

SUPPLEMENTAL MATERIAL

Data S1.

Supplemental Results

Additional independent predictors of in-hospital outcomes

Variables independently associated with an increased probability of in-hospital mortality were male sex, lower income, insulin-use, premorbid cancer, heart failure, preadmission independence, and CNS score. Variables independently associated with direct discharge to LTC were male sex, rural setting, hypertension, premorbid renal impairment and preadmission dependence, CNS score, and previous stroke (See Table S1 for corresponding aOR).

Additional independent predictors of and long-term outcomes

Variables associated with long-term all-cause mortality post-discharge were male sex, widowed marital status, rural setting, premorbid atrial fibrillation, cancer, premorbid coronary disease, stroke, heart failure, and renal impairment, hypertension, current smoking, anti-platelets, anti-coagulants, and lipid medications, and modified Rankin Score; meanwhile, highest income was inversely associated. Variables associated with readmission for stroke after discharge were South Asian ethnicity, premorbid coronary disease and stroke. Variables adversely associated with admission to LTC after discharge were divorced, hyperglycemia at admission, preadmission independence and premorbid stroke, anti-hypertensive medication, CNS group, modified Rankin score, and length of in-hospital stay; meanwhile, the three higher income tertiles were inversely associated with LTC. In addition, prior record of depression was associated with a 25% increased risk of admission to LTC (aHR=1.25 [1.034, 1.512], p=0.0213). Variables associated with incident dementia were premorbid

atrial fibrillation and preadmission independence; CNS group, modified Rankin score, and length of in-hospital stay (See Table S1 for corresponding aHR).

Table S1. Whole cohort associations between covariates and outcome measures.

Variable	In-hospital mortality Adj. Odds Ratios [95% CI]	In-hospital to LTC Adj. Odds Ratios [95% CI]	Mortality from discharge Adj. Hazard Ratios [95% CI]	LTC/CCC from discharge Adj. Hazard Ratios [95% CI]	Recurrent stroke/TIA from discharge Adj. Hazard Ratios [95% CI]	Dementia from discharge Adj. Hazard Ratios [95% CI]
Male sex	1.26 [1.01, 1.58]	1.61 [1.05, 2.48]	1.24 [1.11, 1.38]	0.88 [0.77, 1.01]	0.97 [0.87, 1.08]	0.99 [0.82, 1.20]
Income Quintile 2 vs 1	1.20 [0.89, 1.63]	1.29 [0.78, 2.13]	0.93 [0.81, 1.07]	0.88 [0.74, 1.05]	1.02 [0.89, 1.18]	0.91 [0.71, 1.16]
Income Quintile 3 vs 1	1.39 [1.03, 1.89]	0.78 [0.42, 1.43]	0.91 [0.79, 1.06]	0.73 [0.60, 0.89]	0.99 [0.86, 1.16]	0.71 [0.54, 0.95]
Income Quintile 4 vs 1	1.15 [0.83, 1.60]	1.31 [0.75, 2.28]	0.91 [0.78, 1.06]	0.80 [0.65, 0.97]	0.88 [0.75, 1.04]	1.03 [0.79, 1.35]
Income Quintile 5 vs 1	1.04 [0.73, 1.47]	0.46 [0.20, 1.05]	0.81 [0.68, 0.95]	0.69 [0.56, 0.84]	0.88 [0.75, 1.04]	0.77 [0.56, 1.04]
Rural setting	1.09 [0.81, 1.45]	0.29 [0.12, 0.72]	1.20 [1.05, 1.38]	0.87 [0.71, 1.06]	0.94 [0.81, 1.09]	0.75 [0.56, 1.01]
Blood glucose at admission	1.91 [1.12, 3.25]	2.11 [0.81, 5.52]	1.05 [0.82, 1.36]	1.53 [1.10, 2.13]	0.83 [0.60, 1.15]	1.07 [0.67, 1.71]
Hypertension	0.93 [0.72, 1.19]	1.64 [1.03, 2.61]	1.18 [1.04, 1.34]	1.14 [0.96, 1.34]	1.12 [0.98, 1.27]	1.37 [1.08, 1.74]
Dyslipidemia	0.80 [0.61, 1.04]	0.93 [0.72, 1.19]	0.96 [0.86, 1.08]	0.90 [0.77, 1.05]	1.10 [0.98, 1.24]	0.92 [0.75, 1.13]
Atrial fibrillation	1.08 [0.75, 1.56]	1.77 [0.93, 3.36]	1.40 [1.16, 1.70]	1.23 [0.94, 1.60]	1.18 [0.95, 1.47]	1.59 [1.14, 2.21]
Heart failure	1.98 [1.44, 2.72]	0.80 [0.42, 1.56]	1.70 [1.47, 1.97]	1.10 [0.88, 1.38]	1.09 [0.91, 1.30]	1.01 [0.74, 1.37]
Coronary artery disease	0.84 [0.62, 1.14]	0.84 [0.48, 1.46]	1.42 [1.25, 1.61]	0.95 [0.79, 1.14]	1.16 [1.01, 1.33]	1.12 [0.88, 1.43]
Cancer	3.64 [2.65, 5.01]	1.17 [0.52, 2.62]	4.20 [3.60, 4.88]	1.03 [0.77, 1.37]	0.97 [0.75, 1.25]	0.67 [0.41, 1.09]
Renal dialysis	1.54 [0.91, 2.61]	2.40 [1.11, 5.18]	2.16 [1.74, 2.67]	1.26 [0.91, 1.74]	0.86 [0.63, 1.18]	0.91 [0.54, 1.54]
Depression	0.86 [0.61, 1.22]	1.01 [0.57, 1.81]	1.15 [0.99, 1.34]	1.25 [1.03, 1.51]	1.12 [0.95, 1.33]	1.21 [0.92, 1.59]
Smoking	0.99 [0.80, 1.24]	1.04 [0.70, 1.56]	1.39 [1.25, 1.54]	1.14 [0.99, 1.31]	0.95 [0.86, 1.06]	0.93 [0.76, 1.13]
Premorbid dependency	0.68 [0.51, 0.91]	1.13 [0.78, 1.65]	0.53 [0.46, 0.61]	0.81 [0.67, 0.99]	1.02 [0.86, 1.22]	0.69 [0.53, 0.90]
Anti-hypertensive medication	1.13 [0.78, 1.65]	1.10 [0.53, 2.28]	1.08 [0.94, 1.23]	1.30 [1.09, 1.56]	0.95 [0.83, 1.08]	0.99 [0.78, 1.27]
Anti-thrombotic medications	0.96 [0.71, 1.30]	0.64 [0.35, 1.17]	0.83 [0.72, 0.95]	1.10 [0.91, 1.33]	1.04 [0.89, 1.26]	1.23 [0.93, 1.63]

