

Supplementary Online Content

Plana-Ripoll O, Pedersen CB, Holtz Y, et al. Exploring comorbidity within mental disorders among a Danish national population. *JAMA Psychiatry*. Published online January 16, 2019. doi:10.1001/jamapsychiatry.2018.3658

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Absolute Risks of Later-Disorders After a Diagnosis of a Prior-Disorder

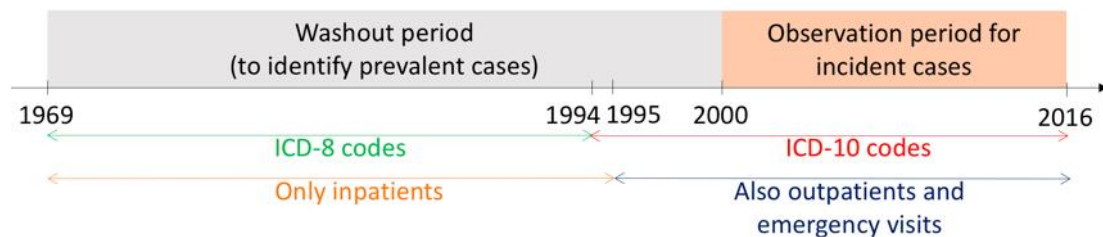
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eAppendix 1. Methods

Data coverage and mental disorders

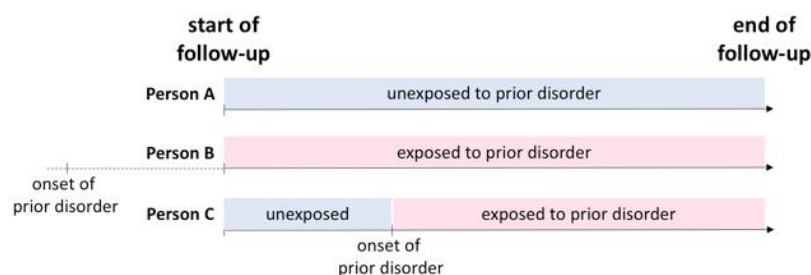
The Danish Psychiatric Central Research Register¹ contains all admissions to psychiatric inpatient facilities since 1969 and, from 1995, also contacts to outpatient psychiatric departments and emergency visits. The diagnostic system used was the Danish modification of the *International Classification of Diseases, Eighth Revision* (ICD-8) from 1969 to 1993, and *Tenth Revision* (ICD-10) from 1994 and onward. For each occasion of service, the treating doctor can allocate: (a) a single action (or current) diagnosis, (b) a single basic (or underlying) diagnosis, (c) one or more secondary diagnoses, and (d) one or more associated diagnoses. For this study, we included mental disorders coded under any of these categories. For each individual in the study, the date of onset for each disorder was defined as the first day of the first contact (inpatient, outpatient, or emergency visit) for any of the specific diagnoses within the specific disorder.

The Danish Psychiatric Central Research Register.



Study population and observation period

We examined the association between all possible 90 pairs of disorders taking the time order into consideration: each pair consisted of a temporally “*prior-disorder*” and a temporally “*later-disorder*”. We investigated the risk of being diagnosed with a later-disorder depending on whether individuals had a previous diagnosis of a particular prior-disorder or not. When investigating the risk of a specific later-disorder (one of the ten disorder groups), follow-up started on January 1, 2000 or at the earliest age at which a person might develop the later-disorder of interest, whichever came later. Follow-up was terminated at onset of the later-disorder, death, emigration from Denmark, or December 31, 2016, whichever came first. Our analyses were based on incident cases of the later-disorder, defined as those cases that (a) had an administrative onset during the observation period (2000-2016), when disorders were diagnosed according to ICD-10 classification system and inpatient, outpatient and emergency visits information were included in the register, and (b) had no diagnosis of the specific later-disorder before the observation period. This stringent washout rule meant that individuals included in the analyses could not have previously accessed services for any of the diagnoses included in the specific later-disorder for a 31-year period from 1969 to 1999. A sensitivity analysis in a previous study estimating incidence rates and lifetime risks for the same mental disorders revealed nearly identical results when extending the washout period to 36 years.² All other nine disorders were considered as prior-disorders and could be identified from the registers using the entire time period available in the register (1969-2016). These nine possible prior-disorders were treated as time-varying exposures when assessing the risk of a later-disorder: individuals were either (a) considered exposed to a specific prior-disorder if they were diagnosed before start of follow-up (note that information on prior-disorders was not used to include or exclude persons from the sample), or (b) considered unexposed until the onset of the prior-disorder (if it happened during follow-up), at which point they became exposed.

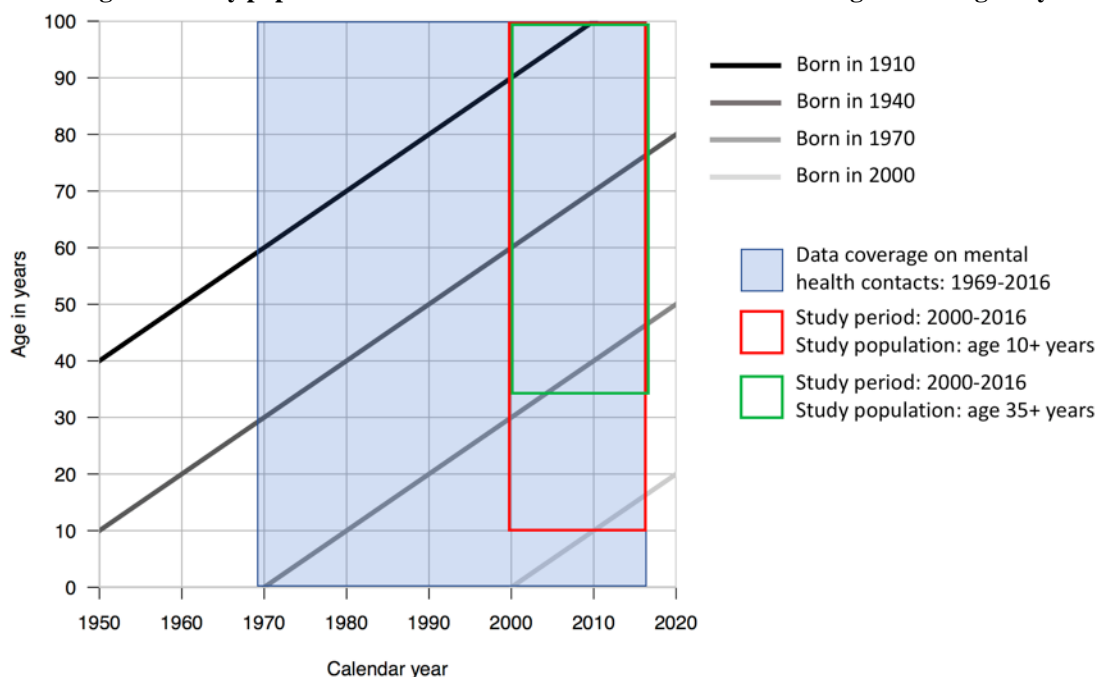


Note that a prior-disorder had to be diagnosed before a later-disorder in order to be considered as an exposure for the later-disorder.

Among all incident later-disorder cases ($n = 752\,997$), a prior-disorder was diagnosed on the same day in 3.4% of the instances (ranging from $<0.01\%$ in the Organic Disorders – Eating Disorders pair; to 15.7% in the Developmental Disorders – Behavioural Disorders pair). In order to preserve the cases of concurrent comorbidity within the time-to-event framework used in this study, we broke the ties by moving a proportion of the prior-disorder diagnoses to one day earlier, otherwise the later-disorder would be always counted for the unexposed, and the association would be underestimated. The proportion of cases to be moved was obtained by estimating the proportion of cases in which the prior-disorder occurred before the later-disorder among those with both prior- and later-disorders occurring within a 5-year window.

As shown in the following Lexis diagram, the study population varied depending on the later-disorder of interest. The population for later-disorders in which the earliest age of onset was 10 years is highlighted in red points, and it included everyone born on or before 31/12/2006. However, the individuals who were followed during the whole observation period (2000-2016) were those born on or before 01/01/1990. If we consider the cohort of individuals born in year 1940, for example, they were followed between the ages of 60 and 76 years. In this cohort, we were able to identify (and exclude from the analysis) prevalent cases diagnosed between the ages of 29 and 60 years (31-year period), but we were not able to identify diagnoses occurring before the age of 29 years.

Lexis diagram: Study populations for later-disorders with earliest onset at age 10 and age 35 years.



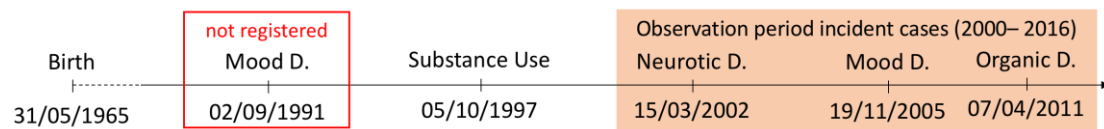
An example of the code used for all data management and analyses can be found online on <http://planaripoll.github.io/NB-COMO> taking as example the pair Mood Disorders (as prior-disorder) and Neurotic Disorders (as later-disorder).

Simplified “worked example” for an individual diagnosed to 4 different disorders

As shown above, the study population varied depending on the later-disorder of interest. Let us consider as example a person born in May 31st 1965, who receives the following diagnoses during their lifetime:

- Mood Disorders: 02/09/1991 and 19/11/2005 (two appearances)
- Substance Use: 05/10/1997
- Neurotic Disorders: 15/03/2002
- Organic Disorders: 07/04/2011

*Note: The first appearance of Mood Disorders is not available in the registers, maybe because they did not seek help, maybe they went to the general practitioner, or maybe it was an outpatient in the hospital (in 1991, only inpatient hospitalizations were recorded). For this reason, we considered also the second appearance.



Let us now examine how this person is included in the study depending on the later-disorder of interest, and how the other disorders are treated as time-varying exposures (table with summary included below).

Later-disorder of interest: Mood Disorders

When investigating the risk of Mood Disorders, this person should be excluded as a prevalent case. However, the diagnosis in 1991 was not registered, and they are included in the risk set in year 2000. Then they are followed until 19/11/2005 when they develop the disorder (false incident case). During the follow-up period:

- Period 01/01/2000-15/03/2002: Exposed to Substance Use
- Period 15/03/2002-19/11/2005: Exposed to Substance Use and Neurotic Disorders

Later-disorder of interest: Substance Use

This person develops the later-disorder before year 2000, so they are considered a prevalent case and do not enter the observation period.

Later-disorder of interest: Neurotic Disorders

The person enters the follow-up period in 01/01/2000, and is followed until 15/03/2002, when they develop the later-disorder of interest. During all the follow-up, he is considered exposed to Substance Use and unexposed to all other disorders.

Later-disorder of interest: Organic Disorders

The person enters the follow-up period in 01/01/2000, and is followed until 07/04/2011, when they develop the later-disorder of interest. During the follow-up period:

- Period 01/01/2000-15/03/2002: Exposed to Substance Use
- Period 15/03/2002-19/11/2005: Exposed to Substance Use and Neurotic Disorders
- Period 19/11/2005-07/04/2011: Exposed to Substance Use, Neurotic Disorders and Mood Disorders.

Later-disorder of interest: any other disorder

The person enters the follow-up period in 01/01/2000, and is followed until 31/12/2016, when they are censored without developing the later-disorder of interest. During the follow-up period:

- Period 01/01/2000-15/03/2002: Exposed to Substance Use
- Period 15/03/2002-19/11/2005: Exposed to Substance Use and Neurotic Disorders
- Period 19/11/2005-07/04/2011: Exposed to Substance Use, Neurotic Disorders and Mood Disorders.
- Period 07/04/2011-31/12/2016: Exposed to Substance Use, Neurotic Disorders, Mood Disorders and Organic Disorders

Description of the follow-up period for the simplified worked example depending on the later-disorder of interest

Later-disorder of interest	Included in the analysis	Observation period		Exposure to prior-disorders
		Start	End	
Mood Disorders	Yes	01/01/2000	15/03/2002	SU
		15/03/2002	19/11/2005	SU+ND
Substance Use	No (prevalent case)			
Neurotic Disorders	Yes	01/01/2000	15/03/2002	SU
Organic Disorders	Yes	01/01/2000	15/03/2002	SU
		15/03/2002	19/11/2005	SU+ND
		19/11/2005	07/04/2011	SU+ND+MD
Any other disorder	Yes	01/01/2000	15/03/2002	SU
		15/03/2002	19/11/2005	SU+ND
		19/11/2005	07/04/2011	SU+ND+MD
		07/04/2011	31/12/2016	SU+ND+MD+OD

*SU = Substance Use; ND = Neurotic Disorders; MD = Mood Disorders; OD = Organic Disorders

Extension of statistical analysis

Cox proportional hazards models were used to estimate associations between pairs of mental disorders. In this type of model, individuals were censored on death, emigration or December 31, 2016, and the rate of a later-disorder $h(t)$ among those exposed ($EXP=1$) and unexposed ($EXP=0$) to a prior-mental disorder was estimated through the following formula

$$h(t, EXP, X_1, \dots, X_n) = h_0(t)e^{\beta \cdot EXP + \beta_1 \cdot X_1 + \dots + \beta_n \cdot X_n}$$

where $h_0(t)$ is the baseline hazard, i.e. the rate of a later-disorder among those unexposed to a prior disorder at a specific age t years and set of covariates X_1, \dots, X_n . The hazard ratio between an exposed and an unexposed is e^β (given all other covariates X_1, \dots, X_n are the same). Model A adjusted for sex and birth date, while model B further adjusted for mental disorder comorbidity with onset before the prior-disorder, but not with onset after the prior-disorder (Model B). This model adjusted for both (a) all additional types of disorders (apart from the specific prior- and later-disorders), and (b) the total number of other disorders (2, 3 or 4+). We further adjusted for the interaction between type and number of co-occurring disorders, but the results were substantially the same as in model B (data not shown). In order to obtain sex-specific estimates and test for differences between males and females, we included an interaction term between exposure to a prior-disorder and sex in the regression models.

All prior-disorders were treated as time-varying exposures with two categories: persons were unexposed to a specific disorder, and they became exposed on the day they were diagnosed for the first time with this disorder. When the rates of a later-disorder among the exposed and unexposed to a prior-disorder are not proportional over time, the Cox proportional hazards model estimates can be interpreted as an average HR over the entire follow-up period.³ However, we further estimated lagged HRs to investigate if the association differed depending on the time since onset of the prior-disorder. To do so, the exposure variable was treated as a time-varying variable with seven categories instead of only two: an unexposed category, and six exposed categories depending on the time since the first diagnosis of the prior-disorder: 0-6 months, 6-12 months, 1-2 years, 2-5 years, 5-10 years, or 15 years or more.

Cumulative incidence proportions were calculated separately by sex and age (at onset of the prior-disorder) groups (<20, 20-40, 40-60, 60-80, and >=80 years) using competing risks survival analyses to account for individual's simultaneously risk of developing the disorder, dying or emigrating (multi-state models).

An example of the code used for all data management and analyses can be found online on <http://planaripoll.github.io/NB-COMO> taking as example the pair Mood Disorders (as prior-disorder) and Neurotic Disorders (as later-disorder).

eAppendix 2. Results

The influence of sex on pairwise associations between mental disorders

The overall estimates stratified by sex were comparable to results of analyses for males and females together (eFigures 21 and 22); however, sex-specific patterns of mental disorder comorbidity were observed (eFigures 23 and 24). While some HRs were similar in men and women, other associations were significantly different. Out of the 90 disorder pairs, the difference between men and women was statistically significant in 76 pairs using Model A and 68 pairs using Model B. The HR of being diagnosed with Neurotic Disorders after a diagnosis in Mood Disorders using model B, for example, was higher in men (HR=12.0 [95% CI 11.8-12.2]) than in women (HR=9.7 [95% CI: 9.6-9.9]) (sex-interaction p-value < 0.001).

eReferences

1. Mors O, Perto GP, Mortensen PB. The Danish Psychiatric Central Research Register. *Scand J Public Health*. 2011;39(7 Suppl):54-57.
2. Pedersen CB, Mors O, Bertelsen A, et al. A comprehensive nationwide study of the incidence rate and lifetime risk for treated mental disorders. *JAMA psychiatry*. 2014;71(5):573-581.
3. Xu R, O'Quigley J. Estimating average regression effect under non-proportional hazards. *Biostatistics*. 2000;1(4):423-439.

eTable. Baseline Characteristics of the Study Population

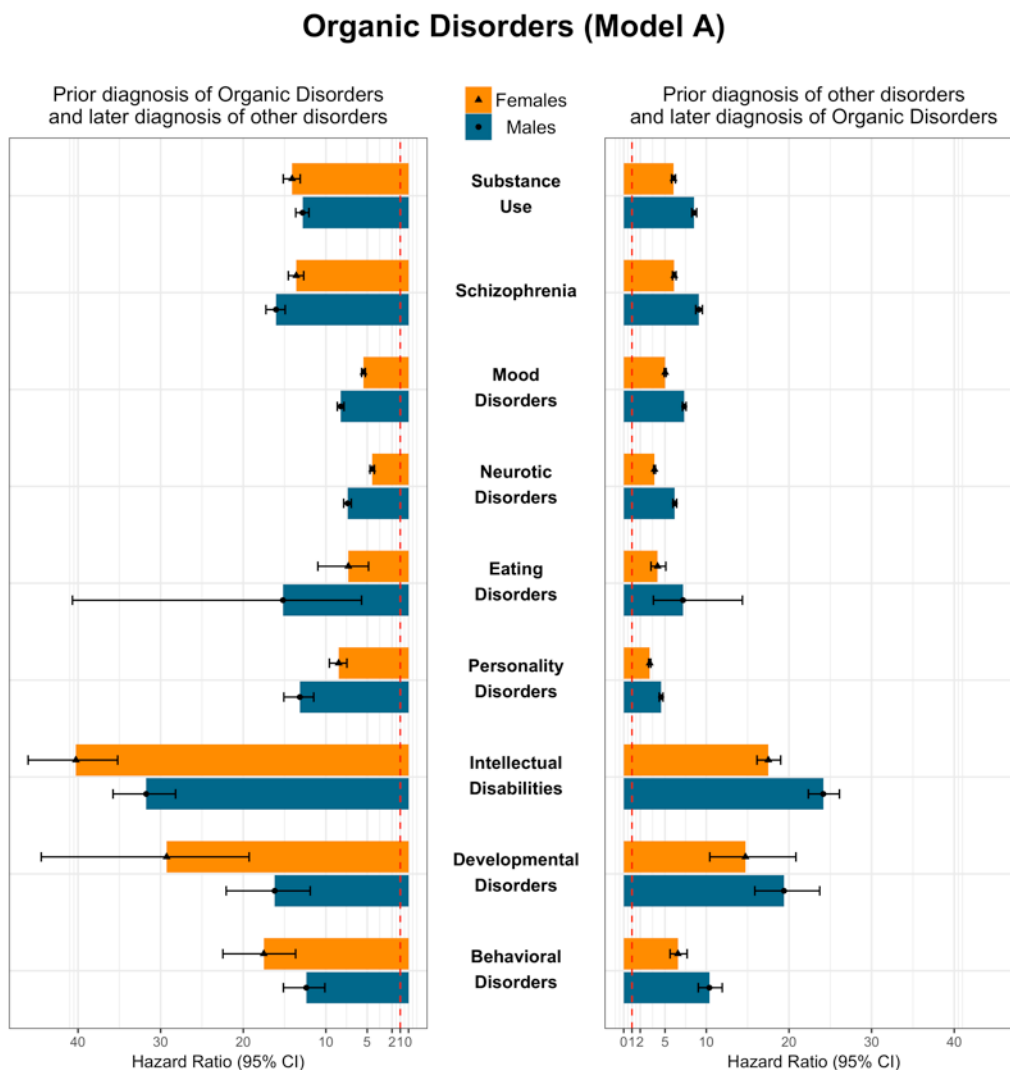
Sex	Males	2 958 293	49.8%
	Females	2 982 485	50.2%
Birth year	1900-1910	37 908	0.6%
	1911-1920	192 783	3.2%
	1921-1930	357 664	6.0%
	1931-1940	470 616	7.9%
	1941-1950	709 878	11.9%
	1951-1960	680 662	11.5%
	1961-1970	724 524	12.2%
	1971-1980	636 306	10.7%
	1981-1990	542 425	9.1%
	1991-2000	662 895	11.2%
	2001-2010	638 704	10.8%
	2011-2015	286 413	4.8%
Age at start of follow-up, med (IQR)		32.1 (7.4-52.9)	
Age at end of follow-up, med (IQR)		47.0 (24.3-68.6)	

All results are presented in n(%) except stated otherwise.

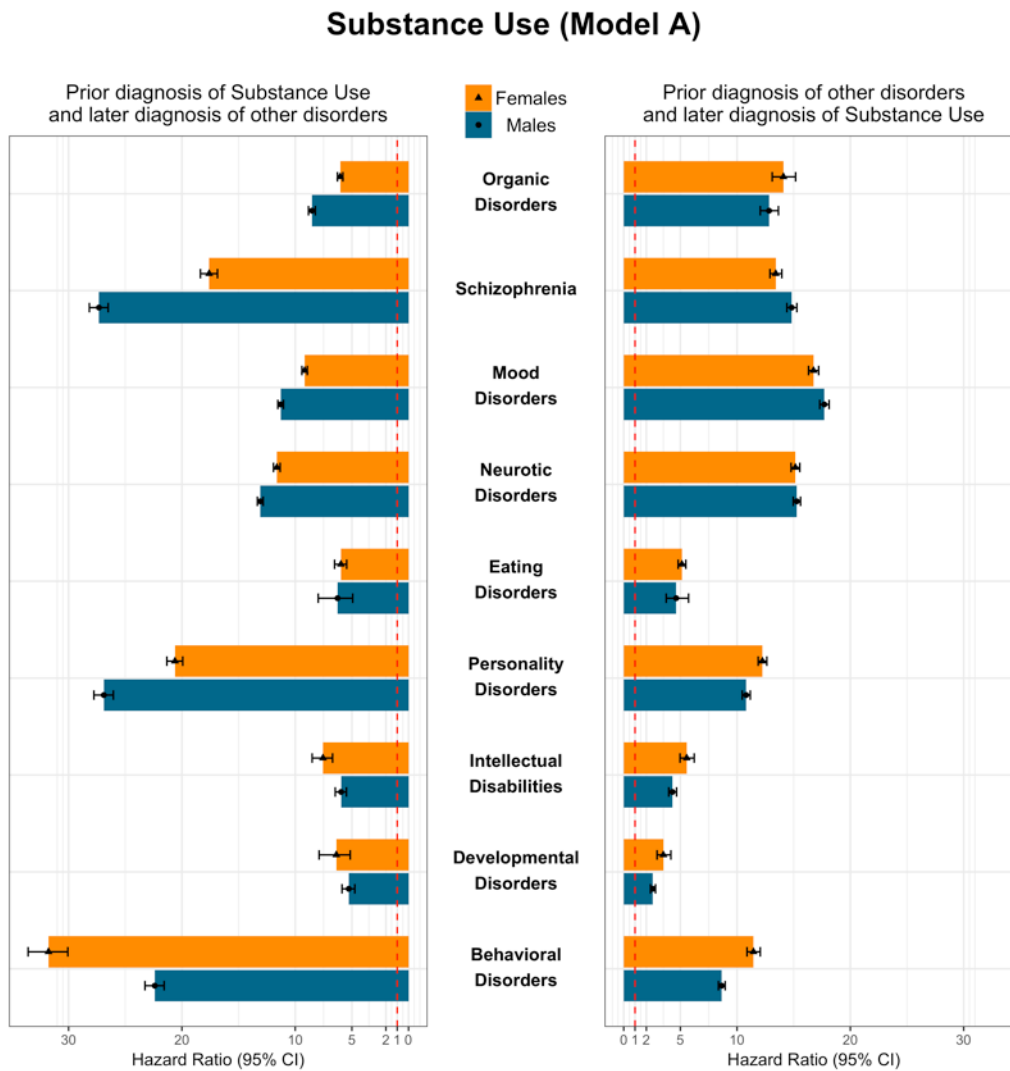
Symmetry of the associations

Most of the investigated associations were bidirectional (i.e. associations between pairs of disorders statistically significant in both directions). In order to visualize whether the associations were symmetrical (i.e. similar magnitude of the association in both directions), we present the following set of figures. Each figure represents one of the 10 disorders. In the left panel, the hazard ratios (HRs) and 95% confidence intervals (CI) are from associations in which the index disorder is the prior-disorder; in the right panel, they are from associations in which the index disorder is the later-disorder. All estimates are shown by females (in yellow) and males (in blue) and are adjusted for age and calendar time (model A) and further adjustment for prior mental comorbidity (model B):

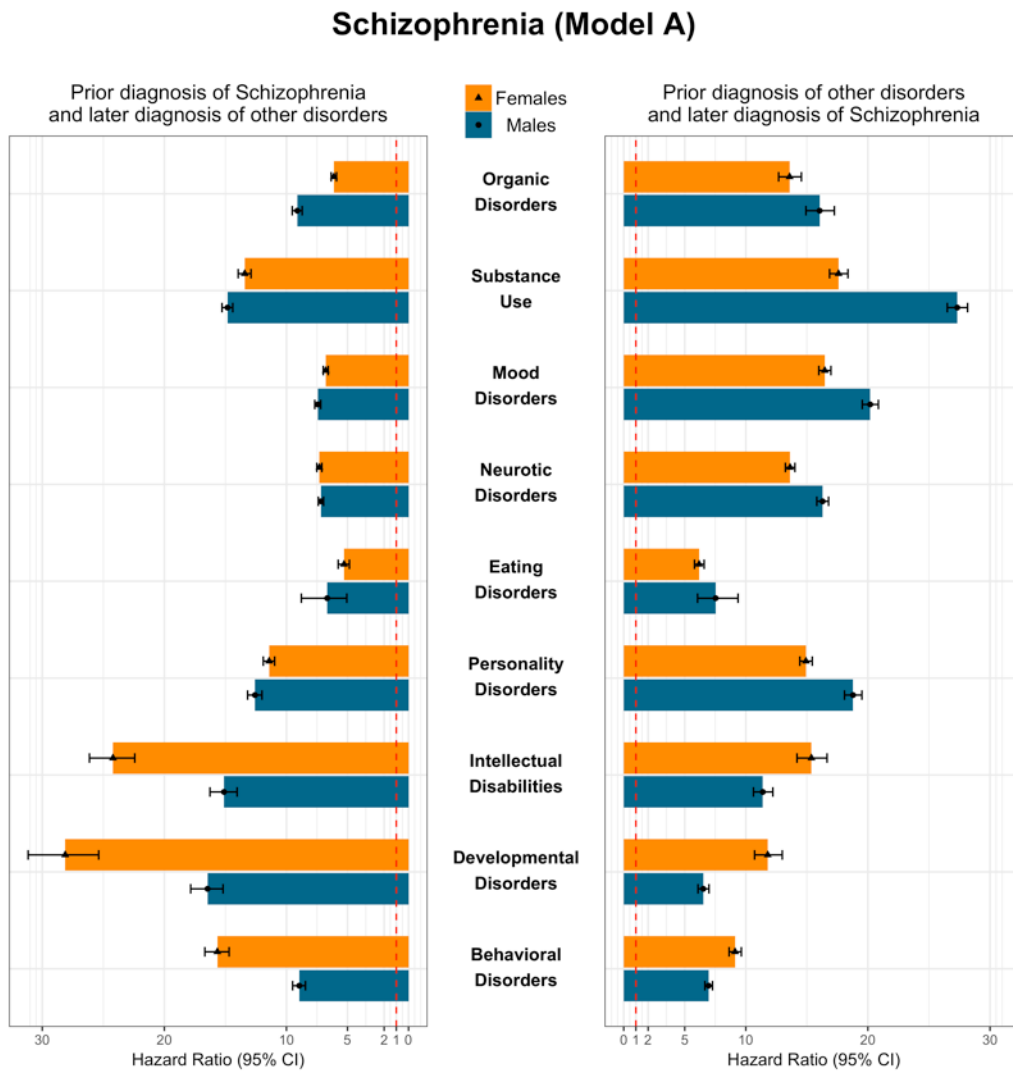
eFigure 1. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Organic Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Organic Disorders (as Later-Disorder) in the Right Panel



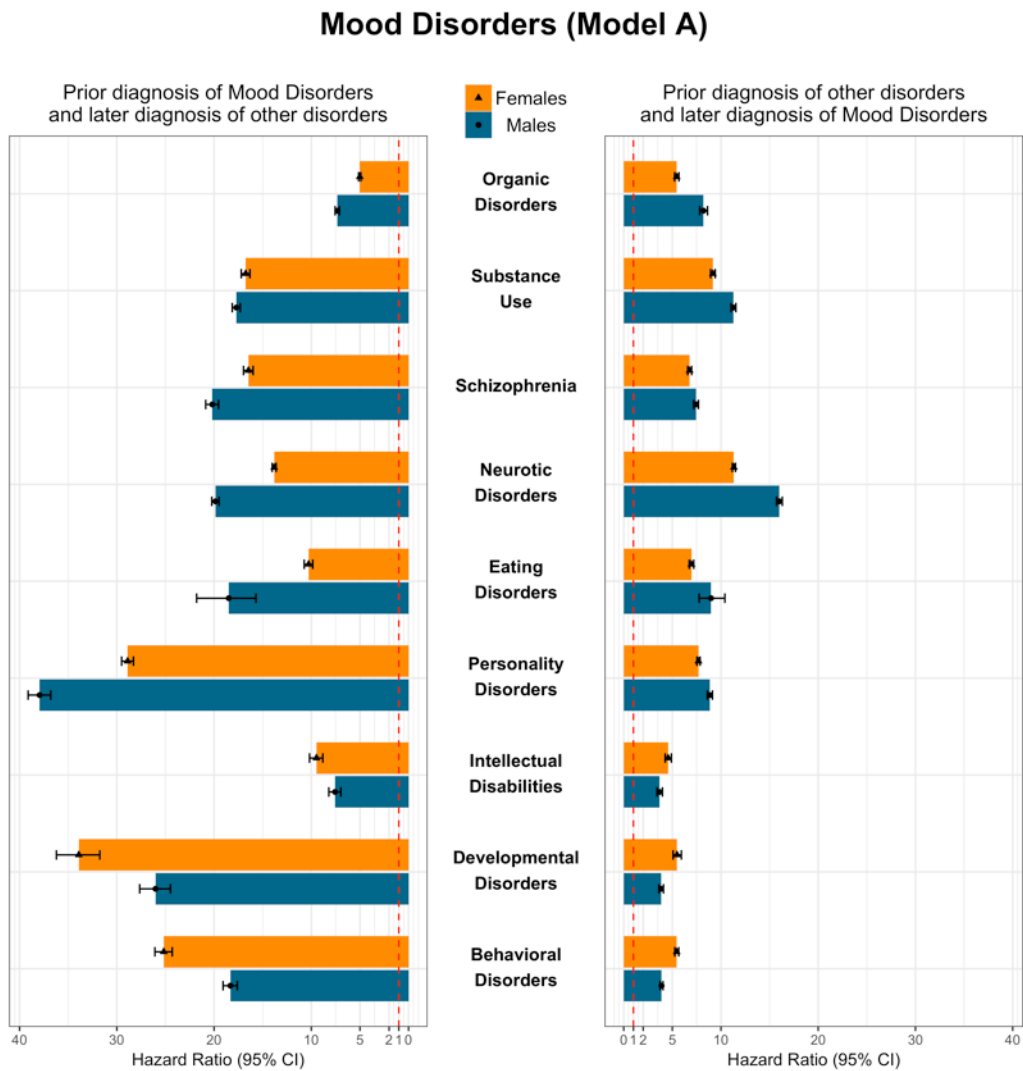
eFigure 2. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) from Substance Use (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Substance Use (as Later-Disorder) in the Right Panel



