

File Composition by State

HCUP State Ambulatory Surgery Databases (SASD)

This document contains cumulative descriptions of the SASD files across all years of HCUP data from 1988 to the current data year. Only data years 1997 forward are released through the HCUP Central Distributor.

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This section describes the original data files obtained from data organizations in participating states and used to create the HCUP outpatient databases. Information about the source of the original data files, the types of hospitals included in those files, the records excluded during HCUP processing, and other pertinent information to understand the composition of these files are presented after the Overview in state-specific sections.

Overview of HCUP Outpatient Databases

Prior to data year 2003, HCUP Partners were asked to provide HCUP with separate ambulatory surgery (AS) and emergency department (ED) source files, if possible, and a combined outpatient file with records flagged by type, as an alternative. Records identified as AS were included in the SASD. Records identified as ED were included in the SEDD. Investigation of these data files revealed that different data sources often defined AS and ED records slightly differently. In addition, a number of the AS and ED source files included other types of outpatient records such as chemotherapy, mammograms, and observation stays. The section "Selection of Records Prior to 2003" includes state-specific information on the inclusion of records in the SASD and/or SEDD prior to 2003.

Starting with the recreated, version 2, 2003 data and data year 2004, HCUP used the state-defined indication of AS and ED records for inclusion in the SASD and SEDD. Records identified by the state as AS were included in the SASD. Records identified by the state as ED were included in the SEDD. Three HCUP data elements (STATE_AS for AS services, STATE_ED for ED services, and STATE_OS for observation services) include information on the source-defined record type.

Data elements derived during HCUP data processing indicate that there is evidence on the HCUP record to indicate an AS, ED, or observation stay (OS) service. These three data elements (HCUP_AS for AS services, HCUP_ED for ED services, and HCUP_OS for observation services) will be on the SASD and SEDD files.

In contrast to other years, all ED records are placed in the SEDD. This includes

- Records identified by the state as ED
- Records with evidence of ED services (HCUP ED > 0).

This change means that some ED records will be included in BOTH the SASD and SEDD. Therefore, all outpatient ED records are available in the SEDD. If the HCUP Partner has indicated that the record is an ambulatory surgery record, but there is evidence of ED services on the HCUP records (i.e., ED charges or revenue codes), then the record is placed in both the SASD and SEDD.

In the first version of data year 2003, the allocation of records into the SASD and SEDD was handled differently. HCUP applied uniform criteria based on information available on the HCUP file for the selection of AS records for the SASD and ED records for the SEDD.

For the SASD, the criteria for identifying ambulatory surgery records include the following:

- Presence of at least one ICD-9-CM or CPT-4 procedure in the following ranges:

ICD-9-CM procedure codes 00.50-86.99 or 88.40-88.59

CPT-4 procedure codes 10040-69999, 70496, 70498, 70544-70549, 71275, 71555, 72159, 72191, 72198, 73206, 73225, 73580, 73706, 73725, 74175, 74185, 75600-75790, 75893-75898, 75952-75954, 75992-75996, 78445, 92287, 92975, 92992-92993, 93501-93581.

- Length of stay of 0 or 1 days, if this information is available.

For the SEDD, the criteria for identifying ED records vary across states because of the differing availability of necessary data elements. We use one or more of these three criteria:

- A revenue center code in the range 450-459, indicating ED charges; or
- A CPT procedure code in the range 99281-99285, indicating an ED visit; or
- A positive emergency room charge, if revenue center codes are not available

If a record fits both the AS and ED criteria, the record was included in the SASD with an indication of ED services (HCUP variable EDflag > 0) with one exception. If a data source provides only ED data to HCUP, then the combination AS/ED records were placed in the SEDD file with an indication of AS services (HCUP variable ASflag > 0).

For all states, records that fit neither the AS nor ED screen are excluded from the SASD and SEDD. Records excluded from the SASD and SEDD were placed in the State Unused Files (STUF). It became apparent in evaluating the records excluded from the SASD and SEDD that in some cases the HCUP Partners had more information available to them and, therefore, were better able to identify AS and ED records.

