

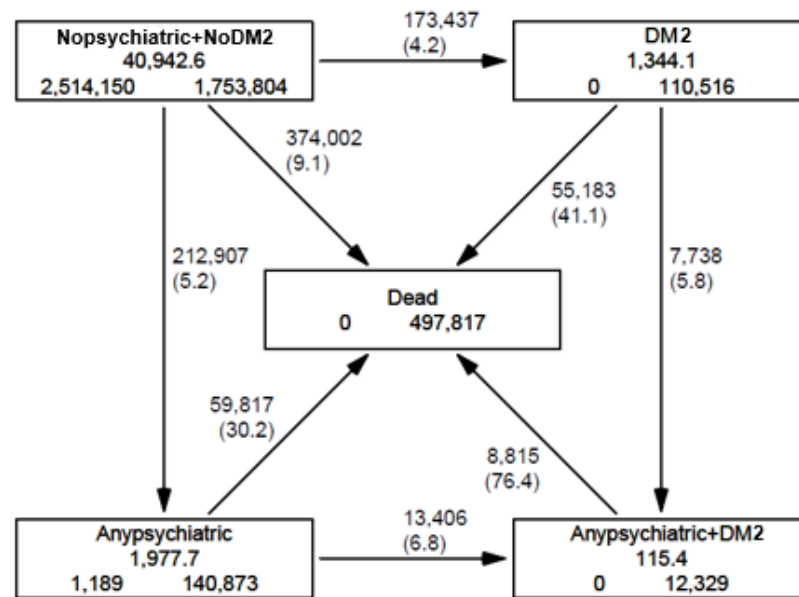
Supplemental material

Appendix 1. An overview of individuals and their transitions during the study period by using multi-state models stratified by sex

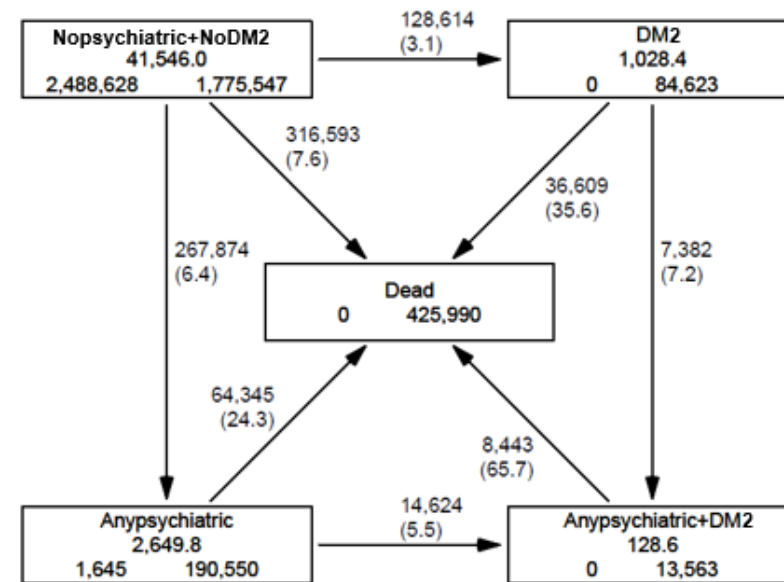
Appendix 2. Descriptive comparison of individuals with and without a psychiatric disorder ($n = 5,005,612$)

Appendix 3. Median and interquartile range of age of type 2 diabetes onset for individuals with and without a psychiatric disorder developing type 2 diabetes during the study period ($N = 334,739$)

Appendix 1. An overview of individuals and their transitions during the study period by using multi-state models stratified by sex



This multi-state model contains all men within the study sample



This multi-state model contains all women within the study sample

Multi-state models for any psychiatric disorder and type 2 diabetes. In these multi-state models, the individuals can be in five stages; 1) Nopsychiatric+NoDM2 (contains individuals not having any psychiatric disorder and not having type 2 diabetes), 2) Anypsychiatric (contains individuals with any psychiatric disorder), 3) DM (contains individuals with type 2 diabetes), 4) Anypsychiatric+DM (contains individuals with any psychiatric disorder and type 2 diabetes), and 5) Dead (contains individuals registered as dead). The numbers on the arrows are number of transitions and transitions per 1,000 person years of follow-up (overall IR). The number in the boxes are: Person years of follow-up (middle), the number of persons beginning in the state (bottom left), the number of persons ending their follow-up in the state (bottom right). The multi-state model to the left illustrates all men within the study sample whereas the multi-state model to the right contains all women from the study sample.

