inconsistent (.C).
ED020	REPORTED AGE IN YEARS DOES NOT EQUAL CALCULATED AGE (Inpatient data only) The age in years calculated from birthdate and admission date does not equal the reported age.	For tabulation purposes only.
ED021	AGE IN YEARS INCONSISTENT WITH INFANT AGE (Inpatient data only) Infant age is nonmissing, but the age in years is greater than zero.	Set AGEDAY and AGE to inconsistent (.C).

HCUP Edit Checks (1988–1997)		
Edit Check	Description	Action
ED030	AMBULATORY SURGERY STAY GREATER THAN 1 DAY (Outpatient data only) The length of stay is greater than 0.	For tabulation purposes only.
ED100	MATERNAL AND NEONATAL RECORD (Inpatient data only) Codes in the diagnosis vector or the procedure vector satisfy both the maternal and neonatal screens.	For tabulation purposes only.
ED101-ED1nn	DIAGNOSIS INCONSISTENT WITH SEX The sex coded for the patient does not agree with the sex of the diagnosis.	Set DXVn and SEX to inconsistent (.C).
ED201-ED2nn	PROCEDURE INCONSISTENT WITH SEX The sex coded for the patient does not agree with the sex of the procedure.	Set PRVn and SEX to inconsistent (.C).
ED301-ED3nn	NEONATAL DIAGNOSIS INCONSISTENT WITH AGE (Inpatient data only) The diagnosis satisfies the NEONATE screen, and the age in years is greater than zero. Retain age on a combined neonatal/maternal record.	Set DXVn to inconsistent (.C). If NEOMAT ne 3, set AGE and AGEDAY to inconsistent (.C).
ED401-ED4nn	MATERNAL DIAGNOSIS INCONSISTENT WITH AGE (Inpatient data only) The diagnosis satisfies the MATERNAL screen, and the nonmissing age in years is less than 10 or greater than 55. Retain age on a combined maternal/neonatal record.	Set DXVn to inconsistent (.C). If NEOMAT ne 3, set AGE and AGEDAY to inconsistent (.C).
ED501-ED5nn	MATERNAL PROCEDURE INCONSISTENT WITH AGE (Inpatient data only) A procedure satisfies the MATERNAL screen, and the nonmissing age in years is less than 10 or greater than 55. Retain age on a combined maternal/neonatal record.	Set PRVn to inconsistent (.C). If NEOMAT ne 3, set AGE and AGEDAY to inconsistent (.C).

HCUP Edit Checks (1988–1997)		
Edit Check	Description	Action
ED600	LONG LOS, JUSTIFIED (Inpatient data only) The length of stay is over 365 days, and is justified by a long-term-care diagnosis, a perinatal diagnosis, discharge to another facility, or the patient's death.	For tabulation purposes only.
ED601	LONG LOS, UNJUSTIFIED (Inpatient data only) The length of stay is over 365 days, and is not justified by a long-term-care diagnosis, a perinatal diagnosis, discharge to another facility, or the patient's death.	Set LOS to inconsistent (.C).
ED700	AMBULATORY SURGERY PATIENT WITH NO SURGERY (Outpatient data only) No procedures (ICD-9-CM, CPT-4, or HCPCS) are coded.	For tabulation purposes only.
ED701-ED7nn	DAY OF PROCEDURE WITHOUT CORRESPONDING PROCEDURE (Inpatient data only) There is a nonmissing day of procedure without a corresponding procedure code.	Set PRDAYn and PRDATEn to missing (.) and move up all subsequent procedure date pairs.
ED801-ED8nn	DAY OF PROCEDURE NOT DURING STAY The nonmissing day of procedure is less than (-4) or greater than the length of stay plus one.	Set PRDAYn and PRDATEn to inconsistent (.C).
ED910	INPATIENT CHARGES PER DAY ARE EXCESSIVELY LOW, JUSTIFIED (Inpatient data only) Total charges and length of stay are both nonmissing; charges per day are less than \$100, and are justified by discharge to another facility or by the patient's death.	For tabulation purposes only.

HCUP Edit Checks (1988–1997)

Edit Check	Description	Action
ED911	<p>INPATIENT CHARGES PER DAY ARE EXCESSIVELY LOW, UNJUSTIFIED (Inpatient data only)</p> <p>Total charges and length of stay are both nonmissing; charges per day are less than \$100, and are not justified by discharge to another facility or by the patient's death.</p>	Set TOTCHG and LOS to inconsistent (.C).
ED912	<p>AMBULATORY SURGERY CHARGES ARE EXCESSIVELY LOW (Outpatient data only)</p> <p>Total charges are less than \$10.</p>	Set TOTCHG to inconsistent (.C).
ED920	<p>INPATIENT CHARGES PER DAY ARE EXCESSIVELY HIGH, JUSTIFIED (Inpatient data only)</p> <p>Total charges and length of stay are both nonmissing; charges per day are more than \$20,000, and are justified by discharge to another facility or by the patient's death.</p>	For tabulation purposes only.
ED921	<p>INPATIENT CHARGES PER DAY ARE EXCESSIVELY HIGH, UNJUSTIFIED (Inpatient data only)</p> <p>Total charges and length of stay are both nonmissing; charges per day are more than \$20,000, and are not justified by discharge to another facility or by the patient's death.</p>	Set TOTCHG and LOS to inconsistent (.C).
ED922	<p>AMBULATORY SURGERY CHARGES ARE EXCESSIVELY HIGH (Outpatient data only)</p> <p>Total charges are \$10,000 or more.</p>	Set TOTCHG to inconsistent (.C).
ED951	<p>UNACCEPTABLE UNIFORM PAY SOURCE COMBINATION</p> <p>The uniform primary pay source and secondary pay source are the same, and the sources are Medicare or Medicaid.</p>	Set PAY2 and PAY2_N to inconsistent (.C).

HCUP Edit Checks (1988–1997)

Edit Check	Description	Action
ED952	UNACCEPTABLE NON-UNIFORM PAY SOURCE COMBINATION The non-uniform primary pay source and secondary pay source are the same, and the sources are CHAMPUS, Worker's Compensation, or Title V.	Set PAY2 and PAY2_N to inconsistent (.C).

ICD-10-CM/PCS DIAGNOSIS AND PROCEDURE SCREENS

The International Classification of Diseases, 10th Edition, Clinical Modification/Procedure Coding System (ICD-10-CM/PCS) diagnosis and procedure screens used in HCUP data processing are specified below. The screens for maternal, neonate, and sex-specific codes are from the Medicare Code Edits that are part of the Medicare Severity Diagnosis Related Grouper (MS-DRG) software. The screens have been updated for ICD-10-CM/PCS coding changes to diagnoses and procedures through fiscal year 2018 (ending date September 30, 2018) based on the following resources:

- Fiscal Year 2018 Medicare Code Edits:
 - FY 2018 Final Rule and Correction Notice Data Files page:
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2018-IPPS-Final-Rule-Home-Page-Items/FY2018-IPPS-Final-Rule-Data-Files.html?DLPage=1&DLEntries=10&DLSort=0&DLSortDir=ascending>
 - File:
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Downloads/FY2018-CMS-1677-FR-Code-Edits.zip>
- Fiscal Year 2017 Medicare Code Edits:
 - FY 2017 Final Rule and Correction Notice Data Files page:
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2017-IPPS-Final-Rule-Home-Page-Items/FY2017-IPPS-Final-Rule-Data-Files.html>
 - File:
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Downloads/FY2017-CMS-1655-FR-Code-Edits.zip>

Maternal:

Screen for fiscal years 2016–2017 data (October 1, 2015 – September 30, 2017):
Diagnoses A34, M830, 0000 to 09A53; Z0371 to Z0379; Z3201, Z331 to Z379;
Z390 to Z3A49; Z640.

