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Source: <https://www.hcup-us.ahrq.gov/db/nation/nrd/nrddde.jsp>

This document includes the target variables for the analysis. It provides a quick overview to the main variables that are of interest to the readmission studies I am conducting.

**AGE:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | AGE | Age in years at admission | 0-124 | Age in years | | . | Missing | | .A | Invalid | | .B | Unavailable from source (coded in 1988-1997 data only) | | .C | Inconsistent: beginning with 1998 data, EAGE02, EAGE03, EAGE04, EAGE05; in 1988-1997 data, ED021, ED3nn, ED4nnn, ED5nn | |

Note: Ages over 89 are aggregated into a single category equal to 90 years old

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/age/nrdnote.jsp>

**AWEEKEND:**

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

Note: if admission day on a weekend

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/aweekend/nrdnote.jsp>

**CHRONBn**:

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Value** | **Value Description** |
| BODYSYSTEMn | ICD-9-CM Body system n | 1 | 1 = Infectious and parasitic disease |
| 2 | 2 = Neoplasms |
| 3 | 3 = Endocrine, nutritional, and metabolic diseases and immunity disorders |
| 4 | 4 = Diseases of blood and blood-forming organs |
| 5 | 5 = Mental disorders |
| 6 | 6 = Diseases of the nervous system and sense organs |
| 7 | 7 = Diseases of the circulatory system |
| 8 | 8 = Diseases of the respiratory system |
| 9 | 9 = Diseases of the digestive system |
| 10 | 10 = Diseases of the genitourinary System |
| 11 | 11 = Complications of pregnancy, childbirth, and the puerperium |
| 12 | 12 = Diseases of the skin and subcutaneous tissue |
| 13 | 13 = Diseases of the musculoskeletal system |
| 14 | 14 = Congenital anomalies |
| 15 | 15 = Certain conditions originating in the perinatal period |
| 16 | 16 = Symptoms, signs, and ill-defined conditions |
| 17 | 17 = Injury and poisoning |
| 18 | 18 = Factors influencing health status and contact with health services |
| . | Missing |
| .A | Invalid |
| .C | Inconsistent |

Note: The Chronic Condition Indicator provides an easy way for users to categorize ICD-9-CM diagnosis codes into one of two categories: chronic or not chronic. In addition, the tool groups all diagnoses into body systems so that users can create indicators listing which specific body systems are affected by a chronic condition. The body system indicator is based upon the chapters of the ICD-9-CM codebook.

File: DX\_PR\_Grps

Link: <https://www.hcup-us.ahrq.gov/db/vars/chronbn/nrdnote.jsp>

**CM\_X:**

Where **X** belongs to:

|  |  |
| --- | --- |
| **X** | Description |
| AIDS | acquired immune deficiency syndrome |
| ALCOHOL | alcohol abuse |
| ANEMDEF | deficiency anemias |
| ARTH | rheumatoid arthritis/collagen vascular diseases |
| BLDLOSS | chronic blood loss anemia |
| CHF | congestive heart failure |
| CHRNLUNG | chronic pulmonary disease |
| COAG | coagulopathy |
| DEPRESS | depression |
| DM | diabetes, uncomplicated |
| DMCX | diabetes with chronic complications |
| DRUG | drug abuse |
| HTN\_C | hypertension (combine uncomplicated and complicated) |
| HYPOTHY | hypothyroidism |
| LIVER | liver disease |
| LYMPH | lymphoma |
| LYTES | fluid and electrolyte disorders |
| METS | metastatic cancer |
| NEURO | other neurological disorders |
| OBESE | obesity |
| PARA | paralysis |
| PERIVASC | peripheral vascular disorders |
| PSYCH | psychoses |
| PULMCIRC | pulmonary circulation disorders |
| RENLFAIL | renal failure |
| TUMOR | solid tumor without metastasis |
| ULCER | peptic ulcer disease excluding bleeding |
| VALVE | valvular disease |
| WGHTLOSS | weight loss |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | CM\_X | AHRQ comorbidity measure for ICD-9-CM codes:  X | 0 | Comorbidity is not present | | 1 | Comorbidity is present | | .A | Invalid | |
|  |

