eTable 1. Comparison of primary models and sensitivity analyses of the difference in follow-up cognitive scores, by hospitalization status[*]

	Visit Status		
	Not following hospitalization	Following non-critical illness hospitalization	Following critical illness hospitalization
PRIMARY MODEL: Adjusted[τ] difference in follow-up CASI (95% CI, p-value)	Referent	-0.85 (-1.13 to -0.56, p<0.001)	--1.39 (-2.72 to -0.07, p=0.04)
SENSITIVITY ANALYSIS[#]: Adjusted difference in follow-up CASI	Referent	-0.86 (-1.13 to -0.57, p<0.001)	-1.37 (-2.68 to -0.06, p=0.040)
PRIMARY MODEL: Adjusted[τ] difference in follow-up CASI IRT (95% CI, p-value	Referent	-0.11 (-0.15 to -0.08, p<0.001)	-0.15 (-0.32 to 0.009, p=0.63)
SENSITIVITY ANALYSIS[#]: Adjusted difference in follow-up CASI (95% CI, p-value)		-0.11 (-0.15 to -0.08, p<0.001)	-0.16 (-0.32 to 0.006, p=0.61)

* Linear regression with GEE to account for repeated observations, specifying an exchangeable correlation matrix and robust variance estimates; note that these analyses include 49 fewer individuals and 212 fewer observations than analyses in Table 3, because of missing data
[τ] Adjusted for age at study visit, sex, baseline cognitive score, years of education, time since baseline visit, and the baseline comorbidities CHD and CVD.
adjusted for the above covariates plus race/ethnicity, smoking status, and additional baseline comorbidities

eTable2. Comparison of primary models and sensitivity analysis of the risk of incident dementia by hospitalization status[*]

	Hospitalization Status		
	No hospitalizations during study (n=1601)	One or more non-critical hospitalizations (n=1287)	One or more critical illness hospitalizations (n=41)
PRIMARY MODEL: Adjusted risk of incident dementia, hazard ratio (95% CI, p-value)	Referent	1.4 (1.1 to 1.8, P=0.002)	2.0 (0.7 to 6.0, p=0.204)
SENSITIVITY MODEL: Adjusted risk of incident dementia, hazard ratio (95% CI, p-value)	Referent	1.3 (1.1 to 1.7, p=0.005)	1.9 (0.7 to 5.7, p=0.234)

*Cox proportional hazards regression, with age as the time axis, left-truncated at age at study entry; note that these analyses include 49 fewer individuals and 212 fewer observations than analyses in Table 5, because of missing data
[τ] Hazard ratios after adjusting for age at study entry, sex, baseline CASI IRT score, years of education, and baseline comorbidities of CHD and CVD, with the latter included as a time varying covariate.
adjusted for the above covariates plus race/ethnicity, smoking status, and additional baseline comorbidities