Supplementary Table 1 – Details of variable creation for all variables used in the analysis.

Variable Name	Source of Data	Description	Included in Propensity Score Model	Variable Name in Database	Values and Database Codes
Main Comparison Groups					
EPI-User	Primary data from EPI program	User of PEPP services, defined based on linked database from program which included data on program clients and psychiatrists.	Yes (dependent variable)	N/A	All people in the cohort who are also represented in the PEPP data are classified as an EPI-user (1), those who were not in the EPI data but had been seen by an EPI psychiatrist are classified as screened (2), and all remaining cohort members are classified as a non-user (0)
Baseline Socio-Demographic Characteristics					
Age at Index Date	RPDB	Age at index date	Yes	BDATE	Continuous variable calculated based on index date and birth date
Gender	RPDB	Recorded sex	Yes	SEX	1 = Male 2 = Female
Rural Residence	RPDB	Rural place of residence, defined using the Rurality Index of Ontario. Areas with score of 40 or above are considered rural.	Yes	RIO2008	1 = Rural 0 = Non-Rural
Resides Outside of Catchment Area	RPDB	Whether the patient resides outside of the EPI catchment area, based on list of postal codes for EPI program catchment area	Yes	PSTLCODE	1 = Yes 2 = No
Residential Instability	ONMARG	Neighbourhood-level indicator of residential instability constructed based on census data	Yes	INSTABILITY_Q_CSD	1 = Least Marginalized 5 = Most Marginalized
Deprivation	ONMARG	Neighbourhood-level indicator of material deprivation constructed based on census data	Yes	DEPRIVATION_Q_CSD	1 = Least Marginalized 5 = Most Marginalized
Ethnic Concentration	ONMARG	Neighbourhood-level indicator of ethnic concentration constructed based on census data	Yes	ETHNICCON_Q_CSD	1 = Least Marginalized 5 = Most Marginalized
Dependency	ONMARG	Neighbourhood-level indicator of social dependency constructed based on census data	Yes	DEPENDENCY_Q_CSD	1 = Least Marginalized 5 = Most Marginalized
Income Quintile	RPDB	Neighbourhood-level income quintile	Yes	INCQUINT	1 = Lowest Income Quintile 5 = Highest Income Quintile
Migrant Status	IRCC	Migrant status for first-generation immigrants and refugees (since 1985)	Yes	CATEG	0 = Non-Migrants (Not Included in IRCC Database) 1 = Immigrant (All Codes not Listed Below) 2 = Refugee (020-029,031-034,037,047-049,052-055,080,086-089,094-095,120-142,153)

Supplementary Table 1 con't. – Details of variable creation for all variables used in the analysis.

Variable Name	Source of Data	Description	Included in Propensity Score Model	Variable Name in Database	Values and Database Codes
Baseline Service-Use Characteristics					
Index Diagnosis	DAD, OMHRS, OHIP, NACRS	Diagnostic category of index diagnosis	Yes	DXCODE, DX10CODE (DAD) AXIS1_DSM4CODE_DISCH1 (OMHRS) DXCODE (OHIP) DX10CODE1 (NACRS)	1 = Schizophrenia & Schizoaffective Disorder (ICD-9 = 295.X; ICD-10 = F20, F25) 2 = Delusional Disorder (ICD-9 = 297.X; ICD-10 = F22, F24) 3 = Other Psychoses (ICD-9 = 298.X; ICD-10 = F23, F28, F29)
Year	DAD, OMHRS, OHIP, NACRS	Year of index diagnosis	Yes	DDATE (DAD, OMHRS) SERVDATE (OHIP) REGDATE (NACRS)	N/A
Discordant Diagnosis	OHIP, NACRS	If diagnosis based on physician or emergency department visits, whether the diagnostic category was discordant across the diagnosis	Yes	See description of Index Diagnosis	1 = Discordant Diagnoses 0 = Concordant Diagnoses
Diagnosing Physician	DAD, OMHRS, OHIP, NACRS	Specialty of physician making the index diagnosis	No	SPEC (OHIP) PRVSERV1-10 (NACRS)	1 = Family Physician (00001) 2 = Psychiatrist (00064, 00065; All claims from DAD and OMHRS) 3 = Family Physician + Psychiatrist (see above) 4 = Other (all other codes)
Inpatient at Index Diagnosis	DAD, OMHRS, OHIP, NACRS	Measured as a dichotomous outcome, whether individuals are inpatients at time of index diagnosis	Yes	N/A	1 = Inpatient at Index Diagnosis (source DAD or OMHRS) 0 = Outpatient at Index Diagnosis (source OHIP or NACRS)
Prior Alcohol Related Disorder	DAD, OMHRS, OHIP, NACRS	Whether person had contact with services for alcohol-related disorders prior to the index date.	Yes	DXCODE, DX10CODE (DAD) AXIS1_DSM4CODE_DISCH1 (OMHRS) DXCODE (OHIP) DX10CODE1 (NACRS)	1 = Prior contact with services for alcohol-related disorders (ICD-10 = F10; ICD-9 = 291.X, 303.X, 305.0) 0 = No prior contact with services for alcohol-related disorders
Prior Subtance Related Disorder	DAD, OMHRS, OHIP, NACRS	Whether person had contact with services for substance-related disorders prior to the index date.	Yes	DXCODE, DX10CODE (DAD) AXIS1_DSM4CODE_DISCH1 (OMHRS) DXCODE (OHIP) DX10CODE1 (NACRS)	1 = Prior contact with services for substance-related disorders (ICD-10 = F11-F19, F55; ICD-9 = 292.X, 304.X, 305.2-305.9) 0 = No prior contact with services for alcohol-related disorders