Screen for fiscal year 2018 data (October 1, 2017 – September 30, 2018):
Diagnoses A34, M830, O0000 to O9A53; Z0371 to Z0379; Z3201, Z331 to Z379;
Z390 to Z3A49; Z640.

New Codes: O0000, O0001, O0010, O0011, O0020, O0021, O0080, O0081, O0090, O0091, O09A0, O09A1, O09A2, O09A3, O114, O115, O1204, O1205, O1214, O1215, O1224, O1225, O134, O135, O1404, O1405, O1414, O1415, O1424, O1425, O1494, O1495, O164, O165, O24415, O24425, O24435, O337XX0, O337XX1, O337XX2, O337XX3, O337XX4, O337XX5, O337XX9, O34211, O34212, O34219, O4420, O4421, O4422, O4423, O4430, O4431, O4432, O4433, O4440, O4441, O4442, O4443, O4450, O4451, O4452, O4453, O7020, O7021, O7022, O7023, Z333.

Neonate:

Screen for fiscal years 2016 (October 1, 2015 – September 30, 2016):

Diagnoses A33, D807, E71511, E8411, H04531 to H04539; N470, P000 to P269; P280 to P834; P836 to P965; P9682 to P969; Q861, Z00110 to Z00111; Z3800 to Z388.

Screen for fiscal years 2017–2018 data (October 1, 2016 – September 30, 2018):

Diagnoses A33, E8411, H04531 to H04539; N470, Z00110 to Z00111; Z3800 to Z388.

Removed codes: D807, E71511, P000 to P269; P280 to P834; P836 to P965; P9682 to P969.

Male diagnoses:

Screen for fiscal years 2016–2017 data (October 1, 2015 – September 30, 2017):

Diagnoses A1814 to A1815; A5422 to A5423; A5902, A6001 to A6002; B260, B3881, C50021 to C50029; C50121 to C50129; C50221 to C50229; C50321 to C50329; C50421 to C50429; C50521 to C50529; C50621 to C50629; C50821 to C50829; C50921 to C50929; C600 to C639; D074 to D0769; D176, D290 to D299; D400 to D409; E290 to E299; E895, F5221, F5232 to F524; I861, L291, N35010, N35014, N35111, N35119, N400 to N539; N99110, N99114, P835, Q5300 to Q559; Q561, Q640, Q980 to Q984; Q986 to Q989; R361, R860 to R869; R972, S30201A to S30201S; S3021XA to S3022XS; S30812A to S30813S; S30815A to S30815S; S30822A to S30823S; S30825A to S30825S; S30842A to S30843S; S30845A to S30845S; S30852A to S30853S; S30855A to S30855S; S30862A to S30863S; S30865A to S30865S; S30872A to S30873S; S30875A to S30875S; S3093XA to S3094XS; S3096XA to S3096XS; S3120XA to S3135XS; S31501A to S31501S; S31511A to S31511S; S31521A to S31521S; S31531A to S31531S; S31541A to S31541S; S31551A to S31551S; S37822A to S37829S; S38001A to S38001S; S3801XA to S3802XS; S38221A to S38232S; S39840A to S39840S; T194XXA to T194XXS; T2106XA to T2106XS; T2116XA to T2116XS; T2126XA to T2126XS; T2136XA to T2136XS; T2146XA to T2146XS; T2156XA to T2156XS; T2166XA to T2166XS; T2176XA to T2176XS; T83410A to T83410S; T83420A to T83420S; T83490A to T83490S; Z125, Z1271, Z1503, Z31440 to Z31448; Z412, Z8042 to Z8043; Z8545 to Z8549; Z87710, Z9852.

Screen for fiscal year 2018 data (October 1, 2017 – September 30, 2018):

Diagnoses A1814 to A1815; A5422 to A5423; A5902, A6001 to A6002; B260, B3881, C50021 to C50029; C50121 to C50129; C50221 to C50229; C50321 to C50329; C50421 to C50429; C50521 to C50529; C50621 to C50629; C50821 to C50829; C50921 to C50929; C600 to C639; D074 to D0769; D176, D290 to D299; D400 to D409; E290 to E299; E895, F5221, F5232 to F524; I861, L291, N35010, N35014, N35111, N35119, N400 to N539; N99110, N99114, P835, Q5300 to Q559; Q561, Q640, Q980 to Q984; Q986 to Q989; R361, R860 to R869; R9720 to R9721; S30201A to S30201S; S3021XA to S3022XS; S30812A to S30813S; S30815A to S30815S; S30822A to S30823S; S30825A to S30825S; S30842A to S30843S; S30845A to S30845S; S30852A to S30853S; S30855A to S30855S; S30862A to S30863S; S30865A to

S30865S; S30872A to S30873S; S30875A to S30875S; S3093XA to S3094XS;
S3096XA to S3096XS; S3120XA to S3135XS; S31501A to S31501S; S31511A
to S31511S; S31521A to S31521S; S31531A to S31531S; S31541A to
S31541S; S31551A to S31551S; S37822A to S37829S; S38001A to S38001S;
S3801XA to S3802XS; S38221A to S38232S; S39840A to S39840S; T194XXA
to T194XXS; T2106XA to T2106XS; T2116XA to T2116XS; T2126XA to
T2126XS; T2136XA to T2136XS; T2146XA to T2146XS; T2156XA to T2156XS;
T2166XA to T2166XS; T2176XA to T2176XS; T83410A to T83410S; T83420A to
T83420S; T83490A to T83490S; Z125, Z1271, Z1503, Z31440 to Z31448; Z412,
Z8042 to Z8043; Z8545 to Z8549; Z87710, Z9852.

New Codes: N4230, N4231, N4232, N4239, N50811, N50812, N50819, N5082,
N5089, N5235, N5236, N5237, R9720, R9721.

Male procedures:

Screen for fiscal years 2016–2018 data (October 1, 2015 – September 30, 2018):
Procedures 0V1N07J to 0VWSXKZ; 0W0M07Z to 0W0M4ZZ; 0W4M070 to
0W4M0Z0; 0W9M00Z to 0W9M4ZZ; 0WBM0ZX to 0WBMXZZ; 0WJM0ZZ to
0WJMXZZ; 0WMM0ZZ, 0WPM00Z to 0WPMXYZ; 0WUM07Z to 0WUM4KZ;
0WWW00Z to 0WWWXYZ; 3E0N304 to 3E0N8TZ; 3E1N38X to 3E1N88Z;
8E0VX1C, 8E0VX63, BV000ZZ to BV2310Z; BV23Y0Z to BV4BZZZ; DV000ZZ to
DVY1FZZ.

