

Supplementary Table 1S Anatomic Therapeutical Chemical (ATC) and International Classification of Disease version 10 (ICD-10) codes used to identify comorbidity in the time period 1995-1998

	ATC codes	ICD10 codes
Acute myocardial infarction		I21-I22; I23-I24
Cancer		C00-C14; C30-C33; C37-C42; C45-C49; C69; C73-74; C754-C759; C15-C17; C22-C26; C18; C19-C21; C34; C43; C44; C50; C51-C52; C56-C58; C53; C55; C60; C62-C63; C61; C64-C68; C76-C80; C97; C81-C96
Cerebrovascular diseases		I62; I65-I68
Chronic ischemic heart disease		I25
Chronic obstructive pulmonary disorder	R03AC18; R03AC19; R03AL02; R03AL03; R03AL04; R03BB04; R03BB05; R03BB06; R03DX07	J44 ² ; J96 ² combined with J44 ³ ; J13-J18 ² combined with J44 ³ or J96 ³ .
Dementia	N06D	F00; G30; F01; F02.0; F03.9; G31.8B; G31.8E; G31.9; G31.0B
Depression	N06A	F32, F33, F34.1, F06.32
Diabetes mellitus	A10A ¹ , A10B ¹	E10; E11 ¹ ; E12-14
Heart failure		I11.0 ² ; I13.0 ² ; I13.2 ² ; I42.0 ² ; I42.6 ² ; I42.7 ² ; I42.9 ² ; I50.0 ² ; I50.1 ² ; I50.9 ²
Osteoporosis	M05BA01; M05BA04; M05BA06; M05BA07; M05BB01; M05BB03; G03XC01; H05AA02; H05AA03	M80-M81
Parkinson	N04	G20, G21, G22, F02.3
Pulmonary heart disease and diseases of pulmonary circulation		I26-I28
Rheumatoid arthritis	M01C; L04AA13; A07EC01; P01BA01; P01BA02	M05; M06; M07.1; M07.2; M07.3; M08; M09
Stroke	C05A	I60 ² ; I61 ² ; I63-I64 ²

1. Minimum of two contacts/purchases; 2. A-diagnosis; 3. B-diagnosis

Supplementary Table S2 Overview of variables obtained from national registers

Information	Register	Variable	Reference
Personal identification number	All registers	PNR	See below
Death	Danish Civil Registration System	DODDATO	Pedersen, C. B. (2011). The Danish Civil Registration System. <i>Scand J Public Health.</i> , 39(7 Suppl), 22-25. doi: 10.1177/1403494810387965.
Migration	Danish Civil Registration System	HAEND_DATO	Pedersen, C. B. (2011). The Danish Civil Registration System. <i>Scand J Public Health.</i> , 39(7 Suppl), 22-25. doi: 10.1177/1403494810387965.
		INDUD_KODE	
Income	Income Statistics Register	DISPON_NY	Baadsgaard, M., & Quitzau, J. (2011). Danish registers on personal income and transfer payments. <i>Scand J Public Health.</i> , 39(7 Suppl), 103-105. doi: 10.1177/1403494811405098.
Financial assets		FORMREST_NY05	
Household ownership		KOEJD	
Morbidity	The Danish National Prescription Registry	ATC	Kildemoes, H. W., Sorensen, H. T., & Hallas, J. (2011). The Danish National Prescription Registry. <i>Scand J Public Health.</i> , 39(7 Suppl), 38-41. doi: 10.1177/1403494810394717.
	National Patient Registry	RECNUM	Lynge, E., Sandegaard, J. L., & Rebolj, M. (2011). The Danish National Patient Register. <i>Scand J Public Health.</i> , 39(7 Suppl), 30-33. doi: 10.1177/1403494811401482.
		C_DIAG	
		C_DIAGTYPE	

Supplementary Table S3 Description of selection of number of trajectory classes for mobility limitations

BIC based on number of individuals				
Number of groups	BIC	Nul model	2*ΔBIC	Form
2	-9260.38	1		02
3	-9014.41	2	491.94	022
4	-8980.78	3	67.26	0222
5	-8971.61	4	18.34	02222
BIC based on number of observations				
Number of groups	BIC	Nul model	2*ΔBIC	Form
2	-9265.90			02
3	-9021.98	2	487.84	022
4	-8991.10	3	61.76	0222
5	-8982.67	4	16.86	02222

**We chose the model with four groups instead of five groups even though the BIC values indicate a slightly better model fit for the latter. This decision was based on observation that the “extra” trajectory in the five group model did not differ sufficiently from the first trajectory in the model; stay high with 0 limitations on the Mob-H scale. The extra trajectory was characterized by a stable mobility limitations of 0.5 limitations on the Mob-H scale.

