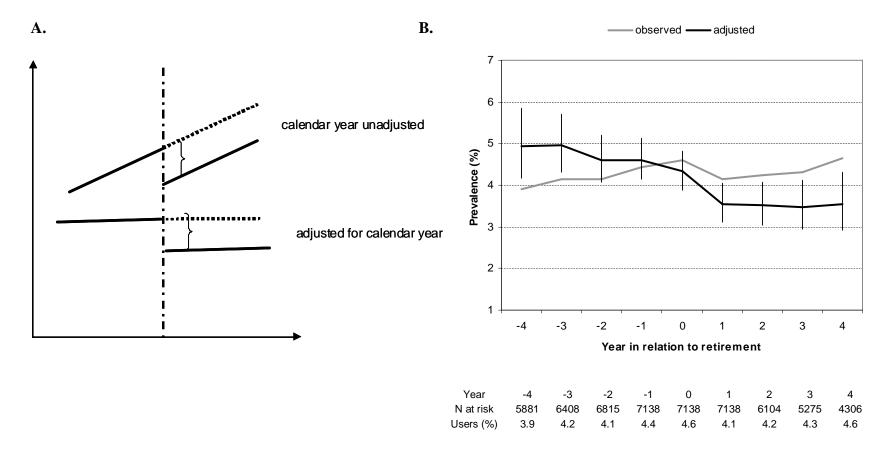
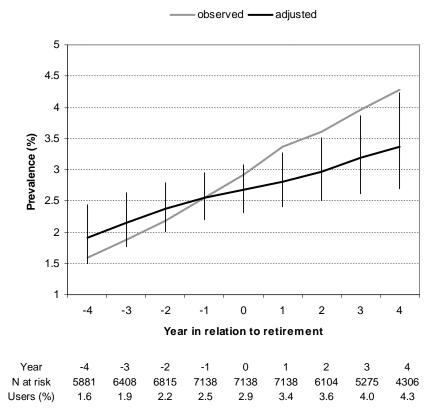
## **Supplementary digital content:** eFigure1

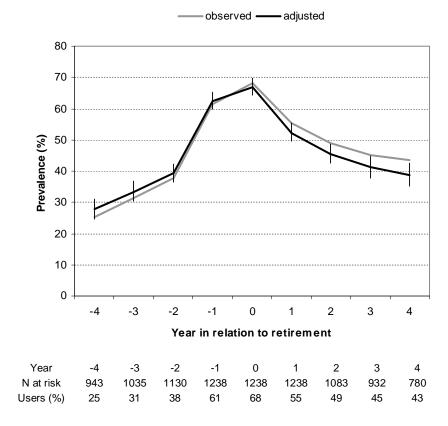
Part A. A schematic figure of the hypothesized decrease in the level of antidepressant use in transition to retirement. The figure illustrates two hypothetical trajectories that are unadjusted and adjusted, respectively, for the secular trend in rising antidepressant prescriptions. Part B. Corresponding unadjusted (observed) and adjusted trajectories of antidepressant use among statutory retirees in relation to transition to retirement (year 0). The gray line shows the observed prevalence of antidepressant use (users %). The black line shows the calendar year and retirement year -adjusted prevalence with 95% confidence intervals of antidepressant use.



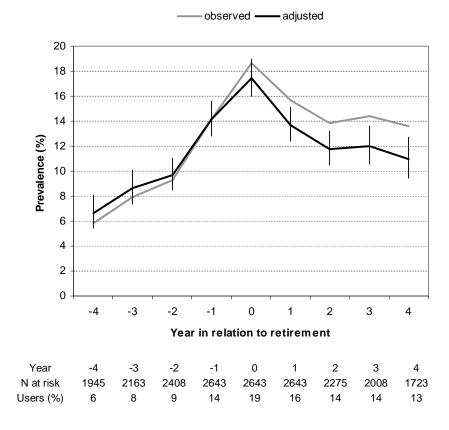
eFigure 2 Observed and adjusted (for retirement age and calendar year) prevalence of use of diabetes medication among statutory retirees.



**eFigure3**Observed and adjusted (for retirement age and calendar year) prevalence of antidepressant use among those retiring early due to mental health issues.



**eFigure4**Observed and adjusted (for retirement age and calendar year) prevalence of antidepressant use among those retiring early due to physical issues.