Appendix 2. Descriptive comparison of individuals with and without a psychiatric disorder ($n = 5,005,612$)

	Any Psychiatric disorder	Organic disorders	Substance use disorders	Schizophrenia	Mood disorders	Neurotic disorders	Eating disorders	Personality disorders	Intellectual disabilities	Developmental disorders	Behavioral disorders
Women											
With psychiatric disorder, %	55.51	55.33	34.98	46.90	61.23	59.26	95.63	65.20	47.52	35.16	44.63
Without psychiatric disorder, %	49.09	49.65	50.09	49.79	49.27	49.26	49.61	49.50	49.75	49.77	49.78
Age at entry to study											
With psychiatric disorder, mean (SD)	36.29 (17.81)	58.59 (13.99)	33.72 (13.84)	33.46 (15.73)	35.44 (17.08)	29.80 (13.64)	20.73 (6.30)	26.92 (11.96)	31.35 (14.59)	20.89 (7.02)	20.39 (5.90)
Without psychiatric disorder, mean (SD)	35.92 (17.10)	35.55 (16.96)	36.01 (17.24)	36.00 (17.19)	35.98 (17.18)	36.28 (17.28)	36.01 (17.18)	36.11 (17.21)	35.97 (17.18)	35.98 (17.18)	36.04 (17.18)
Migration status: immigrant											
With psychiatric disorder, %	5.59	3.09	4.54	8.49	5.50	6.72	3.48	4.00	3.66	1.99	2.77
Without psychiatric disorder, %	4.65	4.77	4.75	4.69	4.71	4.64	4.75	4.78	4.75	4.75	4.75
Education level at entry to study: lower secondary and below											
With psychiatric disorder, %	63.52	59.52	62.6	69.16	61.31	65.93	83.21	73.87	96.31	91.78	91.00
Without psychiatric disorder, %	55.76	56.50	56.42	56.37	56.36	56.07	56.47	56.28	56.46	56.50	56.38
Incident type 2 diabetes											
With psychiatric disorder, %	8.58	13.03	8.49	10.65	9.20	7.52	2.99	7.16	10.05	3.50	2.97
Without psychiatric disorder, %	6.47	6.57	6.45	6.63	6.58	6.64	6.70	6.68	6.68	6.69	6.71

SD: standard deviation.

“With psychiatric disorder” refer to individuals with the specific psychiatric disorder during study period. Whereas “without psychiatric disorder” refer to individuals without the specific psychiatric disorder during study period.

Appendix 3. Median and interquartile range of age of type 2 diabetes onset for individuals with and without a psychiatric disorder developing type 2 diabetes during the study period ($N = 334,739$)

Psychiatric disorder	With psychiatric disorder of interest		Without psychiatric disorder of interest	
	<i>n</i>	Median (IQR)	<i>n</i>	Median (IQR)
Any psychiatric disorder				
<i>Men</i>	21,620	57.9 (19.5)	168,405	62.4 (16.2)
<i>Women</i>	22,333	60.1 (22.7)	122,381	64.3 (17.8)
Organic disorders				
<i>Men</i>	5,649	69.6 (15.4)	184,376	61.8 (16.2)
<i>Women</i>	5,820	73.2 (13.33)	138,894	63.4 (18.5)
Substance use disorders				
<i>Men</i>	6,033	54.2 (15.4)	183,992	62.2 (16.6)
<i>Women</i>	3,472	56.1 (15.5)	140,909	64.0 (18.5)
Schizophrenia				
<i>Men</i>	3,838	51.5 (17.1)	186,187	62.2 (16.6)
<i>Women</i>	3,805	55.2 (19.6)	140,909	64.0 (18.4)
Mood disorders				
<i>Men</i>	8,159	57.2 (18.0)	181,866	62.2 (16.6)
<i>Women</i>	10,145	58.6 (21.9)	134,569	64.2 (18.3)
Neurotic disorders				
<i>Men</i>	8,492	52.9 (16.4)	181,533	62.4 (16.5)
<i>Women</i>	9,868	53.7 (19.5)	134,846	64.4 (18.1)
Eating disorders				
<i>Men</i>	43	42.1 (14.8)	189,982	62.0 (16.7)
<i>Women</i>	424	40.6 (13.8)	144,290	63.9 (18.5)
Personality disorders				
<i>Men</i>	2,198	49.7 (16.2)	187,827	62.1 (16.6)
<i>Women</i>	3,492	49.4 (18.4)	141,222	64.1 (18.3)
Intellectual disabilities				
<i>Men</i>	559	50.1 (17.6)	189,466	62.0 (16.7)
<i>Women</i>	599	50.9 (19.4)	144,115	63.9 (18.5)
Developmental disorders				
<i>Men</i>	193	40.3 (17.0)	189,832	62.0 (16.7)
<i>Women</i>	74	40.1 (15.2)	144,640	63.8 (18.6)
Behavioral disorders				
<i>Men</i>	415	42.1 (15.1)	189,610	62.0 (16.7)
<i>Women</i>	327	41.1 (14.4)	144,387	63.9 (18.5)

IQR, interquartile range