**The icustays table**

**Table source:** Hospital database.

**Table purpose:** Defines each ICUSTAY\_ID in the database, i.e. defines a single ICU stay.

**Number of rows:** 61,532

**Links to:**

* PATIENTS on SUBJECT\_ID
* ADMISSIONS on HADM\_ID

**Important considerations**

* ICUSTAY\_ID is a *generated* identifier that is *not* based on any raw data identifier. The hospital and ICU databases are not intrinsically linked and so do not have any concept of an ICU encounter identifier.
* The ICUSTAYS table is derived from the TRANSFERS table. Specifically, it groups the TRANSFERS table based on ICUSTAY\_ID, and excludes rows where no ICUSTAY\_ID is present.

**Table columns**

| **Name** | **Postgres data type** |
| --- | --- |
| ROW\_ID | INT |
| SUBJECT\_ID | INT |
| HADM\_ID | INT |
| ICUSTAY\_ID | INT |
| DBSOURCE | VARCHAR(20) |
| FIRST\_CAREUNIT | VARCHAR(20) |
| LAST\_CAREUNIT | VARCHAR(20) |
| FIRST\_WARDID | SMALLINT |
| LAST\_WARDID | SMALLINT |
| INTIME | TIMESTAMP(0) |
| OUTTIME | TIMESTAMP(0) |
| LOS | DOUBLE |

**Detailed Description**

SUBJECT\_ID, HADM\_ID, ICUSTAY\_ID

Identifiers which specify the patient: SUBJECT\_ID is unique to a patient, HADM\_ID is unique to a patient hospital stay and ICUSTAY\_ID is unique to a patient ICU stay.

DBSOURCE

DBSOURCE contains the original ICU database the data was sourced from. Patients admitted between 2001 - 2008 had their data managed by the CareVue information system, represented in this column as ‘carevue’. Patients admitted between 2008 - 2012 had their data managed by the Metavision system, represented in this column as ‘metavision’. Knowing the database source is important as the data archiving for these two databases differs in some cases.

FIRST\_CAREUNIT, LAST\_CAREUNIT

FIRST\_CAREUNIT and LAST\_CAREUNIT contain, respectively, the first and last ICU type in which the patient was cared for. As an ICUSTAY\_ID groups all ICU admissions within 24 hours of each other, it is possible for a patient to be transferred from one type of ICU to another and have the same ICUSTAY\_ID.

Care units are derived from the TRANSFERS table, and definition for the abbreviations can be found in the documentation for TRANSFERS.

FIRST\_WARDID, LAST\_WARDID

FIRST\_WARDID and LAST\_WARDID contain the first and last ICU unit in which the patient stayed. Note the grouping of physical locations in the hospital database is referred to as ward. Though in practice ICUs are not referred to as wards, the hospital database technically tracks ICUs as “wards with an ICU cost center”. As a result, each ICU is associated with a WARDID.

INTIME, OUTTIME

INTIME provides the date and time the patient was transferred into the ICU. OUTTIME provides the date and time the patient was transferred out of the ICU.

LOS

LOS is the length of stay for the patient for the given ICU stay, which may include one or more ICU units. The length of stay is measured in fractional days.

Care units include the following:

| **Care unit** | **Description** |
| --- | --- |
| CCU | Coronary care unit |
| CSRU | Cardiac surgery recovery unit |
| MICU | Medical intensive care unit |
| NICU | Neonatal intensive care unit |
| NWARD | Neonatal ward |
| SICU | Surgical intensive care unit |
| TSICU | Trauma/surgical intensive care unit |