Female diagnoses:

Screen for fiscal years 2016–2017 data (October 1, 2015 – September 30, 2017):
Diagnoses A1816 to A1818; A34, A5142, A5402 to A5403; A5424, A5602,
A5611, A5901, A6003 to A6004; B373, C50011 to C50019; C50111 to C50119;
C50211 to C50219; C50311 to C50319; C50411 to C50419; C50511 to C50519;
C50611 to C50619; C50811 to C50819; C50911 to C50919; C510 to C58; C7960
to C7962; D060 to D0739; D250 to D289; D390 to D399; E280 to E289; E8940 to
E8941; F5222 to F5231; F525 to F526; F53, G43821 to G43839; I863, J8481,
L292, M830, N35021 to N35028; N3512, N7001 to N989; N9912 to N993;
N9983, O000 to O9A53; P546, Q5001 to Q529; Q562, Q960 to Q979; R870 to
R879; R971, S30202A to S30202S; S3023XA to S3023XS; S30814A to
S30814S; S30816A to S30816S; S30824A to S30824S; S30826A to S30826S;
S30844A to S30844S; S30846A to S30846S; S30854A to S30854S; S30856A to
S30856S; S30864A to S30864S; S30866A to S30866S; S30874A to S30874S;
S30876A to S30876S; S3095XA to S3095XS; S3097XA to S3097XS; S3140XA
to S3145XS; S31502A to S31502S; S31512A to S31512S; S31522A to
S31522S; S31532A to S31532S; S31542A to S31542S; S31552A to S31552S;
S35531A to S35536S; S37401A to S3769XS; S38002A to S38002S; S3803XA to
S3803XS; S38211A to S38212S; T192XXA to T193XXS; T2107XA to T2107XS;
T2117XA to T2117XS; T2127XA to T2127XS; T2137XA to T2137XS; T2147XA
to T2147XS; T2157XA to T2157XS; T2167XA to T2167XS; T2177XA to
T2177XS; T8331XA to T8339XS; T83711A to T83711S; T83721A to T83721S;
Y760 to Y768; Z01411 to Z0142; Z0371 to Z0379; Z124, Z1272 to Z1273; Z1502,
Z1504, Z30011 to Z30019; Z3041 to Z308; Z31430 to Z31438; Z3181 to Z3183;

Z3200 to Z3202; Z331 to Z379; Z390 to Z3A49; Z4002, Z4430 to Z4432; Z45811 to Z45819; Z52810 to Z52819; Z640 to Z641; Z780, Z79890, Z8041, Z8540 to Z8544; Z86001, Z8632, Z87410 to Z8742; Z8751 to Z8759; Z90710 to Z90722; Z975, Z9851, Z98870.

Screen for fiscal year 2018 data (October 1, 2017 – September 30, 2018):

Diagnoses A1816 to A1818; A34, A5142, A5402 to A5403; A5424, A5602, A5611, A5901, A6003 to A6004; B373, C50011 to C50019; C50111 to C50119; C50211 to C50219; C50311 to C50319; C50411 to C50419; C50511 to C50519; C50611 to C50619; C50811 to C50819; C50911 to C50919; C510 to C58; C7960 to C7962; D060 to D0739; D250 to D289; D390 to D399; E280 to E289; E8940 to E8941; F3281, F5222 to F5231; F525 to F526; F53, G43821 to G43839; I863, J8481, L292, M830, N35021 to N35028; N3512, N7001 to N989; N9912 to N993; N9983, O0000 to O9A53; P546, Q5001 to Q529; Q562, Q960 to Q979; R870 to R879; R971, S30202A to S30202S; S3023XA to S3023XS; S30814A to S30814S; S30816A to S30816S; S30824A to S30824S; S30826A to S30826S; S30844A to S30844S; S30846A to S30846S; S30854A to S30854S; S30856A to S30856S; S30864A to S30864S; S30866A to S30866S; S30874A to S30874S; S30876A to S30876S; S3095XA to S3095XS; S3097XA to S3097XS; S3140XA to S3145XS; S31502A to S31502S; S31512A to S31512S; S31522A to S31522S; S31532A to S31532S; S31542A to S31542S; S31552A to S31552S; S35531A to S35536S; S37401A to S3769XS; S38002A to S38002S; S3803XA to S3803XS; S38211A to S38212S; T192XXA to T193XXS; T2107XA to T2107XS; T2117XA to T2117XS; T2127XA to T2127XS; T2137XA to T2137XS; T2147XA to T2147XS; T2157XA to T2157XS; T2167XA to T2167XS; T2177XA to T2177XS; T8331XA to T8339XS; T83711A to T83711S; T83721A to T83721S; Y760 to Y768; Z01411 to Z0142; Z0371 to Z0379; Z124, Z1272 to Z1273; Z1502, Z1504, Z30011 to Z30014; Z30018 to Z30019; Z3041 to Z308; Z31430 to Z31438; Z3181 to Z3183; Z3200 to Z3202; Z331 to Z379; Z390 to Z3A49; Z4002, Z4430 to Z4432; Z45811 to Z45819; Z52810 to Z52819; Z640 to Z641; Z780, Z79890, Z8041, Z8540 to Z8544; Z86001, Z8632, Z87410 to Z8742; Z8751 to Z8759; Z90710 to Z90722; Z975, Z9851, Z98870.

New Codes: F3281, N8300, N8301, N8302, N8310, N8311, N8312, N83201, N83202, N83209, N83291, N83292, N83299, N83311, N83312, N83319, N83321, N83322, N83329, N83331, N83332, N83339, N8340, N8341, N8342, N83511, N83512, N83519, N83521, N83522, N83529, N9060, N9061, N9069, N931, N9410, N9411, N9412, N9419, O0000, O0001, O0010, O0011, O0020, O0021, O0080, O0081, O0090, O0091, O09A0, O09A1, O09A2, O09A3, O114, O115, O1204, O1205, O1214, O1215, O1224, O1225, O134, O135, O1404, O1405, O1414, O1415, O1424, O1425, O1494, O1495, O164, O165, O24415, O24425, O24435, O337XX0, O337XX1, O337XX2, O337XX3, O337XX4, O337XX5, O337XX9, O34211, O34212, O34219, O4420, O4421, O4422, O4423, O4430, O4431, O4432, O4433, O4440, O4441, O4442, O4443, O4450, O4451, O4452, O4453, O7020, O7021, O7022, O7023, Q52120, Q52121, Q52122, Q52123, Q52124, Q52129, Z3044, Z3045, Z3046, Z333.

Female procedures:

Screen for fiscal years 2016–2018 data (October 1, 2015 – September 30, 2018):
Procedures 04LE0CT, 04LE0DT, 04LE0ZT, 04LE3CT, 04LE3DT, 04LE3ZT, 04LE4CT, 04LE4DT, 04LE4ZT, 04LF0CU, 04LF0DU, 04LF0ZU, 04LF3CU, 04LF3DU, 04LF3ZU, 04LF4CU, 04LF4DU, 04LF4ZU, 0U15075 to 0UY10Z2; 0W0N07Z to 0W0N4ZZ; 0W1J0J4 to 0W1J4JJ; 0W4N071 to 0W8NXZZ; 0W9N00Z to 0W9N40Z; 0W9N4ZZ, 0WBN0ZX to 0WBNXZZ; 0WHN03Z to 0WHN0YZ; 0WHN33Z to 0WHN3YZ; 0WHN43Z to 0WHN4YZ; 0WJN0ZZ to 0WJNXZZ; 0WMN0ZZ, 0WPN00Z to 0WPNXYZ; 0WQN0ZZ to 0WQNXZZ; 0WUN07Z to 0WUN4KZ; 0WWN00Z to 0WWNXYZ; 102073Z to 10Y07ZY; 2Y04X5Z, 2Y44X5Z, 2Y54X5Z, 30273H1 to 30277W1; 3E0E304 to 3E0E8TZ; 3E0P05Z to 3E0P8TZ; 3E1P38X to 3E1P88Z; 4A0H74Z to 4A0JXBZ; 4A1H74Z to 4A1JXBZ; 8E0HX62, 8E0UXY7, BU000ZZ to BU4CZZZ; BY30Y0Z to BY33ZZZ; BY34YZZ to BY4GZZZ; DU000ZZ to DUY2FZZ.

ICD-9-CM DIAGNOSIS AND PROCEDURE SCREENS

The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis and procedure screens used in HCUP data processing are specified below. The screens have been updated for ICD-9-CM coding changes to diagnoses and procedures through fiscal year 2015 (ending date September 30, 2015). On October 1, 2015, the ICD-9-CM code sets used to report medical diagnoses and inpatient procedures were replaced by International Classification of Diseases, 10th Edition, Clinical Modification/Procedure Coding System (ICD-10-CM/PCS) code sets. Changes to the screens across years are underlined.