If the data elements EDflag or ASflag are on the 2003 data file, then the HCUP file had records excluded and placed in the STUF file. If the data elements

HCUP_AS, HCUP_ED, or HCUP_OS are on the 2003 file, then records were not excluded and placed in the STUF file.

Colorado File Composition

Source Files

The Colorado Health & Hospital Association Discharge Data Program provides ambulatory surgery data to HCUP in a single source file. The file contains discharge records from ambulatory surgery centers that are associated with acute care hospitals. Discharges from freestanding ambulatory surgery centers are not included.

1988 Record Counts. Ambulatory surgery data collection by Colorado officially commenced April 1988, for hospitals with more than 50 beds. Those under 50 beds were added January 1989. Colorado indicated that the total observations in 1988 are inflated because the data submitted by hospitals included observations from many outpatient settings, rather than being limited to only discharges from hospital-associated ambulatory surgery centers. This was corrected by 1989.

Selection of Records

Beginning in 1991, Colorado supplied ambulatory surgery records separate from inpatient records. Colorado defined an ambulatory surgery record as a having less than an overnight stay with a principal ICD-9-CM procedure of 01.01 to 86.99 regardless of location. From 1988 to 1990, Colorado supplied abstracts for ambulatory surgeries in the same source files as the inpatient discharge abstracts, distinguished by a record type indicator. Starting in 1991, Colorado supplied inpatient and ambulatory surgery records in separate files. Only the ambulatory surgery discharges were retained in the HCUP SASD. The table below explains how the ambulatory surgery discharges were identified.

How Ambulatory Surgery Records Were Identified in Colorado Data

Record Type	Value of Record Type Indicator on Abstract Ambulatory Surgery Databases	Inclusion in HCUP
Inpatient	1	Exclude
Ambulatory surgery	2	Include
Unknown	0	Include if all of the following conditions are true (i.e., assumed to be an ambulatory surgery record):

		<ul style="list-style-type: none"> • Length of stay is 0; • Principal procedure is present; • Total charges are nonmissing; • Routine (room and nursing) charges are missing; and • Age in days is not equal to 0. <p>Otherwise, exclude as an inpatient record.</p>
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Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the Colorado outpatient records are separated as follows:

- 99.3 % of records are included in the SASD
- 0.7 % of records are excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 Colorado SASD. There are 69 unique DSHOSPID values in the 1997 CO SASD. All should be considered hospital-based facilities.

Florida File Composition

Source Files

The Florida Agency for Health Care Administration (AHCA) provides HCUP with ambulatory patient data from short-term acute care hospitals, freestanding ambulatory surgery centers, radiation therapy centers, lithotripsy centers, cardiac catheterization laboratories, and providers of radiation therapy. Any Florida ambulatory surgery center which has a total of 200 or more visits per quarter is required to report data to AHCA. Facilities with fewer than 200 patient visits in a quarter must certify this fact in writing each quarter, in order to be exempt.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the Florida outpatient records are separated as follows:

- 99.9% of records are included in the SASD
- 0.1% of records are excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to distinguish hospital-based and freestanding facilities.

- DSHOSPID is the facility identifier provided by the data source.
- AHAID is the facility identifier used by the American Hospital Association.

1997 Florida SASD. There are 491 unique DSHOSPID values in the 1997 FL SASD.

- 199 have the AHAID coded indicating they are a hospital-based facility.
- The remaining 292 facilities with DSHOSPID coded and the AHAID missing should be considered freestanding ambulatory surgery centers.

