

Changes in frailty status	Deaths (%)	Adjusted HR (95% CI)		Deaths (%)	Adjusted HR (95% CI)		p for interaction
Sex: male				Sex: female			
Sustained pre/Frailty	191 (62.42%)	1.00 (ref)		282 (53.61%)	1.00 (ref)		
Robustness to pre/Frailty	94 (39.17%)	0.57 (0.44-0.74)	■	75 (29.07%)	0.65 (0.50-0.84)	■	0.753
pre/Frailty to robustness	64 (31.37%)	0.47 (0.35-0.63)	■	59 (25.88%)	0.54 (0.41-0.73)	■	
Sustained robustness	124 (20.00%)	0.36 (0.28-0.47)	■	63 (14.89%)	0.47 (0.35-0.63)	■	
Age: <80 years				Age: ≥80 years			
Sustained pre/Frailty	70 (29.05%)	1.00 (ref)		403 (68.19%)	1.00 (ref)		
Robustness to pre/Frailty	38 (17.35%)	0.59 (0.39-0.89)	■	131 (46.95%)	0.58 (0.48-0.71)	■	0.822
pre/Frailty to robustness	26 (12.32%)	0.37 (0.24-0.59)	■	97 (43.89%)	0.49 (0.39-0.61)	■	
Sustained robustness	80 (11.28%)	0.37 (0.26-0.53)	■	107 (32.04%)	0.38 (0.30-0.47)	■	
Education: no school				Education: 1 year or more			
Sustained pre/Frailty	310 (58.49%)	1.00 (ref)		163 (53.97%)	1.00 (ref)		
Robustness to pre/Frailty	99 (35.61%)	0.65 (0.51-0.82)	■	70 (31.82%)	0.54 (0.41-0.73)	■	0.117
pre/Frailty to robustness	73 (33.03%)	0.59 (0.45-0.77)	■	50 (23.70%)	0.41 (0.29-0.57)	■	
Sustained robustness	86 (21.23%)	0.50 (0.38-0.65)	■	101 (15.83%)	0.33 (0.25-0.43)	■	
Marital status: not in marriage				Marital status: in marriage			
Sustained pre/Frailty	328 (62.12%)	1.00 (ref)		145 (47.70%)	1.00 (ref)		
Robustness to pre/Frailty	106 (39.55%)	0.66 (0.53-0.83)	■	63 (27.39%)	0.49 (0.36-0.66)	■	0.001
pre/Frailty to robustness	84 (37.67%)	0.62 (0.49-0.80)	■	39 (18.66%)	0.32 (0.22-0.45)	■	
Sustained robustness	99 (25.52%)	0.51 (0.40-0.65)	■	88 (13.44%)	0.29 (0.22-0.39)	■	
Income: fair/poor				Income: rich			
Sustained pre/Frailty	388 (55.75%)	1.00 (ref)		85 (62.50%)	1.00 (ref)		
Robustness to pre/Frailty	130 (32.42%)	0.60 (0.49-0.73)	■	39 (40.21%)	0.62 (0.40-0.94)	■	0.951
pre/Frailty to robustness	97 (27.17%)	0.50 (0.40-0.63)	■	26 (34.67%)	0.53 (0.33-0.85)	■	
Sustained robustness	144 (17.93%)	0.41 (0.33-0.51)	■	43 (17.92%)	0.36 (0.24-0.55)	■	
Residence: rural				Residence: urban			
Sustained pre/Frailty	278 (55.05%)	1.00 (ref)		195 (59.63%)	1.00 (ref)		
Robustness to pre/Frailty	91 (35.41%)	0.71 (0.55-0.91)	■	78 (32.37%)	0.50 (0.38-0.65)	■	0.172
pre/Frailty to robustness	62 (25.83%)	0.50 (0.37-0.66)	■	61 (31.77%)	0.51 (0.38-0.68)	■	
Sustained robustness	91 (16.88%)	0.44 (0.34-0.57)	■	96 (19.05%)	0.36 (0.27-0.47)	■	
Living with family: no				Living with family: yes			
Sustained pre/Frailty	80 (49.69%)	1.00 (ref)		393 (58.57%)	1.00 (ref)		
Robustness to pre/Frailty	27 (25.23%)	0.65 (0.41-1.04)	■	142 (36.32%)	0.60 (0.49-0.73)	■	0.881
pre/Frailty to robustness	19 (25.68%)	0.54 (0.33-0.91)	■	104 (29.05%)	0.50 (0.40-0.63)	■	
Sustained robustness	35 (18.42%)	0.52 (0.33-0.80)	■	152 (17.82%)	0.39 (0.32-0.48)	■	
Lifestyle: unhealthy				Lifestyle: healthy			
Sustained pre/Frailty	446 (56.74%)	1.00 (ref)		27 (58.70%)	1.00 (ref)		
Robustness to pre/Frailty	152 (33.19%)	0.60 (0.50-0.73)	■	17 (42.50%)	0.59 (0.29-1.19)	■	0.416
pre/Frailty to robustness	116 (29.00%)	0.52 (0.42-0.64)	■	7 (21.88%)	0.39 (0.15-1.03)	■	
Sustained robustness	171 (18.47%)	0.42 (0.34-0.51)	■	16 (13.68%)	0.21 (0.10-0.47)	■	
ADL disability: no				ADL disability: yes			
Sustained pre/Frailty	328 (50.62%)	1.00 (ref)		145 (78.80%)	1.00 (ref)		
Robustness to pre/Frailty	154 (33.26%)	0.66 (0.54-0.80)	■	15 (42.86%)	0.41 (0.23-0.74)	■	0.421
pre/Frailty to robustness	102 (26.70%)	0.55 (0.44-0.69)	■	21 (42.00%)	0.34 (0.21-0.56)	■	
Sustained robustness	177 (17.40%)	0.44 (0.36-0.54)	■	10 (38.46%)	0.30 (0.15-0.59)	■	
			0.1 0.6 1				0.1 0.6 1
			Adjusted HR (95% CI)				Adjusted HR (95% CI)