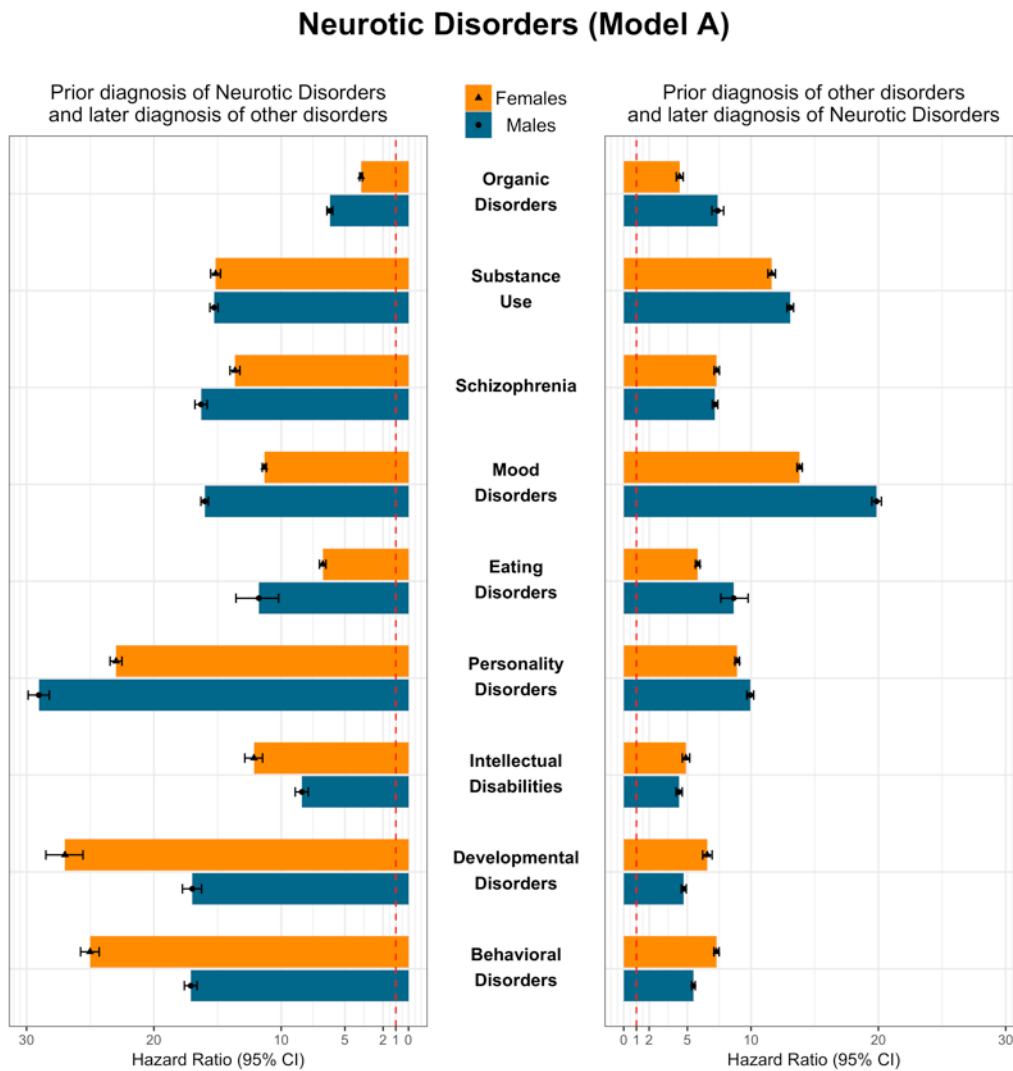
eFigure 3. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Schizophrenia (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Schizophrenia (as Later-Disorder) in the Right Panel



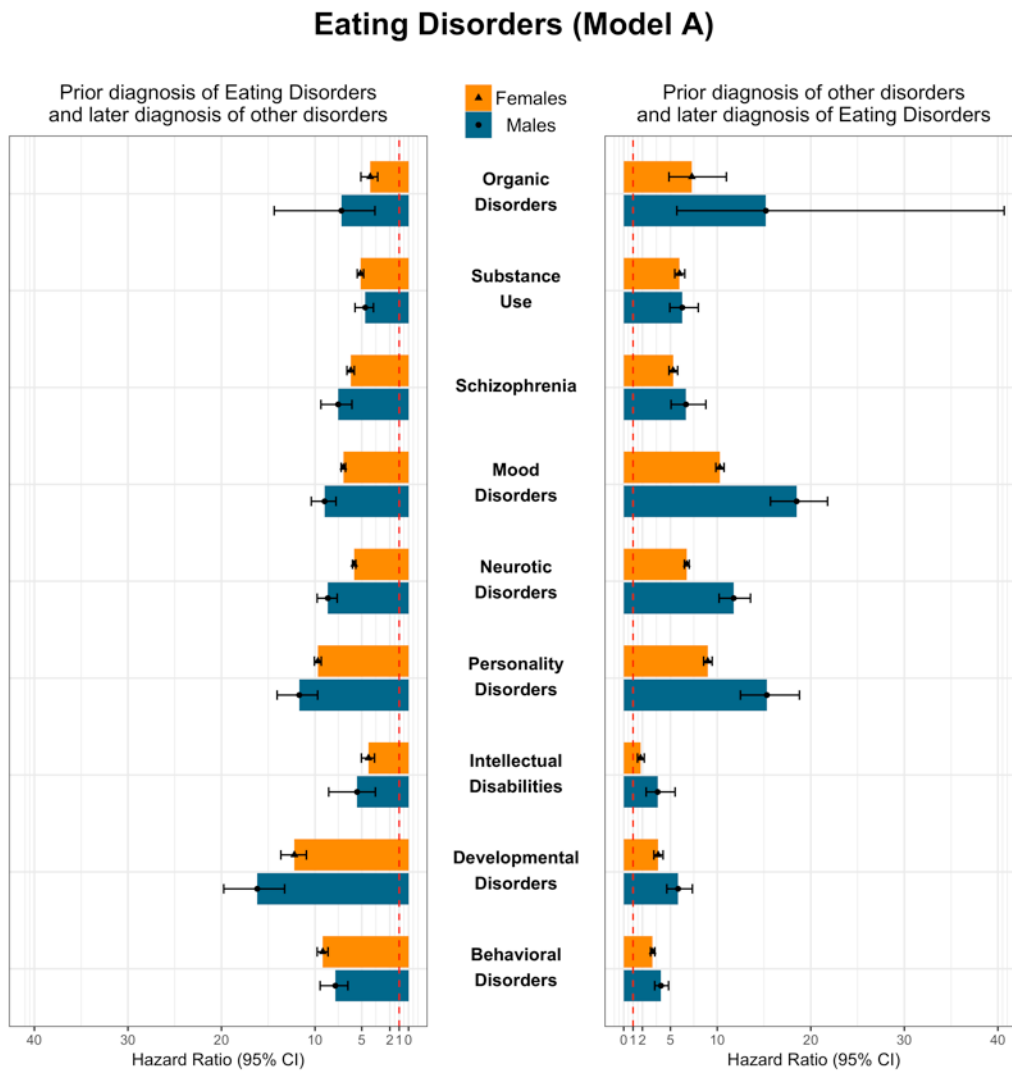
eFigure 4. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Mood Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Mood Disorders (as Later-Disorder) in the Right Panel



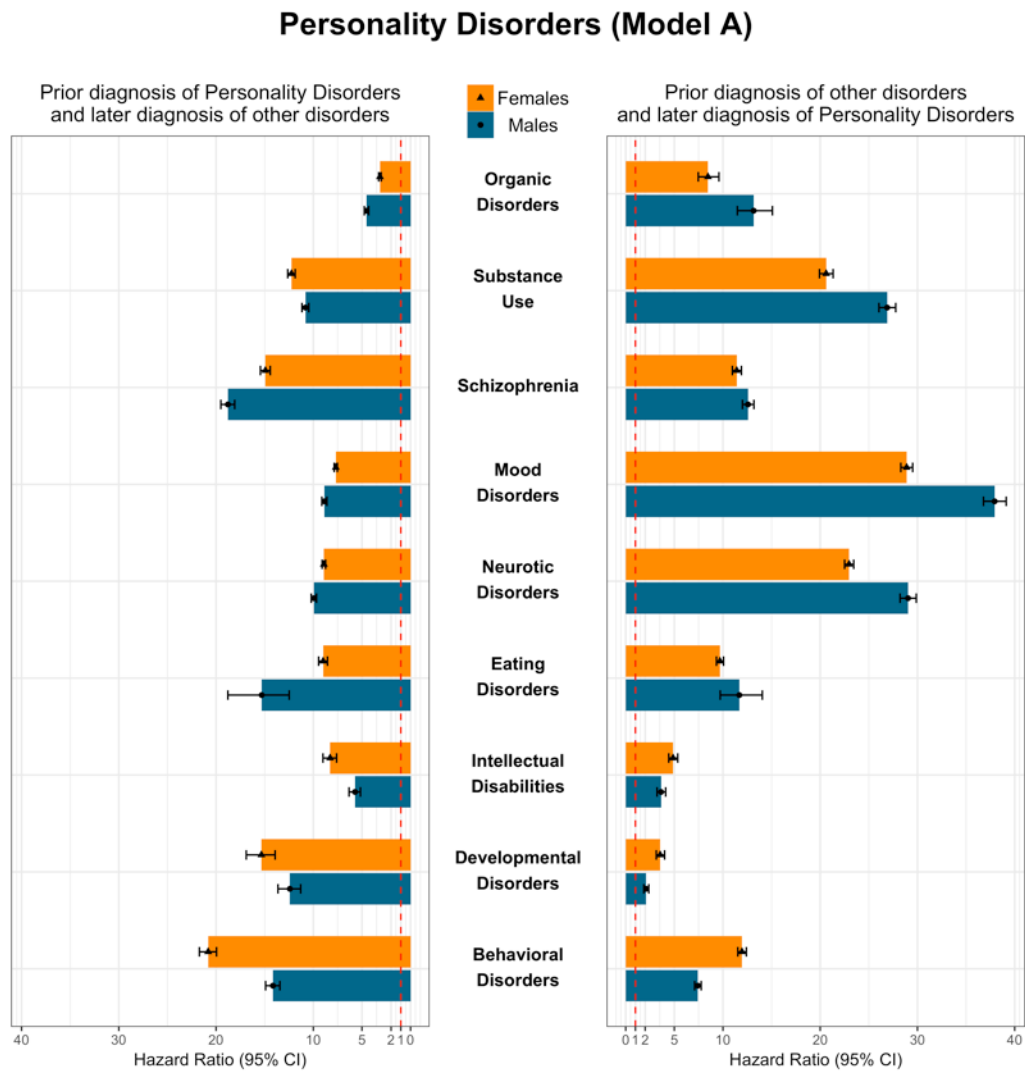
eFigure 5. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Neurotic Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) In the Left Panel, and From Other Disorders (as Prior-Disorders) to Neurotic Disorders (as Later-Disorder) in the Right Panel



eFigure 6. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Eating Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Eating Disorders (as Later-Disorder) in the Right Panel

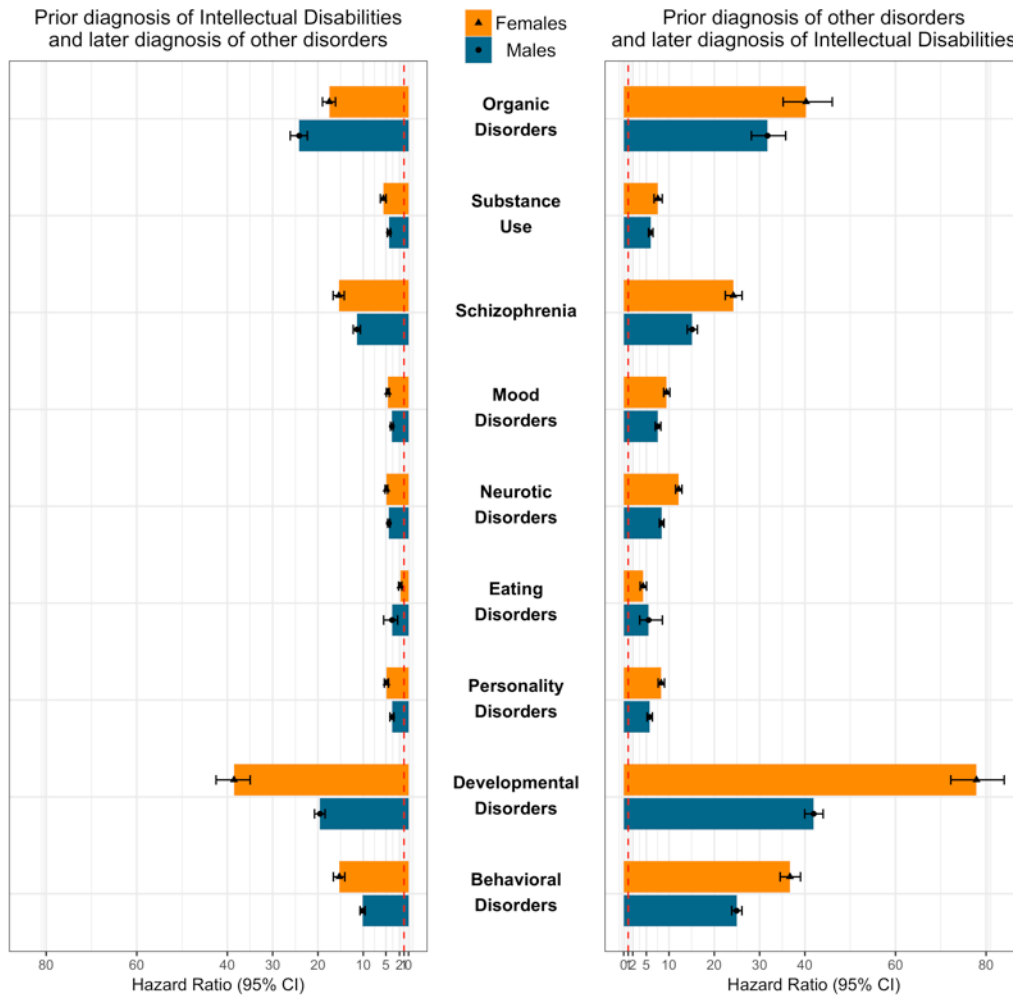


eFigure 7. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Personality Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Personality Disorders (as Later-Disorder) in the Right Panel



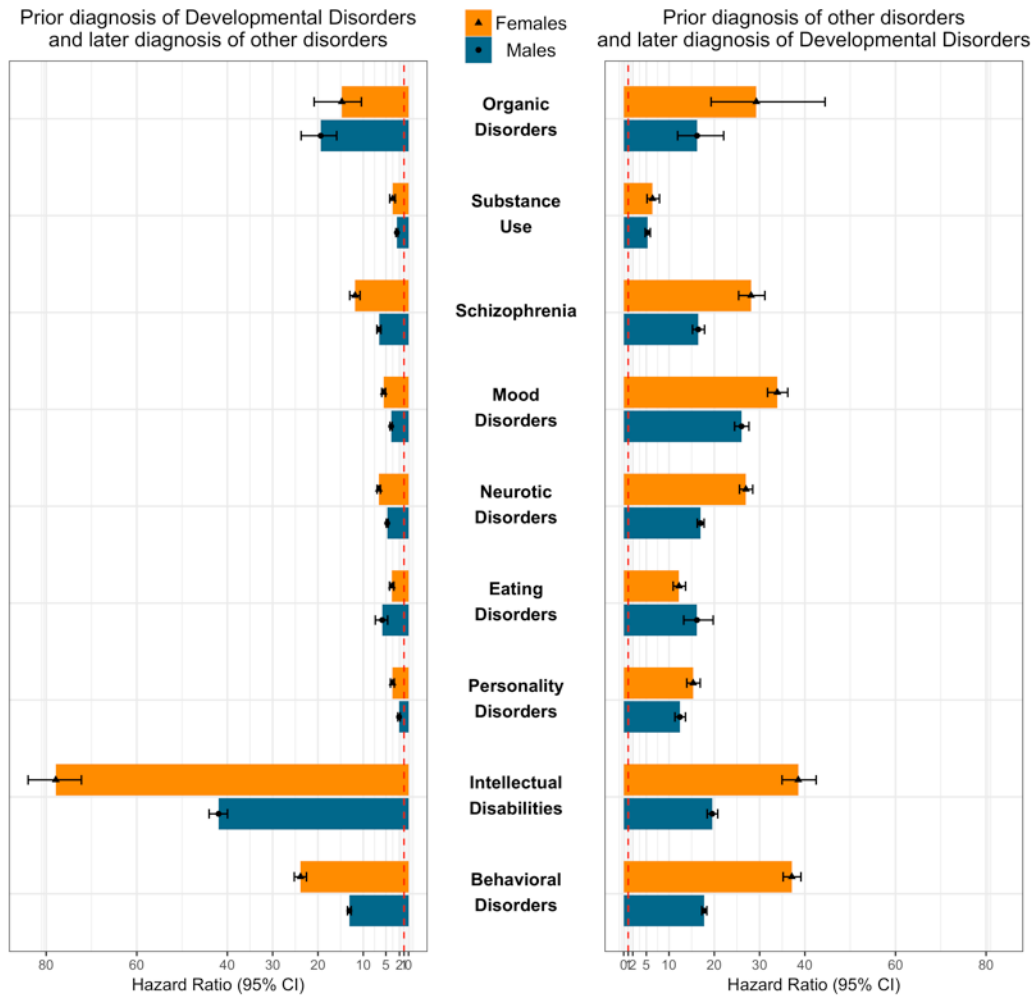
eFigure 8. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Intellectual Disabilities (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Intellectual Disabilities (as Later-Disorder) in the Right Panel

Intellectual Disabilities (Model A)



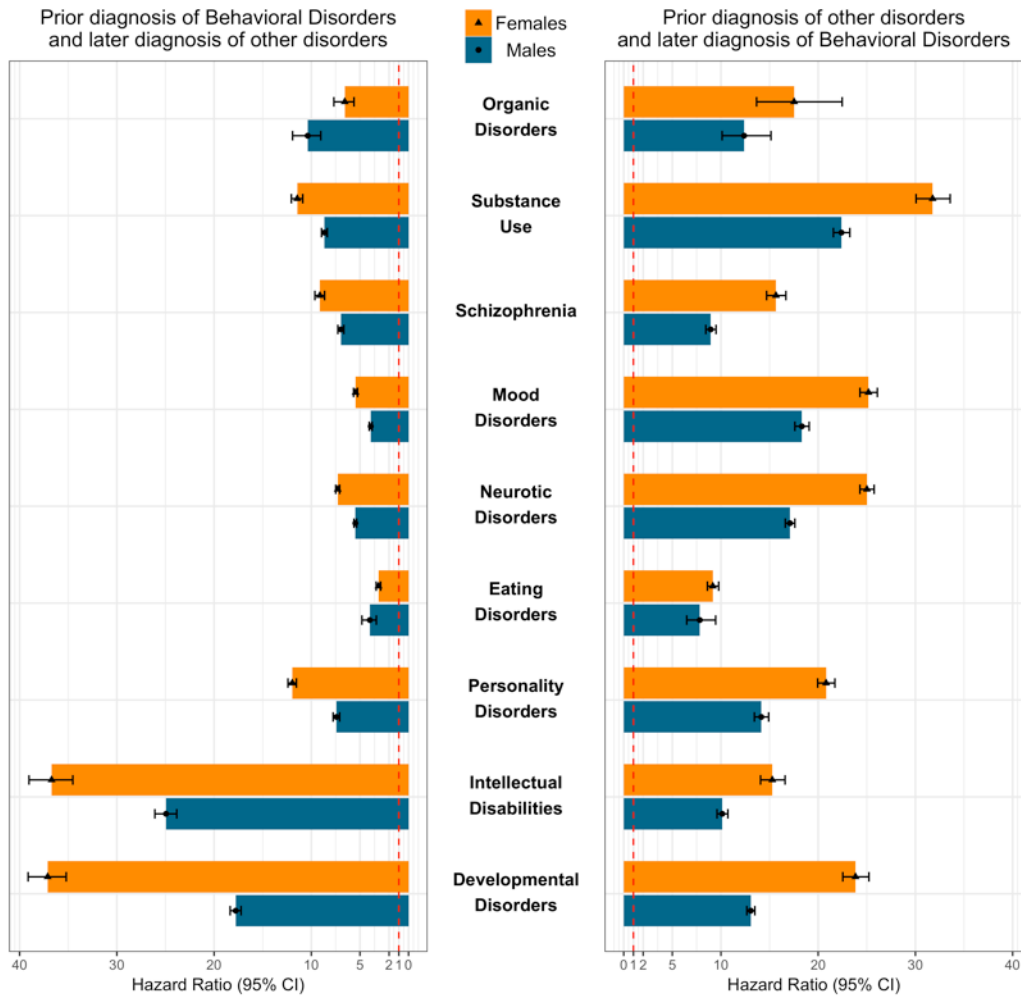
eFigure 9. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Developmental Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Developmental Disorders (as Later-Disorder) in the Right Panel

Developmental Disorders (Model A)

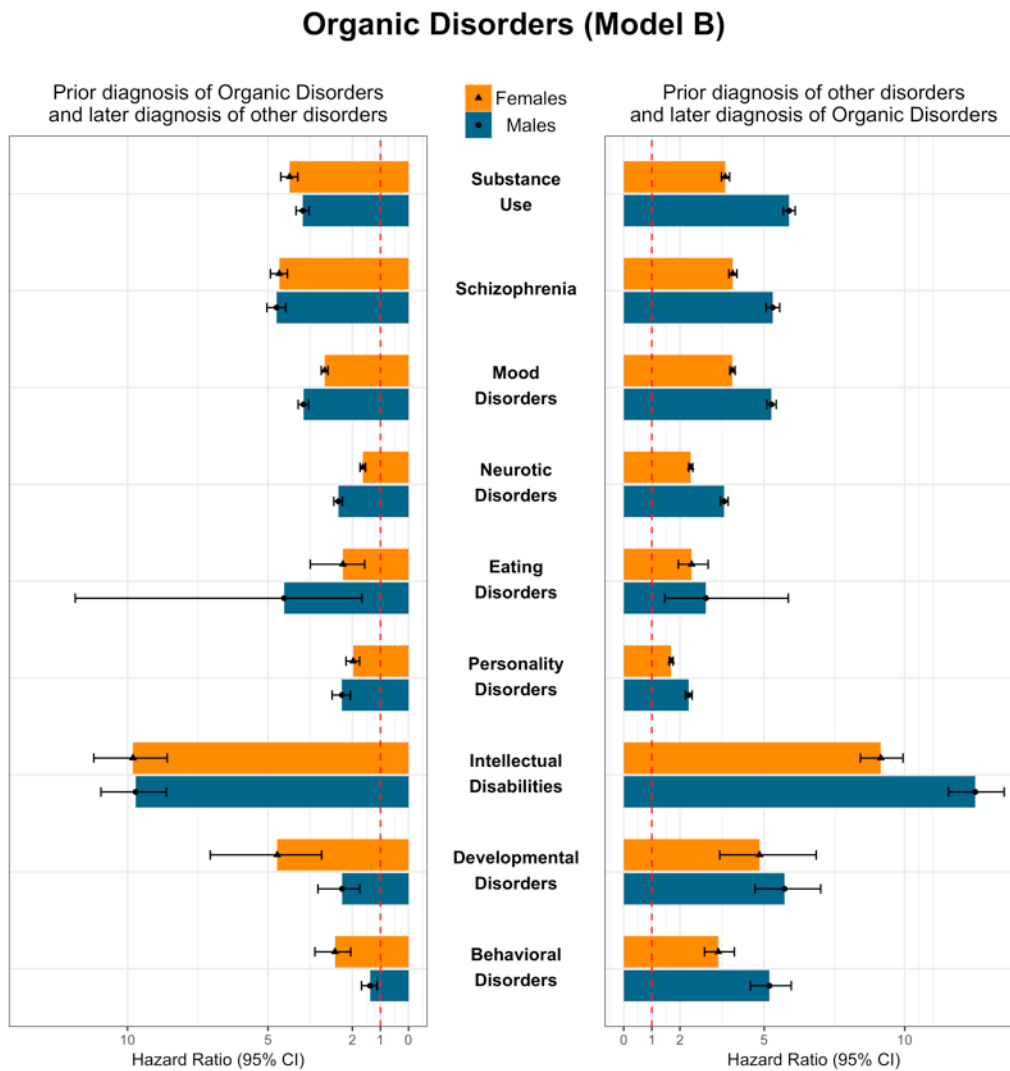


eFigure 10. Sex-Specific HRs and 95% CIs (Adjusted for Age and Calendar Time) From Behavioral Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Behavioral Disorders (as Later-Disorder) in the Right Panel

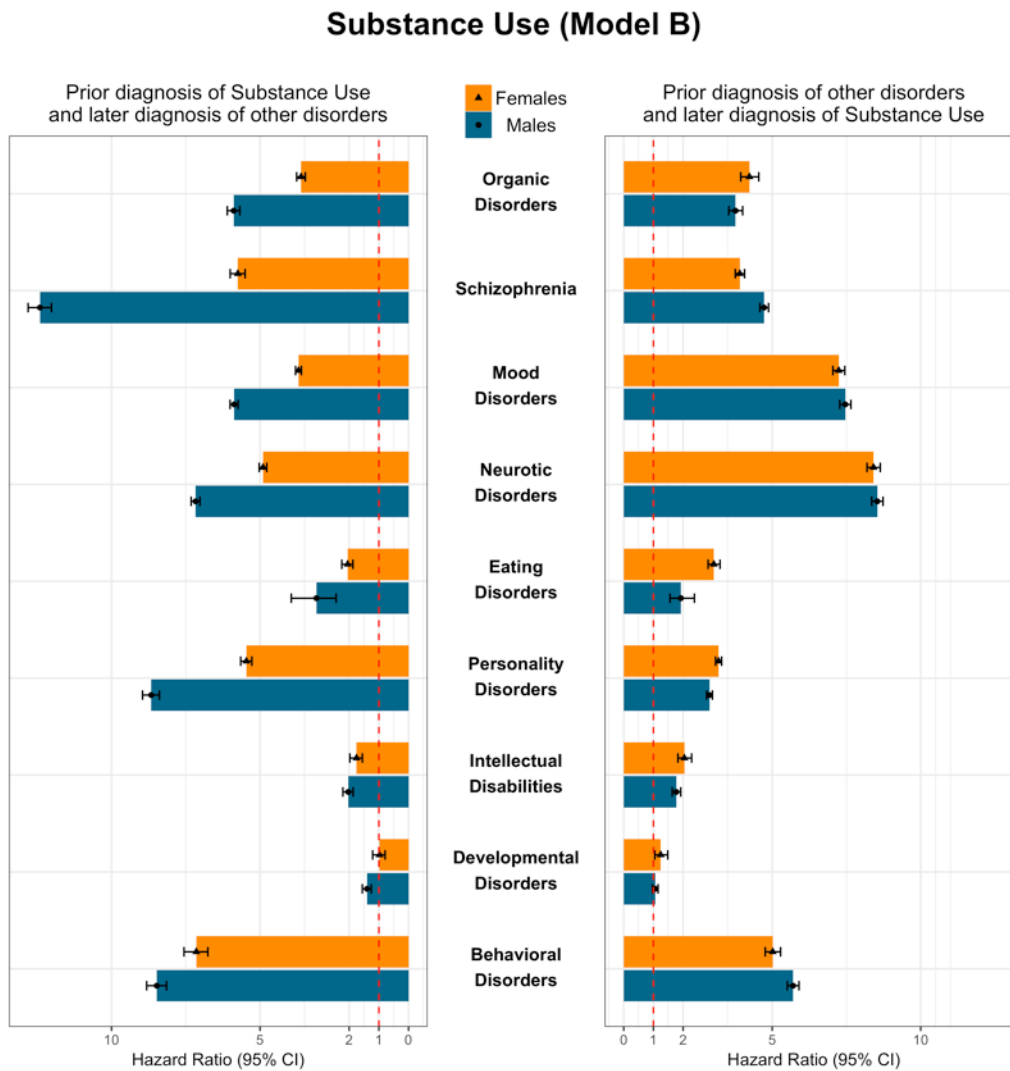
Behavioral Disorders (Model A)



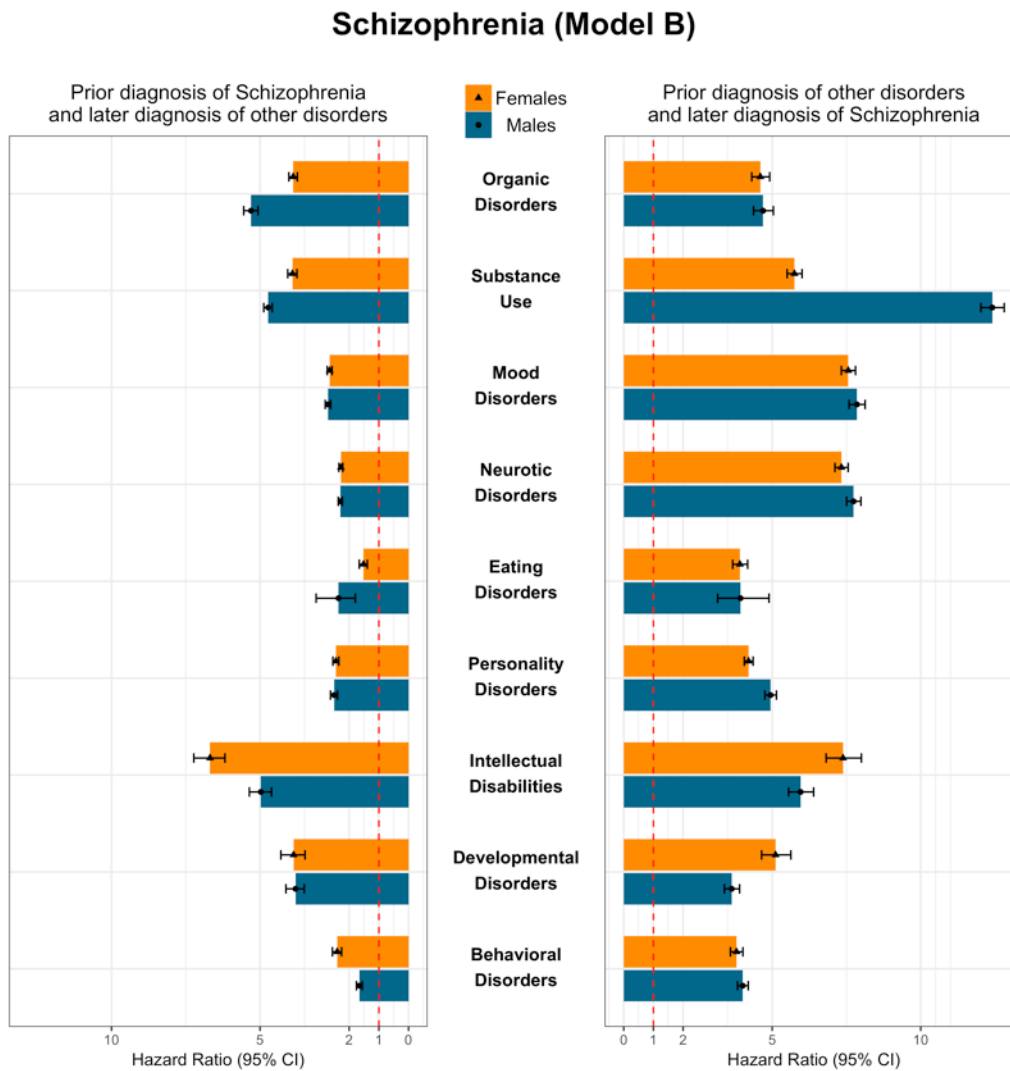
eFigure 11. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Organic Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Organic Disorders (as Later-Disorder) in the Right Panel



eFigure 12. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Substance Use (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Substance Use (as Later-Disorder) in the Right Panel



eFigure 13. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Schizophrenia (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Schizophrenia (as Later-Disorder) in the Right Panel



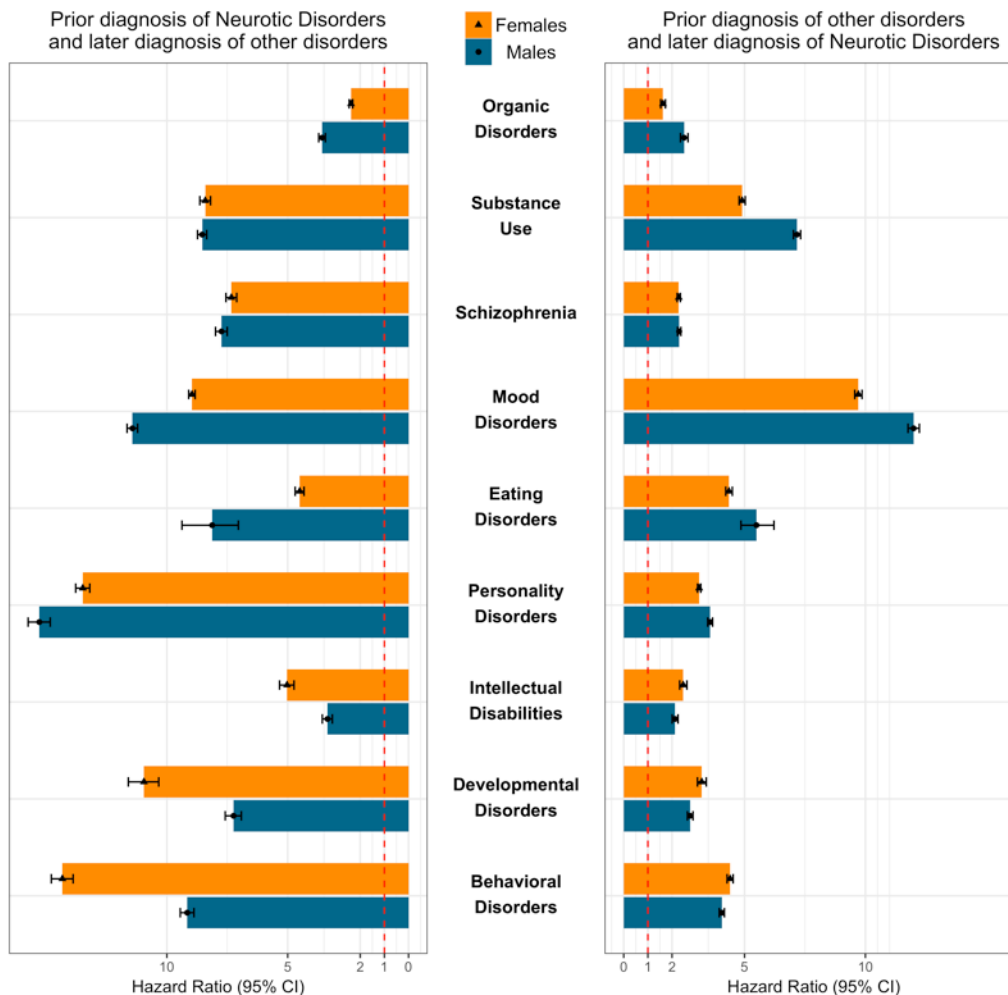
eFigure 14. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Mood Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Mood Disorders (as Later-Disorder) in the Right Panel

Mood Disorders (Model B)