Identifying the Type of Facility. The type of facility can be identified by the first 2 to 4 digits of the Florida hospital identifier stored in the HCUP data element DSHOSPID

- Hospital-based ambulatory surgery centers are identified by:
 - First four digits of DSHOSPID = "0010"
 - First four digits of DSHOSPID = "0011"
 - First four digits of DSHOSPID = "0012"

- First two digits of DSHOSPID = "23"
- Freestanding ambulatory surgery centers are identified by:
 - First four digits of DSHOSPID = "0000"
 - First two digits of DSHOSPID = "14"
- Freestanding radiation therapy centers are included only until December 2002. They are identified by:
 - First four digits of DSHOSPID = "0020"
- Freestanding cardiac catheterization laboratories are identified by:
 - First four digits of DSHOSPID = "0050"
- Freestanding lithotripsy centers are identified by:
 - First four digits of DSHOSPID = "0052"

Iowa File Composition

Source Files

Beginning in data year 2004, Iowa Hospital Association (IHA) provided their Statewide Outpatient Database to HCUP. This database contains information on all emergency room, ambulatory surgeries, and observation visits from Iowa hospitals and surgery centers. IHA identified the different types of outpatient records as follows:

- Emergency Room - Any record with a HCPCS code of 99281-99285 or 99291 and with a revenue code 0450, 0451, 0452, 0456, 0459
- Outpatient Surgery - Any record not classified as Emergency Room AND with a revenue code 0360, 0361, 0369, 0480, 0481, 0490, 0499, 0750, 0759.
- Observation - Any record not classified as Emergency Room or Outpatient Surgery AND with a revenue code 0760, 0762, 0769.

In 1996 only, the IHA provided ambulatory surgery data from acute care hospitals and not freestanding ambulatory surgery centers. Between 1997 and 2003, no Iowa outpatient data is available through HCUP.

Kentucky File Composition

Source Files

The Kentucky Cabinet for Health and Family Services, Department for Public Health, provides ambulatory surgery data to HCUP in a single source file. The source file contains information on the following outpatient services: ambulatory surgeries, mammographies performed in the outpatient setting, and emergency room visits involving a surgical procedure. ER surgeries may be performed in a surgical suite or endoscopy room. Data from freestanding ambulatory surgery centers are not included.

Kentucky hospitals are required to collect information on the following ICD-9-CM procedure codes performed in the outpatient setting: 01.00 through 86.99, 87.37 (Mammography), 88.40 through 88.60, and 98.50 through 98.59.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the source records are separated as follows:

- 74% of source records are included in the SASD.
- 26% of source records are excluded.

The majority of the excluded records are mammograms. As noted previously, Kentucky hospitals are required to collect data on mammograms, which are an outpatient screening procedure that is not considered ambulatory surgery.

Maine File Composition

Source Files

The Maine Health Data Organization (MHDO) provides ambulatory surgery (AS) and emergency department (ED) records to HCUP in one combined outpatient file. The file also contains information on other services such as physical therapy and chemotherapy visits. Information on recurring visits which list several visits for the same type of scheduled procedure/treatment can be bundled into one record. Data from freestanding ambulatory surgery centers are not included.

SASD Notes

Identifying Freestanding Facilities. The data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities.

Unusual Charge File for the Maine SASD. Maine provided a normalized line item charge detail file instead of the usual file with one observation per discharge with summary revenue and charge information. HCUP has retained the normalized file as provided with revenue codes, CPT/HCPCS codes, units, charges, and day of service.

The Maine SASD charge file contains more than one observation per discharge. Line item charge and service detail for a discharge should be summarized by the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

Selection of Records

The Maine Health Data Organization provided outpatient records for ambulatory surgery and emergency department discharges in the same file. Discharges that did not include services to revenue codes in the range 450-459 (emergency room) were retained in the HCUP Maine SASD.

Records with a discharge disposition of "still a patient" were excluded from the HCUP Maine ambulatory surgery data. A quick analysis of these records indicate that these excluded records were interim records for physical therapy, psychotherapy, blood work, dialysis, and radiation therapy.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the SASD and SEDD, the source records are sorted as follows:

- 14.4% of source records are assigned to the SASD
- 15.9% of source records are included in the SEDD
- 68.7% of source records are sent to the STUF.