**eTable1.** Number of purchases of antidepressants made during the follow-up by type and main cause of retirement.

	Number of purchases of antidepressants during the follow-up							
	0	1	2	3	4	5 or more		
Statutory retirement N (%)	6349 (89)	66 (1)	123 (2)	69 (1)	57 (1)	474 (7)		
Early retirement due to mental health issues $N\left(\%\right)$	203 (16)	20 (2)	41 (3)	38 (3)	45 (4)	891 (72)		
Eartly retirement due to physical issues N (%)	1795 (68)	91 (3)	104 (4)	59 (2)	39 (2)	555 (21)		

**eTable 2.** Trends in antidepressant use within the transition period and the pre- and post-retirement periods among statutory retirees.

	Pre-retirement period (years -4 to -2)		Transiti	on period (years - 1 to +1)	Post-retirement period (years +2 to +4)	
	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI
Gender						
Men	1.12	0.82 to 1.52	0.76	0.58 to 0.99	1.35	1.04 to 1.72
Women	0.91	0.79 to 1.04	0.78	0.68 to 0.89	0.93	0.81 to 1.08
Socioeconomic status						
Upper grade non-manual	1.19	0.96 to 1.46	0.68	0.56 to 0.81	0.96	0.78 to 1.18
Lower grade non-manual	0.82	0.68 to 1.00	0.84	0.70 to 1.01	0.93	0.77 to 1.13
Manual	0.79	0.62 to 1.01	0.85	0.67 to 1.09	1.20	0.94 to 1.53
Employer						
Town	0.98	0.83 to 1.14	0.78	0.67 to 0.91	1.06	0.91 to 1.24
Hospital	0.86	0.70 to 1.06	0.77	0.63 to 0.93	0.87	0.70 to 1.08
Area of residence						
Southern Finland	0.99	0.85 to 1.16	0.77	0.66 to 0.89	1.00	0.86 to 1.16
Middle Finland	0.86	0.66 to 1.11	0.77	0.61 to 0.98	1.06	0.79 to 1.43
Northern Finland	0.79	0.59 to 1.08	0.78	0.57 to 1.07	0.93	0.66 to 1.31
Presence of chronic disease						
None	0.89	0.76 to 1.03	0.78	0.68 to 0.90	1.01	0.87 to 1.17
At least one	1.08	0.85 to 1.37	0.74	0.59 to 0.91	0.97	0.78 to 1.21
Long-term sickness absence						
None	1.00	0.83 to 1.19	0.94	0.80 to 1.11	1.00	0.85. to 1.18.
At least one	0.89	0.76 to 1.06	0.65	0.55 to 0.77	1.03	0.86 to 1.23

<sup>a</sup>Prevalence ratios are for antidepressant use in the last year of the period compared with that in the first year of the period, adjusted for retirement age and calendar year. Prevalence ratios significantly greater than unity indicate increase in antidepressant use and prevalence ratios significantly lower than unity indicate decrease in antidepressant use.

**eTable 3.** Trends in antidepressant use within the transition period and the pre- and post-retirement periods among participants retiring early due to mental health issues.

	Pre-retirement period (years -4 to -2)		Transition period (years -1 to +1)		Post-retirement period (years +2 to +4)	
	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI
Gender						
Men	1.90	1.45 to 2.50	0.82	0.71 to 0.95	0.90	0.79 to 1.02
Women	1.35	1.21 to 1.51	0.90	0.85 to 0.95	0.84	0.78 to 0.90
Socioeconomic status						
Upper grade non-manual	1.55	1.26 to 1.90	0.78	0.70 to 0.86	0.87	0.77 to 0.98
Lower grade non-manual	1.31	1.13 to 1.51	0.92	0.85 to 0.99	0.82	0.74 to 0.90
Manual	1.53	1.27 to 1.84	0.91	0.81 to 1.01	0.87	0.79 to 0.96
Employer						
Town	1.41	1.26 to 1.58	0.87	0.81 to 0.93	0.84	0.79 to 0.90
Hospital	1.45	1.17 to 1.80	0.92	0.84 to 1.01	0.85	0.74 to 0.97
Area of residence						
Southern Finland	1.32	1.17 to 1.50	0.89	0.83 to 0.95	0.87	0.81 to 0.94
Middle Finland	1.66	1.26 to 2.18	0.88	0.78 to 0.99	0.82	0.69 to 0.98
Northern Finland	1.61	1.28 to 2.04	0.85	0.76 to 0.96	0.76	0.66 to 0.88
Presence of chronic disease						
None	1.34	1.30 to 1.51	0.89	0.83 to 0.95	0.82	0.76 to 0.88
At least one	1.69	1.37 to 2.08	0.85	0.76 to 0.95	0.92	0.82 to 1.05
Long-term sickness absence						
None	1.51	1.09 to 2.09	0.84	0.64 to 1.09	0.85	0.67 to 1.08
At least one	1.42	1.28 to 1.58	0.89	0.84 to 0.94	0.85	0.80 to 0.90