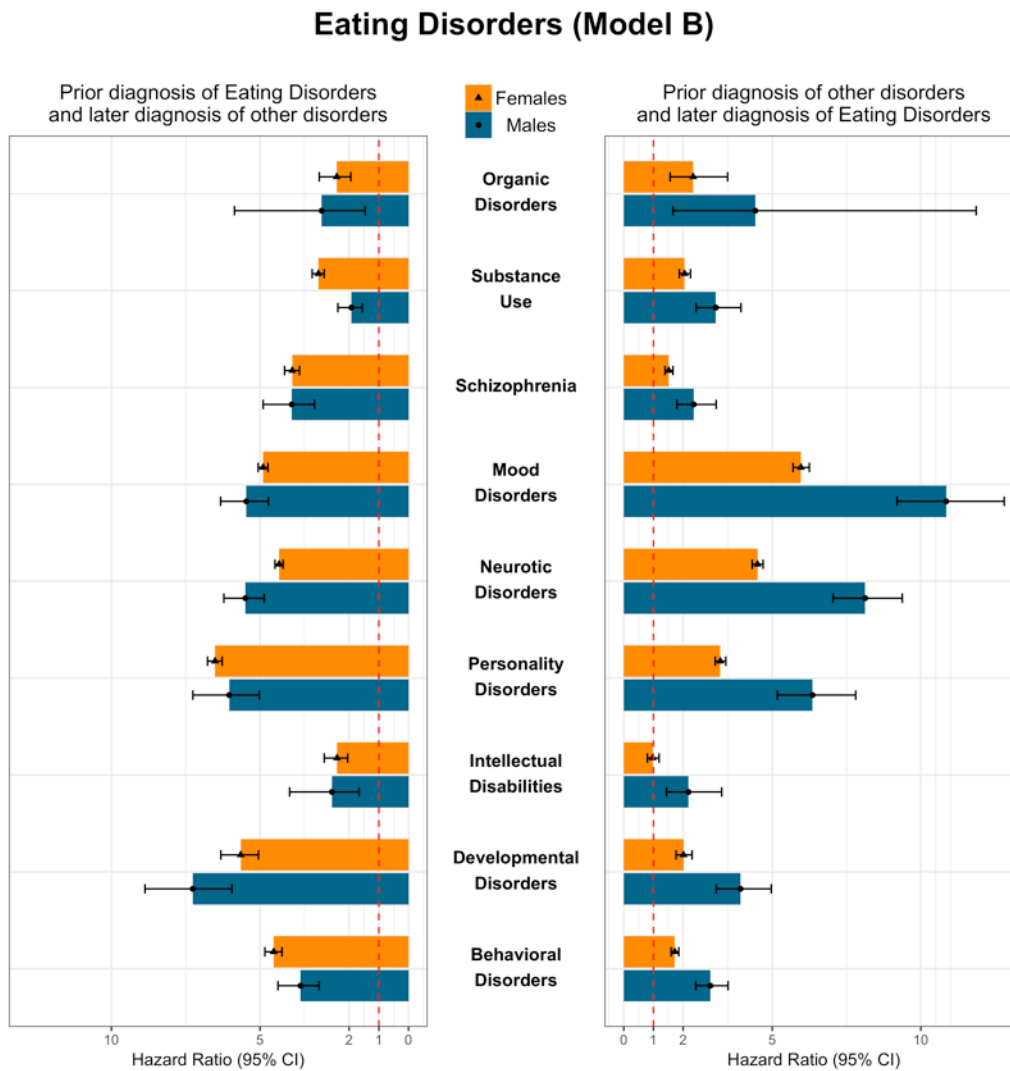


eFigure 15. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Neurotic Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Neurotic Disorders (as Later-Disorder) in the Right Panel

Neurotic Disorders (Model B)

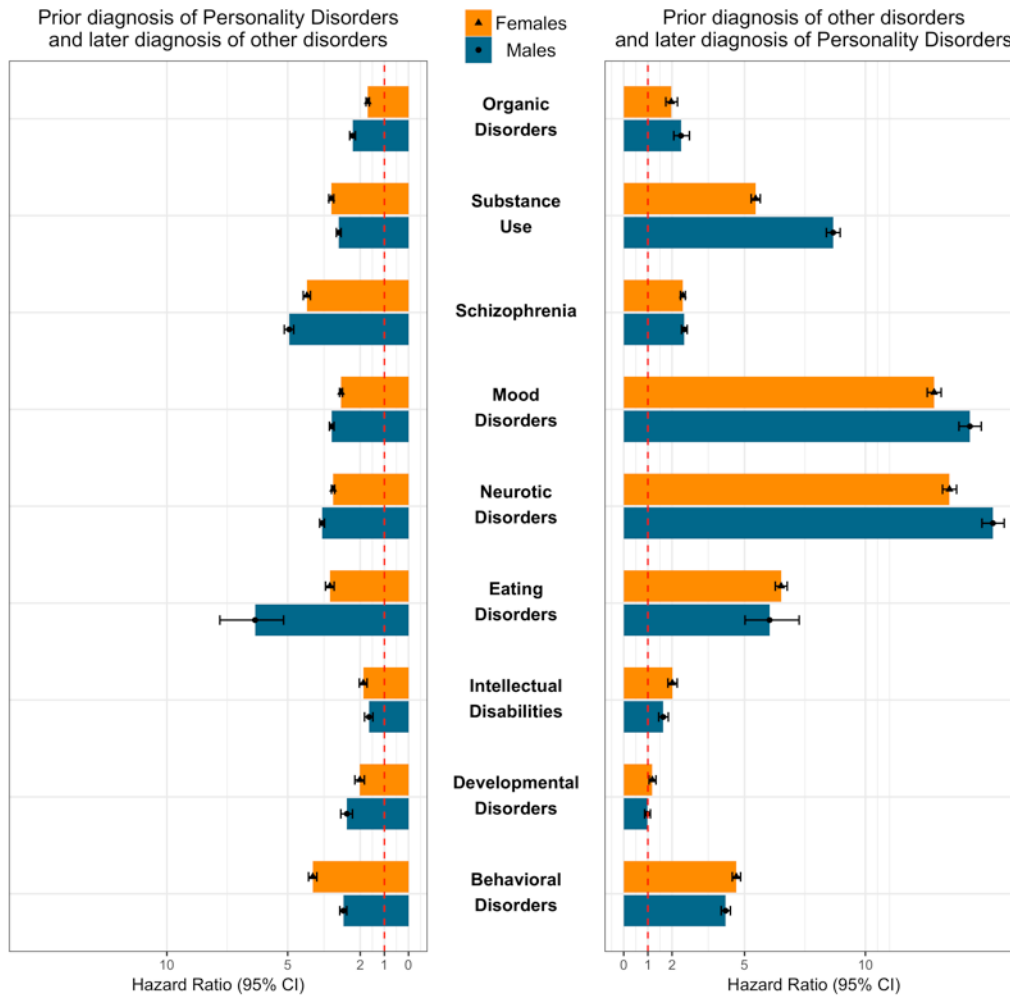


eFigure 16. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Eating Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Eating Disorders (as Later-Disorder) in the Right Panel

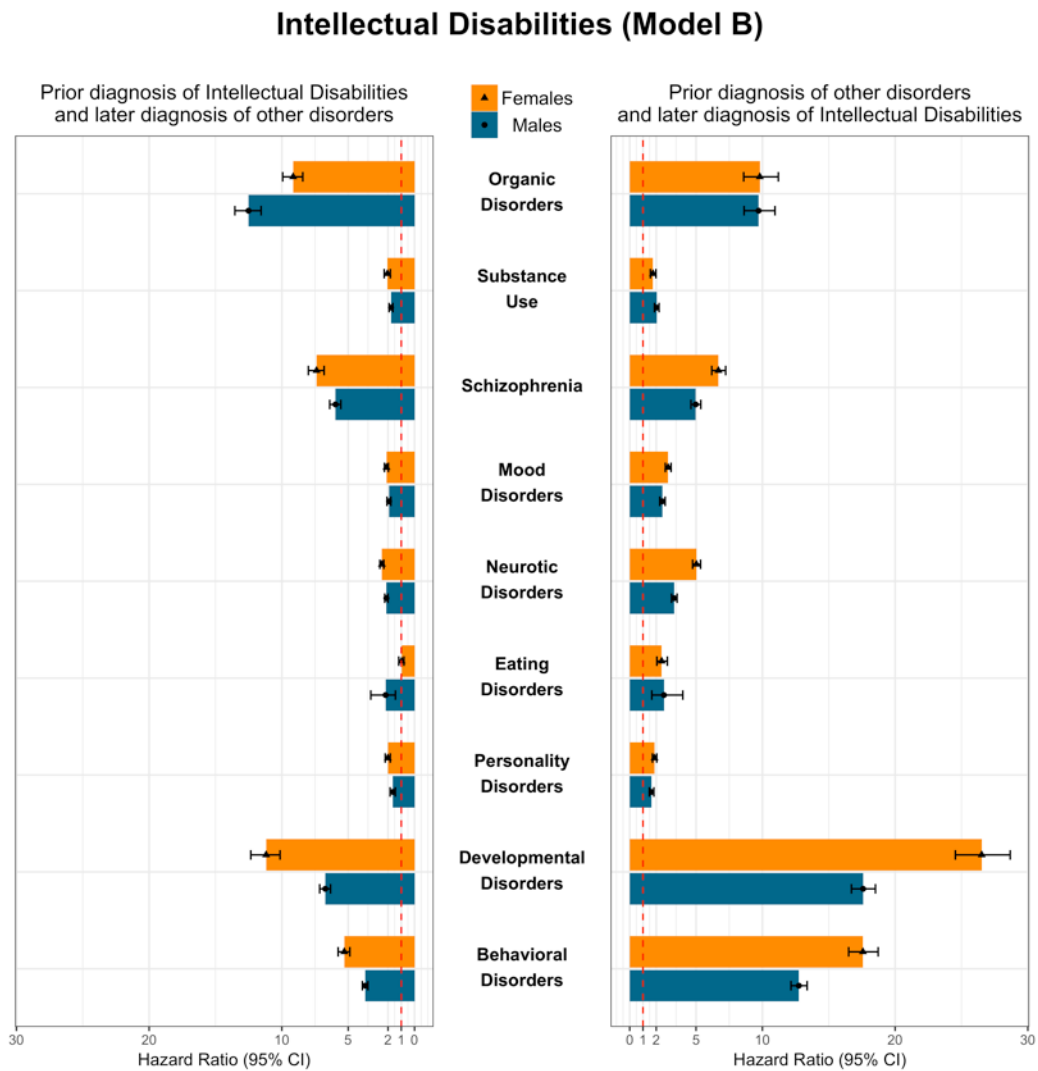


eFigure 17. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Personality Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Personality Disorders (as Later-Disorder) in the Right Panel

Personality Disorders (Model B)

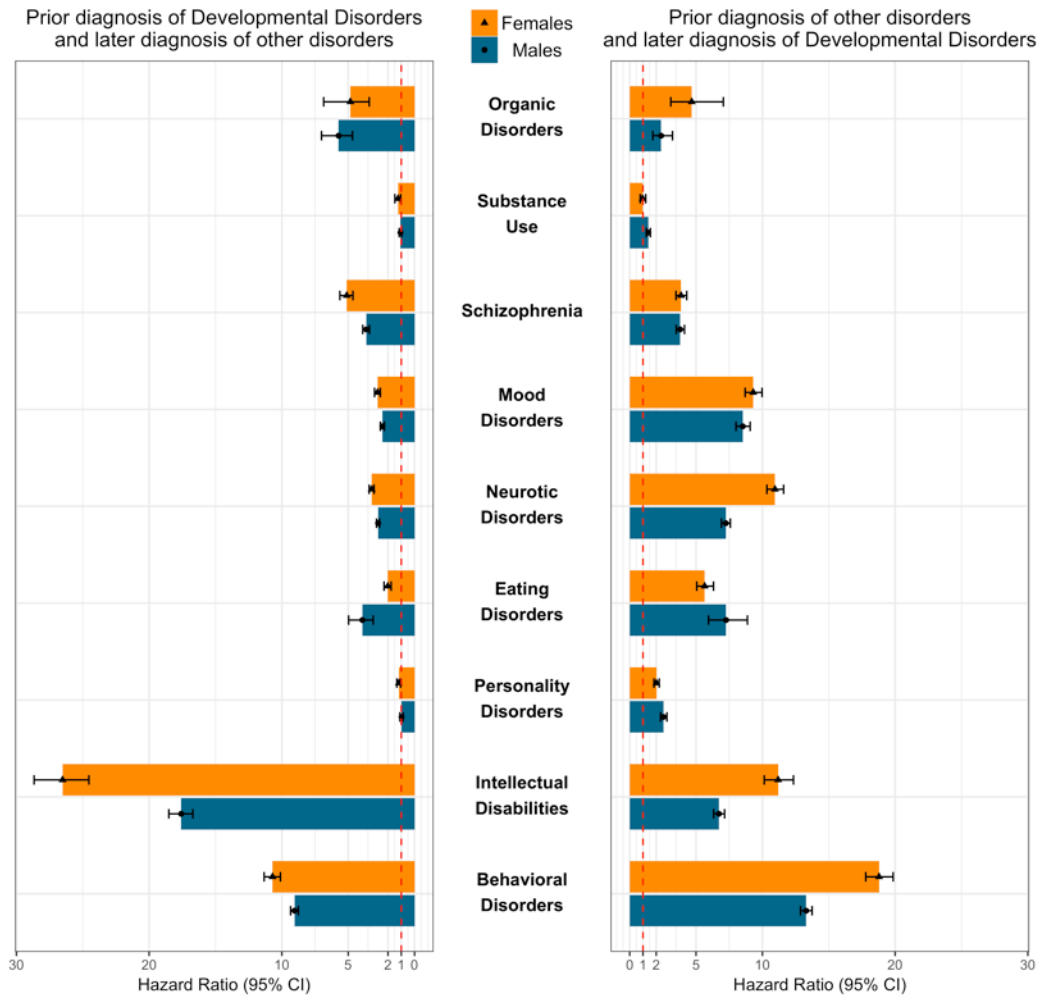


eFigure 18. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Intellectual Disabilities (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Intellectual Disabilities (as Later-Disorder) in the Right Panel



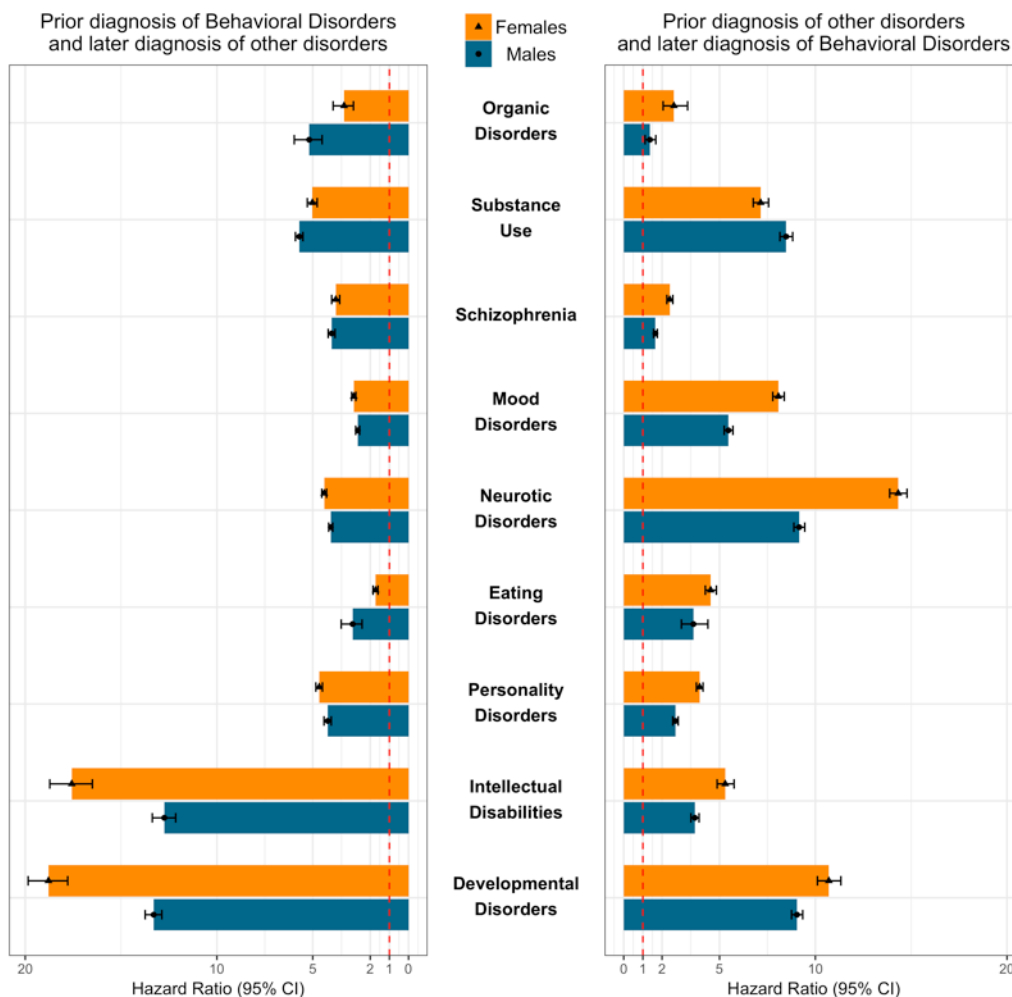
eFigure 19. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Developmental Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Developmental Disorders (as Later-Disorder) in the Right Panel

Developmental Disorders (Model B)



eFigure 20. Sex-Specific HRs and 95% CIs (Adjusted for Age, Calendar Time and Prior Mental Comorbidity) From Behavioral Disorders (as Prior-Disorder) to Other Disorders (as Later-Disorders) in the Left Panel, and From Other Disorders (as Prior-Disorders) to Behavioral Disorders (as Later-Disorder) in the Right Panel

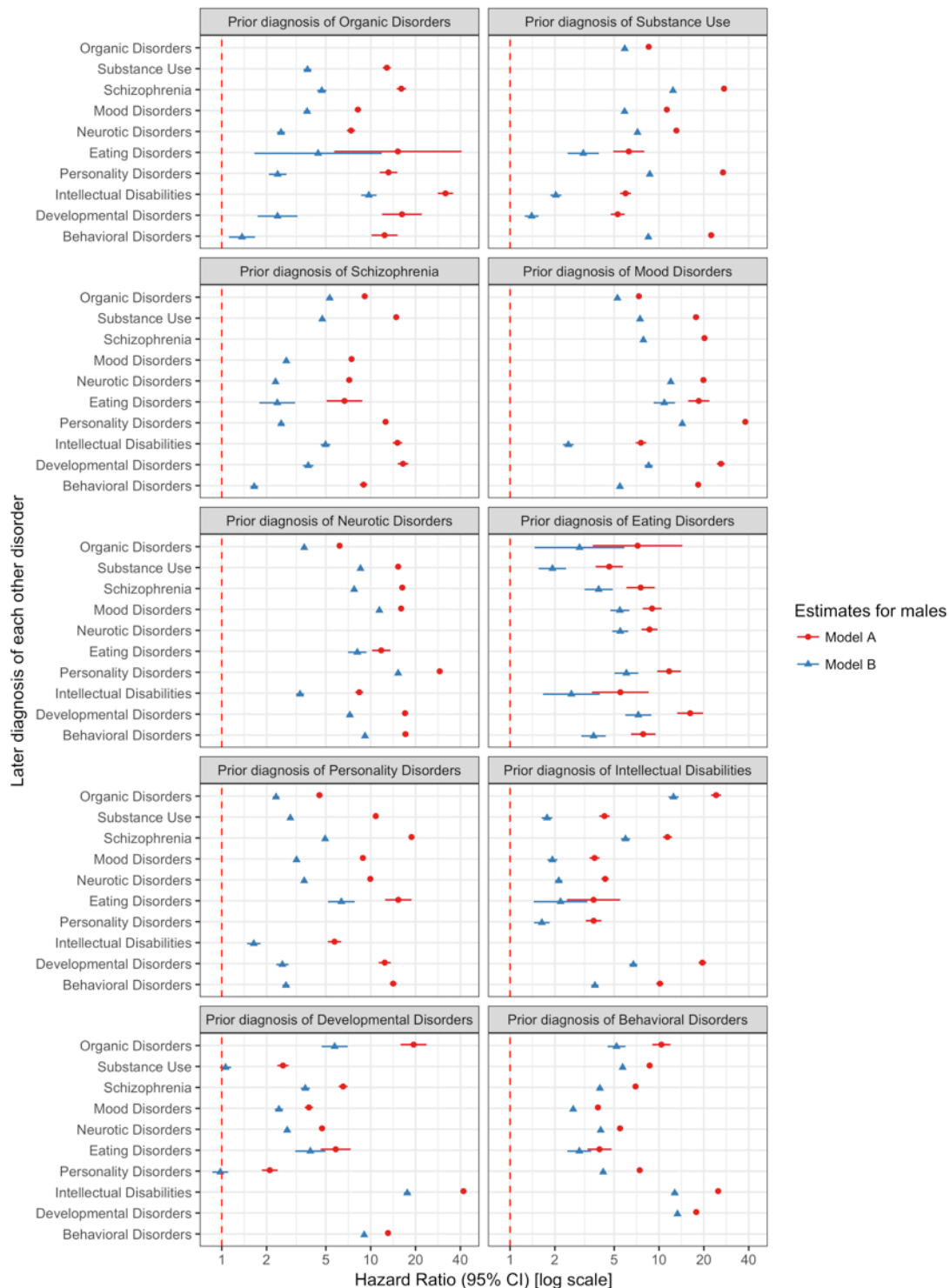
Behavioral Disorders (Model B)



Sex-specific pairwise associations

In the following figures, the main estimates for the pairwise hazard ratios are shown separately for men and women. Each panel shows the pairwise comorbidity between prior-disorders (shown as labels at the top of each panel) and later-disorders (shown as rows within each panel; the labels for each row are shown to the left). Each HR is accompanied by its 95% CI; however, these are often obscured by the effect size symbol used to display the HRs. Estimates were obtained via Cox proportional hazards models with age as the underlying time scale, adjusting for sex and calendar time (Model A – points in red); and further adjustment for other mental disorders that had onset prior to the prior-disorder (Model B – triangles in blue). The line of unity is shown as a red dashed line in each plot.

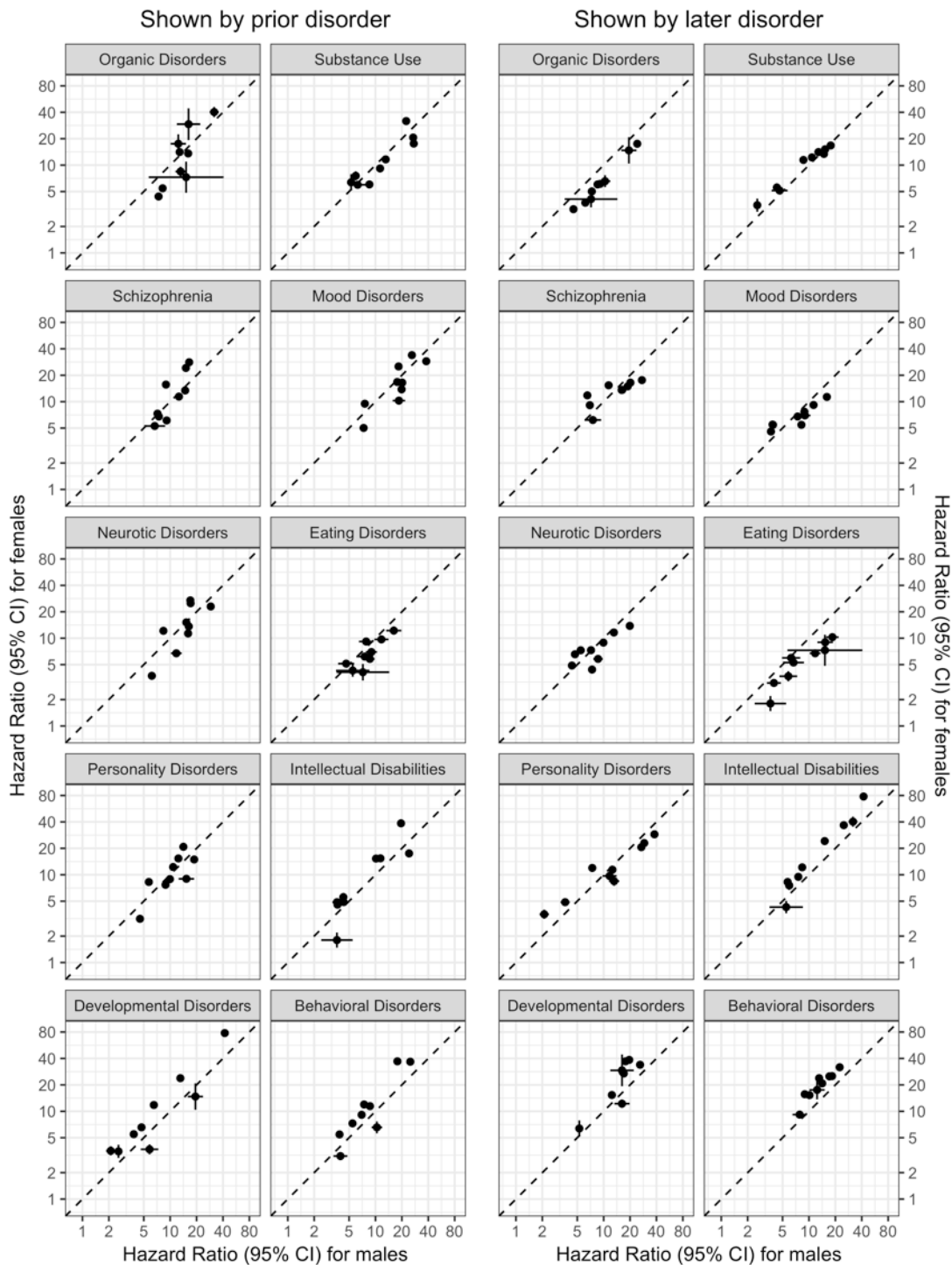
eFigure 21. HRs and 95% CIs Comparing Males With and Without a Prior Diagnosis of Each Disorder of Being Diagnosed With Another Disorder



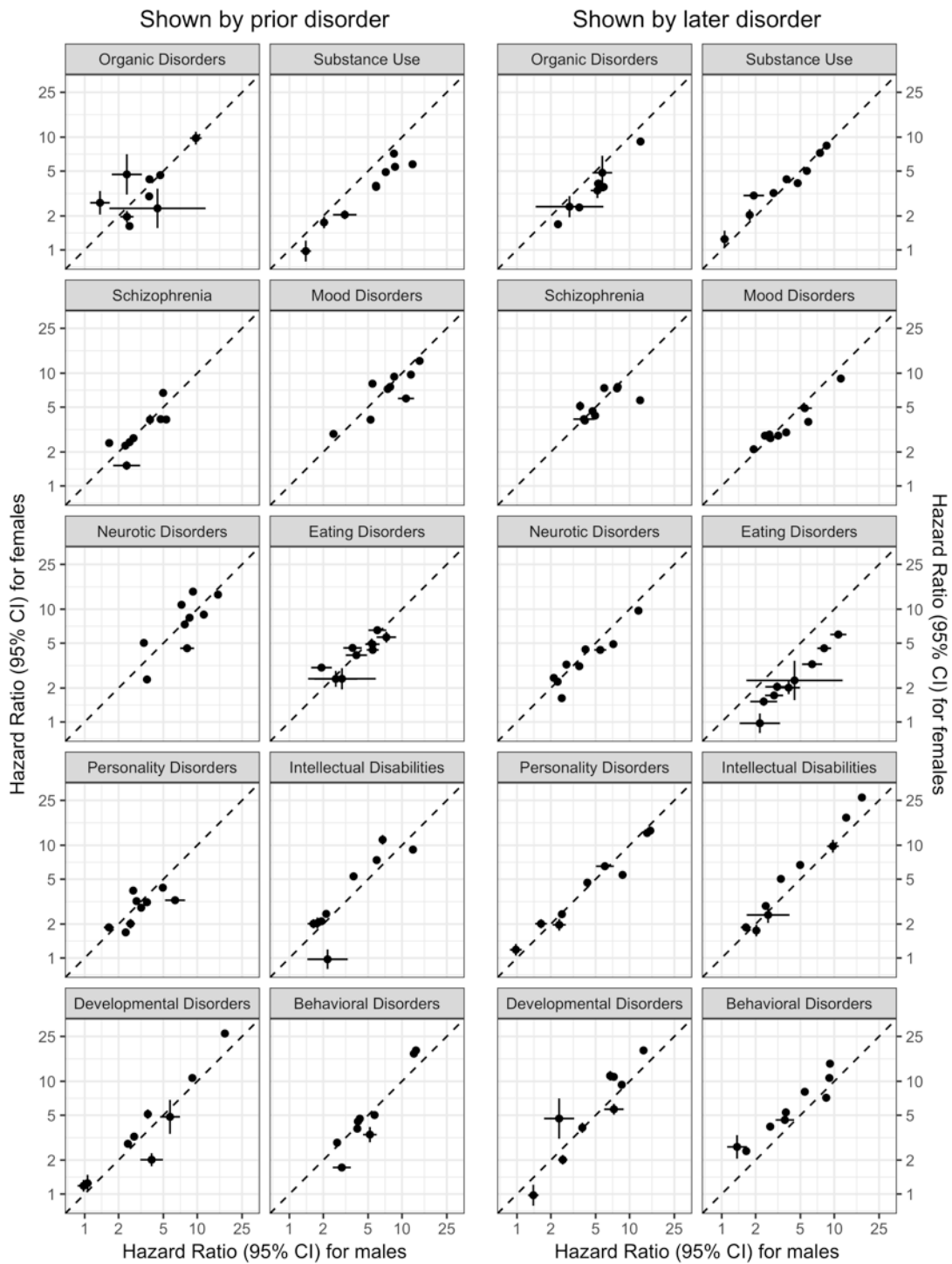
Sex-specific patterns of comorbidity

While some hazard ratios (HRs) were similar in males and females, other associations were different. In the following figures, we show scatter plots comparing the HRs and 95% confidence intervals (CIs) in males (horizontal axis) and females (vertical axis), grouped by prior-disorder and later-disorder. Estimates were obtained via Cox proportional hazards models with age as the underlying time scale.

eFigure 23. Scatter Plot Comparing HRs and 95% CI for Males (Horizontal Axis) and Females (Vertical Axis) With All Estimates Adjusted for Age and Calendar Time



eFigure 24. Scatter Plot Comparing HRs and 95% CI For Males (Horizontal Axis) and Females (Vertical Axis) With All Estimates Adjusted for Age, Calendar Time and Prior Mental Comorbidity