Supplementary Table 1 con't. – Details of variable creation for all variables used in the analysis.

Variable Name	Source of Data	Description	Included in Propensity Score Model	Variable Name in Database	Values and Database Codes
Baseline Service-Use Characteristics Con't.					
Family Physician Contact in Previous 6 Months	OHIP	Any primary care visit for a mental health reason in the previous 6 months, defined as all mental health service codes and general service codes with a mental health diagnostic code.	Yes	Algorithm Description: Med Care:42(10),960-965	1 = Contact with Family Physician 0 = No Contact with Family Physician
Psychiatrist Contact in Previous 6 Months	OHIP	Any outpatient psychiatry visit in the previous 6 months	Yes	SPEC	1 = Contact with Psychiatrist (00064, 00065) 0 = No Contact with Psychiatrist
Emergency Department Visit in Previous 6 Months	NACRS	Any emergency department visit for a mental health reason in the previous 6 months	Yes	DX10CODE1	1 = Emergency Department Visit (ICD-10 = All F codes; ICD-9 = 291.x,292.x,and 295.x-319.x; Transfers excluded) 0 = No Emergency Department Visit
Psychiatric Hospitalization in Previous 6 Months	DAD, OMHRS	Any hospitalization in the previous 6 months with a primary discharge diagnosis of a mental disorder	Yes	DXCODE, DX10CODE (DAD) AXIS1_DSM4CODE_DISCH1 (OMHRS)	1 = Psychiatric Hospitalization (ICD-10 = All F Codes; ICD-9 = 291.x, 292.x, and 294.x-319.x; OMHRS = All hospitalizations EXCEPT 293.X, 780.X, 290.X, 294.X, and V codes) 0 = No Psychiatric Hospitalization
Total Psychiatric Hospital Days in Previous 6 Months	DAD, OMHRS	Total number of psychiatric hospital days in the previous 6 months	Yes	LOS	Continuous variable
Outcome Variables					
Contact with Primary Care	OHIP	Any primary care visit for a mental health reason after EPI admission, defined as all mental health service codes and general service codes with a mental health diagnostic code.	No	Algorithm Description: Med Care:42(10),960-965	1 = Contact with Family Physician 0 = No Contact with Family Physician
Contact with Psychiatrist	OHIP	Any outpatient psychiatry visit after EPI admission	No	SPEC	1 = Contact with Psychiatrist (00064, 00065) 0 = No Contact with Psychiatrist
Emergency Department Visits	NACRS	Any emergency department visit for a mental health reason after EPI admission	No	DX10CODE1	1 = Emergency Department Visit (ICD-10 = All F codes; ICD-9 = 291.x,292.x,and 295.x-319.x; Transfers excluded) 0 = No Emergency Department Visit

Supplementary Table 1 con't. – Details of variable creation for all variables used in the analysis.

