

| <b>Table 1S. Physician and patient's baseline characteristics</b> |               |
|---|---------------|
| <b>Physician variables N=47</b>                                   |               |
| Age, median (IQR)   | 41 (38-51)    |
| Male, N (%) N=46  | 36 (80)       |
| Year since graduation, median (IQR)                               | 14 (11-24)    |
| <b>Patient variables N=300</b>                                    |               |
| Age, median (IQR)   | 62 (53-71)    |
| Male, N (%)   | 172 (57.33)   |
| Race  |               |
| White   | 188 (62.67)   |
| African American  | 98 (32.67)    |
| Other   | 14 (4.67)     |
| Level of Education  |               |
| College or more   | 146 (50)      |
| Patient's previous residence                                      |               |
| Home (house or apartment)   | 283 (93.71)   |
| Chronic Care facility <sup>1</sup>                                | 19 (6.29)     |
| Employed  | 85 (28.72)    |
| Married or living with partner                                    | 150 (50)      |
| Patient's Insurance   |               |
| Private   | 104 (34.67)   |
| Medicare  | 160 (53.33)   |
| Other   | 36 (12)       |
| Hospitalized in previous year                                     | 212 (73.20)   |
| Able to walk up 10 consecutive stairs in the month before         | 241 (80.60)   |
| Toileting independently before hospitalization                    | 264 (88.29)   |
| Cognitive abnormal  | 51 (17.17)    |
| <b>Previous morbidity</b>   |               |
| Functional Comorbidity Index, median (IQR)                        | 3 (2-5)       |
| Neurological condition  | 58 (19.33)    |
| Congestive heart failure  | 112 (37.33)   |
| Coronary artery disease   | 102 (34.00)   |
| Chronic obstructive pulmonary disease                             | 66 (22.00)    |
| Renal failure requiring dialysis                                  | 30 (10)       |
| Malignancy (treated for cure or metastatic)                       | 94 (31.33)    |
| Malignancy (treated for cure)                                     | 64 (21.33)    |
| Malignancy (known metastatic or palliative approach)              | 39 (13.00)    |
| Liver disease   | 35 (11.67)    |
| Cognitive impairment  | 17 (5.67)     |
| Psychiatric comorbidity   | 103 (34.33)   |
| <b>Variables related to ICU admission</b>                         |               |
| Primary ICU Diagnosis   |               |
| Medical   | 214 (71.33)   |
| Surgical  | 86 (28.67)    |
| APACHE 3 score, mean (SD)   | 98.24 (32.06) |

1. Long-term acute care hospital, nursing home or retirement home

**Figure 1S.** Linear association between physicians' and patients' variables and confidence of predictions