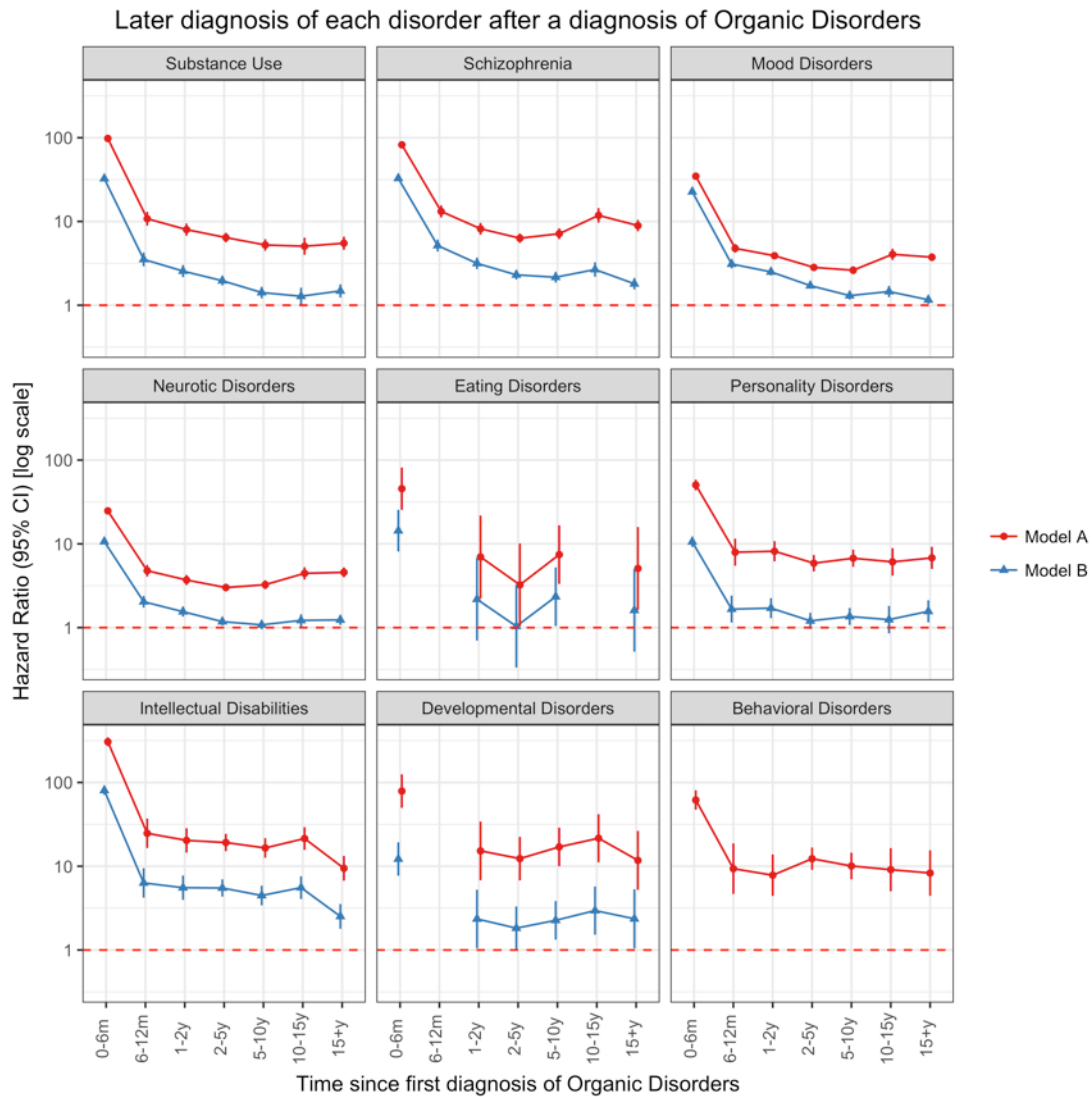


Lagged associations

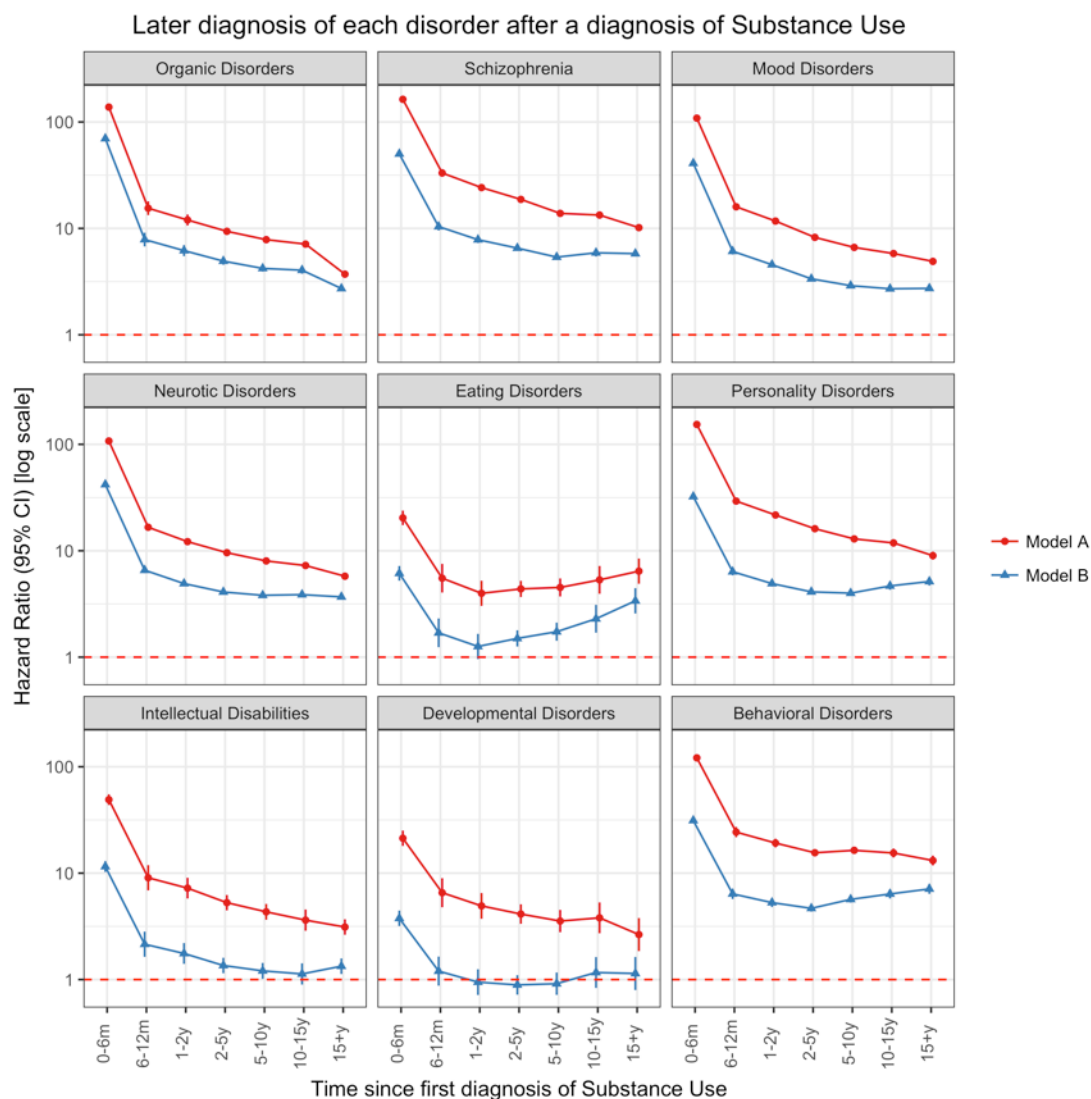
The following figures show the hazard ratios (HRs) of being diagnosed with each disorder depending on whether individuals had been previously diagnosed with a prior-disorder, depending on time since the first diagnosis of this disorder. Estimates were obtained via Cox proportional hazards models with age as the underlying time scale, adjusting for sex and calendar time (Model A – points in red); and further adjustment for other mental disorders that had onset prior to the prior-disorder (Model B – triangles in blue). The reference category are persons without a diagnosis of the prior-disorder. The line of unity is shown as a red dashed line in each plot.

eFigure 25. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Organic Disorders, Depending on Time Since the First Diagnosis

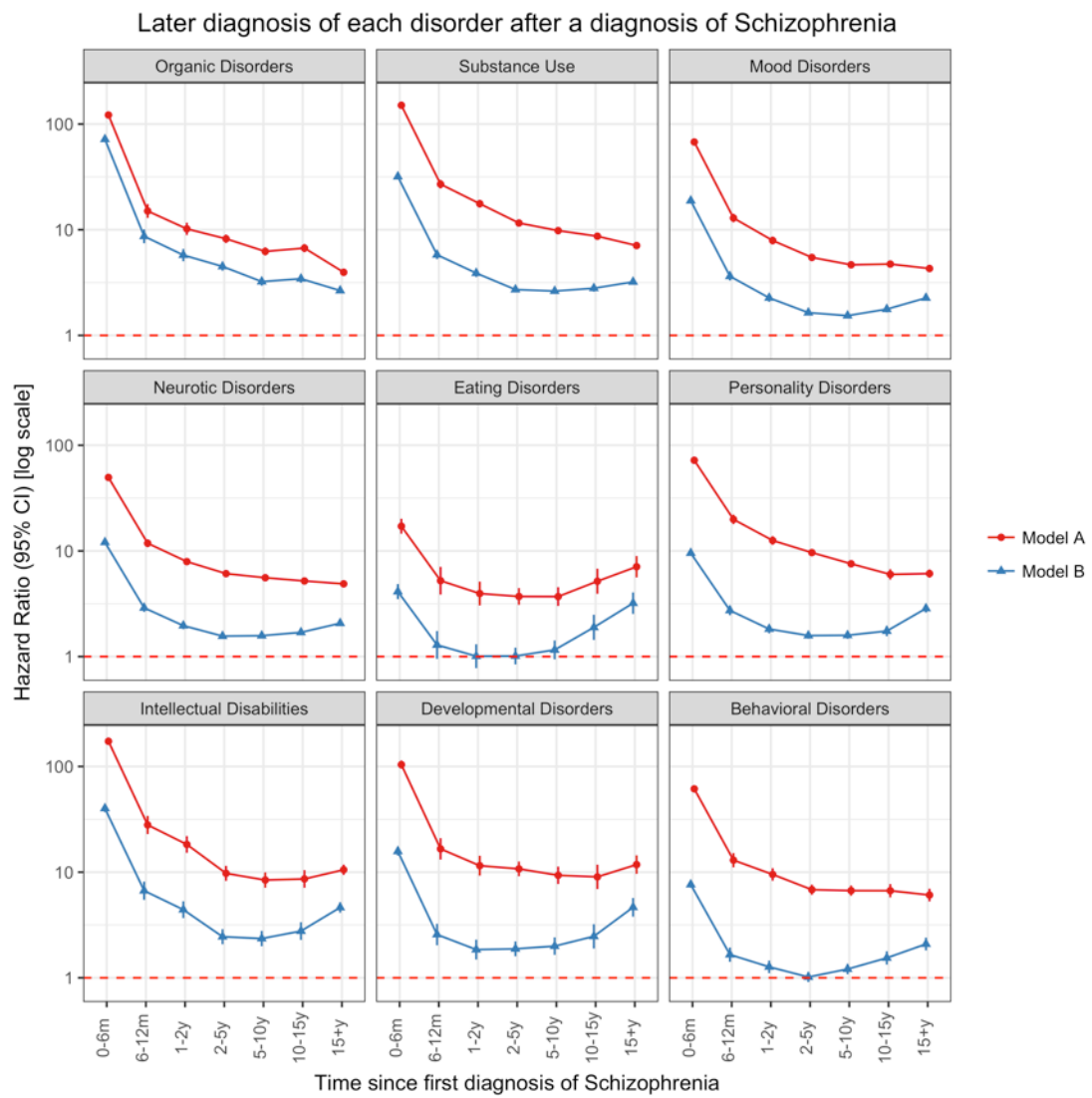
Estimates with less than 3 cases are not shown. There were not enough cases in the model with Behavioral Disorders as later-disorder to adjust for mental health comorbidity.



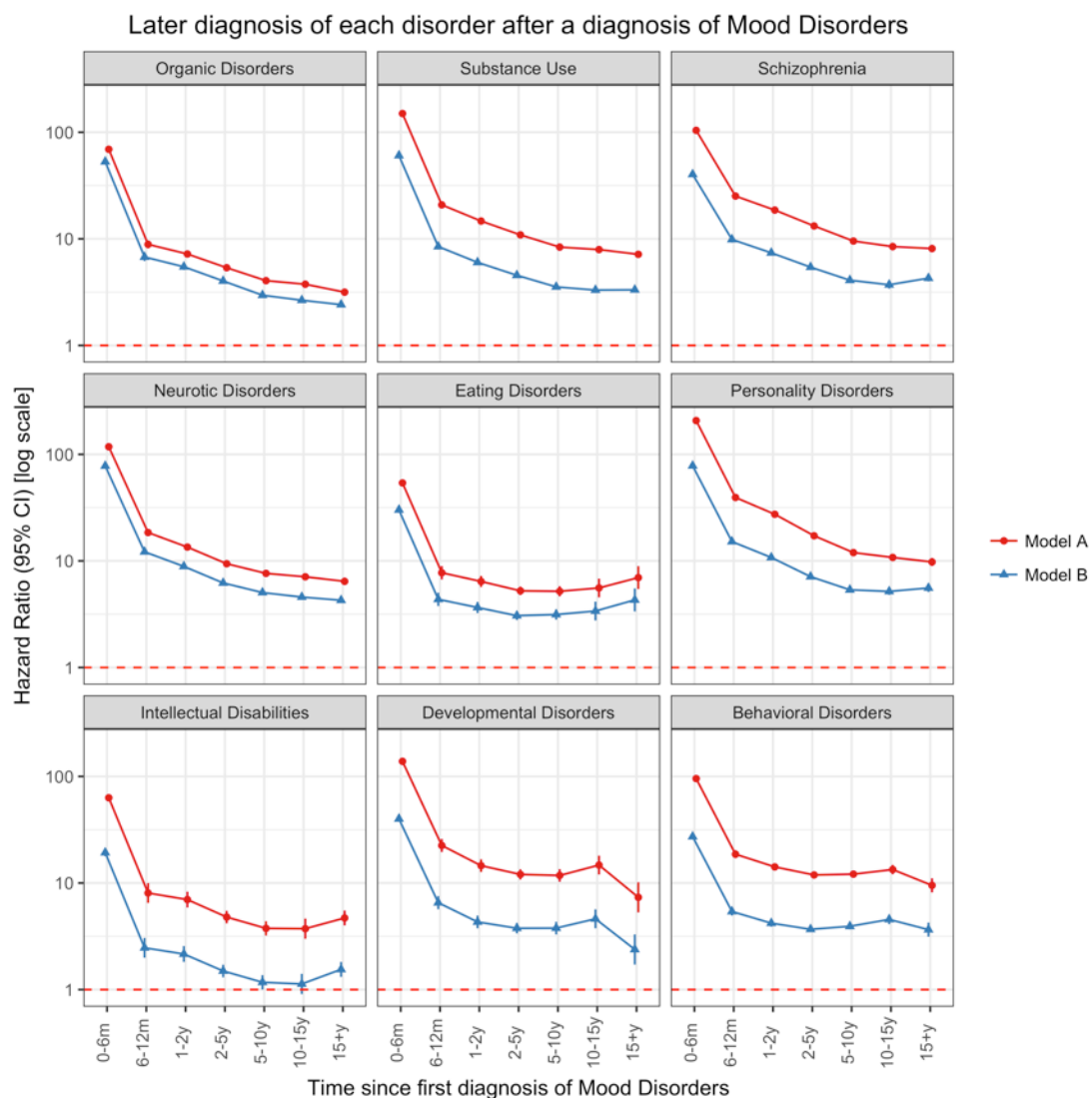
eFigure 26. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Substance Use, Depending on Time Since the First Diagnosis



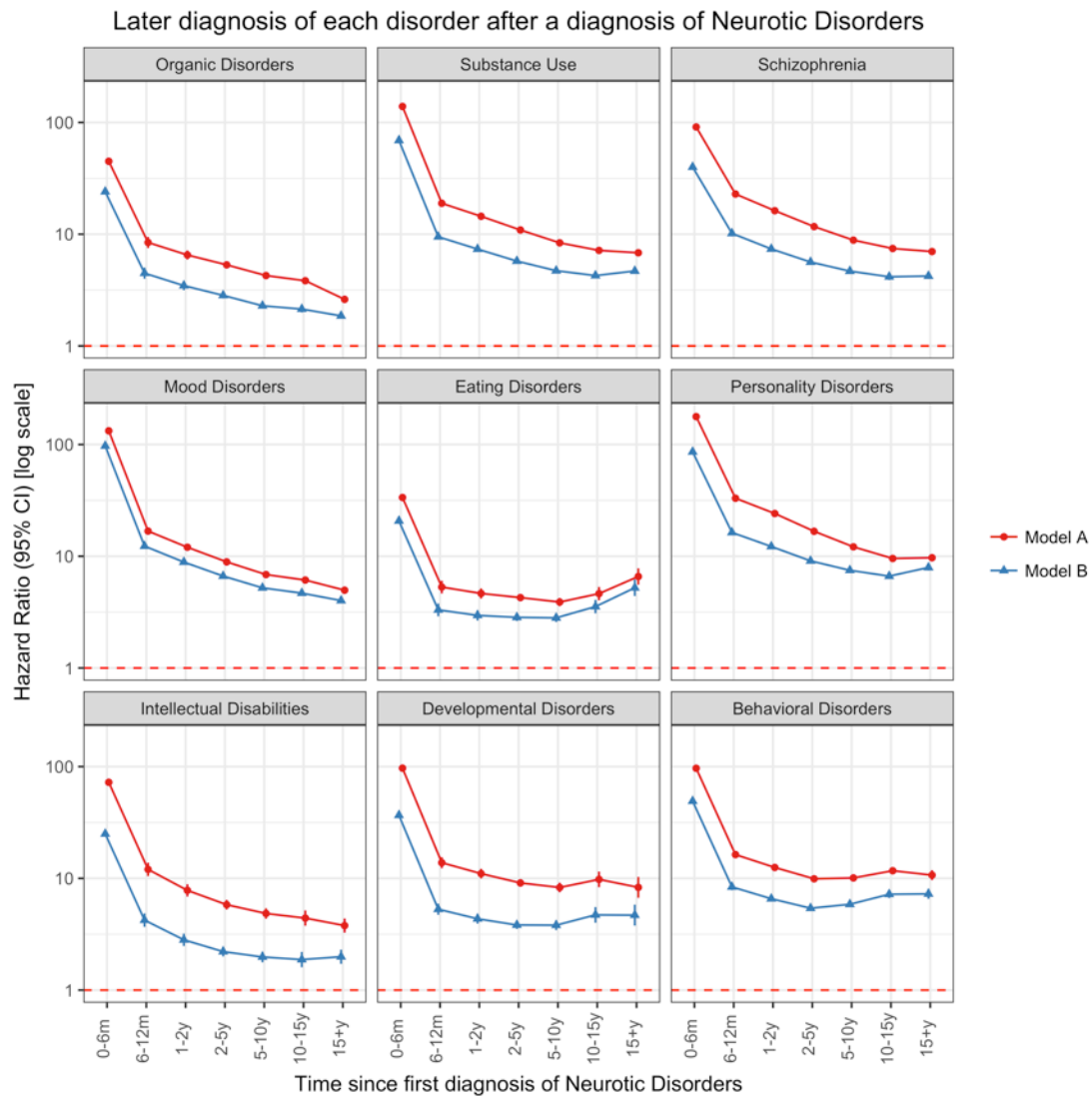
eFigure 27. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Schizophrenia, Depending on Time Since the First Diagnosis



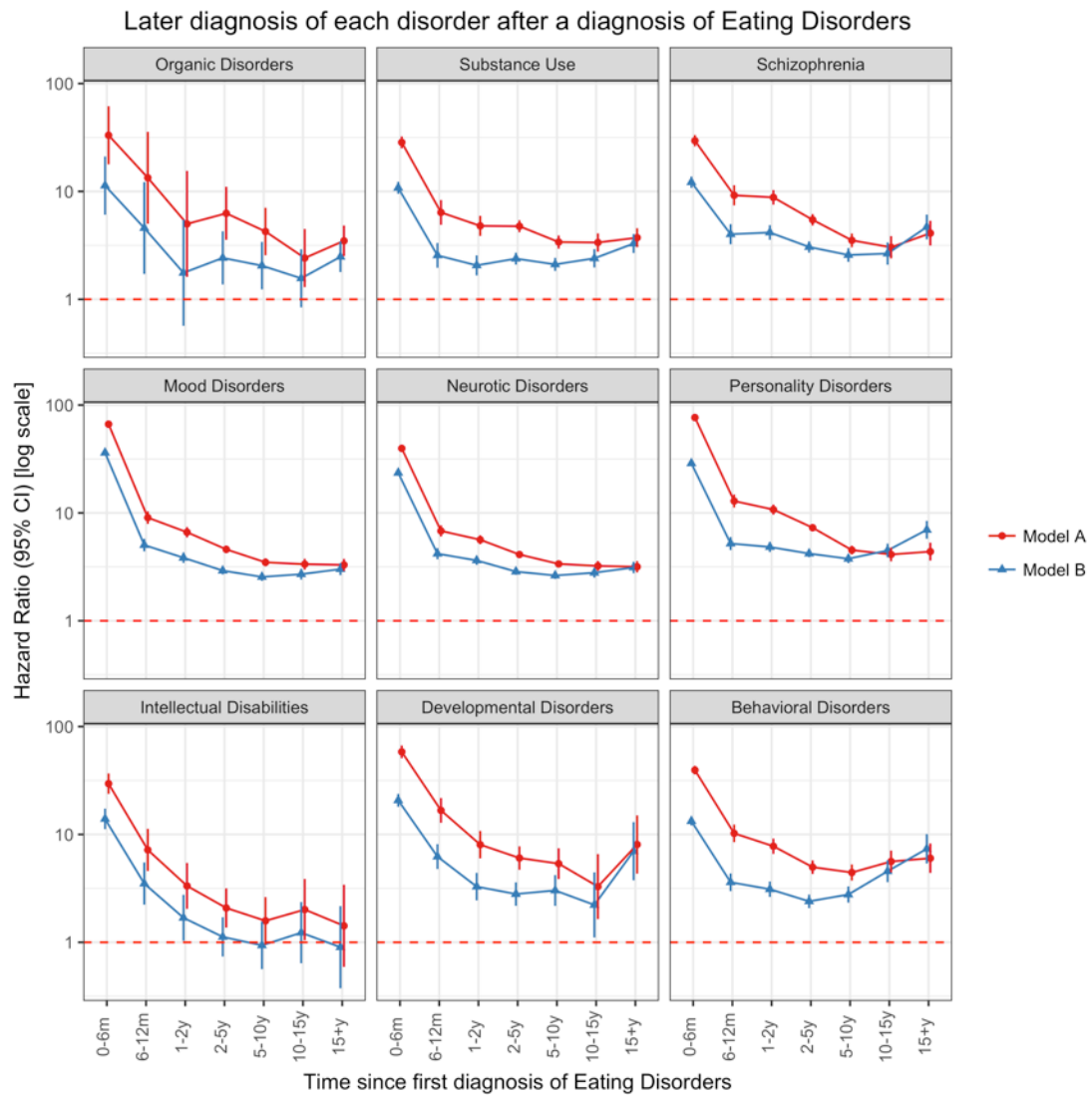
eFigure 28. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Mood Disorders, Depending on Time Since the First Diagnosis



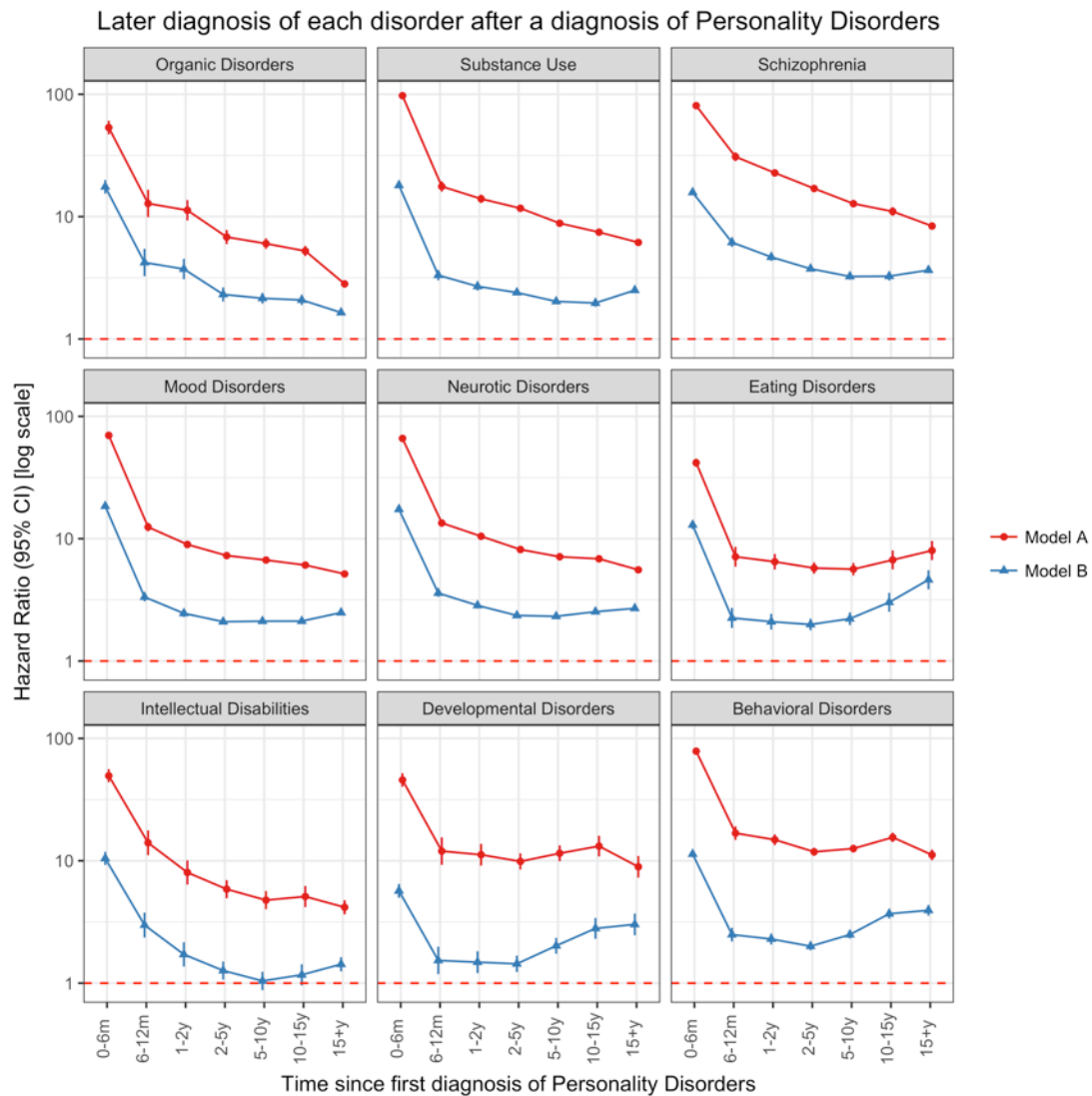
eFigure 29. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Neurotic Disorders, Depending on Time Since the First Diagnosis



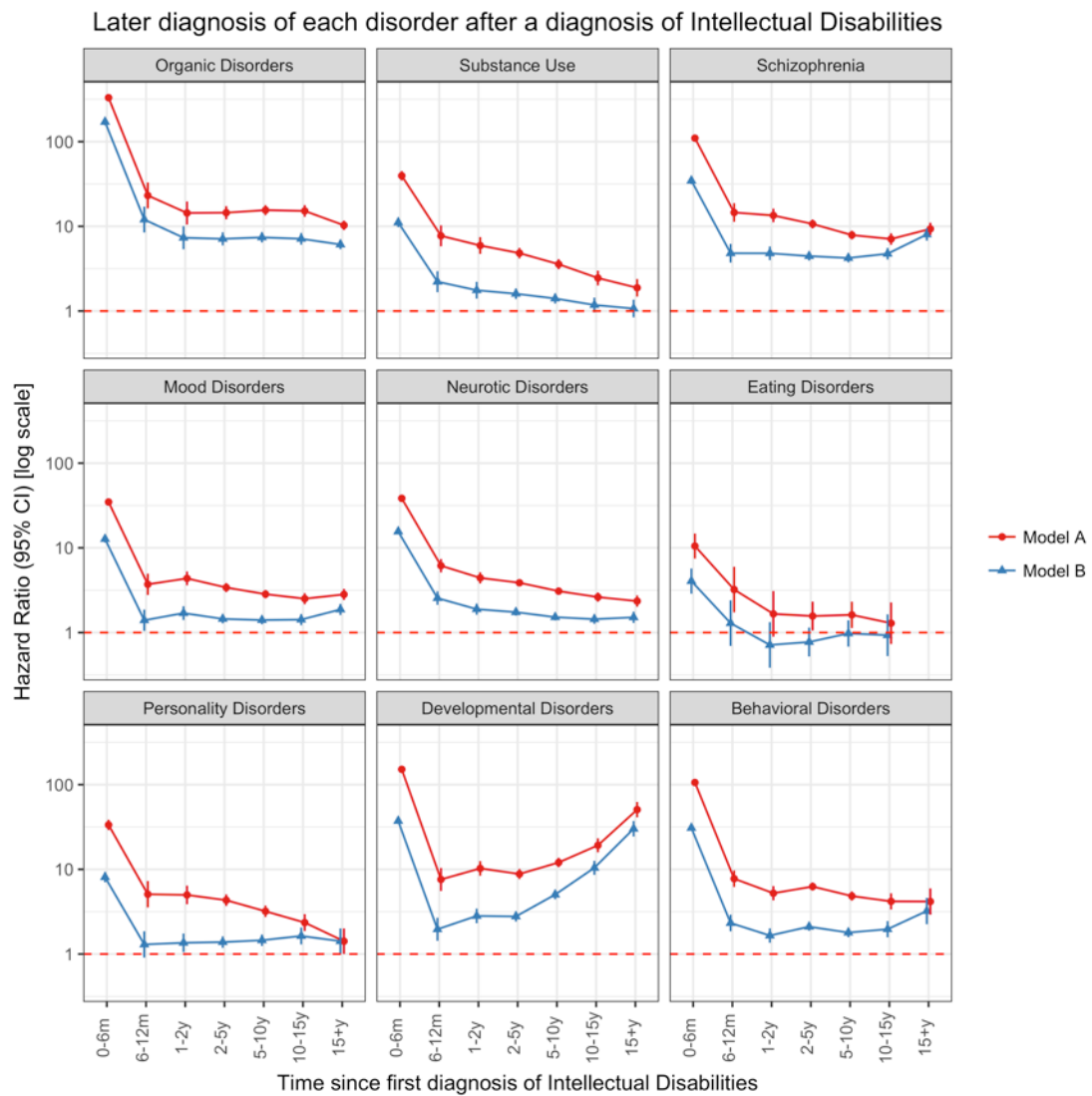
eFigure 30. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Eating Disorders, Depending on Time Since the First Diagnosis



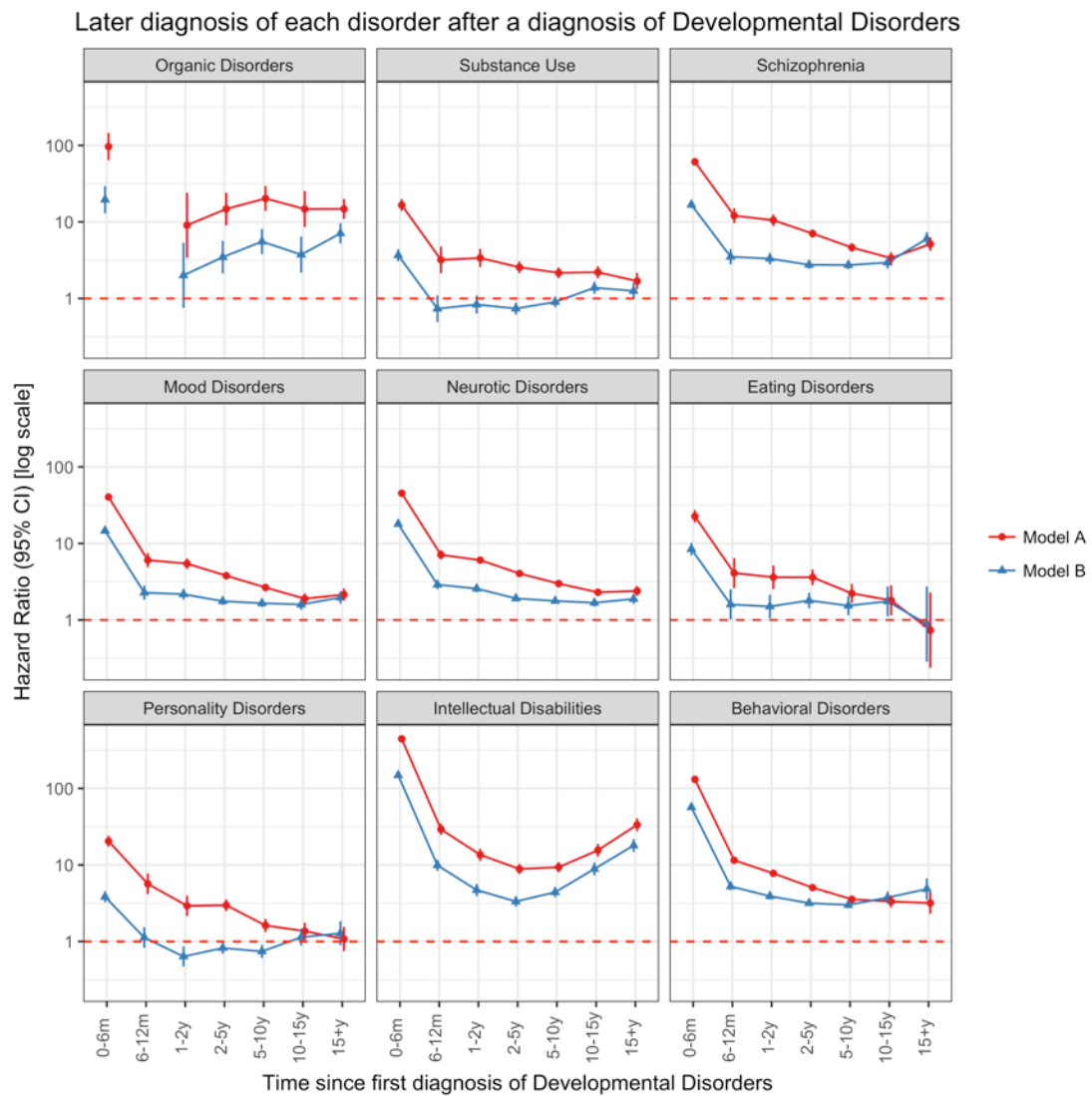
eFigure 31. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Personality Disorders, Depending on Time Since the First Diagnosis



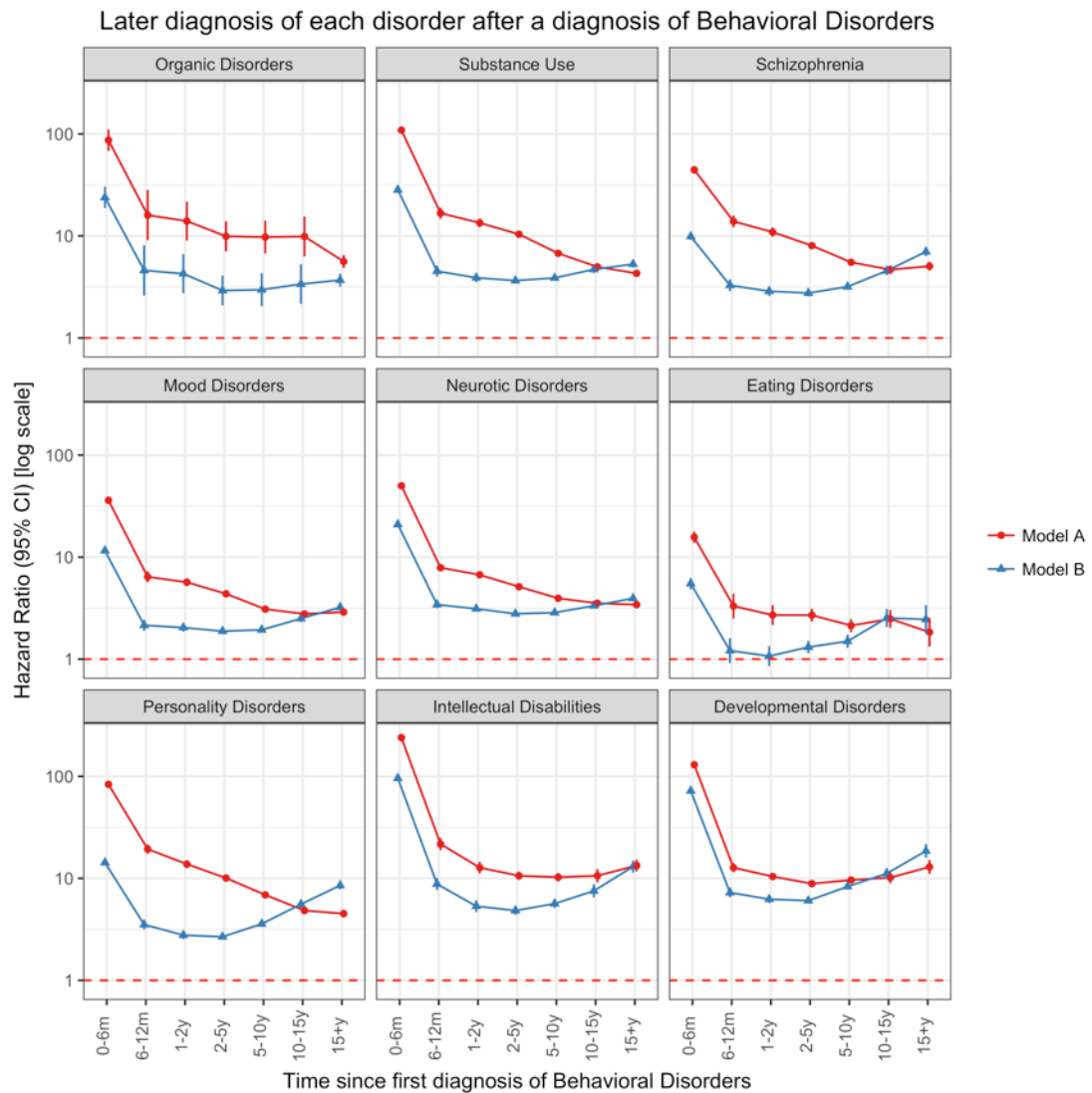
eFigure 32. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Intellectual Disabilities, Depending on Time Since the First Diagnosis
 Estimates with less than 3 cases are not shown.



eFigure 33. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Developmental Disorders, Depending on Time Since the First Diagnosis
 Estimates with less than 3 cases are not shown.