Note: Comorbidity measures are assigned using the AHRQ comorbidity software. The AHRQ comorbidity measures identify coexisting medical conditions that are not directly related to the principal diagnosis, or the main reason for admission, and are likely to have originated prior to the hospital stay. Comorbidities are identified using ICD-9-CM diagnoses and the Diagnosis Related Group (DRG) in effect on the discharge date. The prefix "CM\_" has been added to the AHRQ comorbidity software data element names to distinguish the comorbidity measures from other HCUP data elements.

File: Severity

Link: <https://www.hcup-us.ahrq.gov/db/vars/cm_aids/nrdnote.jsp>

**DIED**:

Died during hospitalization (DIED) is coded from the discharge disposition of patient

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

Note: Died during hospitalization (DIED) is coded from the discharge disposition of patient. The coding varies across years of data.

Beginning with 2001 HCUP data, the coding of DIED is assigned as follows:

* If DISPUniform indicates that a patient was discharged alive (values 1-7, 21 (starting in 2010), 99), then DIED is coded as 0.
  + If a patient had discharge status of died outside the hospital, then DISPuniform is set to 99 (discharged from the hospital alive, destination unknown) and DIED was set to alive (0).
* If DISPUniform indicates that a patient died in the hospital (value 20), then DIED is coded as 1.
* If DISPUniform is missing (.) or invalid (.A), then DIED is also coded as missing (.) or invalid (.A).

In other words, DIED mirrors DISPUniform variable (no need to use both)

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/died/nrdnote.jsp>

**DISPUNIFORM:**

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| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | DISPUNIFORM | Disposition of patient, uniform coding | 1 | Routine | | 2 | Transfer to short-term hospital | | 5 | Transfer other: includes Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF), and another type of facility | | 6 | Home Health Care (HHC) | | 7 | Against medical advice (AMA) | | 20 | Died in hospital | | 21 | Discharged/transferred to court/law enforcement | | 99 | Discharged alive, destination unknown, beginning in 2001 | | . | Missing | | .A | Invalid | |
|  |

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

Transfers to facilities other than short-term hospitals (skilled nursing facilities, intermediate care facilities, and other type of facilities) are coded as DISPUNIFORM= 5.

Transfers to Home Health Care (including IV providers and Hospice home care) are coded as DISPUNIFORM= 6.

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/dispuniform/nrdnote.jsp>

**DMONTH:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Value** | **Value Description** |
| DMONTH | Discharge month | 1-12 | Discharge month |
| . | Missing |
| .A | Invalid |

Note: Discharge month (DMONTH) is derived from the discharge date (DDATE). If DDATE is missing, then DMONTH is missing (.). If DDATE is invalid, then DMONTH is invalid (.A).

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/dmonth/nrdnote.jsp>

**DXCCSn:**

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

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| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | DXCCSn | Clinical Classifications Software (CCS): ICD-9-CM diagnosis classification | 1-259 | CCS Diagnosis Codes | | 260 | CCS E-code Class (1988-1997 data) | | 2601-2621 | CCS E-code Class (beginning with 1998 data) | | . | No diagnosis code | | .A | Invalid diagnosis code: beginning with 1998 data, EDX02 | | .C | Inconsistent: beginning with 1998 data, EAGE04, EAGE05, EDX03 | |
|  |

Note: DXCCSn is coded as follows:

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

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/dxccsn/nrdnote.jsp>

**ELECTIVE:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Value** | **Value Description** |
| ELECTIVE | Elective versus non-elective admission | 0 | Non-elective admission |
| 1 | Elective admission |
| . | Missing |
| .A | Invalid |

Note: ELECTIVE indicates whether the admission to the hospital was elective. This information was derived from the type of admission (ATYPE). If the admission type indicated an elective admission (ATYPE = 3), then ELECTIVE was set to 1. If the admission type was missing or invalid, then ELECTIVE is also missing or invalid.

