

Supplementary material

Supplementary material 1

READ codes – eating disorder diagnoses and symptoms

	Anorexia Nervosa
E271.00	Anorexia nervosa
Eu50000	[X]Anorexia nervosa
	Bulimia nervosa
E275100	Bulimia (non-organic overeating)
Eu50200	[X]Bulimia nervosa
Eu50211	[X]Bulimia NOS
Eu50212	[X]Hyperorexia nervosa
	Eating disorder, other
E275.00	Other and unspecified non-organic eating disorders
E275000	Unspecified non-organic eating disorder
E275200	Pica
E275y00	Other specified non-organic eating disorder
E275z00	Non-organic eating disorder NOS
Eu50.00	[X]Eating disorders
Eu50400	[X]Overeating associated with other psychological disturbances
Eu50411	[X]Psychogenic overeating
Eu50y00	[X]Other eating disorders
Eu50y11	[X]Pica in adults
Eu50y12	[X]Psychogenic loss of appetite
Eu50z00	[X]Eating disorder, unspecified
Eu50100	[X]Atypical anorexia nervosa
Eu50300	[X]Atypical bulimia nervosa
	Eating disorder symptoms
R030.00	[D]Anorexia
R030z00	[D]Anorexia NOS
R036000	[D]Excessive eating
R036011	[D]Bulimia NOS
1612.11	Anorexia symptom
1FF..00	Binge eating

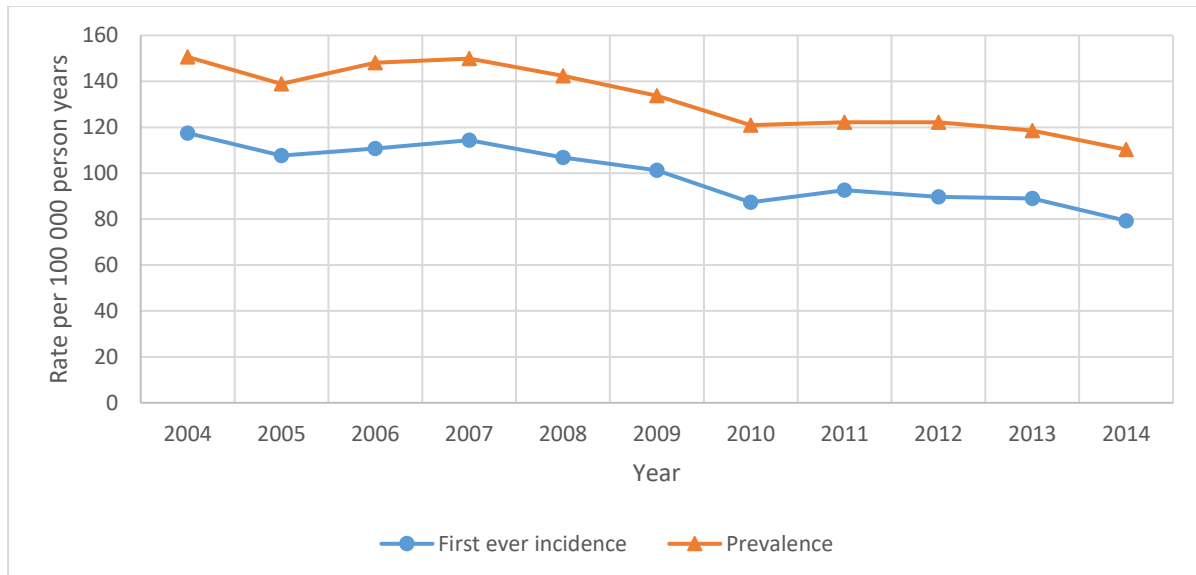
ICD 10 codes –eating disorder diagnoses

F50	Eating disorders
F50.0	Anorexia nervosa
F50.1	Atypical anorexia nervosa
F50.2	Bulimia nervosa
F50.3	Atypical bulimia nervosa

F50.4	Overeating associated with other psychological disturbances
F50.8	Other eating disorders
F50.9	Eating disorder, unspecified

Supplementary material 2

The crude prevalence rate was 133.0 per 100 000 person years (95% CI 129.8-136.3, n=6,348). Rates decreased significantly from 150.6 per 100 000 person years (95% CI 138.9-163.1, n= 609) to 110.3 per 100 000 person years (95% CI 99.3-122.1, n= 370) over the study period. Annual prevalence rates consistently mapped first ever incidence rates, thereby reflecting demand (see Suppl. Fig.1).