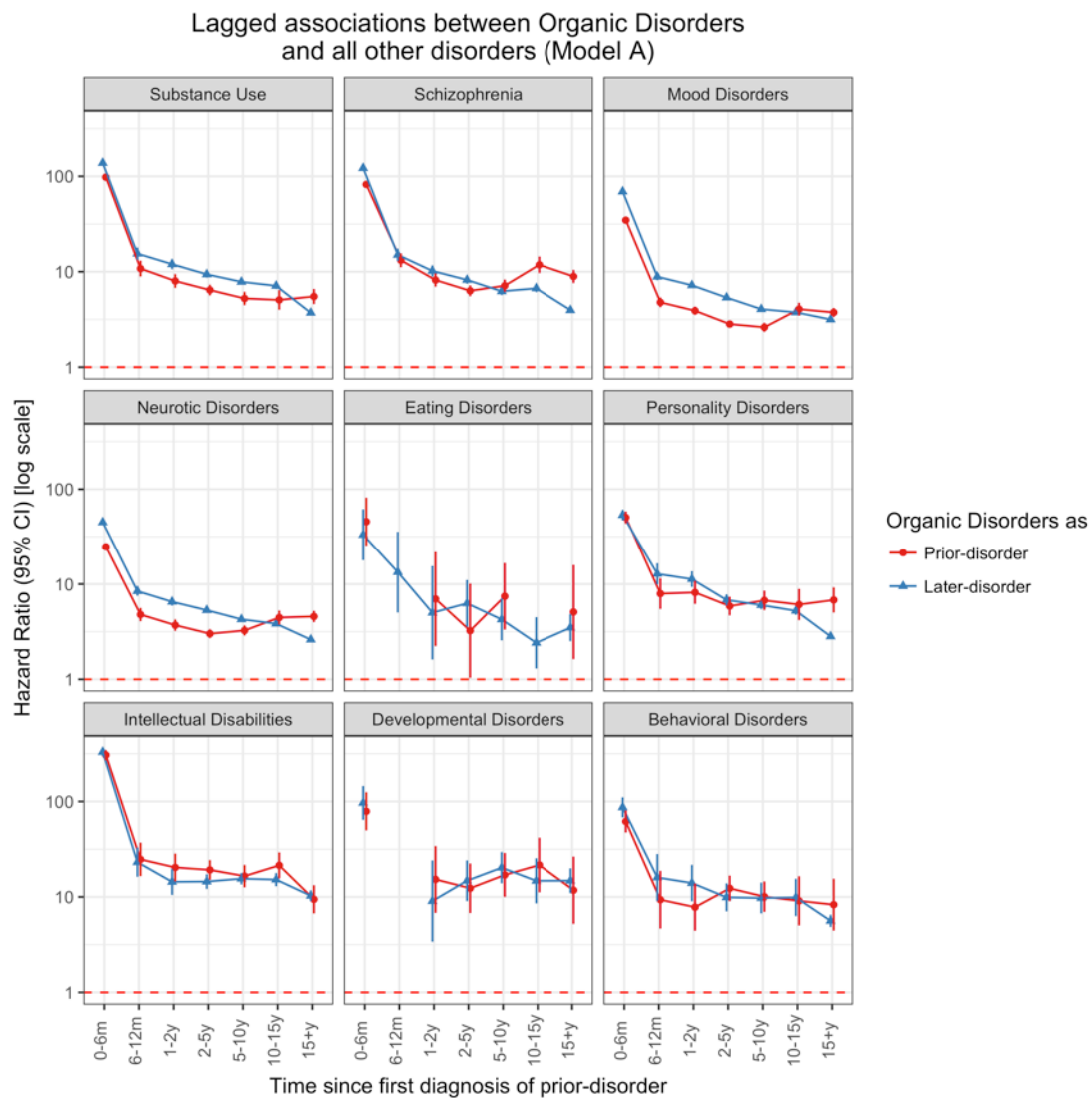
eFigure 34. HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Behavioral Disorders, Depending on Time Since the First Diagnosis



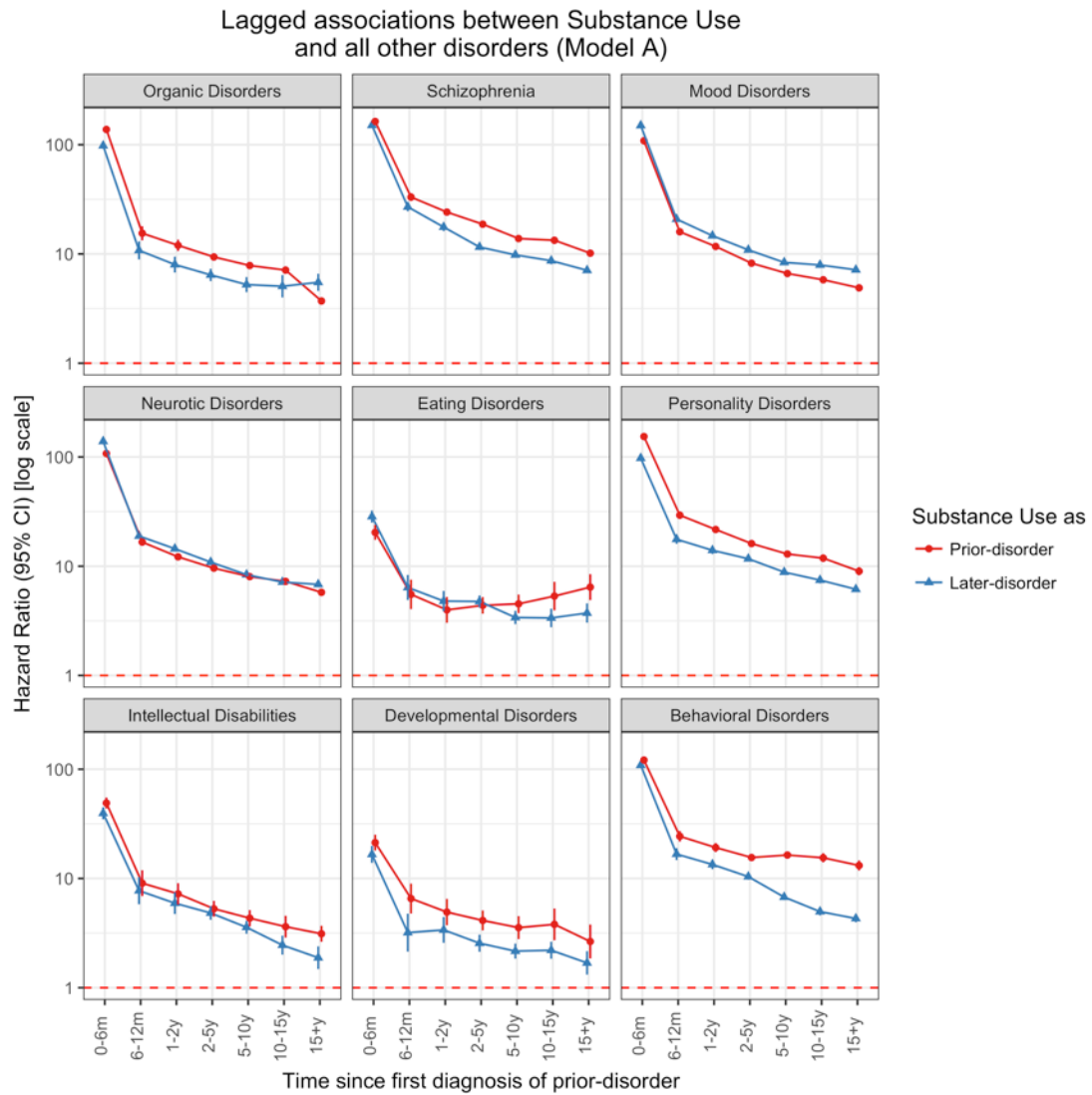
Symmetry of the lagged associations

The symmetry of the lagged associations is shown in the following set of figures. Each figure represents one index disorder of the 10 main mental disorders. Estimates in red points represent the index disorder as prior-disorder (and all other disorders as later-disorders in each panel); while estimates in blue triangles represent the index disorder as later-disorder (and all other disorders as prior-disorders in each panel). All estimates were obtained via Cox proportional hazards models with age as the underlying time scale, adjusting for sex and calendar time (Model A); and further adjustment for other mental disorders that had onset prior to the prior-disorder (Model B). The reference category are persons without a diagnosis of the prior-disorder. The line of unity is shown as a red dashed line in each plot.

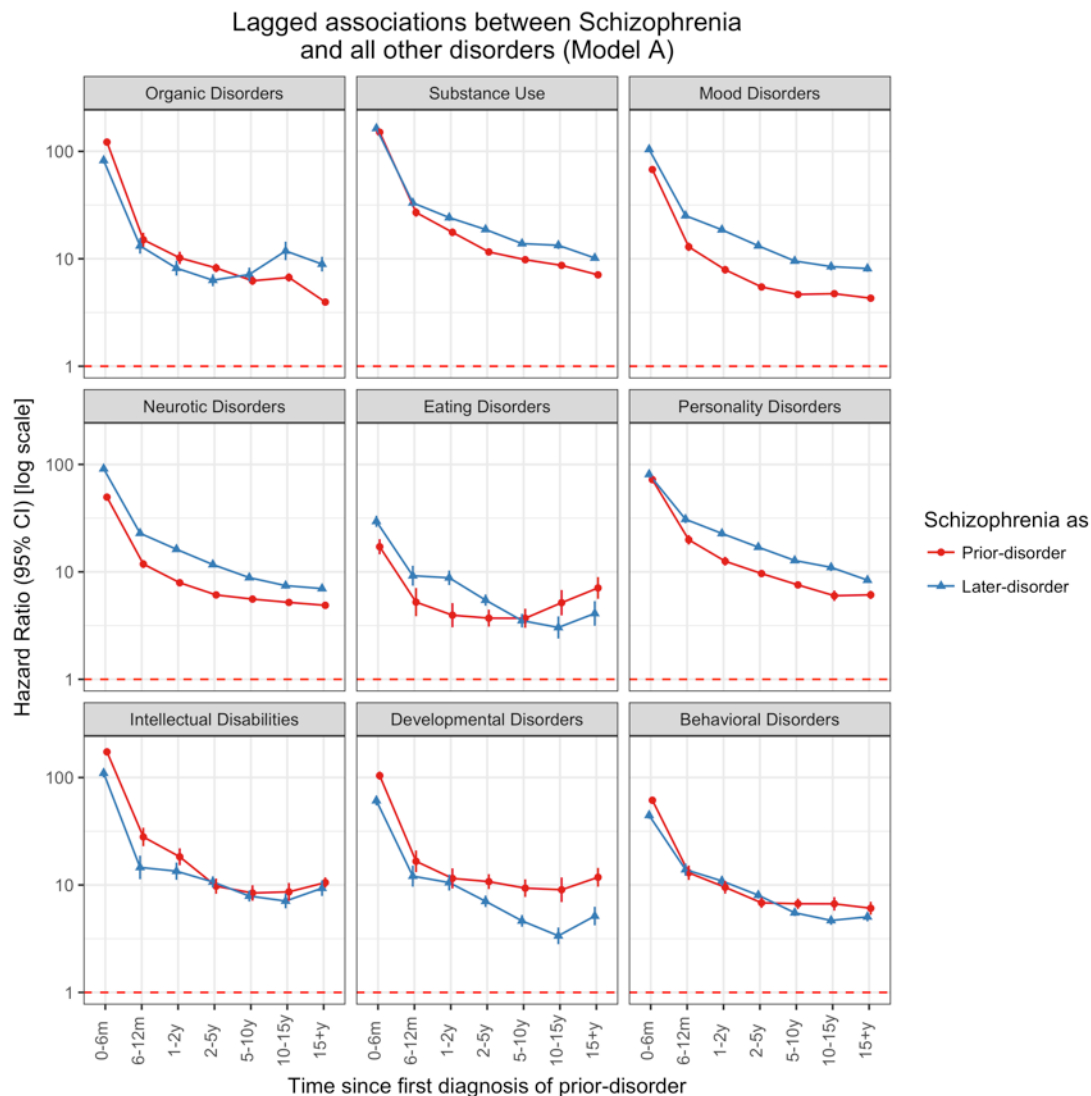
eFigure 35. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Organic Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Organic Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
All estimates were adjusted for age, sex and calendar time. Estimates with less than 3 cases are not shown.



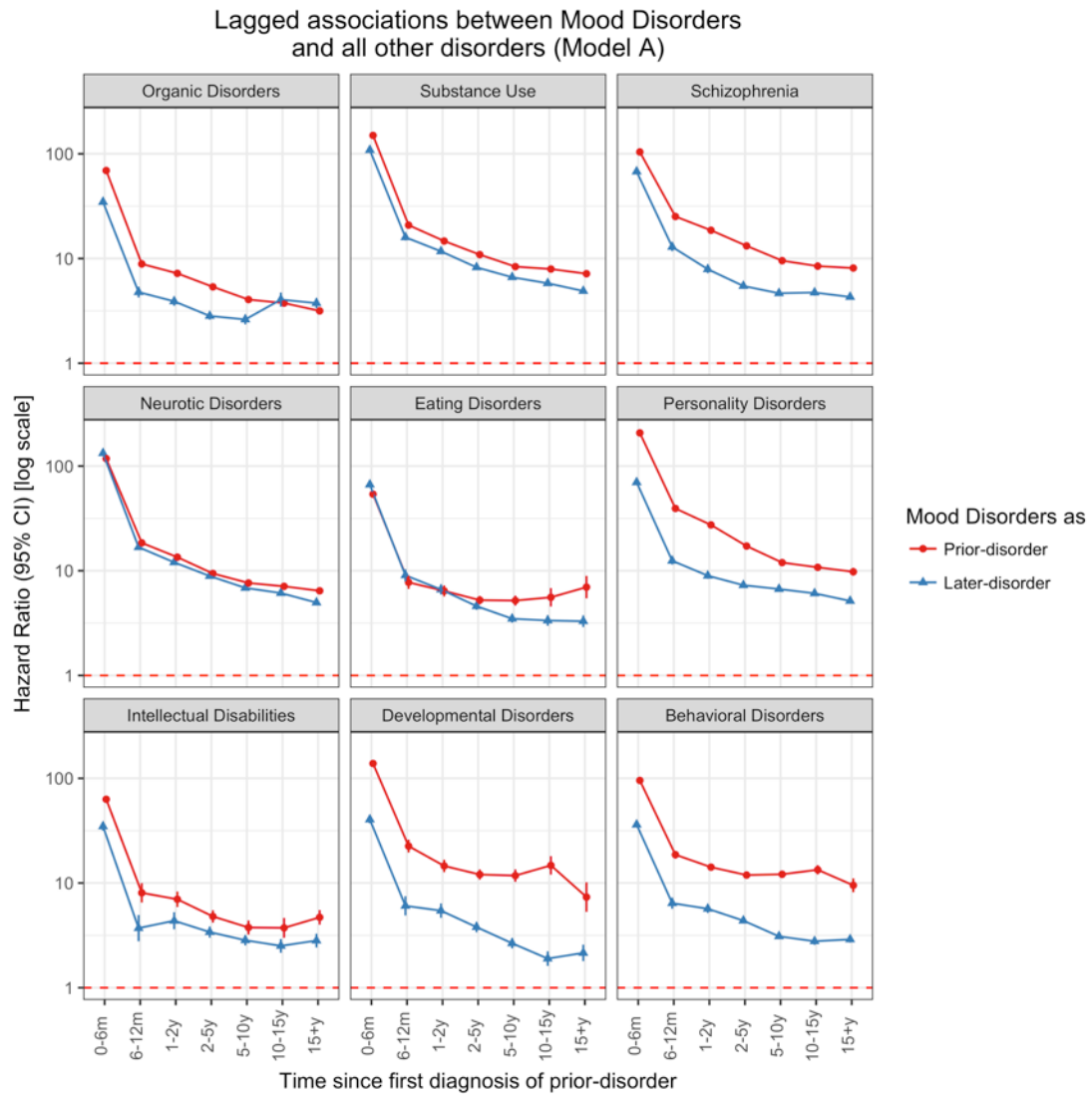
eFigure 36. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Substance Use, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Substance Use Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time.



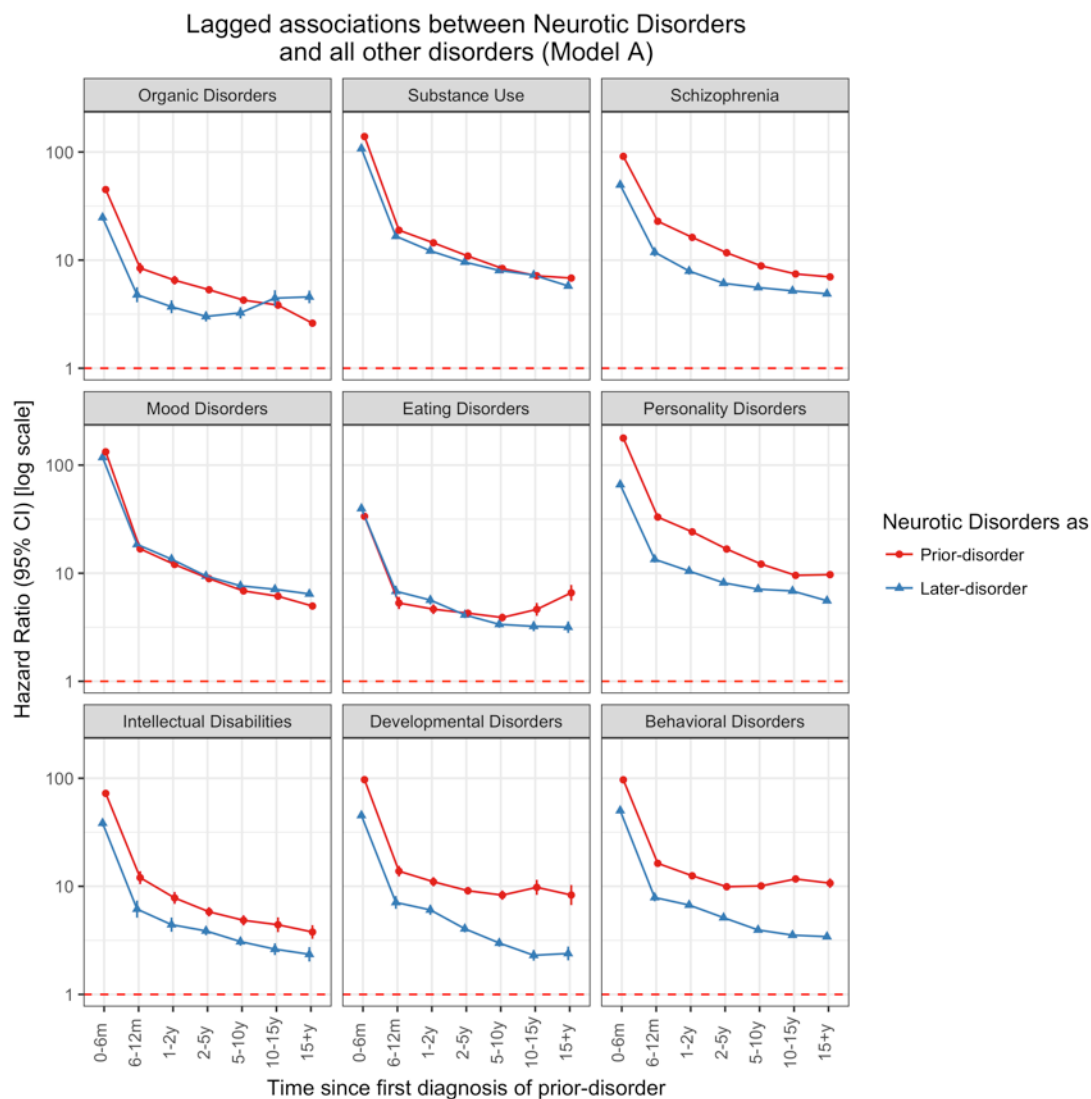
eFigure 37. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Schizophrenia, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Schizophrenia Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time.



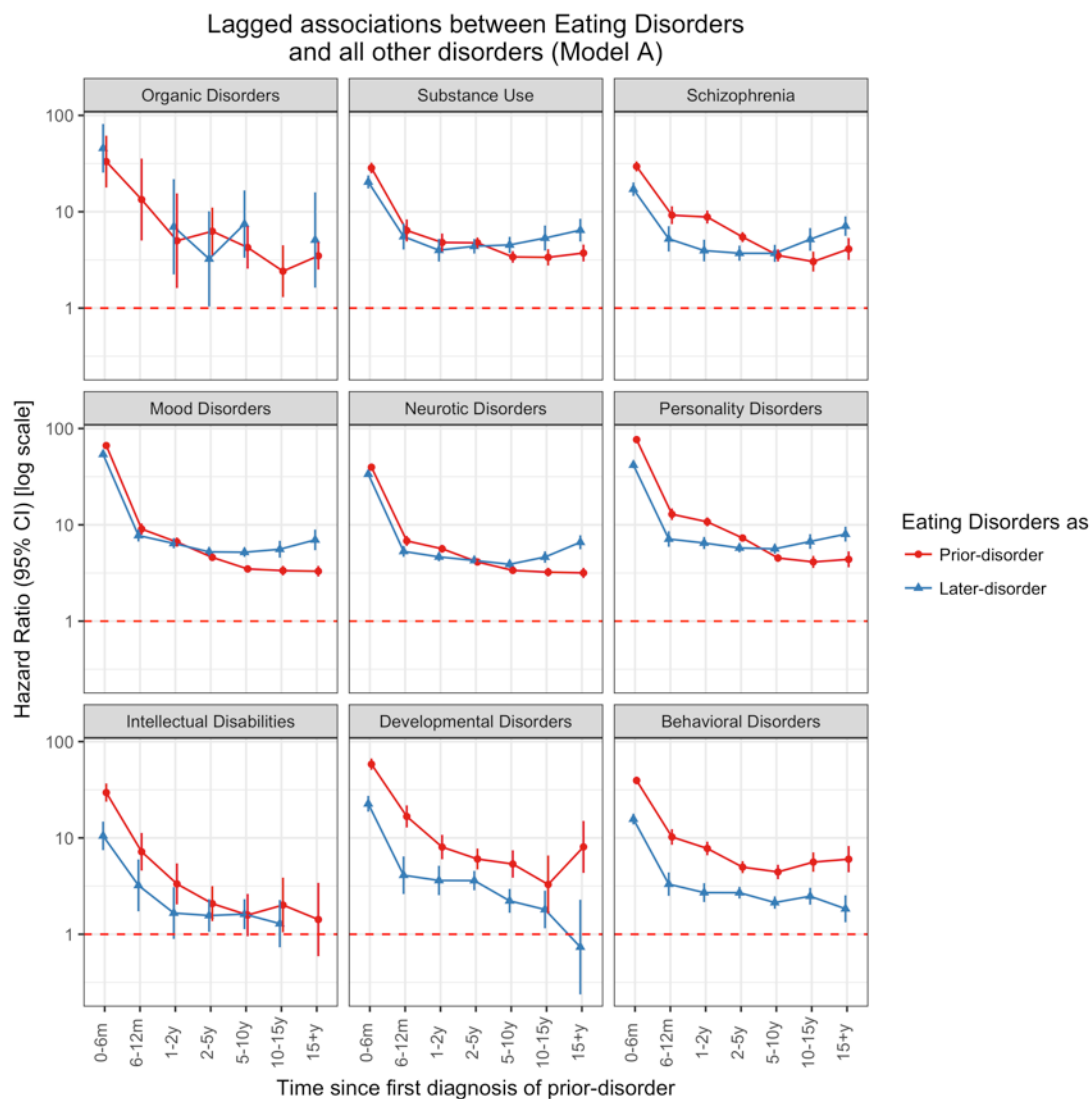
eFigure 38. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Mood Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Mood Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
All estimates were adjusted for age, sex and calendar time.



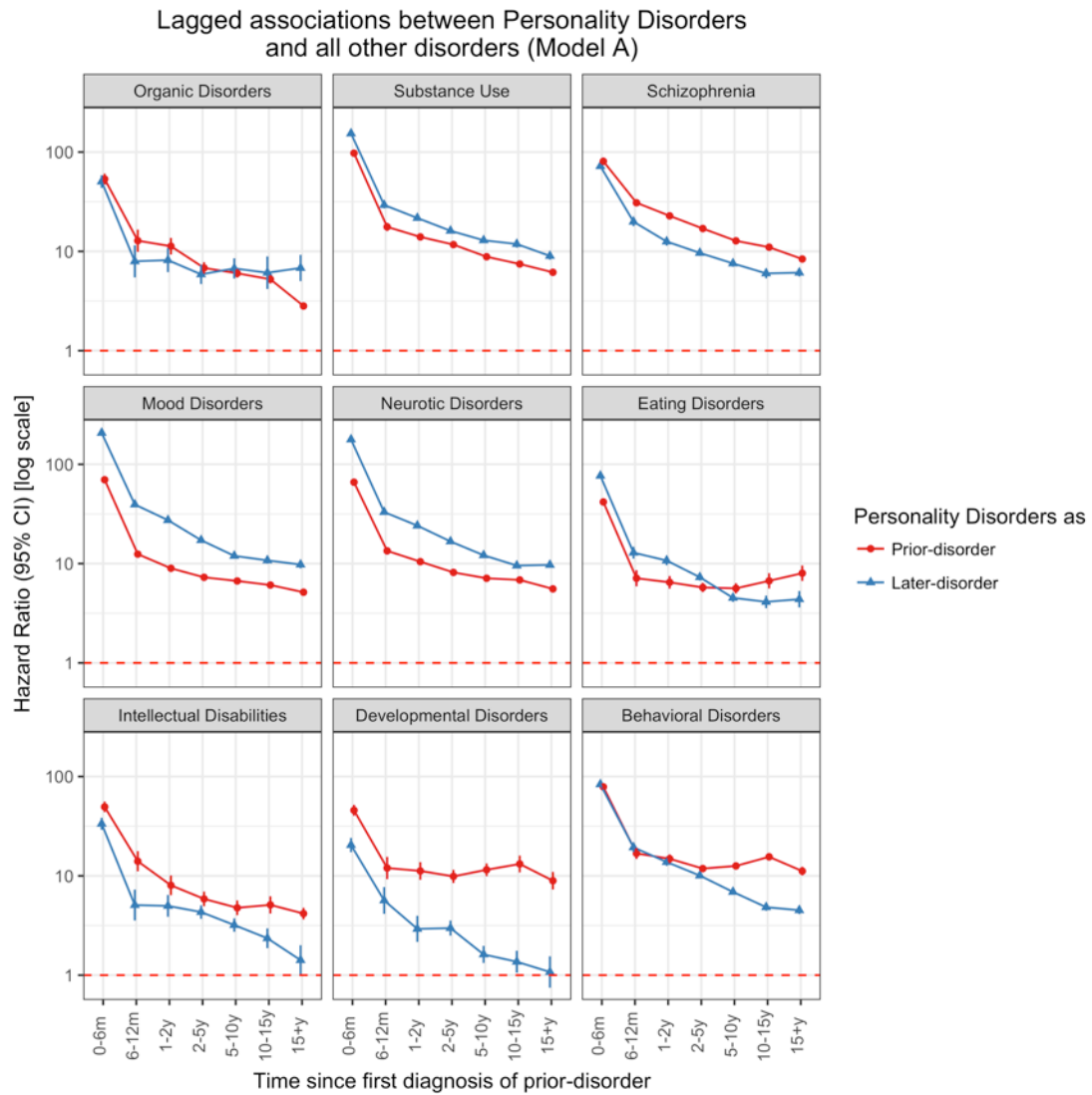
eFigure 39. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Neurotic Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Neurotic Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since The First Diagnosis
All estimates were adjusted for age, sex and calendar time.



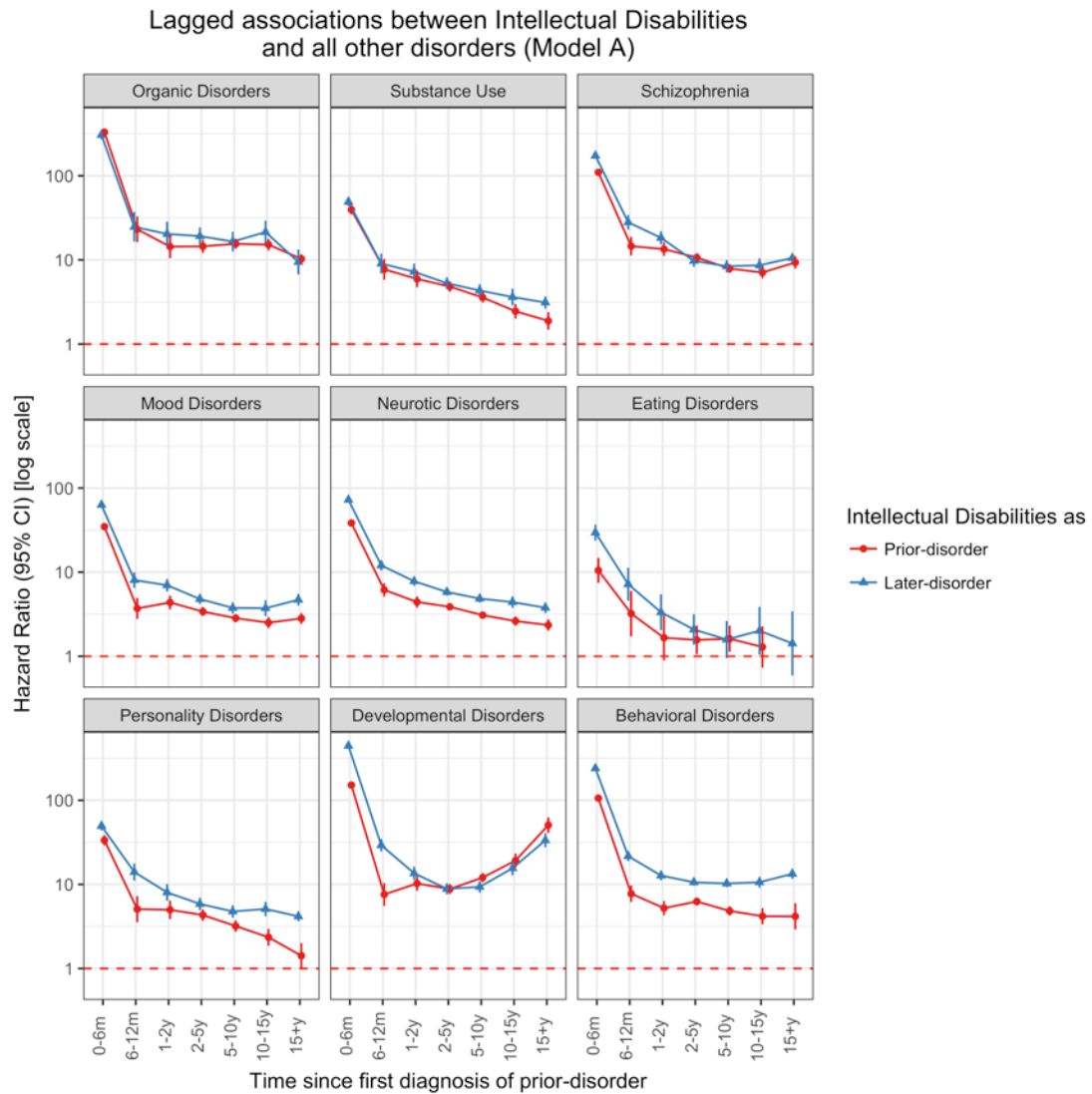
eFigure 40. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Eating Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Eating Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time. Estimates with less than 3 cases are not shown.