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/elective/nrdnote.jsp>

**FEMALE:**

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

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

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/female/nrdnote.jsp>

**LOS:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | LOS | Length of stay, cleaned | 0 - 365 (for HCUP inpatient data), 0-3 (for HCUP outpatient data) | Days (In the 1988-1997 inpatient data, LOS can be greater than 365 days) | | . | Missing | | .A | Invalid | | .B | Unavailable from source (coded in 1988-1997 data only) | | .C | Inconsistent: beginning with 1998 data, ELOS03, ELOS04; in 1988-1997 data, ED011, ED601, ED911n, ED921 | |
|  |

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

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/los/nrdnote.jsp>

**NRD\_DaysToEvent:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Value** | **Value Description** |
| NRD\_DaysToEvent | Days from "start date" to admission | nnnn | Timing between events |
| . | Missing |

Note: NRD\_DaysToEvent is one of two data elements created specifically for the Nationwide Readmissions Database (NRD) for tracking patients across hospitals in a year. The timing information in NRD\_DaysToEvent must be used in tandem with the visit linkage variable (NRD\_VisitLink). These variables enable users to study multiple hospital visits for the same patient across hospitals and time while adhering to strict privacy regulations.

The timing variable (NRD\_DaysToEvent) was calculated consistently for each verified patient linkage (NRD\_visitLink) based on a randomly assigned "start date." Each patient linkage is assigned a unique start date that is used to calculate NRD\_DaysToEvent for all visits associated with that visitLink value. The variable NRD\_DaysToEvent is the difference between the visit's admission date and the start date associated with the visitLink

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/nrd_daystoevent/nrdnote.jsp>

**NRD\_visitLink:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | NRD\_VisitLink | Patient linkage variable in the NRD | 7(a) | Verified patient linkage number for linking hospital visits for the same patient across hospitals | | . | Missing | |

Note: NRD\_visitLink is one of two data elements created specifically for the Nationwide Readmissions Database (NRD) for tracking patients across hospitals in a year. The timing information in NRD\_DaysToEvent must be used in tandem with the visit linkage variable (NRD\_visitLink). These variables enable users to study multiple hospital visits for the same patient across hospitals and time while adhering to strict privacy regulations.

NRD\_visitLink does not link to other HCUP databases or to external databases. In addition, the values of NRD\_visitLink differ from year to year. An individual person identified by NRD\_visitLink cannot be cannot be followed across data years.

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/nrd_visitlink/nrdnote.jsp>

**PAY1:**

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

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

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/pay1/nrdnote.jsp>

**PRCCSn:**

Clinical Classifications Software (CCS) consists of 231 procedure categories. All ICD-9-CM procedure codes are classified.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | PRCCSn | Clinical Classifications Software (CCS) for ICD-9-CM Procedures | 1 - 231 | CCS procedure class | | . | No procedure code | | .A | Invalid procedure code: beginning with 1998 data, EPR02 | | .C | Inconsistent: beginning with 1998 data, EAGE05, EPR03 | |
|  |

Note: PRCCSn is coded as follows:

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

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/prccsn/nrdnote.jsp>

**PL\_NCHS:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | PL\_NCHS | Patient Location: NCHS Urban-Rural Code | 1 | "Central" counties of metro areas of >=1 million population | | 2 | "Fringe" counties of metro areas of >=1 million population | | 3 | Counties in metro areas of 250,000-999,999 population | | 4 | Counties in metro areas of 50,000-249,999 population | | 5 | Micropolitan counties | | 6 | Not metropolitan or micropolitan counties | | . | Missing | |

Note: PL\_NCHS is a six-category urban-rural classification scheme for U.S. counties developed by the National Center for Health Statistics (NCHS) especially for use in health care research. The classification emphasizes urban distinctions and is unique in differentiating between central and fringe counties of large metropolitan areas. Smaller metropolitan counties are subdivided by population. Non-metropolitan counties are divided simply into micropolitan and non-core categories.