<sup>&</sup>lt;sup>a</sup>Prevalence ratios are for antidepressant use in the last year of the period compared with that in the first year of the period, adjusted for retirement age and calendar year. Prevalence ratios significantly greater than unity indicate increase in antidepressant use and prevalence ratios significantly lower than unity indicate decrease in antidepressant use.

**eTable 4.** Trends in antidepressant use within the transition period and the pre- and post-retirement periods among participants retiring early due to physical causes

	Pre-retirement period (years -4 to -2)		Transition period (years -1 to +1)		Post-retirement period (years +2 to +4)	
	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI
Gender						
Men	1.58	1.05 to 2.39	1.02	0.83 to 1.25	0.86	0.70 to 1.05
Women	1.43	1.19 to 1.71	0.94	0.84 to 1.06	0.94	0.85 to 1.05
Socioeconomic status						
Upper grade non-manual	1.39	0.99 to 1.95	0.84	0.69 to 1.04	0.97	0.81 to 1.15
Lower grade non-manual	1.40	1.08 to 1.81	1.02	0.87 to 1.19	0.91	0.79 to 1.06
Manual	1.53	1.18 to 1.99	0.96	0.82 to 1.11	0.92	0.79 to 1.08
Employer						
Town	1.45	1.19 to 1.75	0.93	0.83 to 1.05	0.93	0.84 to 1.04
Hospital	1.46	1.07 to 1.98	1.06	0.87 to 1.27	0.89	0.72 to 1.11
Area of residence						
Southern Finland	1.37	1.11 to 1.68	0.90	0.80 to 1.02	0.99	0.88 to 1.11
Middle Finland	1.69	1.16 to 2.46	1.01	0.79 to 1.29	0.64	0.47 to 0.88
Northern Finland	1.51	1.05 to 2.19	1.09	0.88 to 1.35	0.87	0.72 to 1.05
Presence of chronic disease						
None	1.52	1.22 to 1.89	0.98	0.86 to 1.12	0.92	0.82 to 1.04
At least one	1.35	1.06 to 1.72	0.91	0.78 to 1.06	0.92	0.79 to 1.08
Long-term sickness absence						
None	1.36	0.88 to 2.10	1.02	0.70 to 1.50	1.10	0.85 to 1.43
At least one	1.47	1.23 to 1.76	0.96	0.86 to 1.07	0.91	0.82 to 1.01

<sup>&</sup>lt;sup>a</sup>Prevalence ratios are for antidepressant use in the last year of the period compared with that in the first year of the period, adjusted for retirement age and calendar year. Prevalence ratios significantly greater than unity indicate increase in antidepressant use and prevalence ratios significantly lower than unity indicate decrease in antidepressant use.

**eTable 5.** Trends in antidepressant use by different cut-points of annual use of antidepressants among statutory retirees.

		Pre-retirement period (years -4 to -2)		Transition period (years -1 to +1)		Post-retirement period (years +2 to +4)	
	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI	PR <sup>a</sup>	95% CI	
any	0.99	0.88 to 1.08	0.74	0.66 to 0.83	1.01	0.89 to 1.14	
at least 90 DDDs	0.88	0.76 to 1.03	0.77	0.66 to 0.90	0.92	0.80 to 1.07	
at least 180 DDDs	0.96	0.78 to 1.18	0.73	0.61 to 0.88	1.03	0.85 to 1.24	

<sup>&</sup>lt;sup>a</sup>Prevalence ratios are for antidepressant use in the last year of the period compared with that in the first year of the period, adjusted for retirement age and calendar year. Prevalence ratios significantly greater than unity indicate increase in antidepressant use and prevalence ratios significantly lower than unity indicate decrease in antidepressant use.