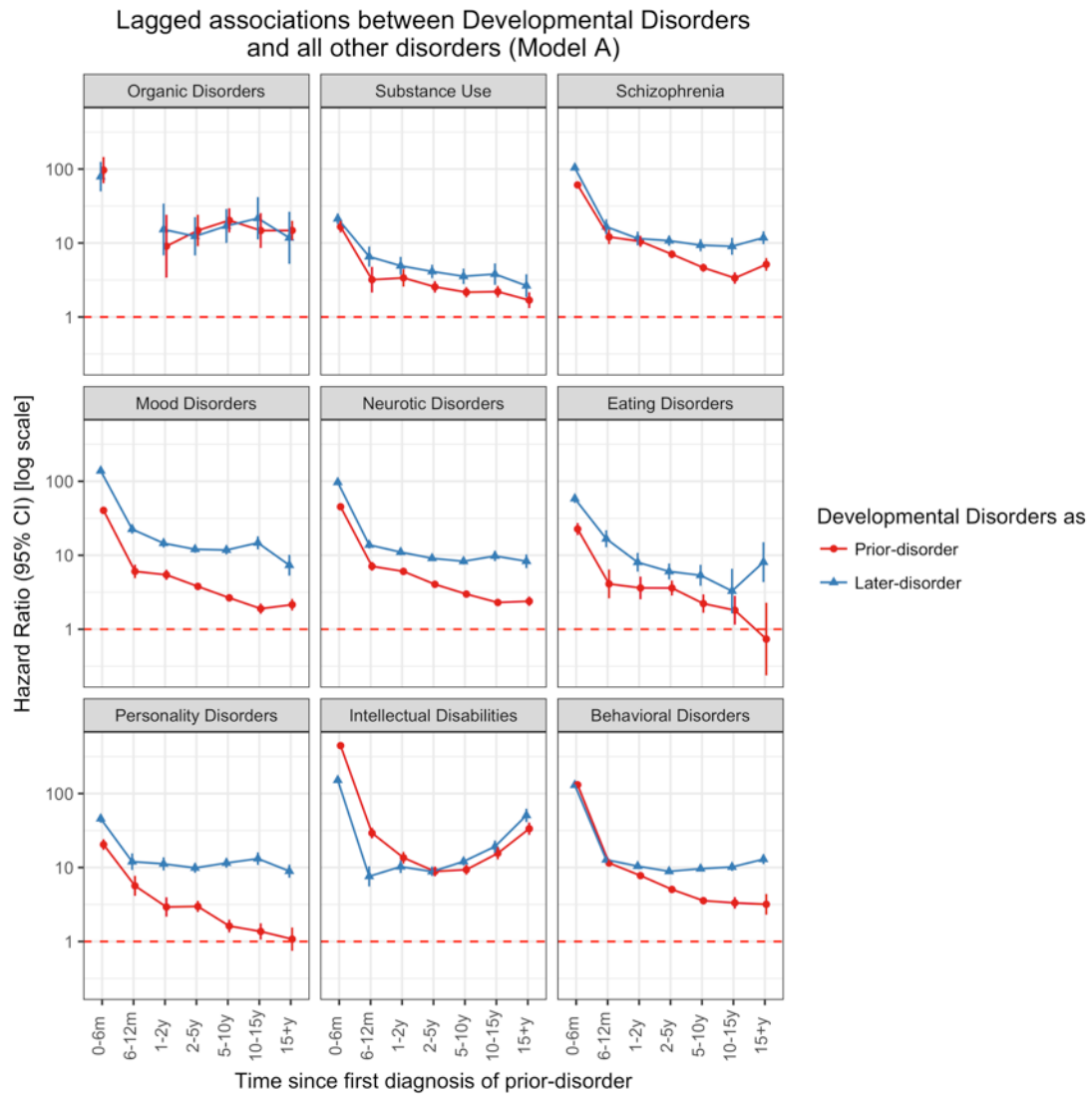
eFigure 41. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Personality Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Personality Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time.



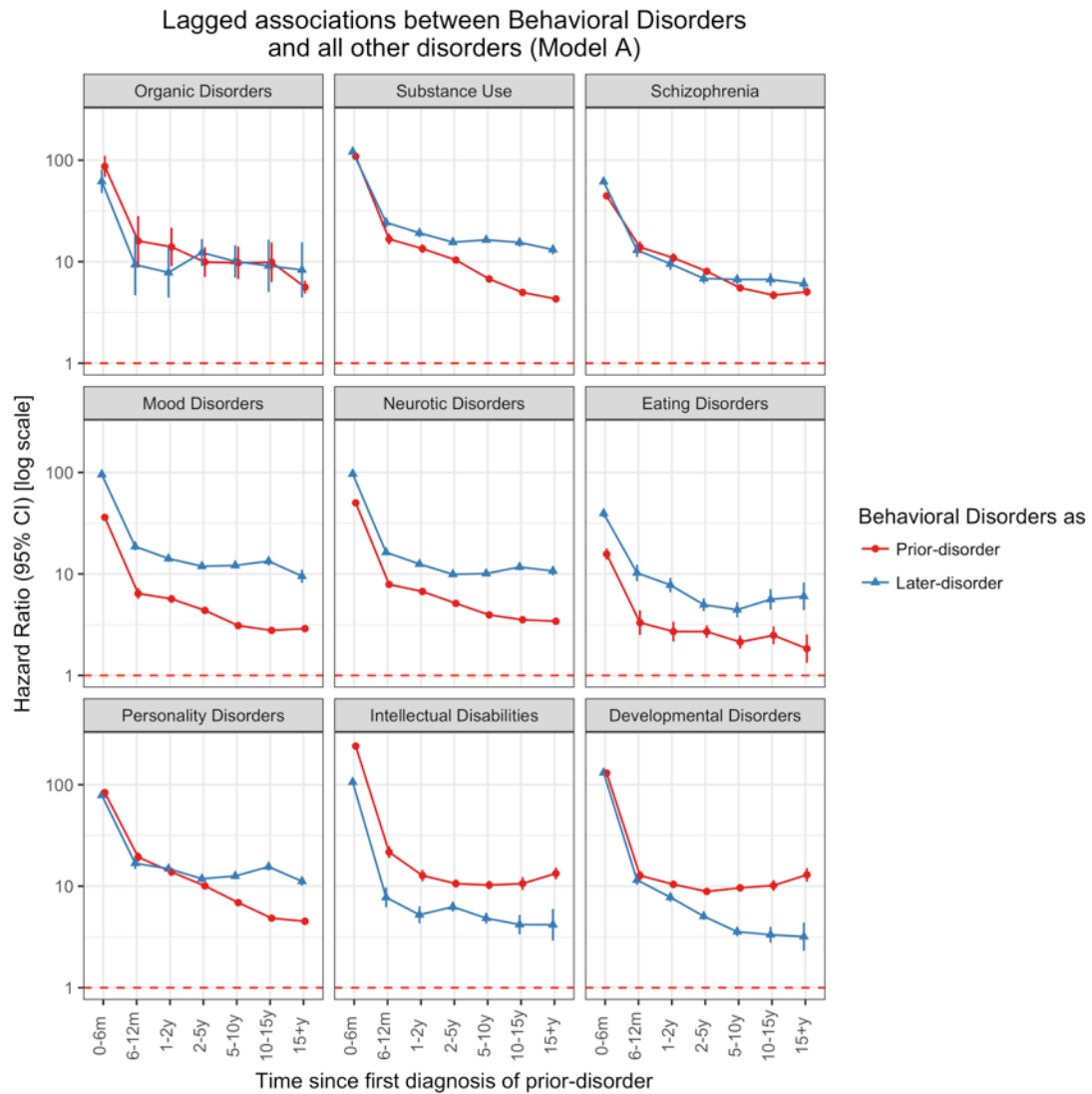
eFigure 42. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Intellectual Disabilities, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Intellectual Disabilities Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time. Estimates with less than 3 cases are not shown.



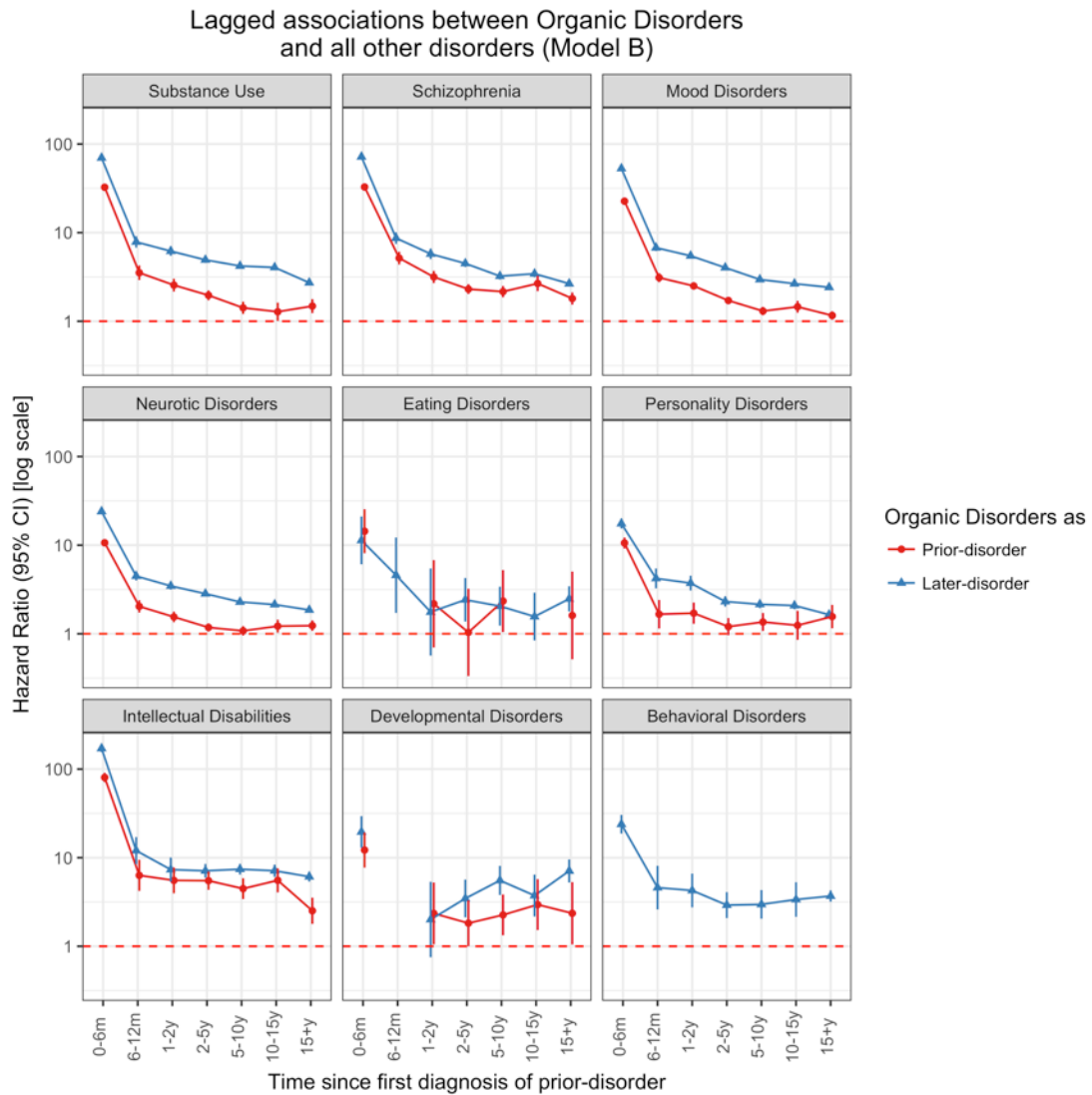
eFigure 43. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Developmental Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Developmental Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time. Estimates with less than 3 cases are not shown.



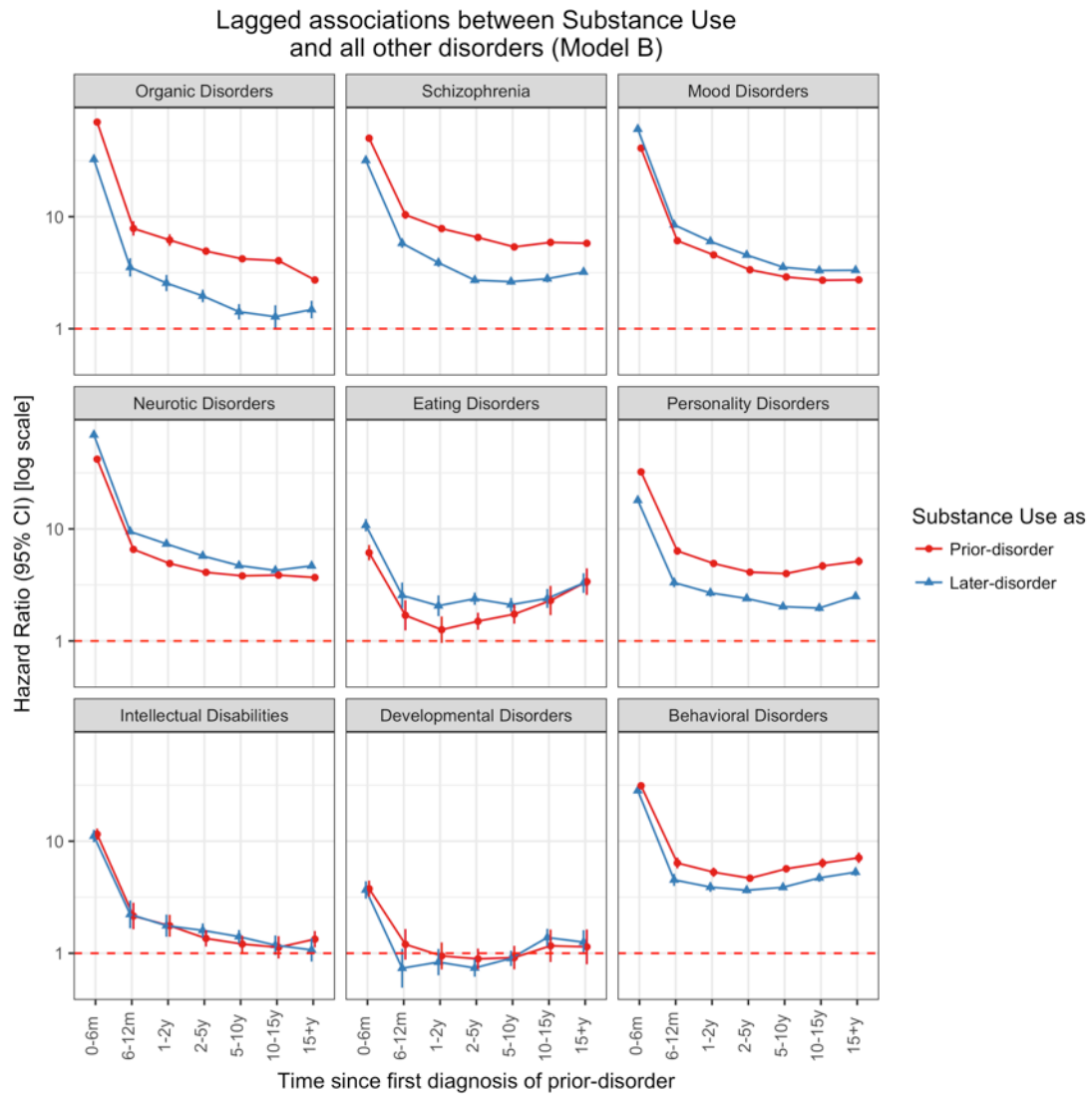
eFigure 44. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Behavioral Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Behavioral Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex and calendar time. Estimates with less than 3 cases are not shown.



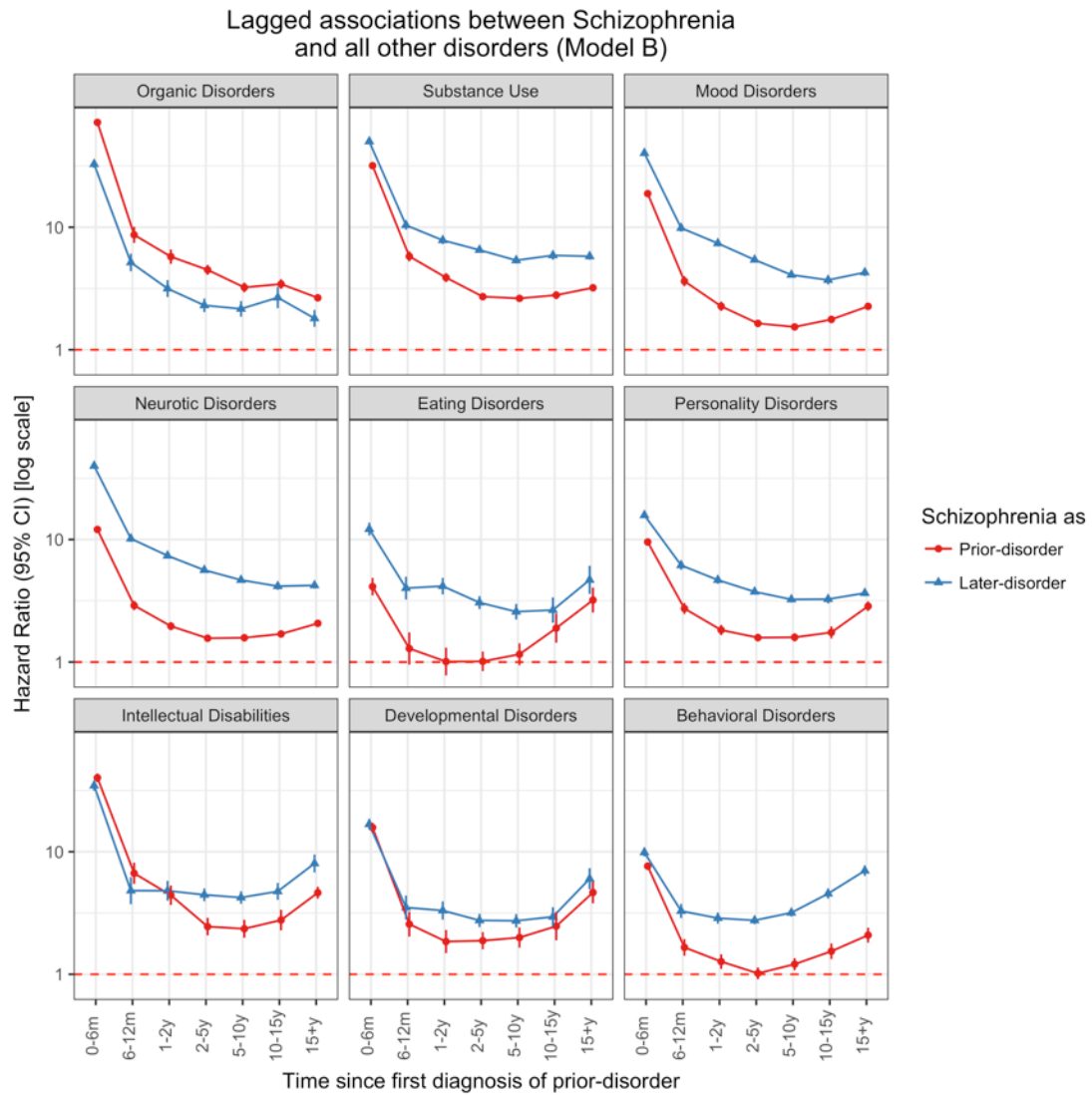
eFigure 45. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Organic Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Organic Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity. Estimates with less than 3 cases are not shown. There were not enough cases in the model with Organic Disorders as prior-disorder and Behavioral Disorders as later-disorder to adjust for mental health comorbidity.



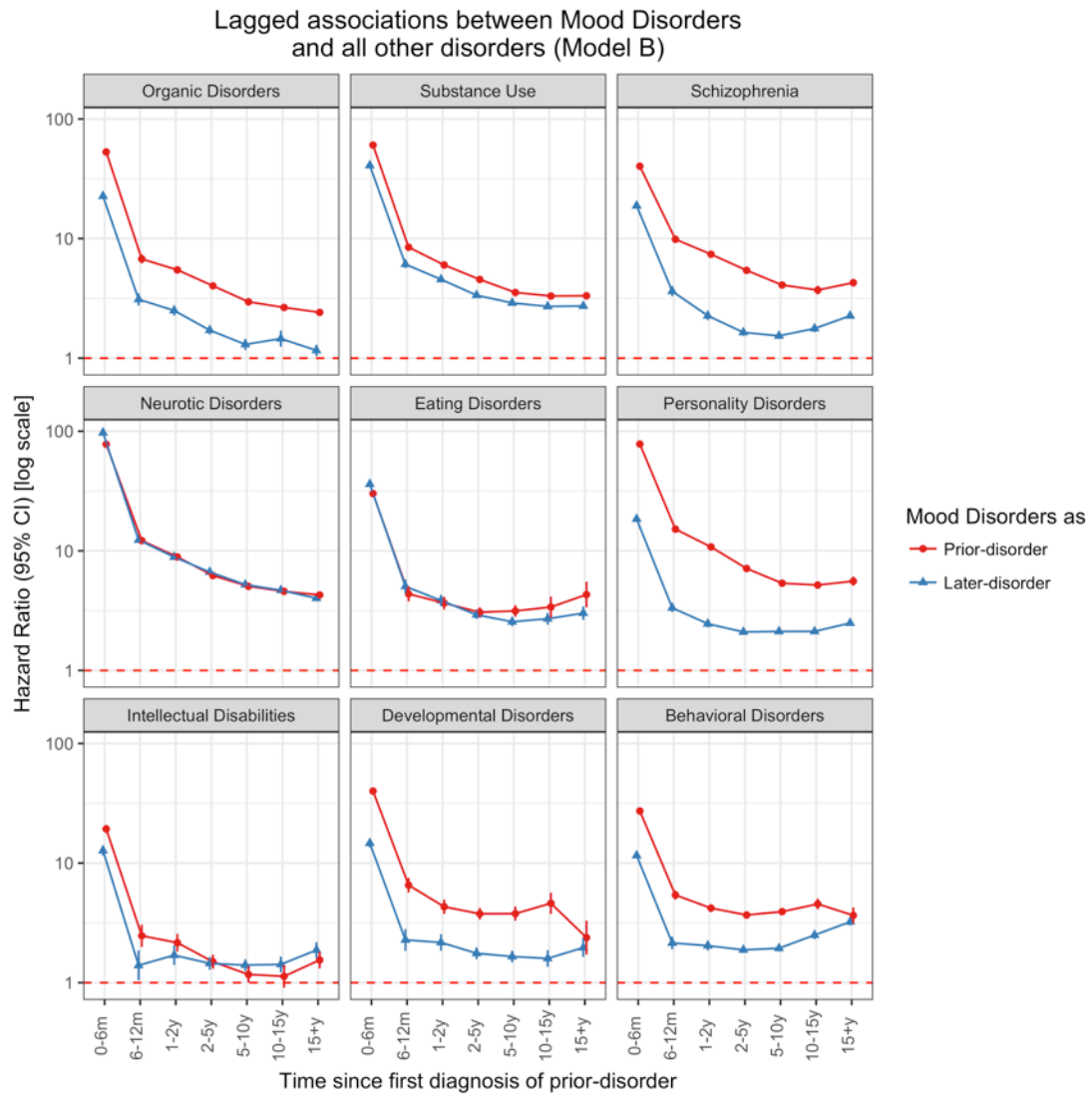
eFigure 46. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Substance Use, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Substance Use Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity.



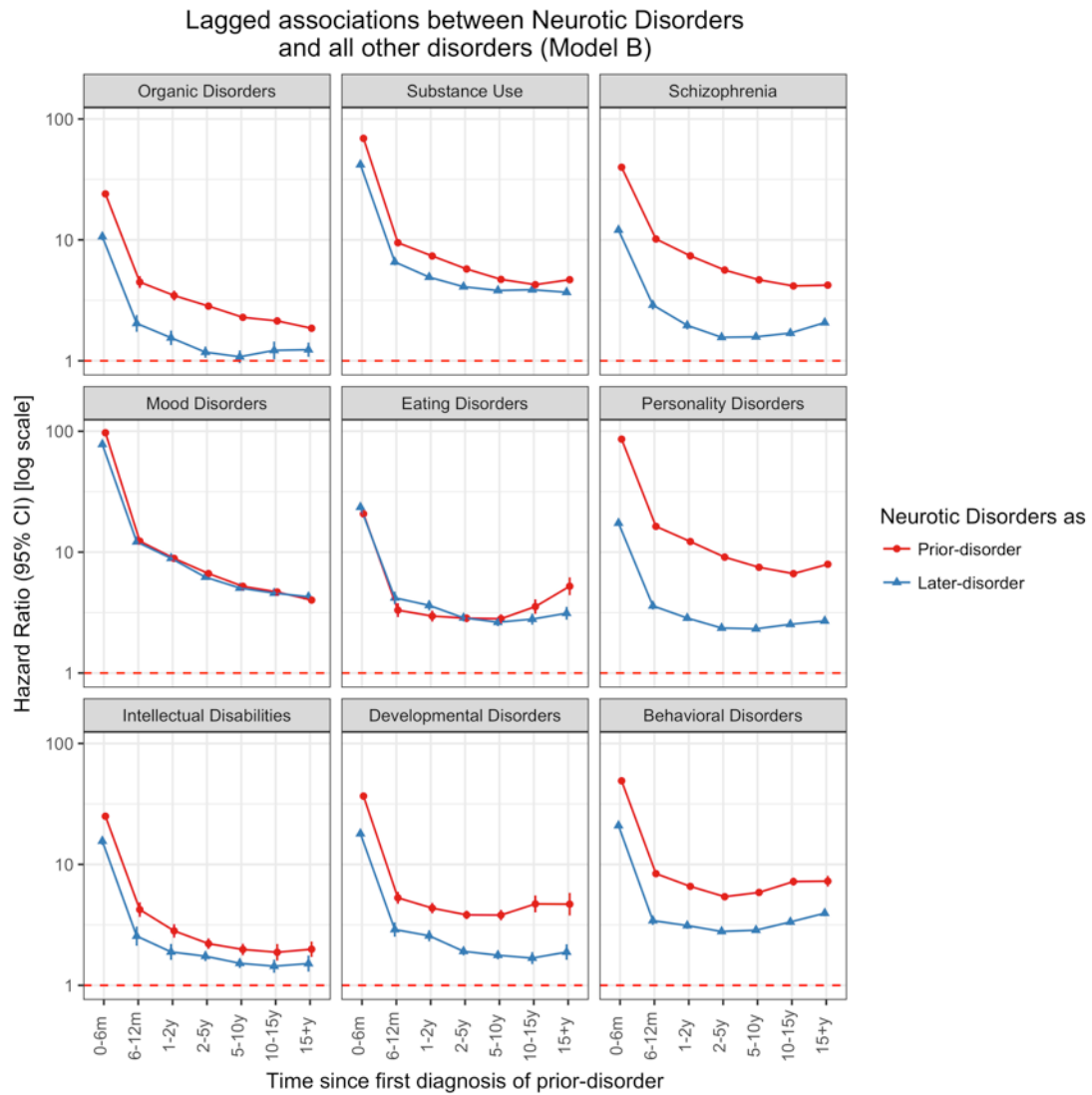
eFigure 47. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Schizophrenia, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Schizophrenia Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity.



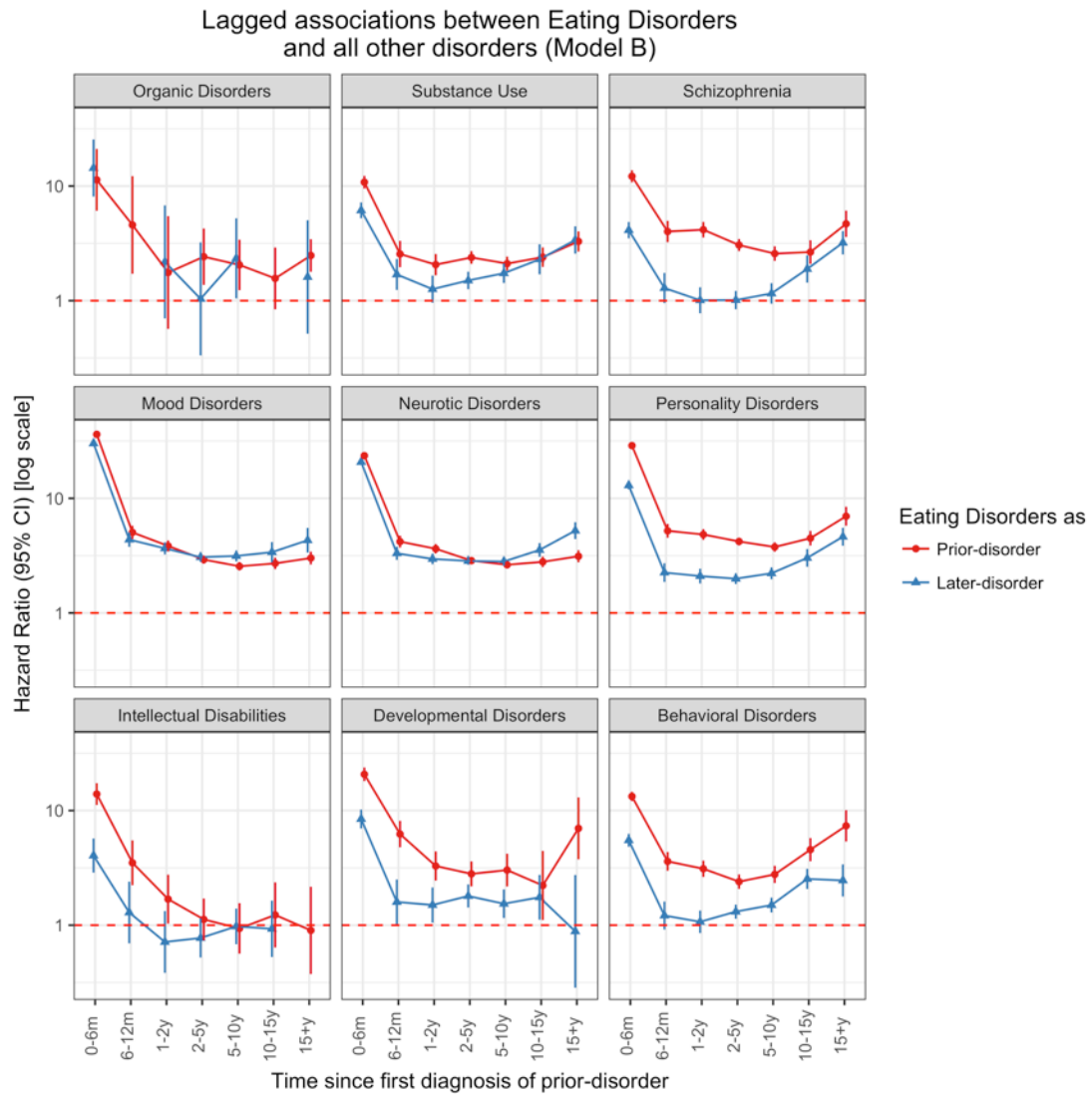
eFigure 48. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Mood Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Mood Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity.



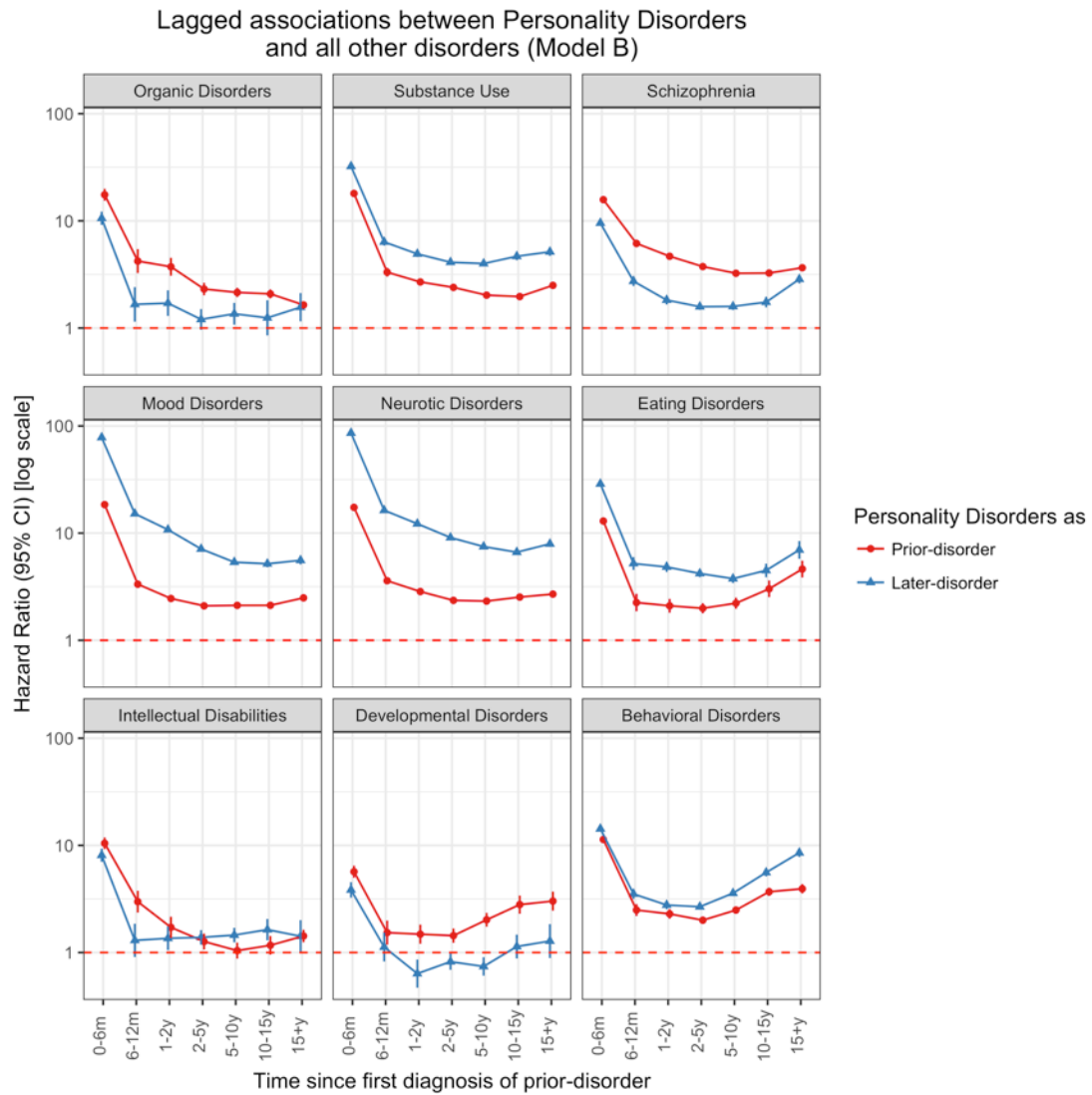
eFigure 49. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Neurotic Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Neurotic Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity.