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/pl_nchs/nrdnote.jsp>

**REHABTRANSFER:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | REHABTRANSFER | A combined record involving transfer to rehabilitation, evaluation, or other aftercare | 0 | Not a combined record or a combined record not involving rehabilitation, evaluation, or other aftercare | | 1 | Combined record involving transfer to rehabilitation, evaluation, or other aftercare | |

Note: REHABTRANSFER is one of two data elements that identify transfers, same-day stays, and combined transfer records in the NRD. Readmission analyses do not usually allow the hospitalization at the receiving hospital to be counted as a readmission. To eliminate this possibility, pairs of records representing a transfer are collapsed into a single "combined" record in the NRD. Transfer records are defined as having all of the following characteristics:

* Discharge date of the first inpatient stay equaled the admission date of a subsequent inpatient stay.
* The first record had a discharge disposition of transfer to an acute care hospital.
* The second record was from a different hospital and had an admission source indicating a transfer.

Pairs of discharges are classified as a same-day stay if the discharge date for one inpatient stay was the same as the admission date of a second stay for the same patient (same as transfers), but there was no indication of a transfer by the discharge disposition or admission source. Same-day stays may or may not have involved different hospitals. Same-day stays may indicate that a patient was discharged too soon and then needed to be return to the hospital on the same day. However, it was also possible that these were transfer records with an incorrect or missing discharge disposition and admission source.

**Records that were part of transfers and same-day stays were combined into a single record. These combined records account for about three percent of records in the NRD and are identified by the data element SAMEDAYEVENT.**

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/rehabtransfer/nrdnote.jsp>

**SAMEDAYEVENT:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | SAMEDAYEVENT | Identifies transfer and same-day stay collapsed records | 0 | Not a transfer or other same-day stay | | 1 | Transfer involving two discharges from different hospitals | | 2 | Same-day stay involving two discharges from different hospitals | | 3 | Same-day stay involving two discharges at the same hospital | | 4 | Same-day stay involving three or more discharges at the same or different hospitals | |

Note: The same of REHABTRANSFER note (see above).

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/samedayevent/nrdnote.jsp>

**RESIDENT:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Value** | **Value Description** |
| RESIDENT | Identifies patient as a resident of the State in which he or she received hospital care | 0 | Nonresident |
| 1 | Resident |

Note: The NRD includes discharges for residents and nonresidents of the State in which they were treated. Although most patients seek treatment at hospitals in their State of residence, there are occasions when patients are treated at hospitals in another State. Hospitals that specialize in a certain types of care may attract patients from across the United States. In addition, hospitals near State borders frequently treat patients that reside in neighboring States. The data element RESIDENT identifies a discharge as a resident of the State in which he or she received hospital care.

File: Core

Link: <https://www.hcup-us.ahrq.gov/db/vars/resident/nrdnote.jsp>

**ZIPINC\_QRTL:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Description** | **Value** | **Value Description** | | ZIPINC\_QRTL | Median household income for patient's ZIP Code (based on current year) | 1 | 0-25th percentile | | 2 | 26th to 50th percentile (median) | | 3 | 51st to 75th percentile | | 4 | 76th to 100th percentile | | . | Other (includes ZIP equal blank A, C, M, F and B) | |
| Note: This categorical variable (ZIPINC\_QRTL) provides a quartile classification of the estimated median household income of residents in the patient's ZIP Code. The quartiles are identified by values of 1 to 4, indicating the poorest to wealthiest populations. These values are derived from ZIP Code-demographic data obtained from Claritas. Because these estimates are updated annually, the value ranges for the ZIPINC\_QRTL categories vary by year  File: Core  Link: <https://www.hcup-us.ahrq.gov/db/vars/zipinc_qrtl/nrdnote.jsp> |