Maryland File Composition

Source Files

The Maryland Health Services Cost Review Commission (HSCRC) provides ambulatory surgery (AS) and emergency department (ED) records to HCUP in two separate files. One file contains information from ambulatory surgery centers that are associated with acute care hospitals. Data from freestanding ambulatory surgery centers are not included. The second file contains ambulatory care data from emergency departments, clinics, and labor/delivery centers within acute care, general hospitals in Maryland.

Selection of Records in 2003, Version 1 Files, Only

Because the Maryland AS file does not include ICD-9-CM procedure codes, only CPT-4 procedure codes are considered in assigning records to the 2003 SASD. For the 2003 SEDD, the presence of a revenue code indicating ED services (range 450-459) is the reason for inclusion. The Maryland outpatient source records are separated as follows:

- 21% of source records are assigned to the SASD
- 63% of source records are included in the SEDD
- 16% of source records are excluded.

The excluded records include labor/delivery and clinic services such as aftercare, non-traumatic joint disorders and HIV infection. As noted previously, the Maryland source file includes these other types of outpatient services.

SASD Notes

Charge File for the Maryland SEDD. Maryland provided summarized charge detail in which charge information is summed within the revenue center. This type of Charges file includes one record per discharge abstract. Each record contains three corresponding arrays with the following information: revenue center (REVCDn), total charge for the revenue center (CHGn), and total units of service for the revenue center (UNITn). For example, if a patient had 5 laboratory tests, REVCD1 would include the revenue code for laboratory, CHG1 would include the total charge for the 5 tests, and UNIT1 would be 5.

2001 SASD. The data supplied to HCUP came in two files, each with a different format. Data for January to June were in one format, and data for July to December were in an expanded format. The July to December file contained data elements that were not provided for the first half of the year.

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 Maryland SASD. There are 52 unique DSHOSPID values in the 1997 MD SASD. All should be considered hospital-based facilities.

Michigan File Composition

Source Files

The HCUP Michigan ambulatory surgery files were constructed from the Michigan Outpatient Data Base (MODB) provided by the Michigan Health & Hospital Association (MHA). The MODB contains outpatient records with a principal ICD-9-CM procedure code between 00.01 and 86.99, inclusive, irrespective of where in the outpatient setting the procedure was performed (ambulatory surgery suite, emergency department, etc).

MHA supplied outpatient data from general acute care and specialty hospitals (e.g., rehabilitation hospitals, osteopathic hospitals) that are a member of the Michigan Health & Hospital Association, with two exceptions. Information from the Henry Ford System hospitals in Detroit and Munson are not included. These two hospitals account for approximately 4 percent of the outpatient visits in Michigan.

Nebraska File Composition

Source Files

The Nebraska Hospital Association (NHA) provides ambulatory surgery (AS) and emergency department (ED) records to HCUP in one single file. NHA collects any type of outpatient record submitted by member acute-care hospitals operating in the state. Information on the record (i.e., revenue codes and CPT codes) is used to identify resources: ED, AS, and observation stay. Revenue codes 450-459 identify ED visits, while the presence of a surgical procedure indicates an AS record. One record can include multiple types of services. Data from freestanding ambulatory surgery centers are not included.

For data year 2001, NHA informed HCUP that the Nebraska outpatient source data files were approximately 80% complete and that the missing claims might reflect patients who lack health insurance and/or less expensive care. Missing claims are primarily hard copy claims that were not submitted by their providers. Hard copy claims are more likely to be associated with private pay and/or smaller third party Commercial payers that do not accept electronic claims. These patients might be more likely to lack health insurance (for whatever reason) and/or to be financially independent. Providers might file some claims on paper if the return on investment for filing them electronically is less obvious. Thus, paper-based claims could conceivably reflect less expensive care.

Selection of Records

The Nebraska Hospital Association prohibits the release of discharge records for patients with HIV diagnoses. These discharges were not included in the source file provided to HCUP and are therefore not included in the HCUP files.

During HCUP processing, records with a discharge disposition of "still a patient" were excluded from the HCUP Nebraska ambulatory surgery data.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD and the SEDD, the source records are separated as follows:

- 38% of source records are assigned to the SASD
- 61% of source records are included in the SEDD
- 1% of source records are excluded.