Lipid lowering medications	1.11 [0.73, 1.68]	0.92 [0.40, 2.15]	0.78 [0.69, 0.88]	0.86 [0.72, 1.02]	0.98 [0.85, 1.13]	1.17 [0.91, 1.50]
Premorbid stroke	1.15 [0.85, 1.57]	1.67 [1.02, 2.74]	1.25 [1.10, 1.43]	1.78 [1.50, 2.10]	1.67 [1.46, 1.91]	1.93 [1.56, 2.39]
CNS moderate vs severe	0.23 [0.18, 0.30]	0.49 [0.31, 0.78]	0.98 [0.81, 1.19]	0.68 [0.56, 0.84]	1.14 [0.90, 1.44]	0.81 [0.59, 1.11]
CNS mild vs severe	0.05 [0.04, 0.07]	0.09 [0.05, 0.15]	0.89 [0.75, 1.06]	0.50 [0.41, 0.60]	1.23 [0.99, 1.53]	0.67 [0.50, 0.90]
mRS group	na	na	1.39 [1.24, 1.56]	2.29 [1.94, 2.69]	0.97 [0.86, 1.10]	1.56 [1.26, 1.93]
Length-of-stay 3-7 days	na	na	0.85 [0.71, 1.02]	1.16 [0.87, 1.56]	1.05 [0.88, 1.24]	1.15 [0.79, 1.67]
Length-of-stay 8-14 days	na	na	0.95 [0.79, 1.15]	1.22 [0.90, 1.64]	1.08 [0.90, 1.31]	1.41 [0.96, 2.07]
Length-of-stay >=15 days	na	na	1.17 [0.96, 1.42]	2.24 [1.66, 3.02]	1.03 [0.84, 1.27]	1.76 [1.19, 2.62]