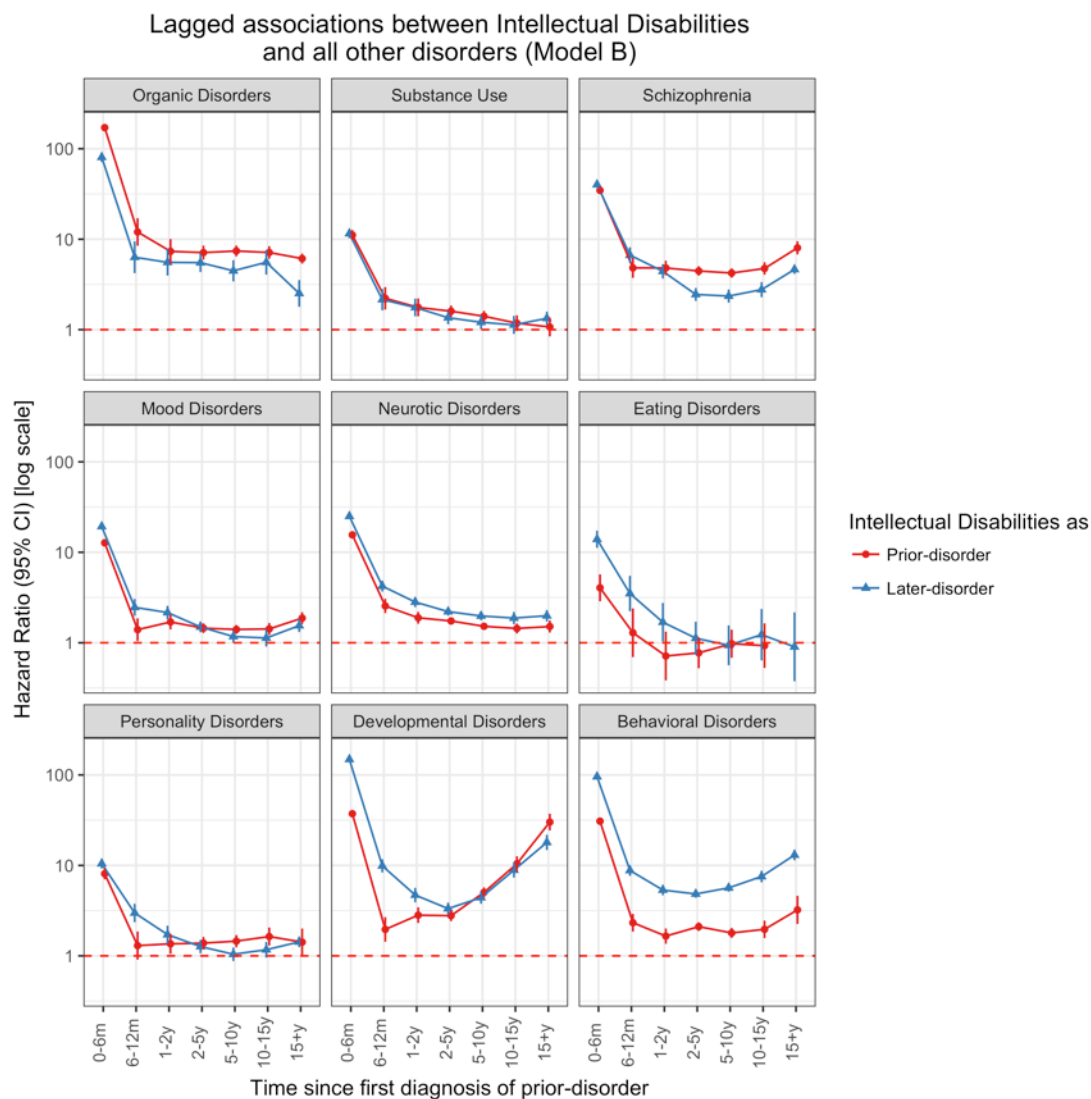
eFigure 50. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Eating Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Eating Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity. Estimates with less than 3 cases are not shown.



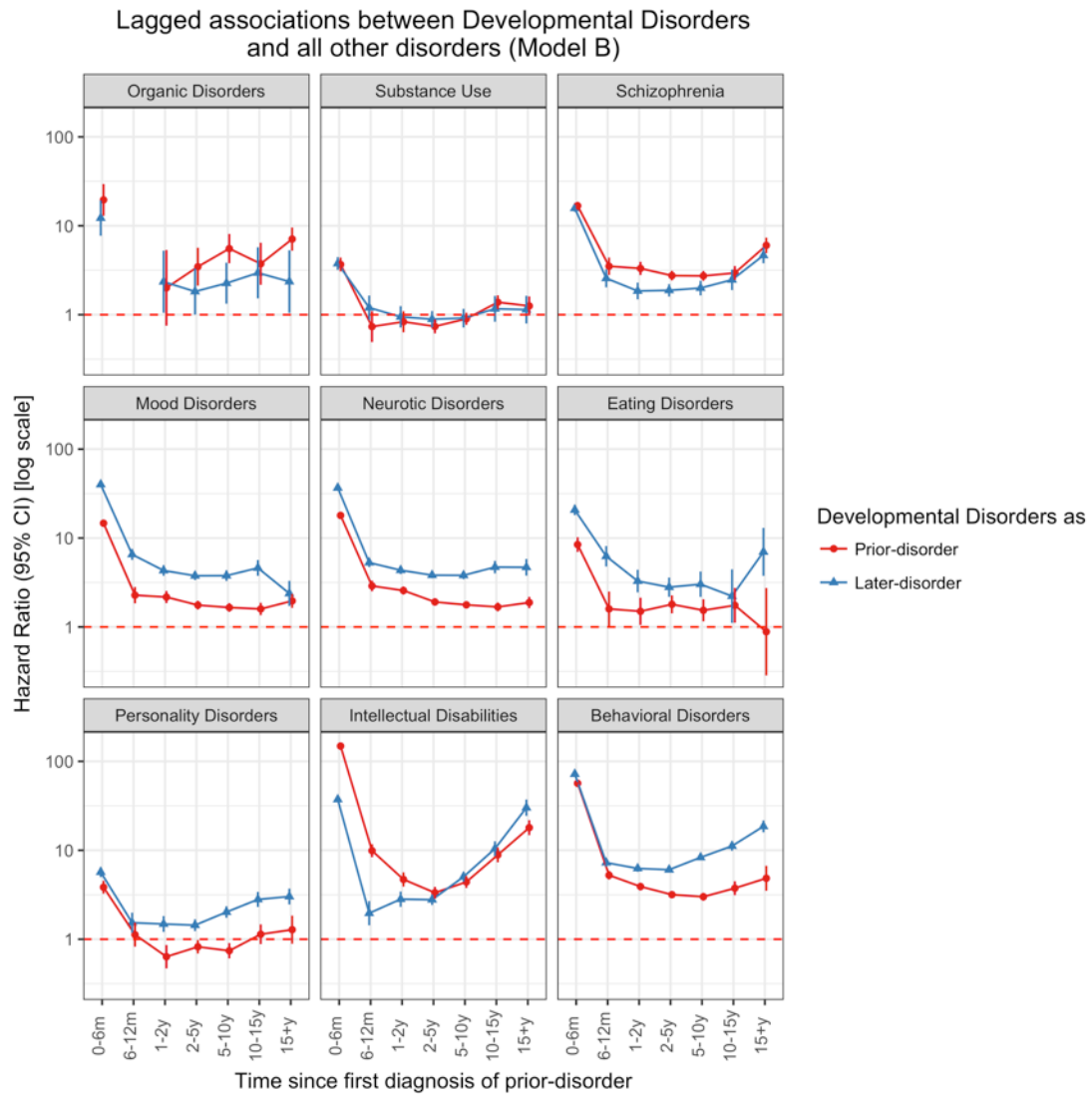
eFigure 51. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Personality Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Personality Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity.



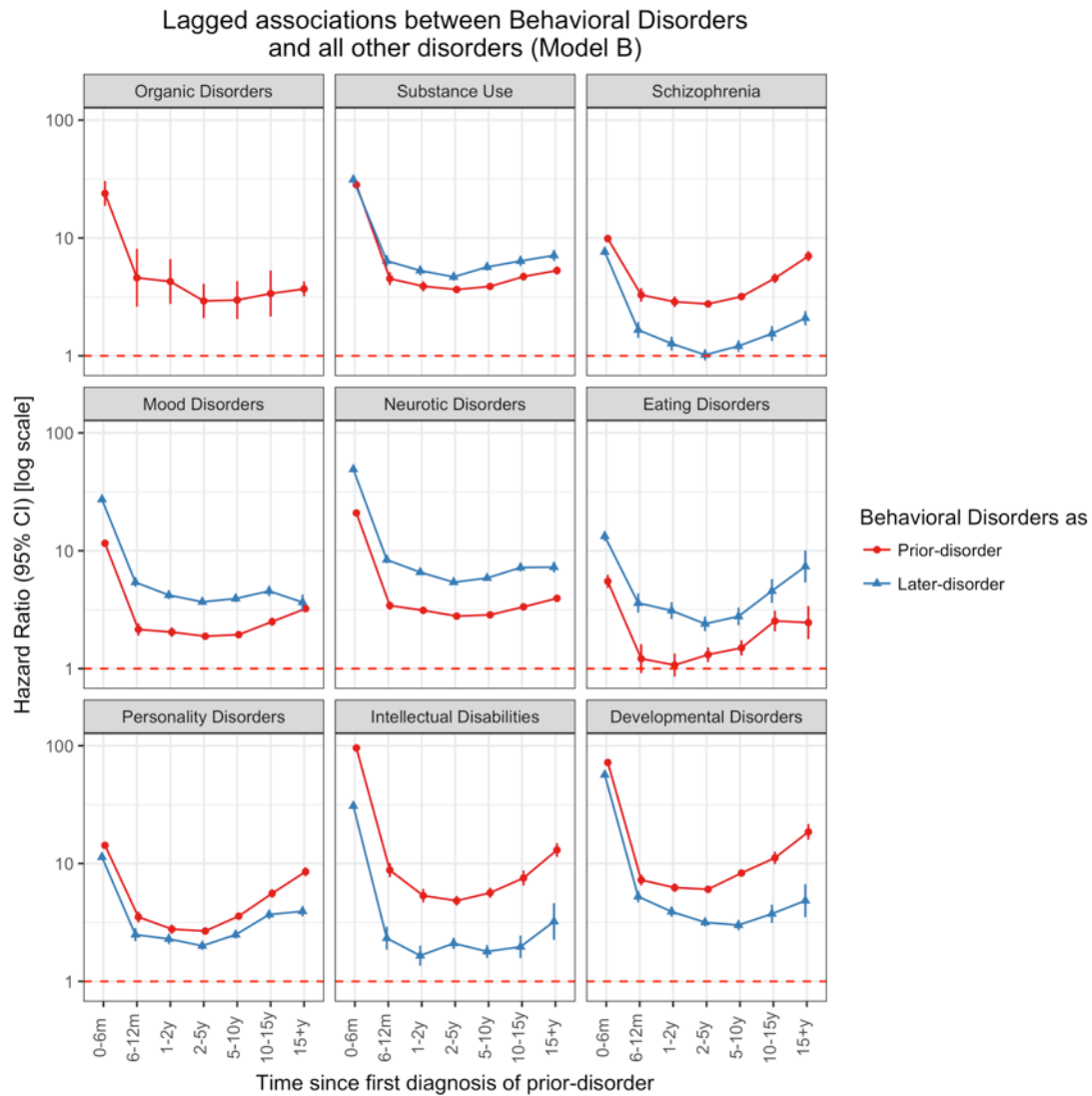
eFigure 52. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Intellectual Disabilities, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Intellectual Disabilities Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity. Estimates with less than 3 cases are not shown.



eFigure 53. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Developmental Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Developmental Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity. Estimates with less than 3 cases are not shown.



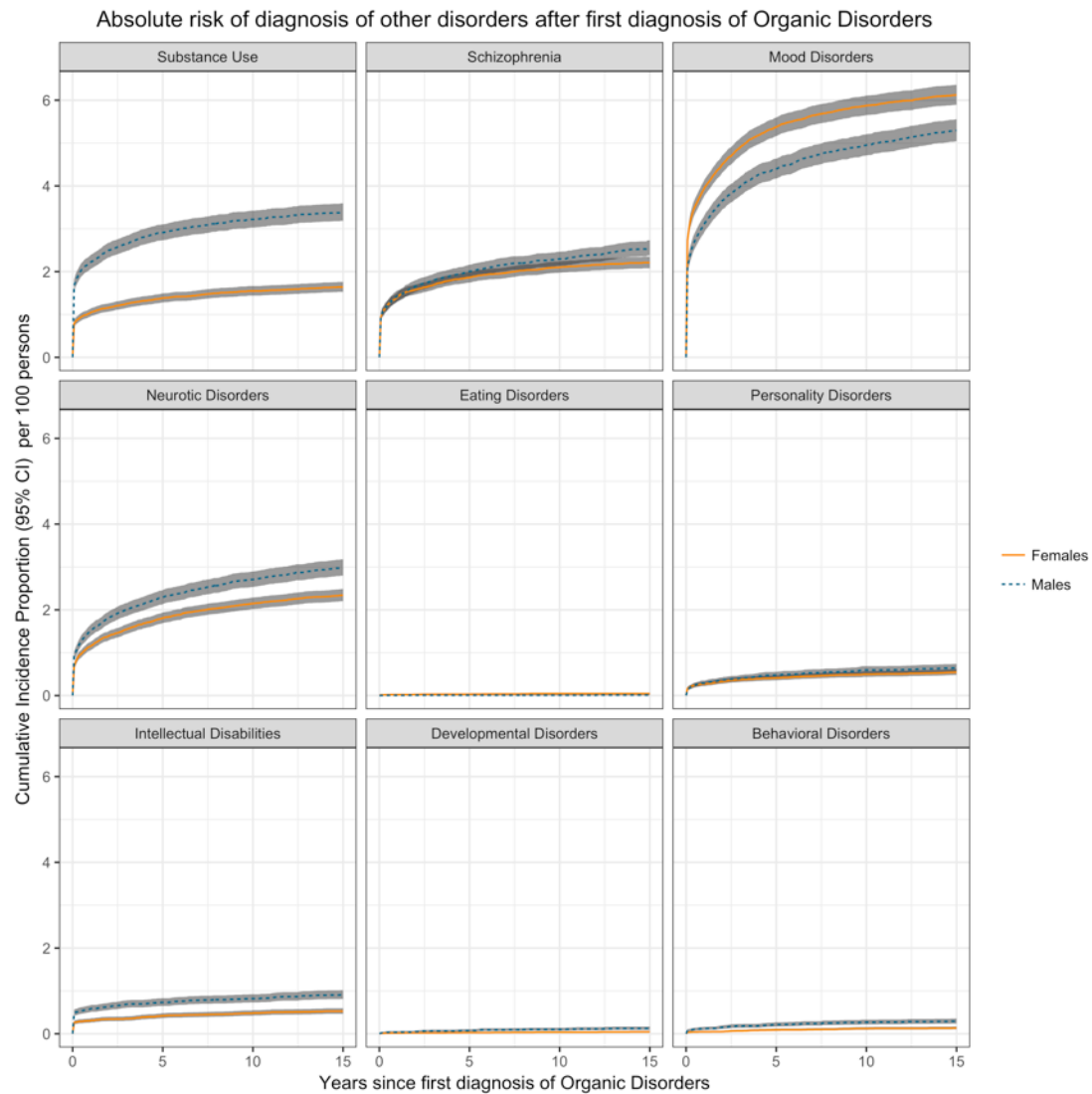
eFigure 54. Estimates in Red Points: HRs and 95% CIs of Being Diagnosed With Each Disorder Comparing Those With and Without a Prior Diagnosis of Behavioral Disorders, Depending on Time Since the First Diagnosis; Estimates in Blue Triangles: HRs and 95% CIs of Being Diagnosed With Behavioral Disorders Comparing Those With and Without a Prior Diagnosis in Each Other Disorder, Depending on Time Since the First Diagnosis
 All estimates were adjusted for age, sex, calendar time time and prior mental comorbidity. Estimates with less than 3 cases are not shown. There were not enough cases in the model with Organic Disorders as prior-disorder and Behavioral Disorders as later-disorder to adjust for mental health comorbidity.



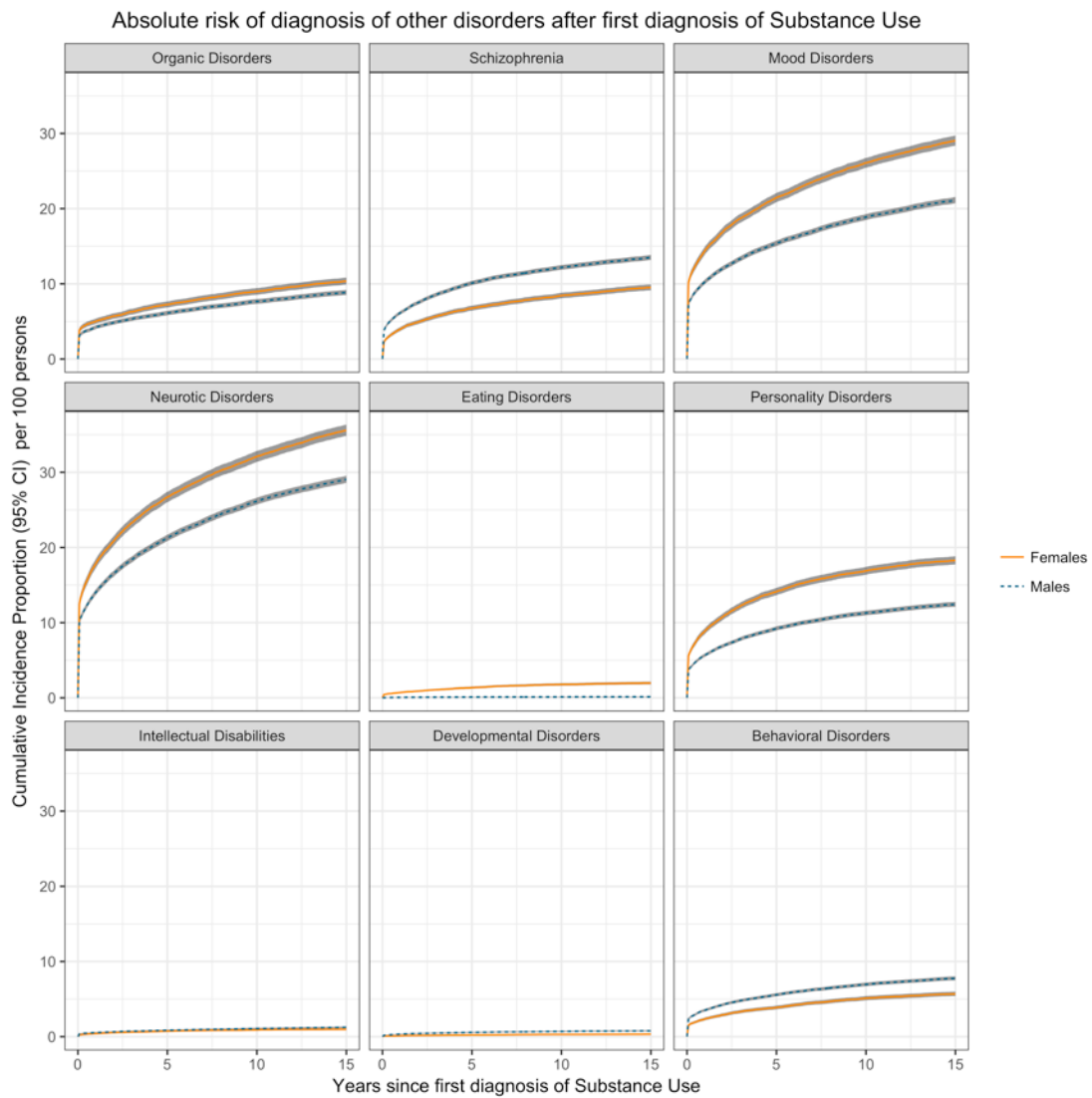
Absolute risks of later-disorders after a diagnosis of a prior-disorder

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with all disorders after being previously diagnosed with one of the disorders. They show the cumulative incidence proportions per 100 persons (solid yellow lines for females; dashed blue lines for males) and 95% confidence intervals (shaded area) estimated across all ages of being diagnosed with each later-disorder (shown as label at the top of each panel) after a prior specific diagnosis. The horizontal axes show the time since first diagnosis of the prior disorder. The vertical axes show the cumulative incidence proportions per 100 persons (and 95% CI).

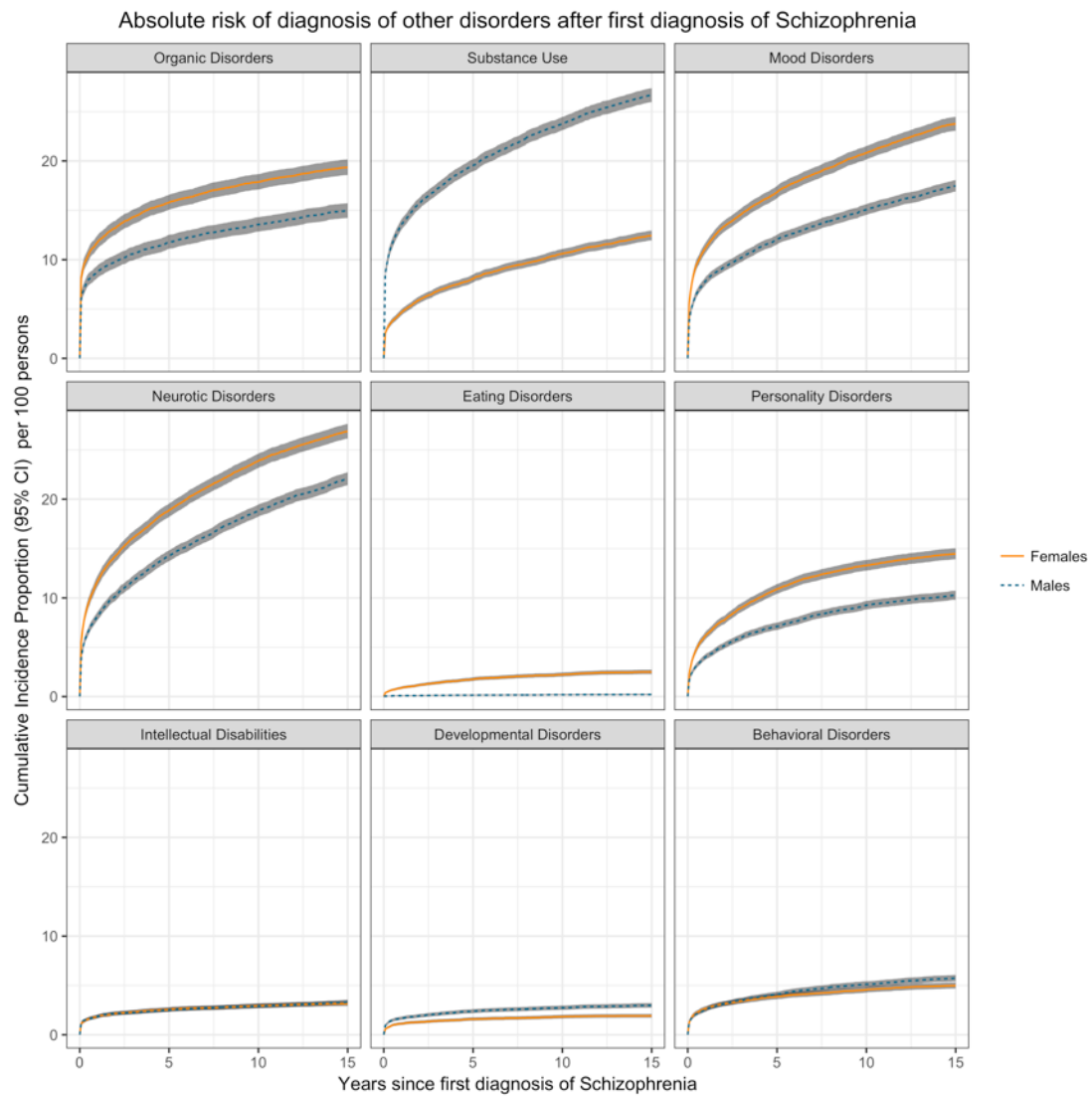
eFigure 55. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Organic Disorders



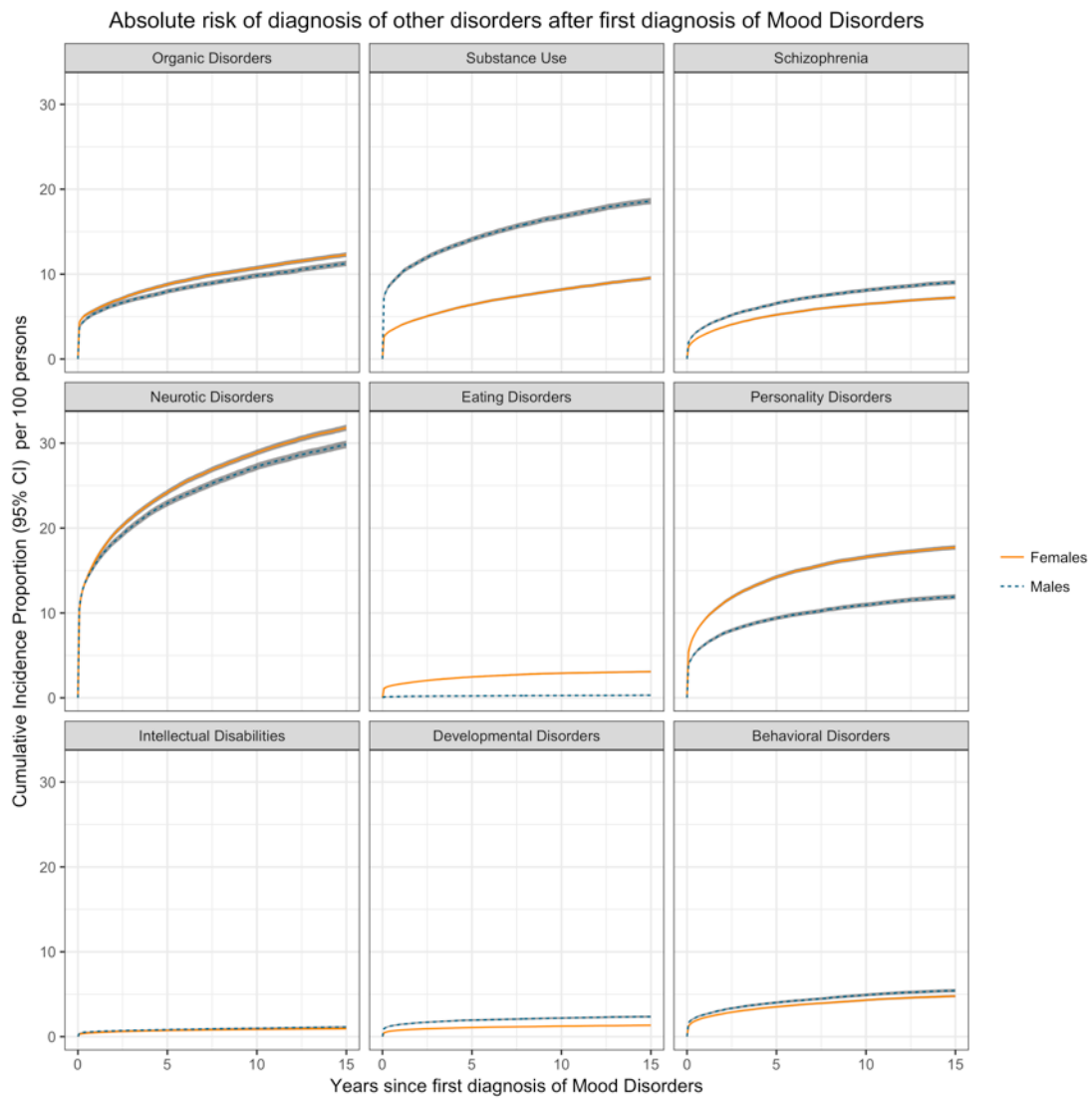
eFigure 56. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Substance Use



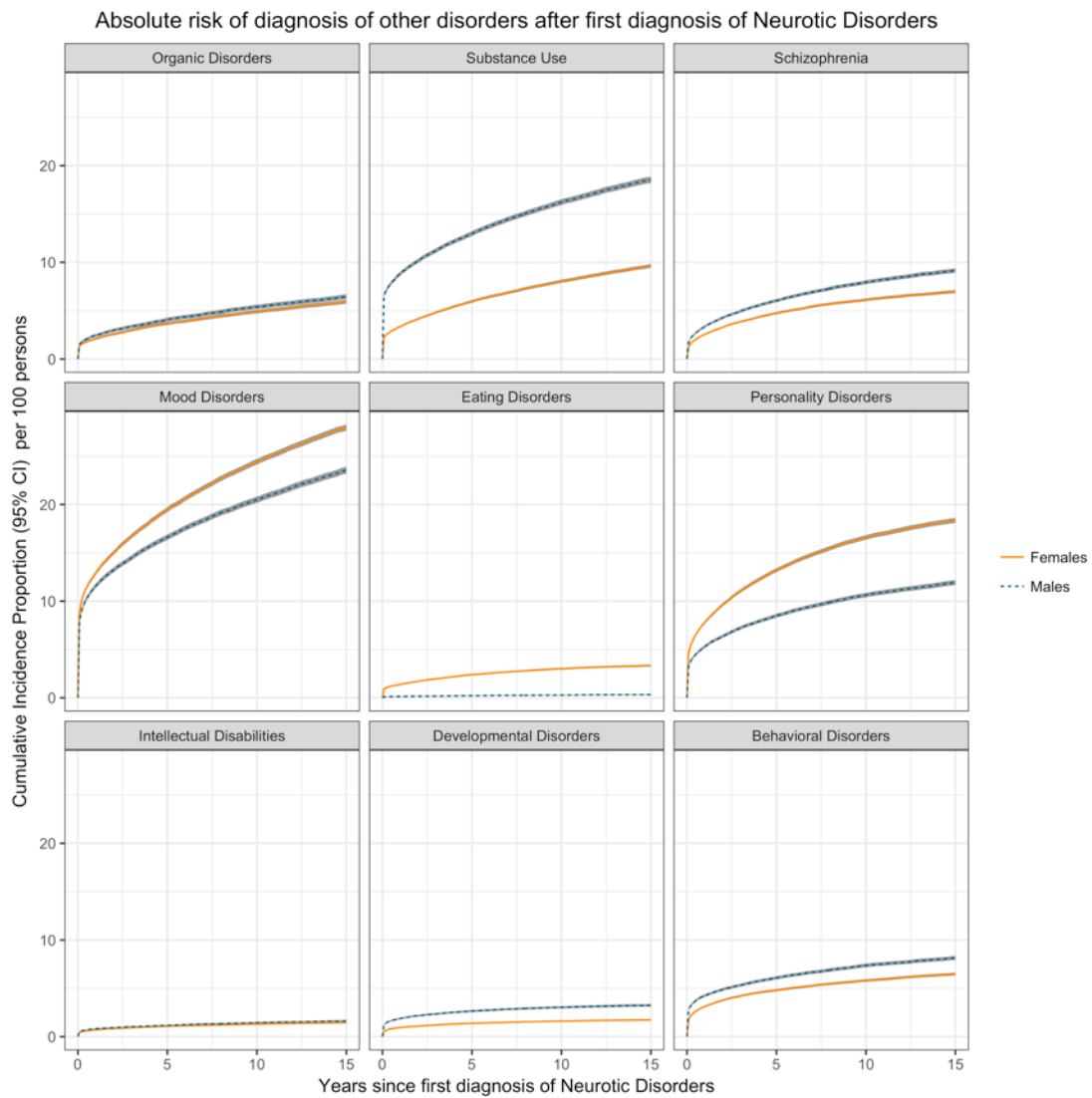
eFigure 57. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Schizophrenia