Supplementary Table S4 Deaths related to socio-demographic factors and social relations.

	5-year mortality cases (%)	
Gender and mobility limitations trajectory		
	Men	Women
No mobility limitations	327 (33.3)	243 (21.7)
No mobility limitations followed by increase in limitations	35 (70.0)	32 (45.1)
Medium mobility limitation level followed by stable increase in limitations	114 (68.7)	194 (40.6)
High mobility limitation level followed by increase in limitations	34 (68.0)	88 (62.4)
Age and mobility limitations trajectory		
	75 years	80 years
No mobility limitations	401 (24.3)	169 (37.8)
No mobility limitations followed by increase in limitations	37 (48.7)	30 (66.7)
Medium mobility limitation level followed by stable increase in limitations	168 (41.5)	140 (58.6)
High mobility limitation level followed by increase in limitations	64 (56.1)	58 (75.3)
	High	Low
Financial asset and mobility limitations trajectory		
No mobility limitations	472 (26.6)	98 (30.2)
No mobility limitations followed by increase in limitations	59 (57.3)	8 (44.4)
Medium mobility limitation level followed by stable increase in limitations	240 (48.2)	68 (46.6)
High mobility limitation level followed by increase in limitations	88 (65.7)	34 (59.7)
Cohabitation status and mobility limitations trajectory		
No mobility limitations	342 (27.6)	228 (26.6)
No mobility limitations followed by increase in limitations	30 (55.6)	37 (55.2)
Medium mobility limitation level followed by stable increase in limitations	143 (46.9)	165 (48.7)
High mobility limitation level followed by increase in limitations	53 (62.4)	69 (65.1)
Visits and mobility limitations trajectory		
No mobility limitations	497 (26.6)	73 (31.9)
No mobility limitations followed by increase in limitations	55 (54.5)	12 (60.0)
Medium mobility limitation level followed by stable increase in limitations	241 (46.6)	67 (52.8)
High mobility limitation level followed by increase in limitations	80 (65.6)	42 (60.9)
Social activity and mobility limitations trajectory		
No mobility limitations	322 (25.3)	248 (30.1)
No mobility limitations followed by increase in limitations	37 (57.8)	30 (52.6)
Medium mobility limitation level followed by stable increase in limitations	145 (44.2)	163 (51.6)
High mobility limitation level followed by increase in limitations	40 (63.5)	82 (64.1)

Table S5 Hazard ratios (HR) and 95% confidence intervals associated with trajectories of mobility limitations stratified in 3055 older adults.

Mobility limitations trajectory	HR (CI95%)
No mobility limitations	1.00
No mobility limitations followed by increase in limitations	2.32 (1.85;2.92)
Medium mobility limitation level followed by stable increase in limitations	2.06 (1.82;2.34)
High mobility limitation level followed by increase in limitations	3.06 (2.59;3.62)
Adjusted for age, gender, comorbidities, the measures of social relations and SEP.	

Supplementary Table S6 Hazard ratios (HR) and 95% confidence intervals associated with trajectories of mobility limitations stratified in stratified analyses