Please note that for Nebraska, the two CPT codes in the HCUP Core file were used to apply the selection criteria. The CPT codes in the line item detail were

not considered. All revenue codes were used for the criteria.

SASD Notes

Identifying Freestanding Facilities. The data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities.

New Jersey File Composition

Source Files

New Jersey Department of Health and Senior Services provides one source file to HCUP that contains a mixture of inpatient and ambulatory surgery (AS) records from acute care hospitals. The file does not distinguish record types. During HCUP data processing, AS records are identified by one of the two following criteria:

- Admission and discharge dates are the same and there is a charge for same day surgery
- Admission and discharge dates are the same, there is a charge for the operating and recovery room, the patient is discharged alive to a destination other than a short-term general hospital, and the patient is not discharged against medical advice.

Selection of Records

Beginning in 1999, records with a discharge disposition of "still a patient" were excluded from the HCUP ambulatory surgery files. Prior to 1999, this type of record was not included in the source data files.

Beginning in 2005, the definition of ambulatory surgery records was based on the UB-92 bill type - the first two digits must be "13" (BillType = 13x) to indicate hospital outpatient services. Inpatient records must have the first two digits of "11" or "12" (BillType = 11x or BillType = 12x) to indicate hospital inpatient services. Prior to 2005, the definition of ambulatory surgery records supplied by New Jersey was:

- Same day stay (ADATE = DDATE)
- Non-zero charges to operating room (CHG24 > 0) or same day surgery (CHG32 > 0), and
- Discharged to home (DISP = 1).

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the source records are separated as follows:

- 97% of source records are assigned to the SASD
- 3% of the records were excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery

facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 New Jersey SASD. There are 94 unique DSHOSPID values in the 1997 NJ SASD. All should be considered hospital-based facilities.

New York File Composition

Source Files

The New York State Department of Health's Statewide Planning and Research Cooperative System (SPARCS) provides ambulatory surgery (AS) data to HCUP in a single source file. The source file contains information for freestanding ambulatory surgery centers and for same-day surgical stays at all New York hospitals, excluding Federal hospitals. New York defines an AS service as surgical procedures that need to be performed for safety reasons in an operating room on anesthetized patients requiring a stay of less than 24 hours duration.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the source records are separated as follows:

- 93% of source records are assigned to the SASD
- 7% of source records are excluded.

The excluded records are for therapeutic and diagnostic procedures that do not fit the screen of surgical procedures.

SASD Notes

Exclusion of Charge Data. The ambulatory surgery discharge data reported by SPARCS do not contain total charges or detailed charges. No charge information is available on the HCUP New York ambulatory surgery files.

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 New York SASD. There are 257 unique DSHOSPID values in the 1997 NY SASD.

- 233 have the AHAIID coded indicating they are a hospital-based facility.
- 3 facilities with a missing AHAIID are hospital-based facilities. These are DSHOSPID=4961, 0028, 0770. DSHOSPID 4961 provided inpatient data

- for the 1997 NY SID and is therefore considered a hospital-based facility. DSHOSPIDs 0028 and 0770 are non-reporting hospitals for 1997.
- The remaining 21 facilities with DSHOSPID coded and the AHAIID missing should be considered freestanding ambulatory surgery centers.

Facility Identifiers. Prior to 1994, facilities in the New York SASD were assigned one of two HCUP identifiers:

- HOSPID, the HCUP hospital identifier or
- DSFREE, the source-defined identifier for freestanding ambulatory surgery facilities.

These variables were mutually exclusive. Beginning in 1994, HOSPID and DSFREE are not included in the New York SASD. The New York facility identifier is included in DSHOSPID.

ERROR in 1989 New York SASD. One freestanding clinic (DSHOSPID = 4067) was inadvertently omitted from the 1989 file during HCUP processing. It reported three (3) discharges for 1989.

