

Supplementary Tables

Table S1. Results Results from survival analysis models for self-reported (SR) and hospital admission (HA) cohorts

	SR falls HR [95% CI]			HA falls (CSH) HR [95% CI]		
	Model II-i	Model II-ii	Model II	Model II-i	Model II-ii	Model II
Loneliness	1.04* [1.00—1.08]	1.05** [1.01—1.08]	1.03 [1.00—1.07]	1.03 [0.99-1.09]	1.05 [1.00-1.10]	1.03 [0.98—1.08]
Living alone	1.17** [1.05—1.31]	--	1.18** [1.07—1.32]	1.27** [1.09-1.49]	--	1.29*** [1.10—1.51]
Low social contact	--	1.04** [1.01-1.07]	1.04** [1.01—1.07]	--	1.06** [1.02-1.11]	1.07** [1.02—1.11]
Observations (N)	4013	4013	4013	9285	9285	9285

Notes: All models controlled for socio-demographic, health and life-style covariates; * p<0.05, ** p<0.01, ***p<0.001; HR-hazard ratio, CI-confidence interval, CSH-cause-specific hazards, SH-subdistribution hazards

Table S2. Results from multiple imputation analyses for SR and HA falls

	SR falls	HA falls	
	Model II	Model II-CSH	Model II-SH
Loneliness	1.03 [0.99—1.06]	1.02 [0.98—1.06]	1.01 [0.96—1.05]
Living alone	1.18** [1.07—1.30]	1.30*** [1.13—1.50]	1.24** [1.07—1.43]
Low social contact	1.04** [1.01—1.07]	1.06** [1.01-1.10]	1.05** [1.01—1.10]
Observations (N)	4,692	11,160	11,160

Table S3. Results from models interacting loneliness and isolation with gender for SR (N=4,068) and HA falls (N=9,407)

	SR falls			HA falls (CSH)		
	Loneliness	Domestic isolation	Social isolation	Loneliness	Domestic isolation	Social isolation
Loneliness	1.04 [0.99—1.10]	1.03 [0.99—1.06]	1.03 [1.00—1.07]	1.00 [0.92—1.08]	1.02 [0.98—1.08]	1.03 [0.98—1.08]
Living alone	1.19** [1.06—1.32]	1.33** [1.13—1.58]	1.18** [1.06—1.32]	1.29** [1.10—1.51]	1.73*** [1.35—2.19]	1.29*** [1.10—1.51]
Low social contact	1.04** [1.01—1.07]	1.04** [1.01—1.07]	1.06** [1.02—1.10]	1.07** [1.02—1.11]	1.06** [1.02—1.11]	1.06 [0.99—1.13]
Woman	1.34* [1.03—1.76]	1.30*** [1.17—1.45]	1.37** [1.14—1.65]	0.96 [0.64—1.45]	1.35** [1.13—1.61]	1.11 [0.82—1.51]
Interaction term with woman	0.98 [0.92—1.04]	0.84 [0.68—1.03]	0.97 [0.92—1.02]	1.05 [0.96—1.14]	0.64** [0.48—0.87]	1.02 [0.93—1.11]

Notes: Fully adjusted model (Model II) with additional interaction terms; † p<0.1 * p<0.05, ** p<0.01, ***p<0.001

Table S4. Results from models interacting loneliness and isolation with age groups for SR (N=4,068) and HA falls (N=9,407)

	SR falls			HA falls (CSH)		
	Loneliness	Domestic isolation	Social isolation	Loneliness	Domestic isolation	Social isolation
Loneliness	1.04 [1.00—1.09]	1.03 [1.00—1.07]	1.03 [1.00—1.07]	1.02 [0.92—1.12]	1.03 [0.98—1.08]	1.03 [0.98—1.08]
Living alone	1.25*** [1.12—1.39]	1.27** [1.11—1.48]	1.24*** [1.11—1.38]	1.33*** [1.14—1.55]	1.51* [1.03—2.20]	1.33*** [1.14—1.55]
Low social contact	1.03* [1.01—1.06]	1.03* [1.01—1.06]	1.03 [1.00—1.07]	1.06* [1.02—1.11]	1.06** [1.02—1.11]	1.07 [0.97—1.17]
Age 60-69	-- --	-- --	-- --	0.90 [0.51—1.61]	1.57*** [1.24—1.98]	1.45 [0.94—2.24]
Age 70-79	1.55** [1.17—2.05]	1.26*** [1.13—1.41]	1.25* [1.03—1.51]	4.58*** [2.64—7.85]	4.03*** [3.20—5.07]	4.39*** [2.93—6.59]
Age 80+	1.23 [0.77—1.96]	1.61*** [1.25—2.08]	1.53* [1.09—2.16]	8.56*** [4.55—16.09]	7.35*** [5.33—10.12]	6.62*** [4.06—10.77]
Interaction with age 60-69	-- --	-- --	-- --	1.13 [1.00—1.28]	0.90 [0.55—1.46]	1.02 [0.90—1.15]
Interaction with age 70-79	0.95 [0.89—1.01]	0.93 [0.75—1.15]	1.00 [0.94—1.06]	0.95 [0.85—1.08]	0.79 [0.51—1.21]	0.95 [0.84—1.07]
Interaction with age 80+	1.07 [0.96—1.18]	1.00 [0.72—1.40]	1.02 [0.93—1.13]	0.98 [0.86—1.11]	0.97 [0.59—1.58]	1.05 [0.91—1.20]

Notes: Fully adjusted model (Model II) with additional interaction terms; † p<0.1 * p<0.05, ** p<0.01, ***p<0.001