<http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html>

## Data frame:support 1000 observations and 35 variables, maximum # NAs:634

The support dataset is a random sample of 1000 patients from Phases I & II of SUPPORT (Study to Understand Prognoses Preferences Outcomes and Risks of Treatment). This dataset is very good for learning how to fit highly nonlinear predictor effects, imputing missing data, and for modeling 4 types of response variables:

* Binary (hospital death)
* Ordinal (severe functional disability - see below)
* Continuous (total hospital costs or possibly study length of stay)
* Time until event (death) with waning effects of baseline physiologic variables over time. Patients are followed up to 5.56 years.

See the following reference for more information about the SUPPORT study (funded by the Robert Wood Johnson Foundation): Knaus WA, Harrell FE, Lynn J et al. (1995): The SUPPORT prognostic model: Objective estimates of survival for seriously ill hospitalized adults. Annals of Internal Medicine 122:191-203.

You may want to use the following normal values that have been found to be satisfactory in imputing missing baseline physiologic data:

| [**Baseline Variable**](http://biostat.mc.vanderbilt.edu/wiki/bin/view/Main/SupportDesc?sortcol=0;table=1;up=0#sorted_table) | [**Normal Fill-in Value**](http://biostat.mc.vanderbilt.edu/wiki/bin/view/Main/SupportDesc?sortcol=1;table=1;up=0#sorted_table) |
| --- | --- |
| Serum albumin | 3.5 |
| PaO2/FiO2 ratio (pafi) | 333.3 |
| Bilirubin | 1.01 |
| Creatinine | 1.01 |
| BUN | 6.51 |
| White blood count | 9 (thousands) |
| Urine output | 2502 |

The ordinal functional disability variable sfdm2 has the following levels (in order):

| [**Level**](http://biostat.mc.vanderbilt.edu/wiki/bin/view/Main/SupportDesc?sortcol=0;table=2;up=0#sorted_table) | [**Meaning**](http://biostat.mc.vanderbilt.edu/wiki/bin/view/Main/SupportDesc?sortcol=1;table=2;up=0#sorted_table) |
| --- | --- |
| 1 | Patient lived 2 months to be able to get 2 month interview, and from this interview there were no signs of moderate to severe functional disability |
| 2 | Patient was unable to do 4 or more activities of daily living at month 2 after study entry. If the patient was not interviewed but the patient's surrogate was, the cutoff for disability was ADL ³ 5 |
| 3 | Sickness Impact Profile total score at 2 months ³ 30 |
| 4 | Patient intubated or in coma at 2 months |
| 5 | Patient died before 2 months after study entry |

There are 159 patients surviving 2 months for whom there were no patient or surrogate interviews. These patients have missing sfdm2.

## 

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | Name | Labels | Levels | Storage | NAs | | age | Age |  | double | 0 | | death | Death at any time up to NDI date:31DEC94 |  | double | 0 | | sex |  | [2](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "sex) | integer | 0 | | hospdead | Death in Hospital |  | double | 0 | | slos | Days from Study Entry to Discharge |  | double | 0 | | d.time | Days of Follow-Up |  | double | 0 | | dzgroup |  | [8](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "dzgroup) | integer | 0 | | dzclass |  | [4](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "dzclass) | integer | 0 | | num.co | number of comorbidities |  | double | 0 | | edu | Years of Education |  | double | 202 | | income |  | [4](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "income) | integer | 349 | | scoma | SUPPORT Coma Score based on Glasgow D3 |  | double | 0 | | charges | Hospital Charges |  | double | 25 | | totcst | Total RCC cost |  | double | 105 | | totmcst | Total micro-cost |  | double | 372 | | avtisst | Average TISS, Days 3-25 |  | double | 6 | | race |  | [5](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "race) | integer | 5 | | meanbp | Mean Arterial Blood Pressure Day 3 |  | double | 0 | | wblc | White Blood Cell Count Day 3 |  | double | 24 | | hrt | Heart Rate Day 3 |  | double | 0 | | resp | Respiration Rate Day 3 |  | double | 0 | | temp | Temperature (celcius) Day 3 |  | double | 0 | | pafi | PaO2/(.01\*FiO2) Day 3 |  | double | 253 | | alb | Serum Albumin Day 3 |  | double | 378 | | bili | Bilirubin Day 3 |  | double | 297 | | crea | Serum creatinine Day 3 |  | double | 3 | | sod | Serum sodium Day 3 |  | double | 0 | | ph | Serum pH (arterial) Day 3 |  | double | 250 | | glucose | Glucose Day 3 |  | double | 470 | | bun | BUN Day 3 |  | double | 455 | | urine | Urine Output Day 3 |  | double | 517 | | adlp | ADL Patient Day 3 |  | double | 634 | | adls | ADL Surrogate Day 3 |  | double | 310 | | sfdm2 |  | [5](http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/Csupport.html" \l "sfdm2) | integer | 159 | | adlsc | Imputed ADL Calibrated to Surrogate |  | double | 0 | | |  |  | | --- | --- | | Variable | Levels | | sex | female | |  | male | | dzgroup | ARF/MOSF w/Sepsis | |  | COPD | |  | CHF | |  | Cirrhosis | |  | Coma | |  | Colon Cancer | |  | Lung Cancer | |  | MOSF w/Malig | | dzclass | ARF/MOSF | |  | COPD/CHF/Cirrhosis | |  | Coma | |  | Cancer | | income | under $11k | |  | $11-$25k | |  | $25-$50k | |  | >$50k | | race | white | |  | black | |  | asian | |  | other | |  | hispanic | | sfdm2 | no(M2 and SIP pres) | |  | adl>=4 (>=5 if sur) | |  | SIP>=30 | |  | Coma or Intub | |  | <2 mo. follow-up | |