	HR (95%CI) for mortality	
Gender and mobility limitations trajectory		
	Men	Women
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.69 (1.98;3.64)	1.98 (1.40;2.80)
Medium mobility limitation level followed by stable increase in limitations	2.47 (2.07;2.96)*	1.75 (1.47;2.10)*
High mobility limitation level followed by increase in limitations	2.82 (2.17;3.66)	2.96 (2.36;3.73)
Age and mobility limitations trajectory		
	75 years	80 years
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.26 (1.66;3.09)	2.43 (1.72;3.42)
Medium mobility limitation level followed by stable increase in limitations	2.13 (1.80;2.50)	1.97 (1.61;2.42)
High mobility limitation level followed by increase in limitations	2.64 (2.10;3.32)*	3.57 (2.77;4.59)*
	High	Low
Financial asset and mobility limitations trajectory		
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.54 (1.99;3.25)	1.65 (0.86;3.16)
Medium mobility limitation level followed by stable increase in limitations	2.09 (1.81;2.41)	1.92 (1.46;2.52)
High mobility limitation level followed by increase in limitations	3.44 (2.85;4.16)*	2.35 (1.65;3.34)*
Cohabitation status and mobility limitations trajectory		
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.50 (1.79;3.50)	2.25 (1.64;3.10)
Medium mobility limitation level followed by stable increase in limitations	2.07 (1.74;2.47)	2.06 (1.71;2.48)
High mobility limitation level followed by increase in limitations	3.12 (2.46;3.96)	3.11 (2.44;3.96)
Visits and mobility limitations trajectory		
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.36 (1.83;3.05)	2.43 (1.41;4.20)
Medium mobility limitation level followed by stable increase in limitations	2.10 (1.83;2.42)	1.90 (1.41;2.56)
High mobility limitation level followed by increase in limitations	3.28 (2.69;4.00)	2.72 (1.95;3.79)
Social activity and mobility limitations trajectory		
No mobility limitations	1.00	1.00
No mobility limitations followed by increase in limitations	2.66 (1.94;3.65)	2.01 (1.44;2.81)
Medium mobility limitation level followed by stable increase in limitations	2.18 (1.81;2.62)	1.97 (1.65;2.35)
High mobility limitation level followed by increase in limitations	3.17 (2.37;4.23)	2.85 (2.31;3.51)

Adjusted for: age, gender, comorbidities, the measures of social relations and SEP
*P-value for interaction: <0.5,

Supplementary Table S7 Descriptive analyses of those excluded due to missing data, numbers (%) among the 4040 who were alive 1st January 1999

	Included	Exclusion due to death	Excluded due to migration	Excluded due to missing on core variables
All	3055	915	4	66
Gender				
Males	1247 (40.8)	509 (55.6)	1 (25.0)	31 (47.0)
Females	1808 (59.2)	406 (44.4)	3 (75.0)	35 (53.0)
Age at baseline				
75 years	2247 (73.6)	567 (62.0)	4 (100.0)	45 (68.2)
80 years	808 (26.5)	348 (38.0)	0 (0.0)	21 (31.8)
Cohabitation status				
Cohabiting	1685 (55.2)	530 (58.1)	1 (25.0)	32 (50.8)
Living alone	1370 (44.8)	383 (41.9)	3 (75.0)	31 (49.2)
missing	0	2	0	3
Financial assets				
High	2509 (82.1)	670 (73.2)	2 (50.0)	51 (77.3)
Low	546 (17.9)	245 (26.8)	2 (50.0)	15 (22.7)
Morbidities				
0	2151 (70.4)	456 (49.8)	4 (100.0)	45 (68.2)
1+	904 (29.6)	459 (50.2)	0 (0.0)	21 (31.8)

Supplementary Table S8 Additional deaths per 1000 person years (py) (CI95%) associated with trajectories of mobility limitations stratified and social relations measured in 2001-02.

	High	Low
Cohabitation status and mobility limitations trajectory	N=2817	
No mobility limitations	0.00 (reference)	0.00 (reference)
No mobility limitations followed by increase in limitations	90.40 (16.94;163.86)	77.11 (22.51;131.71)
Medium mobility limitation level followed by stable increase in limitations	53.24 (21.76;84.72)	60.83 (34.39;87.27)
High mobility limitation level followed by increase in limitations	111.85 (41.33;182.37)	148.51 (81.29;215.73)
Visits and mobility limitations trajectory	N=2621	
No mobility limitations	0.00 (reference)	0.00 (reference)
No mobility limitations followed by increase in limitations	66.27 (16.83;115.71)	43.32 (67.89;154.53)
Medium mobility limitation level followed by stable increase in limitations	52.17 (31.43;72.91)	41.92 (-8.25;92.09)
High mobility limitation level followed by increase in limitations	85.99 (28.70;143.27)	128.53 (53.85;203.21)
Social activity and mobility limitations trajectory	N=2616	
No mobility limitations	0.00 (reference)	0.00 (reference)
No mobility limitations followed by increase in limitations	117.41 (23.33;211.49)	60.76 (6.84;114.67)
Medium mobility limitation level followed by stable increase in limitations	52.09 (23.24;80.93)	52.62 (22.77;82.47)
High mobility limitation level followed by increase in limitations	89.44 (12.87;166.00)	123.14 (66.06;180.22)