Maternal:

Screen used for 1988 to 1993 calendar year data:

Diagnoses 630 to 67694; V220 to V242; and V270 to V279.

Procedures 720 to 7599.

Screen used for 1994 to 1996 calendar year data:

Diagnoses 630 to 677; V220 to V242; and V270 to V279.

Procedures 720 to 7599.

Screen used for 1997 calendar year data:

Diagnoses 630 to 677 (excluding 655.7, 655.71, 655.73); 7965; V220 to V242; and V270 to V279.

Procedures 720 to 7599.

Note: Codes 655.7 (valid until September 1997), 655.71, and 655.73 (valid as of October 1997) were erroneously excluded in the 1997 maternal screen. This would cause ED4nn "Maternal Diagnosis Inconsistent with Age" to not be set if a discharge with any of these diagnoses and an age less than 10 or greater than 55. This omission was corrected starting with 1998 data.

Screen used for 1998 to 2001 calendar year data:

Diagnoses 630 to 677; 7965; V220 to V242; and V270 to V279.

Procedures 720 to 7599.

Screen used for 2002 to 2003 calendar year data:

Diagnoses 630 to 677; 7965; V220 to V242; and V270 to V279.

Procedures 720 to 7537, 754 to 7599.

Screen used for 2004 to 2005 calendar year data:

Diagnoses 630 to 677; 7965; V220 to V242; V270 to V279; and V6511.

Procedures 720 to 7537; and 754 to 7599.

Screen used for 2006 to 2008 calendar year data:
Diagnoses 630 to 677; 7923, 7965, V220 to V242; V270 to V282; V286, V616 to V617; V6511, and V7242.
Procedures 720 to 7537; and 754 to 7599.

Screen used for 2009 to 2010 calendar year data:
Diagnoses 630 to 67914; 7923, 7965, V220 to V2384; V2386 to V242; V270 to V282; V286 to V2889; V616 to V617; V6511, V7242, and V8901 to V8909.
Procedures 720 to 7537; and 754 to 7599.

Screen used beginning with 2011 calendar year data:
Diagnoses 630 to 67914; 7923, 7965, V220 to V2384; V2386 to V242; V270 to V282; V286 to V2889; V616 to V617; V6511, V7242, and V8901 to V8909, V9100 to V9199.
Procedures 720 to 7537; and 754 to 7599.

Neonate:

Screen used for 1988 to 1993 calendar year data:
Diagnoses 7600 to 7799; and V3000 to V392.

Screen used for 1994 to 1995 calendar year data:
Diagnoses 75983; 7600 to 7799; and V3000 to V392.

Note: Code 75983 was erroneously included in the neonate screen. Because this is a rare condition, only a negligible number of records should be affected.

Screen used for 1996 to 1999 calendar year data:
Diagnoses 7600 to 7799; and V3000 to V392.

Screen used for 2000 calendar year data:
Diagnoses 7620 to 7785; 7787 to 7799; and V3000 to V392.

Note: maternal conditions affecting the fetus (760 to 761) and congenital hydrocele (7786) were removed from the neonate screen because these conditions are sometimes coded for children more than one year old.

Screen used for 2001 to 2004 calendar year data:
Diagnoses 27701, 7620 to 7706; 7708 to 7785; 7787 to 7799; V290 to V299; and V3000 to V392.

Note: chronic respiratory disease arising in the perinatal period (code 7707) was removed from the neonate screen because this diagnosis code is often used even after the first year to indicate a condition originating in the perinatal period.

Screen used for 2005 calendar year data:
Diagnoses 27701, 7620 to 7706; 7708 to 7785; 7787 to 7799; 7966; V290 to V299; and V3000 to V392.

Screen used for 2006 to 2009 calendar year data:
Diagnoses 27701, 74783, 76077 to 76078; 7620 to 7706;
7708 to 7785; 7787 to 7796; 77981 to 7799; 7966, and
V290 to V392.

Screen used beginning with 2010 calendar year data:
Diagnoses 27701, 74783, 76061 to 76064; 76077 to 76078; 7620 to 7706; 77081
to 7785; 7787 to 7796; 77981 to 7799; 7966, V2031 to V2032; and V290 to
V392.

Male diagnoses:

Screen used for 1988 to 1992 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 7525 to 7526, 7587,
78832, 7922, 8780 to 8783, 9393, V1045 to V1049, V502.

Screen used for 1993 to 1995 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 7525 to 7526, 7587,
78832, 79093, 7922, 8780 to 8783, 9393, V1045 to V1049, V502.

Screen used for 1996 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75269, 7587,
78832, 79093, 7922, 8780 to 8783, 9393, V1045 to V1049, V502.

Screen used for 1997 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75269, 7587,
78832, 79093, 7922, 8780 to 8783, 9393, V1045 to V1049, V1642 to V1643,
V502.

Screen used for 1998 to 2000 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75269, 7587,
78832, 79093, 7922, 8780 to 8783, 9393, V1045 to V1049, V1361, V1642 to
V1643, V2652, V502, V7644 to V7645.

Screen used for 2001 to 2003 calendar year data:
Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834,
13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to
2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75252; 75263

to 75269, 7587, 78832, 79093, 7922, 8780 to 8783, 9393, V1045 to V1049, V1361, V2652, V502, V7644 to V7645.

Note: Diagnosis codes indicating a family history of male-specific malignant neoplasms (V1642 to V1643) were removed from the male diagnosis screen. Diagnosis codes 75261 (Hypospadias) and 75262 (Epispadias) were removed from the male diagnosis screen because female versions of these conditions are possible, although very rare.

Screen used for 2004 calendar year data:

Diagnoses 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834, 13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to 2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75252; 75263 to 75269, 7587, 78832, 79093, 7922, 8780 to 8783, 9393, 95913, V1045 to V1049, V1361, V2652, V502, V7644 to V7645.

Screen used for 2005 to 2006 calendar year data:

Diagnoses, 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834, 13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to 2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75252; 75263 to 75269, 7587, 78832, 79093, 7922, 8780 to 8783, 9393, 95913, V1045 to V1049, V1361, V2652, V502, V7644 to V7645, V8403.

Note: Beginning with calendar year 2006, we compared the HCUP male diagnoses screens to the Medicare Code Edits and adjusted the HCUP edit screens as appropriate for HCUP processing.

Screen used for 2007 to 2009 calendar year data:

Diagnoses, 01640 to 01656, 05413, 0720, 09812 to 09814, 09832 to 09834, 13103, 1750 to 1759, 185 to 1879, 2144, 2220 to 2229, 2334 to 2336, 2364 to 2366, 2570 to 2579, 30274 to 30275, 4564, 600 to 6089, 75251 to 75252; 75263 to 75269, 7587, 78832, 79093, 7922, 8780 to 8783, 9393, 95913, V1045 to V1049, V1361, V2634 to V2639; V2652, V502, V7644 to V7645, V8403.

Screen used beginning with 2010 calendar year data:

Diagnoses 01640 to 01656; 05413, 0720, 09812 to 09814; 09832 to 09834; 13103, 1750 to 1759; 185 to 1879; 2144, 2220 to 2229; 2334 to 2336; 2364 to 2366; 2570 to 2579; 30274 to 30275; 4564, 60000 to 6089; 75251 to 75269; 75281, 7587, 78832, 79093, 7922, 8780 to 8783; 9393, 95913, V1045 to V1049; V1361, V2634 to V2639; V2652, V502, V7644 to V7645; and V8403.

Male procedures:

Screen used beginning with 1988 calendar year data:

Procedures 600 to 6499, 8791 to 8799, 9824, 9994 to 9996.