North Carolina File Composition

Source Files

The North Carolina Department of Health and Human Services provides AS data to HCUP in a single source file. The file includes information from ambulatory surgery centers that are associated with acute care hospitals and data from freestanding ambulatory surgery centers.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the source records are separated as follows::

- 96.5% of source records are assigned to the SASD
- 3.5% of source records are excluded.

South Carolina File Composition

Source Files

The South Carolina Budget and Control Board provides ambulatory surgery (AS) and emergency department (ED) records to HCUP in three separate files. One file contains information from ambulatory surgery centers associated with acute care hospitals. The second file contains ambulatory surgery data from freestanding surgery centers. The third file contains visits to hospital-based emergency departments, excluding records that have total charges less than \$50.

The data include outpatient discharges from all South Carolina acute care hospitals derived from UB-92 records and discharges from South Carolina freestanding ambulatory surgery centers derived from HCFA 1500 records.

Selection of Records

The following records were excluded from the HCUP South Carolina ambulatory surgery files:

- Discharges with disposition of "still a patient" were excluded in all years.
- In the 1998 database, 812 records (0.2% of the total records) were excluded because an accurate hospital identifier was not provided by the data source, and
- In the 1999 database, 3,019 records (0.7% of the total records) were excluded because an accurate hospital identifier was not provided.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD and positive emergency room charges for assigning records to the SEDD, the source records are separated as follows:

- 30% of source records are assigned to the SASD
- 69% of source records are included in the SEDD
- 1% of source records are excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 South Carolina SASD. Freestanding and hospital-based facilities are included in separate SASD files.

Utah File Composition

Source Files

The Office of Health Care Statistics, Utah Department of Health provides ambulatory surgery (AS) and emergency department (ED) records to HCUP in two separate files. One file contains information on selected ambulatory surgeries occurring in hospital outpatient departments, hospital-affiliated ambulatory surgery centers, and freestanding ambulatory surgery centers. The second file contains emergency department encounters (identified by revenue codes in the range 450 to 459) from all Utah licensed hospitals. If a patient comes into the ED and has an ambulatory surgery, that record is included in the AS file.

The list of procedures that qualify as ambulatory surgery in Utah include the following:

Description	CPT-4 Codes	ICD-9-CM Procedure Codes
Mastectomy	19120-19220	850-8599
Musculoskeletal	20000-29909	760-8499
Respiratory	30000-32999	300-3499
Cardiovascular	33010-37799	350-3999
Lymphatic/Hematic	38100-38999	400-4199
Diaphragm	39501-39599	ICD9 codes in Respiratory
Digestive System	40490-49999	420-5499
Urinary	50010-53899	550-5999
Male Genital	54000-55899	600-6499
Laparoscopy	56300-56399	ICD9 codes in Musculoskeletal, Digestive, and Female Genital
Female Genital	56405-58999	650-7199
Endocrine/Nervous	60000-64999	010-0799
Eye	65091-68899	080-1699
Ear	69000-69979	180-2099
Nose, Mouth, Pharynx	CPT codes in Musculoskeletal and Respiratory	210-2999
Heart Catheterization	93501-93660	ICD-9 Codes in Cardiovascular

Selection of Records

The following records were excluded from the HCUP Utah ambulatory surgery files:

- Discharges with disposition of "still a patient" were excluded.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD and positive emergency room charges for assigning records to the SEDD, the Utah outpatient source records are separated as follows:

- 37% of source records are assigned to the SASD
- 62% of source records are included in the SEDD
- 2% of source records are excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 Utah SASD. There are 53 unique DSHOSPID values in the 1997 UT SASD.

- 39 have the AHAIID coded indicating they are a hospital-based facility.
- 1 facility (DSHOSPID=307) with a missing AHAIID is a hospital-based facility. DSHOSPID 307 provided inpatient data for the 1997 UT SID and is therefore considered a hospital-based facility.
- The remaining 13 facilities with DSHOSPID coded and the AHAIID missing should be considered freestanding ambulatory surgery centers.