Suppl. Fig.1 The crude annual first ever incidence and prevalence rate of individuals per 100 000 person years with eating disorders for 11-24 year olds

Supplementary table 1- Adjusted prevalence rate ratios for eating disorder diagnoses derived from Poisson regression analysis

Annual prevalence		
	Individuals (n, %)	Prevalence Rate ratio ^a (95% CI)
Sex:		
Male	534 (8.4%)	-
Female	5814 (91.6%)	11.9(10.8-13.0)
Age:		
11 to 15	1629 (25.7%)	0.5(0.5-0.5)
16 to 20	3087 (48.6%)	-
21 to 24	1632 (25.7%)	0.7(0.6-0.7)
Deprivation:		
1 (least)	1642 (25.9%)	1.7(1.5-1.8)
2	1435 (22.6%)	1.5(1.4-1.6)
3	1163 (18.3%)	1.3(1.2-1.4)
4	1243 (19.6%)	1.3(1.2-1.4)
5 (most)	865 (13.6%)	-
Year:		
2004	609 (9.6%)	-
2005	596 (9.4%)	0.9(0.8-1.0)
2006	657 (10.3%)	1.0(0.9-1.1)
2007	689 (10.9%)	1.0(0.9-1.1)
2008	665 (10.5%)	0.9(0.8-1.1)
2009	631 (9.9%)	0.9(0.8-1.0)
2010	565 (8.9%)	0.8(0.7-0.9)
2011	553 (8.7%)	0.8(0.6-0.9)
2012	537 (8.5%)	0.8(0.7-0.9)
2013	476 (7.5%)	0.8(0.7-0.9)
2014	370 (5.8%)	0.7(0.6-0.8)

CI, confidence interval

Total study population= 1,135,038 individuals

^aAdjusted for calendar year, gender, age group and deprivation

Supplementary table 2 -Crude incidence rate for first ever recorded eating disorder symptom by year

	Individuals (n)	Crude incidence rate ^a (95% CI)
Year:		
2004	203	50.2(43.5-57.6)
2005	168	39.1(33.4-45.5)
2006	194	43.7(37.8-50.3)
2007	182	39.6(34-45.8)
2008	203	43.5(37.7-49.9)
2009	176	37.3(32-43.2)
2010	130	27.8(23.3-33)
2011	123	27.2(22.6-32.4)
2012	111	25.2(20.8-30.4)
2013	107	26.7(21.8-32.2)
2014	82	24.4(19.4-30.3)

CI, confidence interval

Total study population= 1,135,038 individuals

^a per 100 000 person years

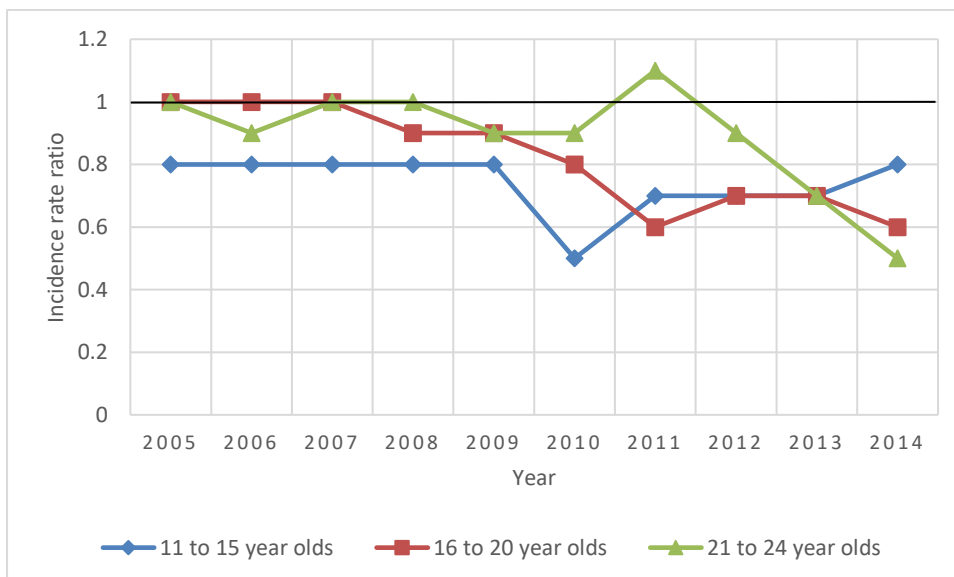
Supplementary table 3 -Adjusted incidence rate ratios for first ever eating disorder diagnosis by age group derived from Poisson regression analysis