Female diagnoses:

Screen used from 1988 to 1995 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 66942, 66944 to 67694, 71630 to 71639, 7520 to 75249, 7923, 7950, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V220 to V235, V238 to V2501, V251, V253, V2541 to V2543, V255, V261, V270 to V289, V447, V524, V557, V723 to V724, V762.

Note: Starting in 1994 calendar year data, Codes 66943, 677, V237, V4551, V4552, and V5042 were erroneously excluded from the female screen. This would cause ED1nn "Diagnosis Inconsistent with Sex" to not be set when a male discharge had one of these female diagnoses.

Screen used for 1996 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 7950, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V270 to V289, V447, V4551 to V4552, V5042, V524, V557, V723 to V724, V762.

Note: Code E9672 was erroneously included in the female screen when processing 1996 calendar year data for all states and 1997 calendar year data for a few states. This would cause male discharges with the diagnosis E9672 (Child and adult battering and other maltreatment -- by mother or step mother) to have edit check ED1nn set to 1 and the diagnosis validity flag DXVn and SEX set to inconsistent (.C). Because this is a rarely used code, only a negligible number of records should be affected.

Screen used for 1997 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 7950, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V1641, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V270 to

V289, V447, V4551 to V4552, V5042, V524, V557, V723 to V724, V762.

Note: Code E9672 was erroneously included in the female screen when processing 1996 calendar year data for all states and 1997 calendar year data for a few states. This would cause male discharges with the diagnosis E9672 (Child and adult battering and other maltreatment -- by mother or step mother) to have edit check ED1nn set to 1 and the diagnosis validity flag DXVn and SEX set to inconsistent (.C). Because this is a rarely used code, only a negligible number of records should be affected.

Screen used for 1998 to 1999 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 7950, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V1641, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V5042, V524, V723 to V724, V762.

Note: Beginning with the 1998 calendar year data processing, the decision was made to exclude V447 and V557 from the female screen because these patients would mostly be transsexuals.

Screen used for 2000 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 7950, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V1641, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V4981, V5042, V524, V6701, V723 to V724, V762, and V7646 to V7647.

Screen used for 2001 to 2002 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 7950, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V4981, V5042, V524, V6701, V723 to V724, V762, and V7646 to V7647.

Note: A diagnosis code indicating a family history of female-specific malignant neoplasms (V1641) was removed from the female diagnosis screen.

Screen used for 2003 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 7923, 79500 to 79509, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131 to V1329, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V4981, V5042, V524, V6701, V723 to V724, V762, and V7646 to V7647.

Screen used for 2004 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 75281, 7923, 79500 to 79509, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131 to V1329, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V4981, V5042, V524, V6511, V6701, V723 to V724, V762, and V7646 to V7647.

Screen used for 2005 calendar year data:

Diagnoses 01660 to 01676, 05411 to 05412, 09815 to 09817, 09835 to 09837, 1121, 13101, 1740 to 1749, 179 to 1849, 1986, 2180 to 2219, 2331 to 2333, 2360 to 2363, 2560 to 2569, 30273, 30276, 30651 to 30652, 4566, 6115 to 6116, 6140 to 677, 71630 to 71639, 7520 to 75249, 75281, 7923, 79500 to 79509, 7965, 8674 to 8675, 8784 to 8787, 90255 to 90256, 90281 to 90282, 9391 to 9392, 9474, 99632, V074, V1040 to V1044, V131 to V1329, V220 to V2501, V251, V253, V2541 to V2543, V255, V261, V2651, V270 to V289, V4551 to V4552, V4981, V5042, V524, V6511, V6701, V723 to V7241, V762, V7646 to V7647, V8402, and V8404.

Screen used for 2006 to 2008 calendar year data:

Diagnoses 01660 to 01676; 05411 to 05412; 09815 to 09817; 09835 to 09837; 1121, 13101, 1740 to 1749; 179 to 1849; 1986, 2180 to 2219; 2331 to 23339; 2360 to 2363; 2560 to 2569; 30273, 30276, 30651 to 30652; 4566, 6115, 6140 to 677; 71630 to 71639; 7520 to 75249; 7923, 79500 to 79509; 7965, 8674 to 8675; 8784 to 8787; 90255 to 90256; 90281 to 90282; 9391 to 9392; 9474, 99632, V074, V1040 to V1044; V131 to V1329; V220 to V2501; V251, V253, V2541 to V2543; V255, V261, V2631 to V2632; V2651, V270 to V289; V4551, V4981, V5042,

V524, V5970 to V5974; V616 to V617; V6511, V6701, V7231 to V7242; V7611, V762, V7646 to V7647; V824, V8402, V8404.

Screen used for 2009 to 2010 calendar year data:

Diagnoses 01660 to 01676; 05411 to 05412; 09815 to 09817; 09835 to 09837; 1121, 13101, 1740 to 1749; 179 to 1849; 1986, 2180 to 2219; 2331 to 23339; 2360 to 2363; 2560 to 2569; 30273, 30276, 30651 to 30652; 34640 to 34643; 4566, 5164, 6115, 6140 to 67914; 71630 to 71639; 7520 to 75249; 7923, 79500 to 79519; 7965, 8674 to 8675; 8784 to 8787; 90255 to 90256; 90281 to 90282; 9391 to 9392; 9474, 99632, V074, V1040 to V1044; V1221, V131 to V1329; V1521, V220 to V2501; V2511 to V2513; V253, V2541 to V2543; V255, V261, V2631 to V2632; V2651, V270 to V289; V4551, V4981, V5042, V524, V5970 to V5974; V616 to V617; V6511, V6701, V7231 to V7242; V7611, V762, V7646 to V7647; V824, V8402, V8404, V8801 to V8803; and V8901 to V8909.

Screen used beginning in 2011 calendar year data:

Diagnoses 01660 to 01676; 05411 to 05412; 09815 to 09817; 09835 to 09837; 1121, 13101, 1740 to 1749; 179 to 1849; 1986, 2180 to 2219; 2331 to 23339; 2360 to 2363; 2560 to 2569; 30273, 30276, 30651 to 30652; 34640 to 34643; 4566, 6115, 6140 to 67914; 71630 to 71639; 7520 to 75249; 7923, 79500 to 79519; 7965, 8674 to 8675; 8784 to 8787; 90255 to 90256; 90281 to 90282; 9391 to 9392; 9474, 99632, V074, V1040 to V1044; V131 to V1329; V1521, V220 to V2501; V2511 to V2513; V253, V2541 to V2543; V255, V261, V2631 to V2632; V2651, V270 to V289; V4551, V4981, V5042, V524, V5970 to V5974; V616 to V617; V6511, V6701, V7231 to V7242; V7611, V762, V7646 to V7647; V824, V8402, V8404, V8801 to V8803; and V8901 to V8909; V9100-V9199.

Screen used beginning in 2012 calendar year data:

Diagnoses 01660 to 01676; 05411 to 05412; 09815 to 09817; 09835 to 09837; 1121, 13101, 1740 to 1749; 179 to 1849; 1986, 2180 to 2219; 2331 to 23339; 2360 to 2363; 2560 to 2569; 30273, 30276, 30651 to 30652; 34640 to 34643; 4566, 5164, 6115, 6140 to 67914; 71630 to 71639; 7520 to 75249; 7923, 79500 to 79519; 7965, 8674 to 8675; 8784 to 8787; 90255 to 90256; 90281 to 90282; 9391 to 9392; 9474, 99632, V074, V1040 to V1044; V1221, V131 to V1329; V1521, V220 to V2501; V2511 to V2513; V253, V2541 to V2543; V255, V261, V2631 to V2632; V2651, V270 to V289; V4551, V4981, V5042, V524, V5970 to V5974; V616 to V617; V6511, V6701, V7231 to V7242; V7611, V762, V7646 to V7647; V824, V8402, V8404, V8801 to V8803; and V8901 to V8909; V9100-V9199.