Variable Name	Source of Data	Description	Included in Propensity Score Model	Variable Name in Database	Values and Database Codes
Outcome Variables Con't.					
Psychiatric Hospitalizations	DAD, OMHRS	Any hospitalization after EPI admission with a primary discharge diagnosis of a mental disorder	No	DXCODE, DX10CODE (DAD) AXIS1_DSM4CODE_DISCH1 (OMHRS)	1 = Psychiatric Hospitalization (ICD-10 = All F Codes; ICD-9 = 291.x, 292.x, and 294.x-319.x; OMHRS = All hospitalizations EXCEPT 293.X, 780.X, 290.X, 294.X, and V codes) 0 = No Psychiatric Hospitalization
Involuntary Admission	DAD, OMHRS, OHIP	Any involuntary admission after EPI admission, including involuntary status in the emergency department and involuntary hospitalization	No	ADMMETH (DAD) PT_STATUS (OMHRS) FEECODE (OHIP)	1 = Involuntary Admission (ADMMETH = D, E; PT_STATUS = 1, 4; FEECODE = K623, K624)
Self-Harm Behaviour	NACRS	Any ED visit for self-harm after EPI admission	No	DX10CODE1	1 = Self-Harm Behaviour (ICD9 = E950-E959; ICD 10 = X60-X84) 0 = No Self-Harm Behaviour
Suicide	ORGD	Death by suicide after EPI admission	No	SUICIDE, DX9CODE, EALIVE, DX10CODE1-25, DISCHDISP (DAD) DISCHREASON (OMHRS) DX10CODE1-10, VISDISP2002 (NACRS) COD (ORGD)	1 = Suicide • DAD: i. SUICIDE = 1, or ii. DX9CODE = E950-E959 and EALIVE = X, or iii. DX10CODE1-25 = X60-84 and DISCHDISP = 07 • OMHRS: DISCHREASON (X90) = 2 • NACRS: DX10CODE1-10 = X60-84 and VISDISP2002 = 10 or 11 • ORGD: COD = E950-E959 0 = No Suicide
All-Cause Mortality	ORGD	Death by any cause after EPI admission	No	DTHDATE	1 = Death after EPI admission 0 = Alive

Supplementary Table 2 – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Title and abstract					
	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	Study design reported in abstract (page 2) Summary reported in abstract (page 2)	RECORD 1.1: The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. RECORD 1.2: If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	Noted in both the title (page 1) and abstract (page 2) Geographic region and timeframe reported in abstract (page 2) Data linkage reported in abstract (page 2)
Introduction					
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	Background and rationale reported on pages 3 and 4		
Objectives	3	State specific objectives, including any prespecified hypotheses	Objectives and hypotheses reported on page 4 (2nd paragraph)		
Methods					
Study Design	4	Present key elements of study design early in the paper	Summary of key methods presented in last paragraph of background (page 4)		
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Study setting described on pages 4 and 5, other details of cohort creation reported on page 6		

Supplementary Table 2 con't. – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Methods					
Participants	6	*(a) Cohort study* - Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *(b) Cohort study* - For matched studies, give matching criteria and number of exposed and unexposed	Described in first paragraph of page 6 Propensity score matching procedure described on pages 8 and 9	RECORD 6.1: The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. RECORD 6.2: Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. RECORD 6.3: If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	Cohort creation described on page 6 Validation study cited on page 6 Flow diagram of data linkage presented in figure 1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	Described on pages 6 through 8, and in Supplemental Table 2	RECORD 7.1: A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	Data dictionary available in Supplemental Table 2
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Details of variable creation described on pages 7 and 8, and in Supplemental Table 2		

Supplementary Table 2 con't. – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Methods con't.					
Bias	9	Describe any efforts to address potential sources of bias	Characteristics of unmatched users described on pages 10 and 17, and in Supplemental Table 3		
Study size	10	Explain how the study size was arrived at	N/A – included all cases over 17-year period		
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	Described on page 9		
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) *Cohort study* - If applicable, explain how loss to follow-up was addressed (e) Describe any sensitivity analyses	Described on pages 8 (propensity score methods) and 9 (details of statistical analyses)		
Data access and cleaning methods				RECORD 12.1: Authors should describe the extent to which the investigators had access to the database population used to create the study population. RECORD 12.2: Authors should provide information on the data cleaning methods.	Described in acknowledgement section (page 18) N/A

Supplementary Table 2 con't. – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Methods con't.					
Linkage		..		RECORD 12.3: State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	Details of data linkages provided on page 5 (source of data) and page 6 (2nd paragraph)
Results					
Participants	13	(a) Report the numbers of individuals at each stage of the study (*e.g.*, numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) (b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram	Flow chart with reasons for exclusion presented in Figure 1	RECORD 13.1: Describe in detail the selection of the persons included in the study (*i.e.,* study population selection) including filtering based on data quality, data availability and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.	Flow chart with reasons for exclusion presented in Figure 1
Descriptive data	14	(a) Give characteristics of study participants (*e.g.*, demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) *Cohort study* - summarise follow-up time (*e.g.*, average and total amount)	Characteristics presented in Table 1 N/A – participants with missing data (<1%) excluded Presented in Tables 2 and 3		