Year:	11 to 15		16 to 20		21 to 24	
	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)
2004	159	-	227	-	89	-
2005	127	0.8(0.7-0.9)	236	1(0.8-1.1)	99	1(0.7-1.4)
2006	140	0.8(0.7-1)	258	1(0.9-1.2)	93	0.9(0.7-1.2)
2007	148	0.8(0.7-0.9)	270	1(0.9-1.2)	108	1(0.8-1.4)
2008	145	0.8(0.7-0.9)	248	0.9(0.8-1.1)	106	1(0.7-1.3)
2009	148	0.8(0.7-0.9)	233	0.9(0.7-1)	97	0.9(0.7-1.2)
2010	100	0.5(0.5-0.7)	213	0.8(0.7-0.9)	95	0.9(0.7-1.2)
2011	123	0.7(0.6-0.8)	178	0.6(0.5-0.8)	118	1.1(0.8-1.5)
2012	116	0.7(0.6-0.8)	190	0.7(0.7-0.8)	88	0.9(0.6-1.2)
2013	111	0.7(0.6-0.9)	178	0.7(0.6-0.9)	68	0.7(0.5-1)
2014	108	0.8(0.7-1.1)	117	0.6(0.5-0.7)	41	0.5(0.4-0.7)

CI, confidence interval

Total study population= 1,135,038 individuals

^aAdjusted for calendar year, gender, deprivation and stratified by age group



Suppl. Fig.2 Adjusted^a incidence rate ratios for first ever eating disorder diagnosis by age group and year^b derived from Poisson regression analysis

^aAdjusted for calendar year, gender, deprivation and stratified by age group

^b2004 as reference year

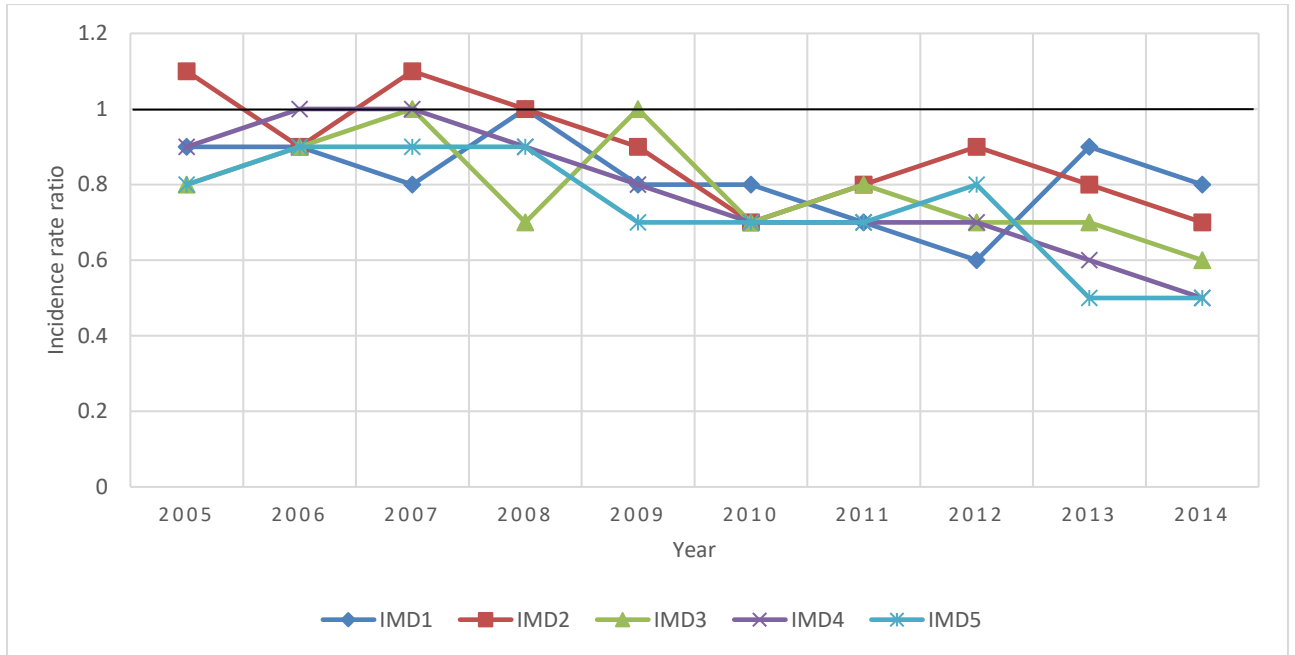
Supplementary table 4- Adjusted incidence rate ratios for first ever eating disorder diagnosis by deprivation quintile derived from Poisson regression analysis