Female procedures:

Screen used for 1988 to 1995 calendar year data:

Procedures 650 to 7599, 8781 to 8789, 8846, 8878, 8926, 9141 to 9149, 9217, 9614 to 9618, 9644, 9724 to 9726, 9771 to 9775, 9816 to 9817, 9823, 9998.

Screen used beginning with 1996 calendar year data:

Procedures 6501 to 7599, 8781 to 8789, 8846, 8878, 8926, 9141 to 9149, 9217, 9614 to 9618, 9644, 9724 to 9726, 9771 to 9775, 9816 to 9817, 9823, 9998.

Injury diagnoses:

Screen used beginning with 2003 calendar year data:

Diagnoses 800 to 9092, 9094, 9099, 910 to 9949, 9955 to 99559, 99580 to 99585.

Medical misadventure/adverse reaction diagnoses:

Screen used beginning with 2003 calendar year data:

Diagnoses 996 to 9999, 9093, 9095.

Injury external cause of injury code:

Screen used beginning with 2003 calendar year data:

First character = "E" and not one of the following: E8490 to E8499, E9670 to E9679, E8694, E870 to E879, E930 to E949.

Medical misadventure/adverse reaction external cause of injury code:

Screen used beginning with 2003 calendar year data:

E Codes E870 to E879, E930 to E949.

Perinate:

Note: Beginning with 1998 calendar year data, the HCUP edit checks were revised and the perinate screen was no longer used or updated.

Screen used from 1988-1997 calendar year data:

Diagnoses 7400 to 7799.

Long-term-care indication:

Note: Beginning with 1998 calendar year data, the HCUP edit checks were revised and the long-term-care indication screen was no longer used or updated.

Screen used for 1988 to 1992 calendar year data:

Diagnoses 2900 to 30503; 30520 to 3124; 3219 to 319; 3440; 430 to 438; and 797 to 7999.

Screen used for 1993 calendar year data:

Diagnoses 2900 to 30503; 30520 to 3124; 3219 to 319; 3440; 34481; 430 to 438; 44024, 4416, 78003, and 797 to 7999.

Note: Codes 78001, 78002, and 78009 were erroneously excluded from the long-term care screen. This would cause some discharges with long length of stays (over 365 days) to have ED601 "Long Length of Stay, Unjustified" set instead of ED600 "Long Length of Stay, Justified."

Screen used for 1994 calendar year data:

Diagnoses 2900 to 30503, 30520 to 3124, 3129 to 319, 34400 to 34409, 34481, 430 to 438, 44024, 4416, 78003, 797 to 7999.

Note: Codes 78001, 78002, 78009, 31281, 31282, and 31289 were erroneously excluded from the long-term care screen. This would cause some discharges with long length of stays (over 365 days) to have ED601 "Long Length of Stay, Unjustified" set instead of ED600 "Long Length of Stay, Justified."

Screen used for 1995 calendar year data:

Diagnoses 2900 to 30503, 30520 to 3124, 3129 to 319, 34400 to 34409, 34481, 430 to 4352, 4358 to 438, 44024, 4416, 78003, 797 to 7999.

Note: Codes 78001, 78002, 78009, 31281, 31282, 31289, and 4353 were erroneously excluded from the long-term care screen. This would cause some discharges with long length of stays (over 365 days) to have ED601 "Long Length of Stay, Unjustified" set instead of ED600 "Long Length of Stay, Justified."

Screen used for 1996 calendar year data:

Diagnoses 2900 to 319, 34400 to 34409, 34481, 430 to 438, 44024, 4416, 78001 to 78009, 797 to 7999.

Screen used for 1997 calendar year data:

Diagnoses 2900 to 319, 34400 to 34409, 34481, 430 to 4389, 44024, 4416, 78001 to 78009, 797 to 7999.

HCPCS/CPT PROCEDURE SCREENS

The Healthcare Common Procedure Coding System (HCPCS) Current Procedural Terminology (HCPCS/CPT) procedure screens used in HCUP data processing are specified below. The screens have been updated for HCPCS/CPT coding changes through calendar year 2017 (ending date December 31, 2017). Changes to the screens across years are underlined. The edits for HCPCS/CPTs are based on a combination of IBM Watson Health and TRICARE edits including codes in gender edits from either source. The TRICARE edits are available online at <http://www.health.mil/Military-Health-Topics/Business-Support/Rates-and-Reimbursement/Age-and-Gender-Restrictions>.

Male procedures:

Screen used for 2000 to 2002 calendar year data:

Procedures 00908, 00914, 00920 to 00938, 19140, 37788, 52010, 52275, 52450, 52510 to 52601, 52612 to 52614, 52647 to 52700, 53215, 53235, 53410 to 53425, 53440, 53505 to 53621, 54000 to 54230, 54235 to 55899, 74440 to 74445, 76870, 76873, 78760 to 78761, 84153 to 84154, 89264, 89310 to 89329.

Screen used for 2003 to 2004 calendar year data:

Procedures 00908, 00914, 00920 to 00938, 19140, 37788, 52010, 52275, 52450, 52510 to 52601, 52612 to 52614, 52647 to 52700, 53215, 53235, 53410 to 53425, 53440, 53505 to 53621, 54000 to 54230, 54235 to 55899, 74440 to 74445, 76870, 76873, 78760 to 78761, 84153 to 84154, 89264, 89310 to 89329, G0256, G0261.

Screen used for 2005 calendar year data:

Procedures 0084T, 00908, 00914, 00920 to 00938, 19140, 37788, 52010, 52275, 52402, 52450, 52510 to 52601, 52612 to 52614, 52647 to 52700, 53215, 53235, 53410 to 53425, 53440, 53505 to 53621, 54000 to 54230, 54235 to 55899, 74440 to 74445, 76870, 76873, 78760 to 78761, 84153 to 84154, 89264, 89310 to 89329, G0256, G0261.

Screen used for 2006 calendar year data:

Procedures 0084T, 00865, 0087T, 00908, 00914, 00920 to 00928; 00930 to 00938; 0137T, 19140, 37788 to 37790; 52010, 52275, 52402 to 52450; 52601 to 52700; 53215, 53235, 53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850 to 53853; 54000 to 55970; 74440 to 74445; 76870, 78760 to 78761; 84066, 84152 to 84154; 89264, 93980 to 93981; A4267, A4326, A4348 to A4349; C1813, E0325, G0027, G0102 to G0103; G9077 to G9080; G9083, J0128, J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S4026, S4028 to S4031.

Screen used for 2007 calendar year data:

Procedures 0084T, 00865, 0087T, 00908, 00914, 00920 to 00928; 00930 to 00938; 0137T, 19300, 37788 to 37790; 52010, 52275,

52402 to 52450; 52601 to 52700; 53215, 53235, 53410 to 53425;
53440 to 53442; 53505, 53515 to 53621; 53850 to 53853; 54000 to
55970; 74440 to 74445; 76870, 78761, 84066, 84152 to 84154; 89264,
93980 to 93981; A4267, A4326, A4349, C1813, E0325, G0027, G0102 to
G0103; G9077 to G9083; G9132 to G9133; J0128, J0275, J3315, L3219
to L3222; L3225, L7900, L8330, S4026, S4028 to S4031.