Supplementary Table 2 con't. – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Results con't.					
Outcome data	15	*Cohort study* - Report numbers of outcome events or summary measures over time	Presented in Tables 2 and 3		
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Propensity score matching used to account for confounding. Estimates presented in Tables 2 and 3 N/A Absolute risk presented for all-cause mortality (page 11).		
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	N/A		

Supplementary Table 2 con't. – The RECORD checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Discussion					
Key results	18	Summarise key results with reference to study objectives	Summarized on page 12		
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Described on pages 15 to 18	RECORD 19.1: Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	Described on pages 15 to 18
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Overall conclusions presented on page 17		
Generalisability	21	Discuss the generalisability (external validity) of the study results	Described in the last paragraph of page 16		
Other Information					
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Source of funding described in acknowledgements		
Accessibility of protocol, raw data, and programming code		..		RECORD 22.1: Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	Addressed in acknowledgement section

*Reference: Benchimol EI, Smeeth L, Guttmann A, Harron K, Moher D, Petersen I, Sørensen HT, von Elm E, Langan SM, the RECORD Working Committee. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement. *PLoS Medicine* 2015; in press.

Supplementary Table 3 – Baseline characteristics and outcome measures for matched vs. unmatched EPI-users.

Value		Matched EPI-Users n = 530 n (%)*	Unmatched EPI-Users n = 224 n (%)*	Standardized Difference*
Baseline Socio-Demographic Characteristics				
Age (years), mean ± SD		25.77 ± 7.85	20.54 ± 4.16	83%
Male Gender		365 (68.9%)	193 (86.2%)	42%
Rural Residence		40 (7.5%)	14 (6.3%)	6%
Resides Outside of Catchment		83 (15.7%)	9 (4.0%)	40%
Lowest Income Quintile	1	139 (26.2%)	41 (18.3%)	19%
	2	132 (24.9%)	43 (19.2%)	14%
	3	100 (18.9%)	47 (21.0%)	5%
	4	67 (12.6%)	44 (19.6%)	19%
Highest Income Quintile	5	90 (17.0%)	48 (21.4%)	11%
Non-Migrant		469 (88.5%)	202 (90.2%)	5%
Immigrant		33 (6.2%)	14 (6.3%)	0%
Refugee		28 (5.3%)	8 (3.6%)	8%
Baseline Clinical & Service-Use Characteristics				
Index Diagnosis				
Schizophrenia		217 (40.9%)	75 (33.5%)	15%
Delusional Disorder		39 (7.4%)	18 (8.0%)	3%
Other Psychoses		274 (51.7%)	131 (58.5%)	14%
Diagnosing Physician				
GP		22 (4.2%)	9 (4.0%)	1%
Psychiatrist		432 (81.5%)	177 (79.0%)	6%
GP + Psychiatrist		44 (8.3%)	17 (7.6%)	3%
Other		32 (6.0%)	21 (9.4%)	13%
Inpatient at Index Diagnosis		126 (23.8%)	52 (23.2%)	1%
Prior Alcohol-Related Disorder		45 (8.5%)	6 (2.7%)	26%
Prior Substance-Related Disorder		91 (17.2%)	21 (9.4%)	23%
Prior Family Physician Contact		185 (34.9%)	66 (29.5%)	12%
Prior Psychiatrist Contact		115 (21.7%)	55 (24.6%)	7%
Prior Mental Health ED Visit		74 (14.0%)	17 (7.6%)	21%
Prior Psychiatric Hospitalization		29 (5.5%)	10 (4.5%)	5%
Outcome Measures				
Contact with Primary Care		226 (42.6%)	109 (39.4%)	7%
Contact with Psychiatrist		523 (98.7%)	259 (93.5%)	27%
Emergency Department Visit		153 (28.9%)	78 (28.2%)	2%
Hospitalization		157 (29.6%)	85 (30.7%)	2%
Involuntary Admission		181 (34.2%)	104 (37.5%)	7%
Self-Harm		<=5	<=5	6%
Death by Suicide		<=5	<=5	11%
All-Cause Mortality		<=5	<=5	3%

** Standardized difference >10% indicates significant between-group differences*