	IMD1		IMD2		IMD3		IMD4		IMD5	
	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)	Individuals (n)	Incidence Rate ratio ^a (95% CI)
Year:										
2004	113	-	93	-	92	-	100	-	77	-
2005	113	0.9(0.7-1.2)	113	1.1(0.9-1.4)	80	0.8(0.7-1)	94	0.9(0.7-1.1)	62	0.8(0.6-1)
2006	112	0.9(0.8-1)	97	0.9(0.8-1.1)	94	0.9(0.7-1.2)	111	1(0.8-1.3)	77	0.9(0.7-1.2)
2007	110	0.8(0.7-1)	120	1.1(1-1.2)	104	1(0.8-1.3)	116	1(0.8-1.3)	76	0.9(0.6-1.2)
2008	132	1(0.9-1.1)	113	1(0.8-1.3)	74	0.7(0.6-0.9)	103	0.9(0.7-1.1)	77	0.9(0.7-1.1)
2009	114	0.8(0.7-1)	108	0.9(0.8-1.2)	104	1(0.9-1.1)	91	0.8(0.6-1)	61	0.7(0.5-0.9)
2010	117	0.8(0.7-1)	74	0.7(0.6-0.8)	77	0.7(0.5-1)	80	0.7(0.5-1)	60	0.7(0.5-0.9)
2011	99	0.7(0.5-1)	92	0.8(0.6-1.1)	82	0.8(0.5-1.2)	83	0.7(0.5-1.1)	63	0.7(0.5-1)
2012	87	0.6(0.6-0.7)	94	0.9(0.8-1)	72	0.7(0.6-0.9)	76	0.7(0.6-0.9)	65	0.8(0.6-0.9)
2013	114	0.9(0.7-1.1)	82	0.8(0.7-1)	64	0.7(0.6-0.9)	58	0.6(0.5-0.7)	39	0.5(0.4-0.7)
2014	92	0.8(0.6-1.1)	58	0.7(0.5-1)	41	0.6(0.4-0.8)	41	0.5(0.4-0.7)	34	0.5(0.4-0.7)

IMD, Index of Multiple Deprivation; CI, confidence interval

Total study population= 1,135,038 individuals

^aAdjusted for calendar year, gender, age group and stratified by deprivation



Suppl. Fig.3 Adjusted^a incidence rate ratios for first ever eating disorder diagnosis by deprivation^b and year^c derived from Poisson regression analysis

^aAdjusted for calendar year, gender, deprivation and stratified by age group

^bIMD, Index of Multiple deprivation, IMD1=least deprived

^c2004 as reference year