Screen used for 2008 calendar year data:

Procedures 0084T, 00865, 0087T, 00908, 00914, 00920 to 00928;
00930 to 00938; 0137T, 19300, 3268F to 3274F; 37788 to 37790;
4163F to 4164F; 52010, 52275, 52402 to 52450; 52601 to 52700; 53215,
53235, 53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850
to 53853; 54000 to 55899; 55970, 74440 to 74445; 76870, 78761, 84066,
84152 to 84154; 89264, 93980 to 93981; A4267, A4326, A4349, C1813,
E0325, G0027, G0102 to G0103; G9077 to G9083; G9132 to G9133;
J0128, J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S4026,
S4028 to S4031.

Screen used for 2009 calendar year data:

Procedures 0084T, 00865, 0087T, 00908, 00914, 00920 to 00928; 00930
to 00938; 0137T, 19300, 3268F to 3274F; 37788 to 37790; 4163F to
4164F; 52010, 52275, 52402 to 52450; 52601 to 52700; 53215, 53235,
53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850 to
53853; 54000 to 55899; 55970, 74440 to 74445; 76870, 78761, 84066,
84152 to 84154; 89264, 93980 to 93981; A4267, A4324 to A4349;
C1813, E0325, G0027, G0102 to G0103; G0416 to G0419; G9077 to
G9083; G9132 to G9133; J0128, J0275, J3315, L3219 to L3222; L3225,
L7900, L8330, S4026, and S4028 to S4031.

Screen used for 2010 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00928; 00930 to 00938;
19300, 3268F to 3274F; 37788 to 37790; 4163F to 4164F; 52010, 52275,
52402 to 52450; 52601 to 52700; 53215, 53235, 53410 to 53425; 53440
to 53442; 53505, 53515 to 53621; 53850 to 53855; 54000 to 55899;
55970, 74440 to 74445; 76870, 78761, 84066, 84152 to 84154; 89264,
93980 to 93981; A4267, A4326, A4349, C1813, E0325, G0027, G0102 to
G0103; G0416 to G0419; G9077 to G9083; G9132 to G9133; J0128,
J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S4026, S4028 to
S4031.

Screen used for 2011 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00928; 00930 to 00938;
19300, 3268F to 3274F; 37788 to 37790; 4163F to 4164F; 52010, 52275,
52402 to 52450; 52601 to 52700; 53215, 53235, 53410 to 53425; 53440
to 53442; 53505, 53515 to 53621; 53850 to 53855; 54000 to 55899;
55970, 74440 to 74445; 76870, 78761, 84066, 84152 to 84154; 89264,
93980 to 93981; A4267, A4326, A4349, C1813, E0325, G0027, G0102 to

G0103; G0160, G0416 to G0419; G9077 to G9083; G9132 to G9133; J0128, J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S4026, S4028 to S4031.

Screen used for 2012–2014 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00928; 00930 to 00938; 19300, 3268F to 3274F; 37788 to 37790; 4163F to 4164F; 52010, 52275, 52402 to 52450; 52601 to 52700; 53215, 53235, 53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850 to 53855; 54000 to 55899; 55970, 74440 to 74445; 76870, 78761, 81224, 84066, 84152 to 84154; 89264, 93980 to 93981; A4267, A4326, A4349, C1813, E0325, G0027, G0102 to G0103; G0160, G0416 to G0419; G8822, G8828 to G8830; G9077 to G9083; G9132 to G9133; J0128, J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S4026, S4028 to S4031.

Screen used for 2015 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00938; 19300, 37788 to 37790; 52010, 52275, 52402, 52450, 52601 to 52700; 53215, 53235, 53250, 53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850 to 53855; 54000 to 55899; 55970, 74440 to 74445; 76870, 76873, 78761, 82757, 84066, 84152 to 84154; 89264, 93980 to 93981; A4267, A4326, E0325, G0102 to G0103; G0416 to G0419; J3315, L3219 to L3222; L3225, L7900, L8330, S0138, S4026, S4028 to S4031.

Deleted Codes: 3268F, 3269F, 3270F, 3271F, 3272F, 3273F, 3274F, 4163F, 4164F, 81224, A4349, C1813, G0027, G0160, G8822, G8828, G8829, G8830, G9077, G9078, G9079, G9080, G9083, G9132, G9133, J0128, J0275.

Screen used for 2016 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00938; 0421T, 0438T, 19300, 37788 to 37790; 52010, 52275, 52402, 52450, 52601 to 52700; 53215, 53235, 53250, 53410 to 53425; 53440 to 53442; 53505, 53515 to 53621; 53850 to 53855; 54000 to 55899; 55970, 74440 to 74445; 76870, 76873, 78761, 82757, 84066, 84152 to 84154; 89264, 93980 to 93981; A4267, A4326, A4349, C1813, C9739 to C9740; E0325, G0027, G0102 to G0103; G0416, G0458, G9077 to G9083; G9132 to G9133; J0275, J3315, L3219 to L3222; L3225, L7900, L8330, S0138, S4026, S4028 to S4031.

Screen used for 2017 calendar year data:

Procedures 00865, 00908, 00914, 00920 to 00938; 0421T, 0443T, 19300, 37788, 52010, 52275, 52402, 52450, 52601 to 52630; 52647 to 52700; 53215, 53235, 53410 to 53425; 53440 to 53442; 53505 to 53621; 53850 to 53855; 54000 to 55400; 55500 to 55899; 55970, 74440 to 74445; 76870, 76873, 78761, 81539, 84152 to 84154; 89264, 89322, 89331, A4267, A4326, A4349, C1813, C9739 to C9740; C9746 to C9747;

E0325, G0027, G0102 to G0103; G0416, G0458, G9077 to G9083;
G9132 to G9133; J0275, J3315, L3219 to L3222; L3225, L7900, L8330,
S4026, S4028 to S4031.

Female procedures:

Screen used for 2000 to 2002 calendar year data:

Procedures 00842, 00846, 00850 to 00857, 00906, 00940 to 00955,
11975 to 11977, 46715 to 46716, 50722, 51845, 51900 to 51925, 52270,
52285, 53210, 53230, 53430, 53502, 53660 to 53665, 56420 to 56515,
56620 to 56632, 56640 to 56805, 57000 to 57410, 57452 to 58322,
58340 to 58540, 58560 to 59899, 64435, 74710 to 74775, 76092, 76805
to 76831, 76941, 76945 to 76948, 80055, 81025, 82143, 82731, 84135 to
84138, 84830, 88143 to 88150, 88153 to 88155, 88164 to 88167,
88267 to 88269.

Screen used for 2003 calendar year data:

Procedures 00842, 00846, 00850 to 00857, 00906, 00940 to 00955,
11975 to 11977, 46715 to 46716, 50722, 51845, 51900 to 51925, 52270,
52285, 53210, 53230, 53430, 53502, 53660 to 53665, 56420 to 56515,
56620 to 56632, 56640 to 56805, 56820 to 56821, 57000 to 57410,
57420 to 57421, 57452 to 58322, 58340 to 58540, 58552 to 58554,
58560 to 59899, 64435, 74710 to 74775, 76092, 76801 to 76802, 76805
to 76831, 76941, 76945 to 76948, 80055, 81025, 82143, 82731, 84135 to
84138, 84830, 88143 to 88150, 88153 to 88155, 88164 to 88167,
88267 to 88269.

Screen used for 2004 calendar year data:

Procedures 00842, 00846, 00850 to 00857, 00906, 00940 to 00955,
11975 to 11977, 46715 to 46716, 50722, 51845, 51900 to 51925, 52270,
52285, 53210, 53230, 53430, 53502, 53660 to 53665, 56420 to 56515,
56620 to 56632, 56640 to 56805, 56820 to 56821, 57000 to 57410,
57420 to 57421, 57425, 57452 to 58322, 58340 to 58540, 58552 to
58554, 58560 to 59899, 64435, 74710 to 74775, 76092, 76801 to 76802,
76805 to 76831, 76941, 76945 to 76948, 80055, 81025, 82143, 82731,
84135 to 84138, 84830, 88143 to 88150, 88153 to 88155, 88164 to
88167, 88267 to 88269.