Possible Data Problems for one Utah Hospital. Please use the 1997 data for DSHOSPID="408" with caution. Based on a cursory review of the hospital's data, the following problems were identified:

- The original discharge date field was shifted by one character causing most of the reported dates to be invalid. During HCUP processing, YEAR was assigned to 97 and DQTR and DDATE were assigned using the shifted position.
- DISP was missing (DISP = .) on 74% of the discharges, and
- the median total charge (TOTCHG) was \$14.

Vermont File Composition

Source Files

The Vermont Association of Hospitals and Health Systems provides both ambulatory surgery (AS) and emergency department (ED) data in a single file combined with other outpatient services, such as observation stays. If a patient receives ED care, the record is marked as an ED record. If the patient at any time receives a surgical procedure (principal or secondary) within the ICD-9-CM range of 01.00 to 86.99, or the CPT4 range of 10000-69999, then the record is classified as ambulatory surgery. The setting can vary, of course: a procedure may have been performed in the operating room, emergency room, an on-site clinic, surgical suites, or ambulatory surgery centers associated with a hospital. Data from freestanding ambulatory surgery centers are not included.

Selection of Records

Vermont supplied discharge abstracts for ambulatory surgeries in the same source files as other outpatient services. The type of outpatient record was distinguished by a record type indicator. Records that were identified as ambulatory surgery (type="A") were retained in the HCUP SASD. Emergency department records (type="E"), observation records (type="O"), and other outpatient services (type="X") were excluded from the HCUP Vermont SASD files.

Records with a discharge disposition of "still a patient" were excluded from the HCUP Vermont ambulatory surgery data.

Selection of Records in 2003, Version 1 Files, Only

The standard HCUP criteria are used for assigning records to the 2003 SASD. Both emergency department CPT codes and two-digit revenue codes of "45" are used for identifying records for the SEDD. Only two-digit revenue codes are used because that is all that is available on the source file. The Vermont outpatient records are separated as follows:

- 38.5% of records are included in the SASD
- 57.1% of records are placed in the SEDD
- 3.9% of records are excluded.

The excluded records are for therapeutic and diagnostic procedures that do not fit the screen of surgical procedures.

Wisconsin File Composition

Source Files

The Wisconsin Department of Health and Family Services provides ambulatory surgery (AS) data to HCUP in a single source file. The data are reported by Wisconsin hospitals, affiliated ambulatory surgery centers and freestanding ambulatory surgery centers. Wisconsin defines AS events as having one or more of the following surgical procedures: ICD-9-CM procedures 01.01-86.99 and CPT procedures 10000-69999. Each AS record contains items or aggregations of items from UB-92 or HCFA-1500 billing forms.

If a person has an outpatient surgical procedure and is then admitted as an inpatient, the hospitalization is represented with a record in the inpatient discharge data file. The principal procedure date may be prior to the admission date. There is no record in the ambulatory surgery data file.

If a patient has an outpatient surgical procedure and is subsequently admitted to a hospital as an inpatient, there will be a record in the ambulatory surgery data file and a separate record in the inpatient discharge file.

Selection of Records in 2003, Version 1 Files, Only

Using the standard HCUP criteria for assigning records to the 2003 SASD, the source records are separated as follows:

- 99.97% of source records are assigned to the SASD
- 0.03% of source records are excluded.

SASD Notes

Identifying Freestanding Facilities. Starting in 1998, the data element FREESTANDING identifies hospital-based and freestanding ambulatory surgery facilities. Prior to 1998, there are two identifiers on the SASD that allow a researcher to identify hospital-based and freestanding ambulatory surgery centers.

- DSHOSPID is the facility identifier provided by the data source.
- AHAIID is the facility identifier used by the American Hospital Association.

1997 Wisconsin SASD. If the DSHOSPID is less than 200, then the ambulatory surgery center is hospital-based. If the DSHOSPID is greater than equal 200, then the ambulatory surgery center is freestanding. The AHA identifier (AHAIID) may be missing on a small number of hospital-based facilities because no

inpatient data were reported for those sites.