

ONLINE DATA SUPPLEMENT; Late Mortality after Sepsis; a propensity-matched cohort study

Appendix 2: Process for matching sepsis to adults not currently hospitalized

Steps 1-2: Generate Propensity Score.
Identify Sepsis Hospitalizations.

Step 3: Remove Duplicate Sepsis Hospitalizations.

So that no patient is included in the analysis more than once, exclude (at random) duplicate sepsis hospitalizations.

Sepsis Hospitalizations

| Patient | HRS Survey Year | HRS Survey Date | Admission Date | Weeks from HRS Survey | Sepsis Propensity |
|--------------|-----------------|----------------------|---------------------|-----------------------|-------------------|
| A | 2002 | 3-Mar-02 | 21-Apr-02 | 7 | 2.5% |
| C | 2004 | 9-Jun-04 | 1-Sep-04 | 12 | 17.8% |
| C | 2006 | 10-May-06 | 8-Nov-06 | 26 | 18.8% |
| D | 2002 | 28-Apr-02 | 13-Apr-03 | 50 | 5.6% |
| E | 2008 | 15-May-08 | 16-Apr-09 | 48 | 11.2% |
| F | 2004 | 3-Jun-04 | 10-Mar-05 | 40 | 14.2% |
| G | 2008 | 28-Mar-08 | 11-Dec-09 | 89 | 16.5% |
| H | 2002 | 22-Apr-02 | 4-Nov-02 | 28 | 12.1% |
| I | 2005 | 17-Mar-05 | 29-Sept-05 | 25 | 14.9% |
| O | 2007 | 19-Apr-07 | 1-Nov-07 | 77 | 9.6% |
| Q | 1998 | 14-June-98 | 27-Dec-98 | 31 | 13.4% |

This hospitalization is excluded at random because patient C has two sepsis hospitalizations

Step 4: Prepare dataset of Health and Retirement Study participants that are not currently hospitalized.

Each patient is considered to be not currently hospitalized for each consecutive week that they are alive and not hospitalized following HRS survey. To allow the "index time" for non-hospitalized adults to occur at random anytime during the period that he or she is alive.

Not Currently Hospitalized

| Patient | HRS Survey Year | Sepsis Propensity | Weeks from HRS Survey |
|---------|-----------------|-------------------|-----------------------|
| A | 2002 | 2.5% | 1 |
| A | 2002 | 2.5% | 2 |
| A | 2002 | 2.5% | 3 |
| A | 2002 | 2.5% | 4 |
| A | 2002 | 2.5% | 5 |
| A | 2002 | 2.5% | 6 |
| C | 2004 | 17.8% | 1 |
| C | 2004 | 17.8% | 2 |
| C | 2004 | 17.8% | 3 |
| C | 2004 | 17.8% | 4 |
| C | 2004 | 17.8% | 5 |
| C | 2004 | 17.8% | 6 |
| C | 2004 | 17.8% | 7 |
| C | 2004 | 17.8% | 8 |
| C | 2004 | 17.8% | 9 |
| C | 2004 | 17.8% | 10 |
| C | 2004 | 17.8% | 11 |
| C | 2004 | 17.8% | 12 |

Process for matching sepsis to adults not currently hospitalized, continued

Step 5: Match Sepsis Hospitalizations to Not Currently Hospitalized Adults.

Sort hospitalizations by sepsis propensity and weeks from HRS survey, then match sepsis hospitalizations by age, gender, and time from HRS survey and propensity for developing sepsis. Continue matching until no more hospitalizations can be matched to each other. For the few instances where a patient is matched more than once, remove his or her duplicate observation (and the matched hospitalization / time of non-hospitalization).