Screen used for 2005 calendar year data:

Procedures 0071T, 0072T, 0500F, 0501F, 0502F, 0503F, 00842, 00846,
00850 to 00857, 00906, 00940 to 00955, 11975 to 11977, 46715 to
46716, 50722, 51845, 51900 to 51925, 52270, 52285, 53210, 53230,
53430, 53502, 53660 to 53665, 56420 to 56515, 56620 to 56632, 56640
to 56805, 56820 to 56821, 57000 to 57410, 57420 to 57421, 57425,
57452 to 58322, 58340 to 58540, 58552 to 58554, 58560 to 59899,
64435, 74710 to 74775, 76092, 76801 to 76802, 76805 to 76831, 76941,
76945 to 76948, 80055, 81025, 82143, 82731, 84135 to 84138, 84163,

84830, 88143 to 88150, 88153 to 88155, 88164 to 88167, 88267 to 88269.

Screen used for 2006 calendar year data:

Procedures 0003T, 0021T, 0031T, 0032T, 00842, 00846, 00851, 00906, 00940 to 00948; 00950 to 00952; 01958 to 01969; 0500F to 0503F; 11976 to 11977; 36460, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 56405 to 59899; 64435, 74710 to 74775; 76092, 76801 to 76831; 76941, 76945 to 76948; 80055, 81025, 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G9071 to G9075; G9113 to G9117; H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260, S2265 to S2267; S2400 to S2411; S3625 to S3626; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035, S4037 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2007 calendar year data:

Procedures 0031T, 0032T, 00842, 00846, 00851, 00906, 00940 to 00952; 01958 to 01969; 0500F to 0503F; 11976 to 11977; 36460, 37210, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2267; S2400 to S2411; S3625 to S3626; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2008, 2009 and 2010 calendar year data:

Procedures 0031T, 0032T, 00842, 00846, 00851, 00906, 00940 to 00952; 01958 to 01969; 0500F to 0503F; 11976 to 11977; 3340F, 3341F,

3342F, 3343F to 3345F; 3350F, 36460, 37210, 4178F, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2270; S2400 to S2411; S3625 to S3628; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2011 calendar year data:

Procedures 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0500F to 0503F; 11976 to 11977; 3340F, 3341F, 3342F, 3343F to 3345F; 3350F, 36460, 37210, 4178F, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 53860, 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2270; S2400 to S2411; S3625 to S3628; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2012 calendar year data:

Procedures 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0500F to 0503F; 11976, 3340F, 3341F, 3342F, 3343F to 3345F; 3350F, 36460, 37210, 4178F, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 53860, 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to

83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G8802 to G8811; G8823 to G8824; G8827, G8831 to G8832; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2270; S2400 to S2411; S3625 to S3628; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2013 calendar year data:

Procedures 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0500F to 0503F; 11976, 3340F, 3341F, 3342F, 3343F to 3345F; 3350F, 36460, 37210, 4178F, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 53860, 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 81500 to 81503; 81508 to 81512; 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4281 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G8802 to G8811; G8823 to G8824; G8827, G8831 to G8832; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J1051 to J1056; J7300 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2270; S2400 to S2411; S3625 to S3628; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2014 calendar year data:

Procedures 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0500F to 0503F; 11976, 3340F, 3341F, 3342F, 3343F to 3345F; 3350F, 36460, 4178F, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53502, 53660 to 53665; 53860, 56405 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 81500 to 81503; 81507 to 81512; 82106, 82120, 82143, 82731, 83030 to 83033; 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4281 to A4286; A4327

to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8051 to G8053; G8106 to G8107; G8111 to G8114; G8802 to G8811; G8823 to G8824; G8827, G8831 to G8832; G9071 to G9075; G9113 to G9117; G9131, G9355 to G9356; G9361, H1000 to H1005; J1051 to J1056; J7300, J7302 to J7303; J7306, L3215 to L3217; L3224, L8000 to L8035; P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0199, S0610 to S0613; S2260 to S2270; S2400 to S2411; S3625 to S3628; S3650 to S3655; S3820 to S3823; S4005 to S4025; S4027, S4035 to S4989; S4993, S8055, S8415, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Screen used for 2015 calendar year data:

Procedures 0071T to 0072T; 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0336T, 0500F to 0503F; 11976, 3015F, 36460, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53500 to 53502; 53660 to 53665; 55980 to 57155; 57160 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 77057, 80055, 81025, 82106, 82120, 82143, 82731, 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 87510 to 87512; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 89250 to 89251; 89254, 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4280 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, H1000 to H1005; J1055 to J1056; J7301 to J7303; J7307, L3215 to L3217; L3224, L8000 to L8030; L8035 to L8039; L8600, P3000 to P3001; Q0091, Q0115, S0128 to S0132; S0197 to S0199; S0610 to S0613; S2260 to S2267; S2400 to S2411; S3625 to S3626; S3650 to S3655; S4005 to S4023; S4027, S4035 to S4040; S4981 to S4989; S4993, S8055, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.

Deleted Codes: 3340F, 3341F, 3342F, 3343F, 3344F, 3345F, 3350F, 4178F, 53860, 57156, 81500, 81503, 81507, 81508, 81509, 81510, 81511, 81512, 83030, 83033, G8051, G8052, G8053, G8106, G8107, G8111, G8112, G8113, G8114, G8802, G8803, G8805, G8806, G8807, G8808, G8809, G8810, G8811, G8823, G8824, G8827, G8831, G8832, G9071, G9072, G9073, G9074, G9075, G9113, G9114, G9115, G9116, G9117, G9131, G9355, G9356, G9361, J1051, J7300, J7306, L8031, L8032, Q0111, Q0114, S0122, S0126, S2270, S3628, S3820, S3822, S3823, S4025, S4042, S8415.

Screen used for 2016 and 2017 calendar year data:

Procedures 0071T to 0072T; 00842, 00846, 00851, 00906, 00940 to 00952; 01958, 01960 to 01969; 0336T, 0404T, 0500F to 0503F; 11976, 3015F, 36460, 46744 to 46748; 50722, 51845, 51900 to 51925; 51992, 52270, 52285, 53210, 53230, 53270 to 53275; 53430, 53500 to 53502;

53660 to 53665; 55980 to 57155; 57160 to 59899; 64435, 74710 to 74775; 76801 to 76831; 76941, 76945 to 76948; 80055, 80081, 81025, 81500 to 81503; 81507 to 81512; 82106, 82120, 82143, 82731, 83632, 83661 to 83664; 84163, 84830, 85460 to 85461; 87510 to 87512; 88141 to 88155; 88164 to 88167; 88174 to 88175; 88267 to 88269; 89250 to 89251; 89254, 99500 to 99501; A4261, A4264, A4266, A4268 to A4269; A4280 to A4286; A4327 to A4328; A4561 to A4562; E0326, E0602 to E0604; G0101, G0123 to G0124; G0141 to G0148; G0202, G8806 to G8811; G9071 to G9075; G9113 to G9117; G9131, H1000 to H1005; J7297 to J7303; J7306 to J7307; L3215 to L3217; L3224, L8000 to L8039; L8600, P3000 to P3001; Q0091, Q0111, Q0114 to Q0115; S0122 to S0132; S0197 to S0199; S0610 to S0613; S2260 to S2267; S2400 to S2411; S3650 to S3655; S4005 to S4025; S4027, S4035 to S4040; S4981 to S4989; S4993, S8055, S9001, S9208 to S9214; S9349, S9436 to S9439; S9442 to S9443; T2101.