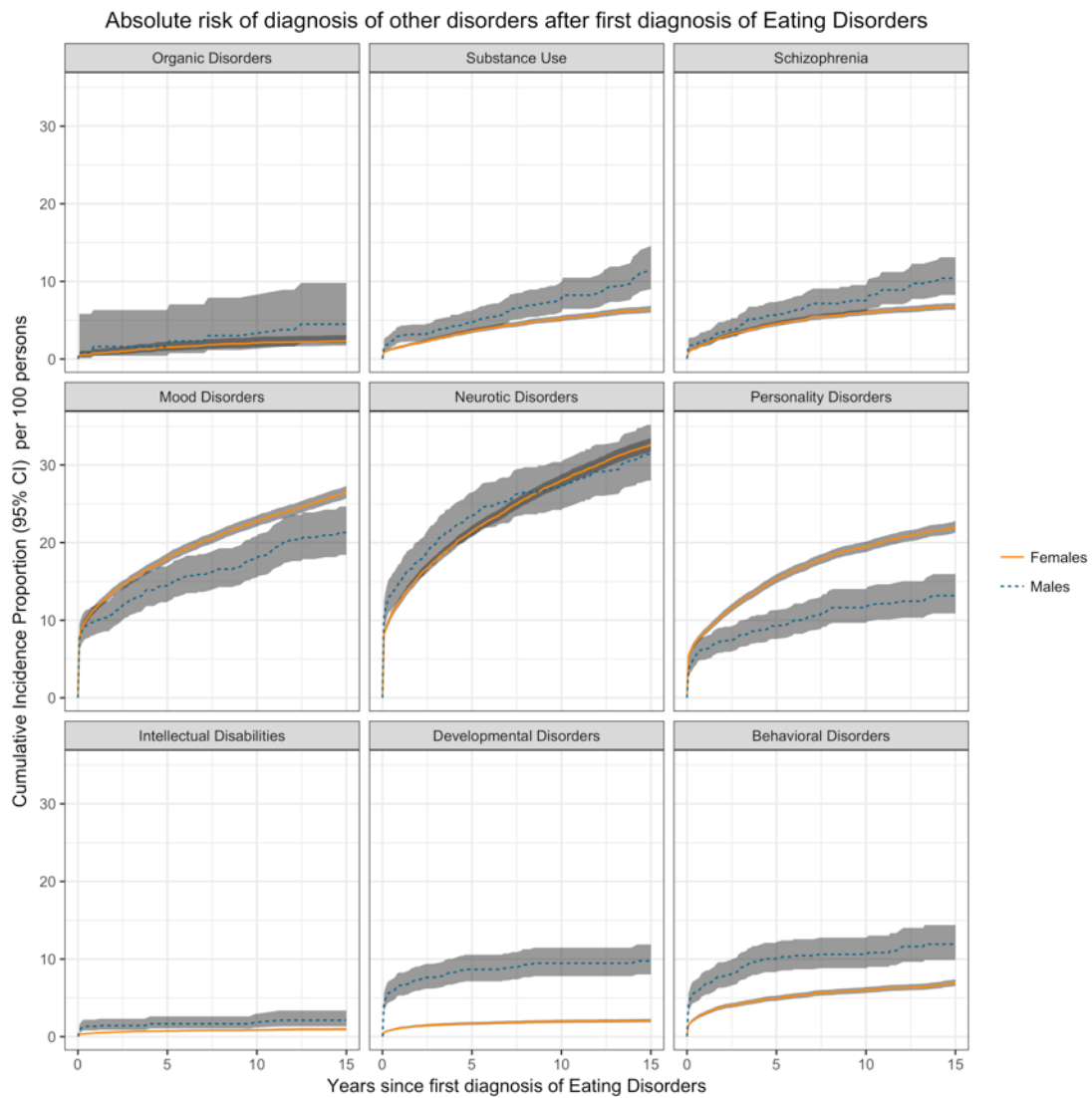
eFigure 58. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Mood Disorders



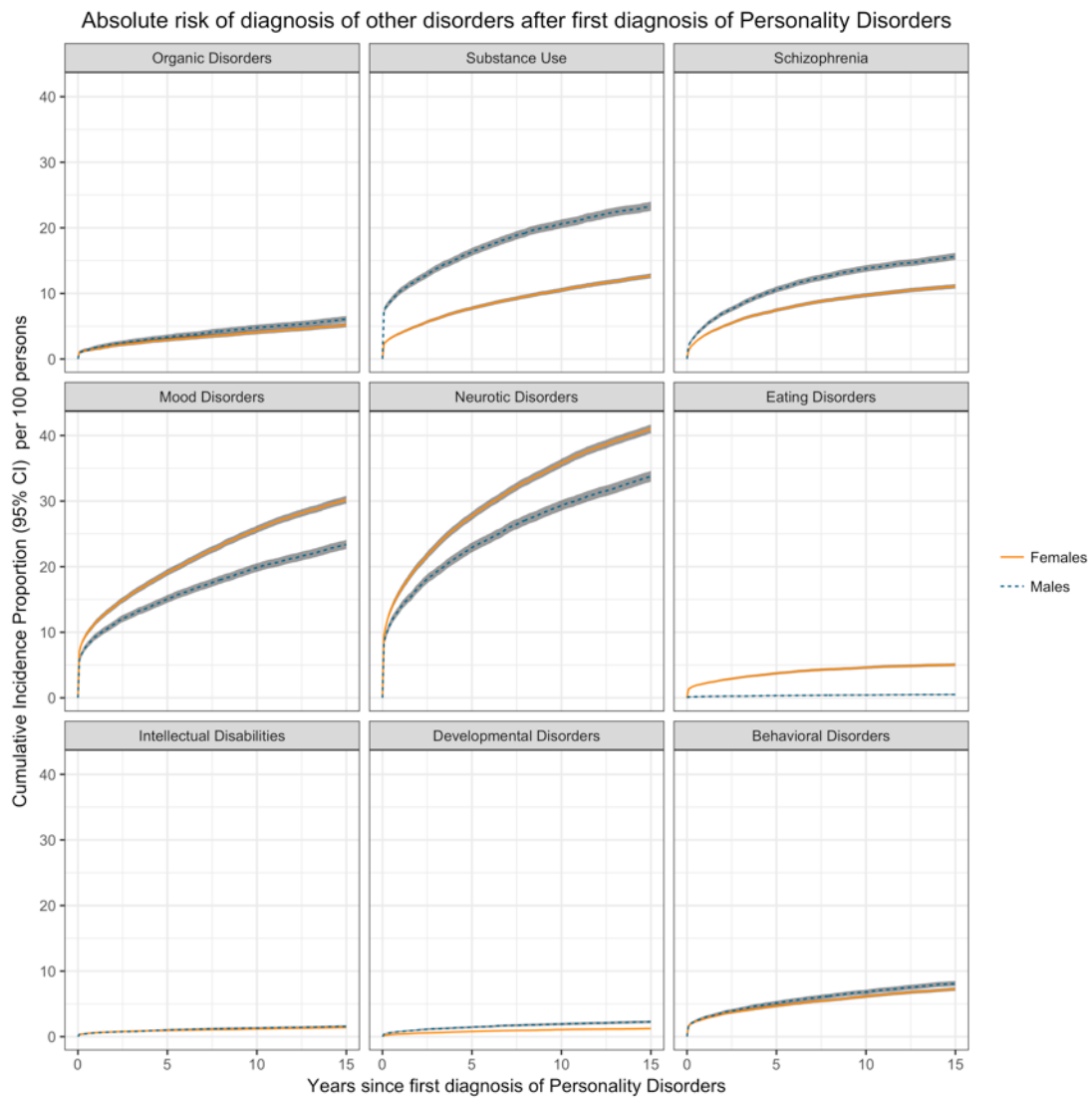
eFigure 59. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Neurotic Disorders



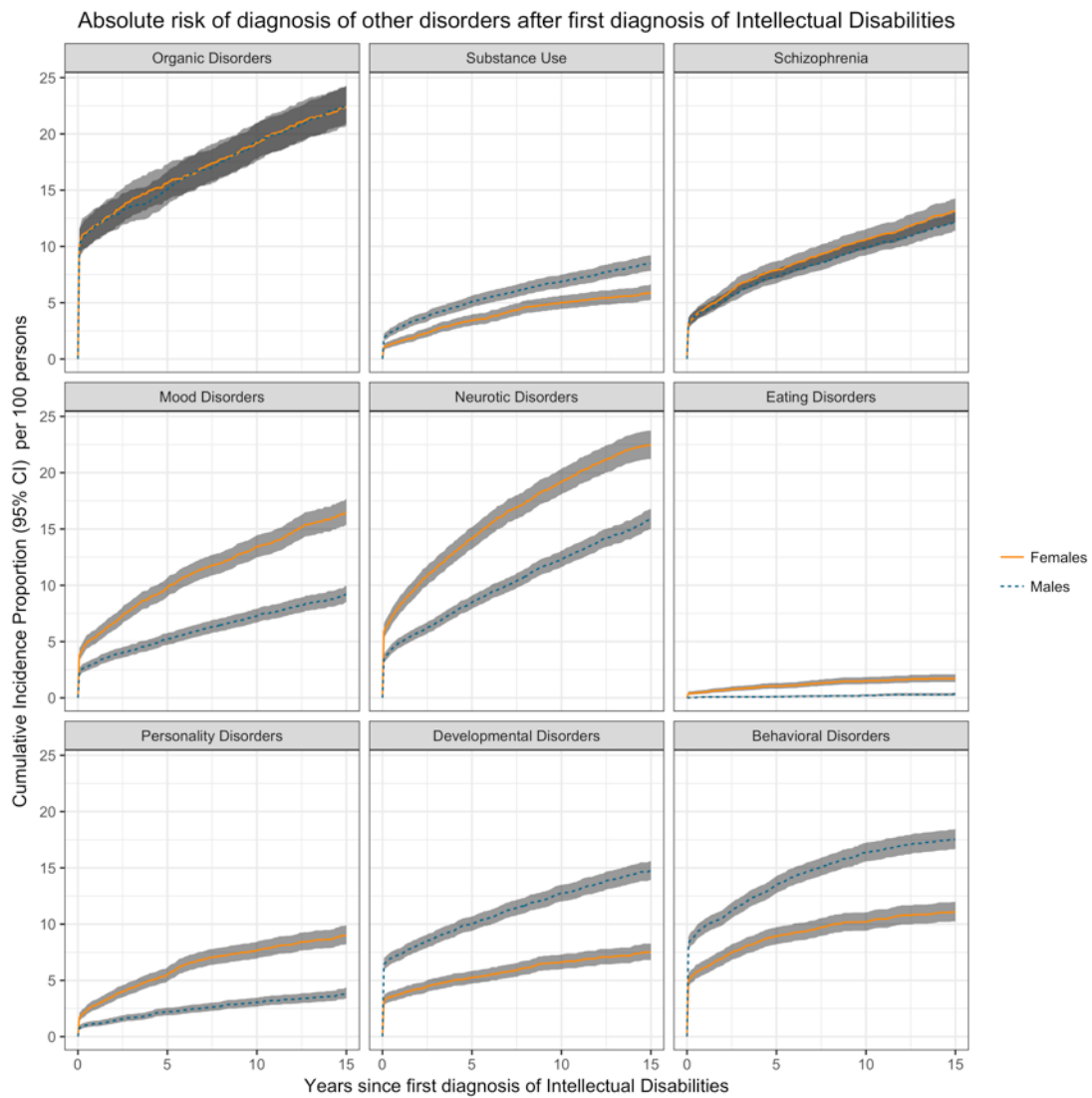
eFigure 60. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Eating Disorders



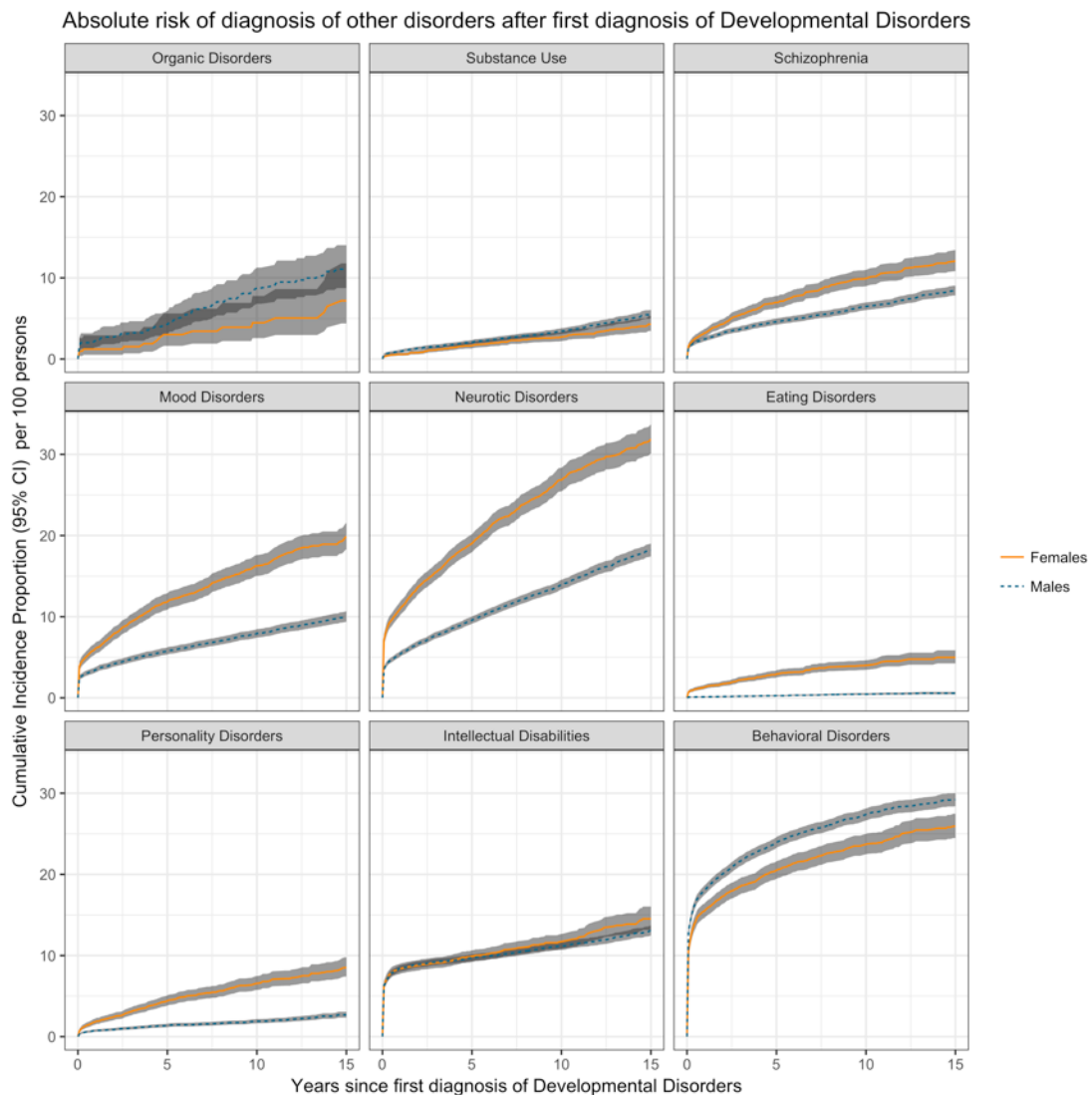
eFigure 61. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Personality Disorders



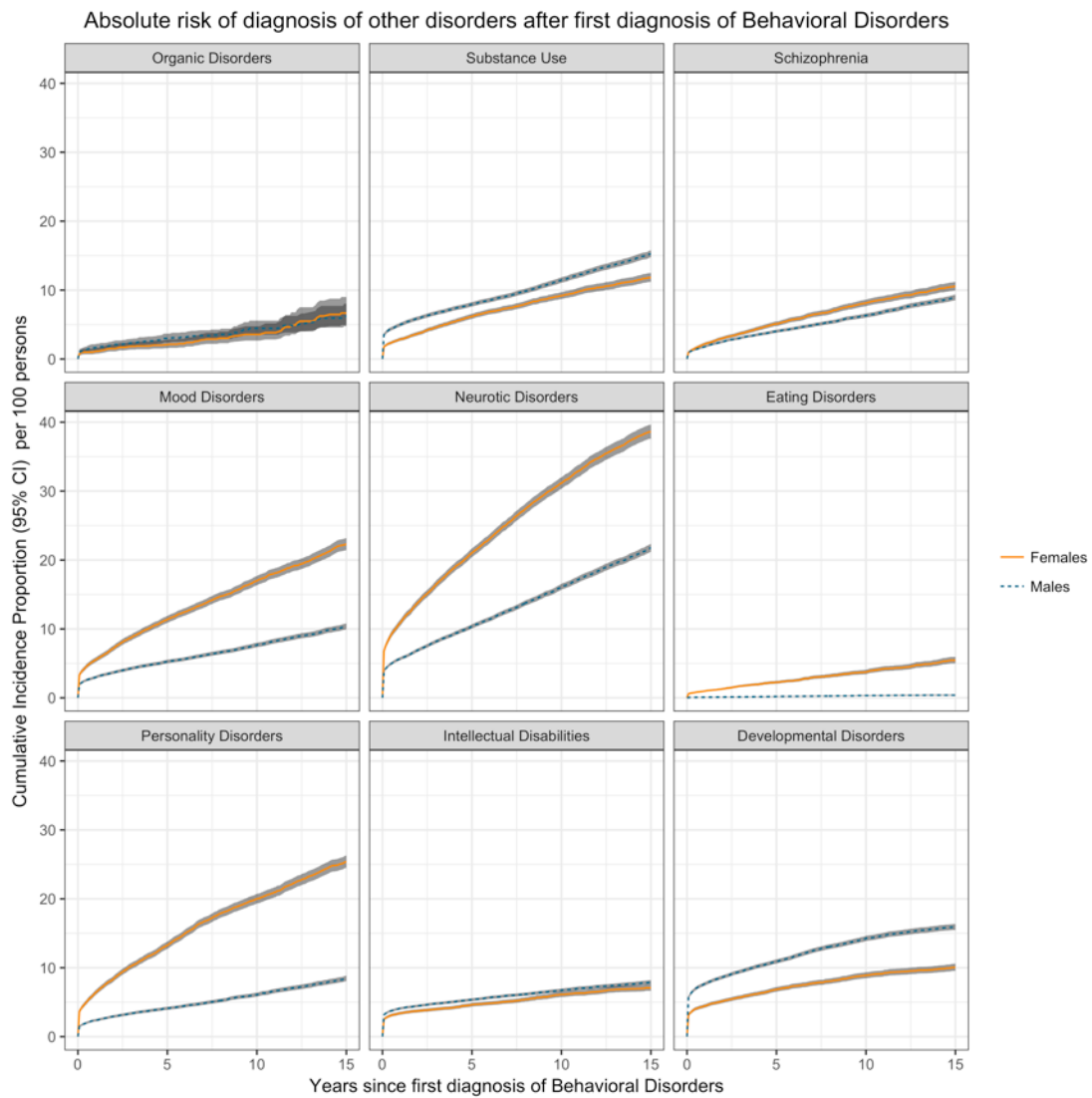
eFigure 62. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Intellectual Disabilities



eFigure 63. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Developmental Disorders



eFigure 64. Absolute Risks of Being Diagnosed With Each Disorder After a Prior Diagnosis of Behavioral Disorders



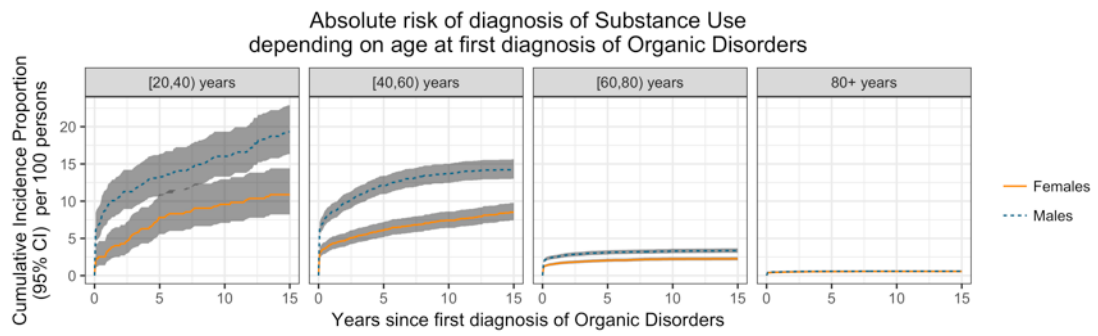
Absolute Risks of Later-Disorders After a Diagnosis of a Prior-Disorder Depending on Age at First Diagnosis of the Prior-Disorder

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with each disorder after being previously diagnosed with another disorder, depending on age at first diagnosis of the prior-disorder. They show the cumulative incidence proportions per 100 persons (solid yellow lines for females; dashed blue lines for males) and 95% confidence intervals (shaded area) estimated for each specific age group of being diagnosed with each specific later-disorder after a prior specific diagnosis. The horizontal axes show the time since first diagnosis of the prior disorder. The vertical axes show the cumulative incidence proportions per 100 persons (and 95% CI).

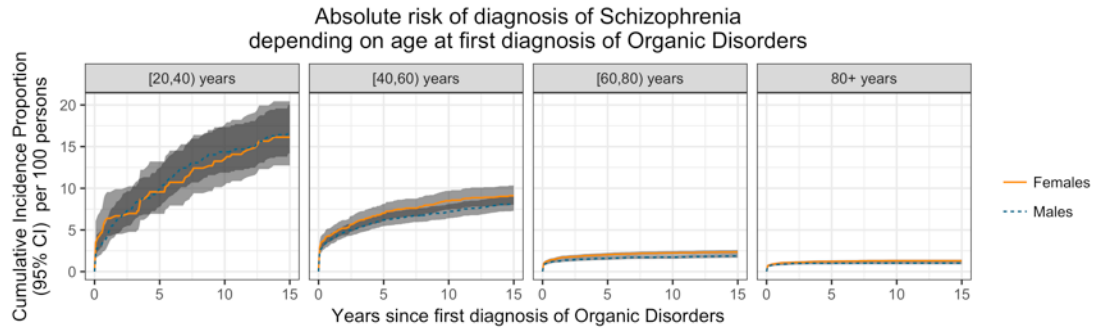
eFigure numbers		Later disorder									
		Organic Disorders	Substance Use	Schizophrenia	Mood Disorders	Neurotic Disorders	Eating Disorders	Personality Disorders	Intellectual Disabilities	Developmental Disorders	Behavioral Disorders
Prior disorder	Organic Disorders	-	65	66	67	68	69	70	71	72	73
	Substance Use	74	-	75	76	77	78	79	80	81	82
	Schizophrenia	83	84	-	85	86	87	88	89	90	91
	Mood Disorders	92	93	94	-	95	96	97	98	99	100
	Neurotic Disorders	101	102	103	104	-	105	106	107	108	109
	Eating Disorders	110	111	112	113	114	-	115	116	117	118
	Personality Disorders	119	120	121	122	123	124	-	125	126	127
	Intellectual Disabilities	128	129	130	131	132	133	134	-	135	136
	Developmental Disorders	137	138	139	140	141	142	143	144	-	145
	Behavioral Disorders	146	147	148	149	150	151	152	153	154	-

eFigure 65. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Organic Disorders

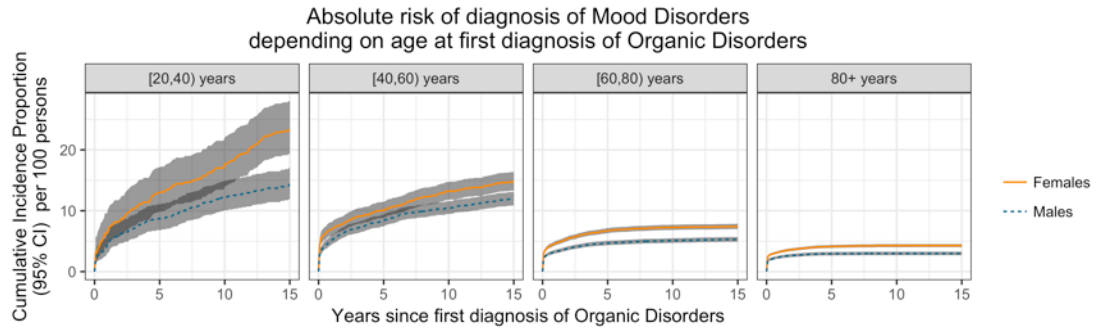
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 66. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Organic Disorders

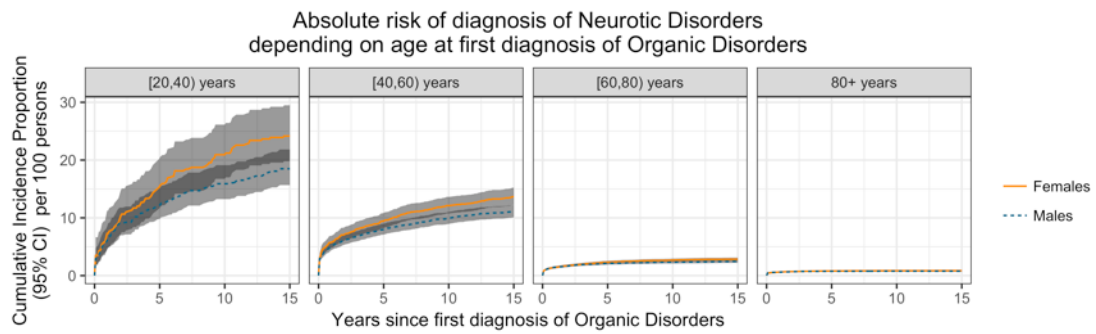


eFigure 67. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Organic Disorders



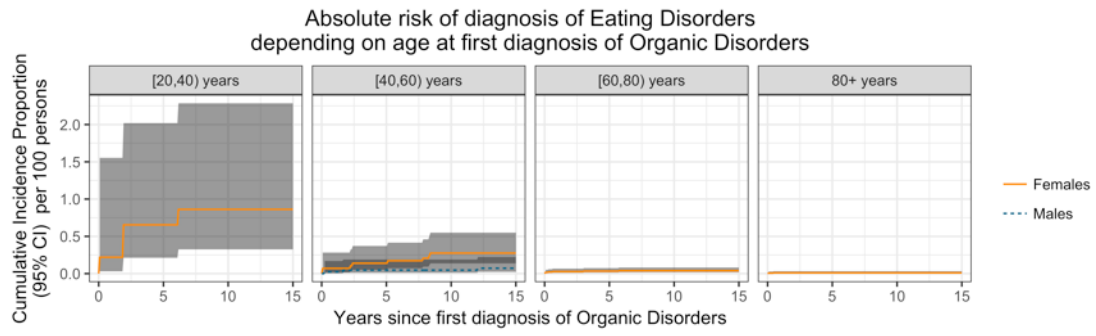
eFigure 68. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Organic Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

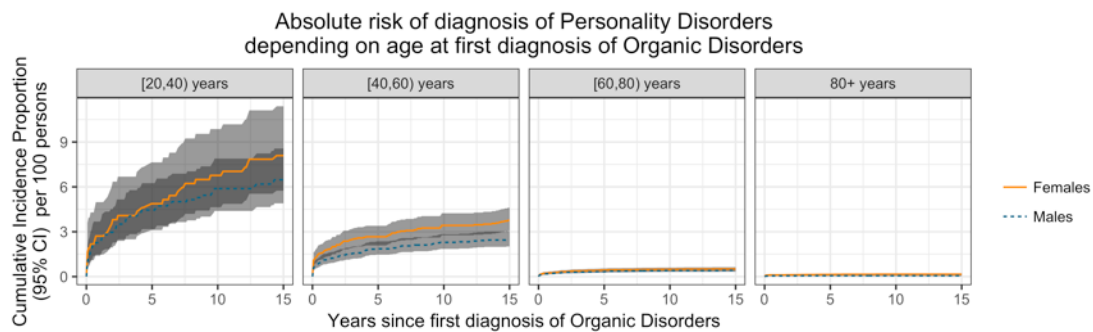


eFigure 69. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Organic Disorders

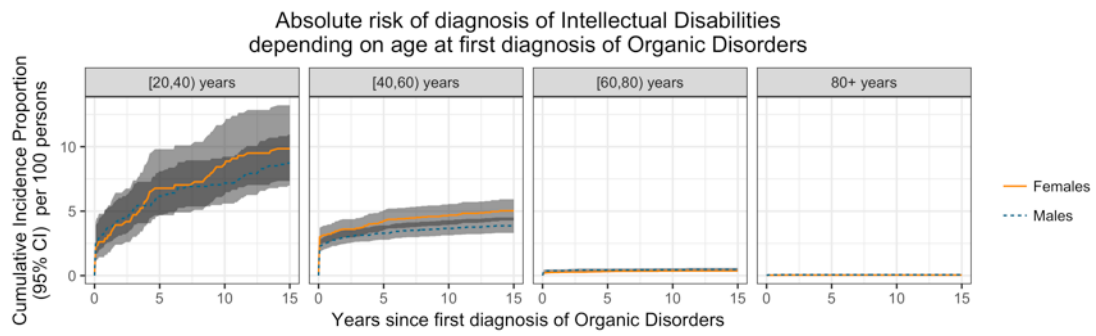
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



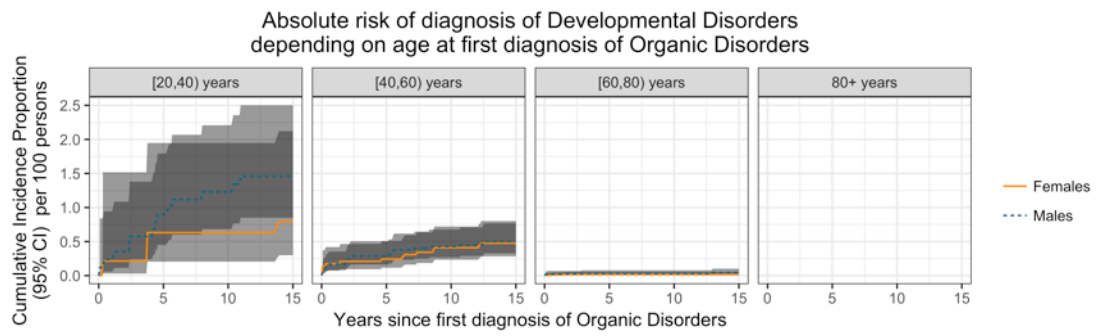
eFigure 70. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Organic Disorders



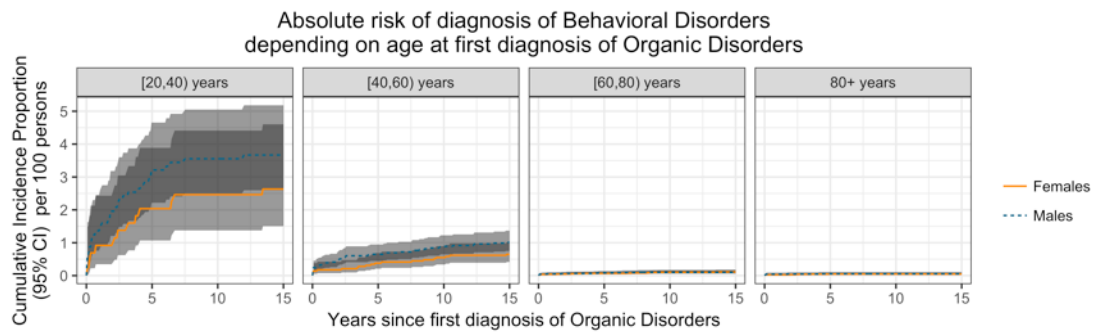
eFigure 71. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Organic Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 72. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Organic Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.

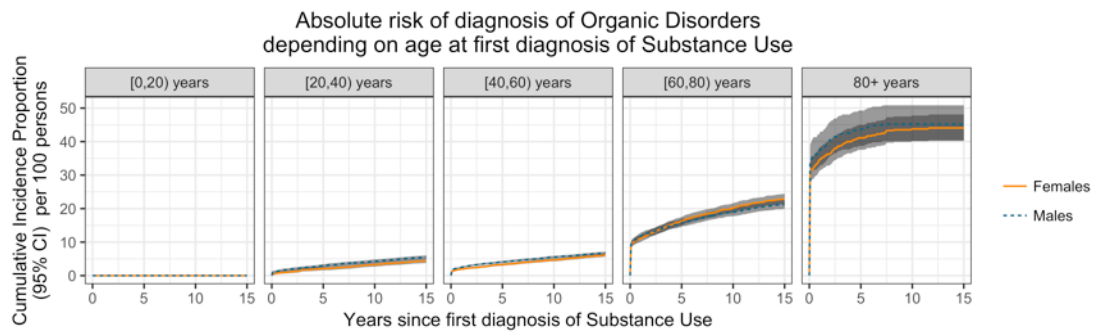


eFigure 73. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Organic Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.

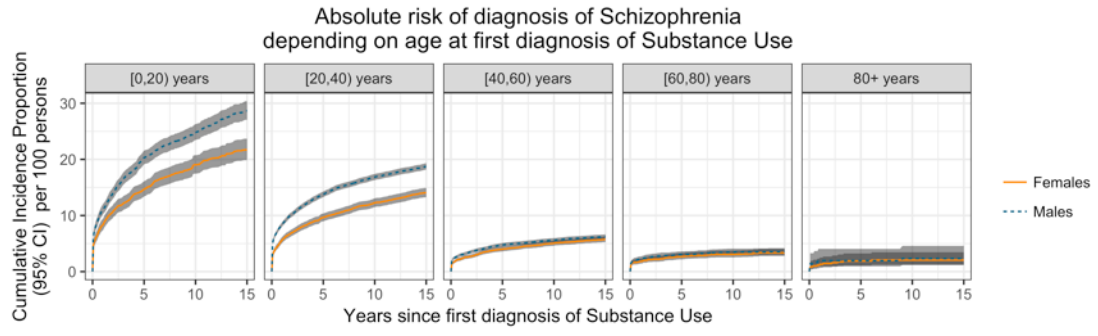


eFigure 74. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Substance Use

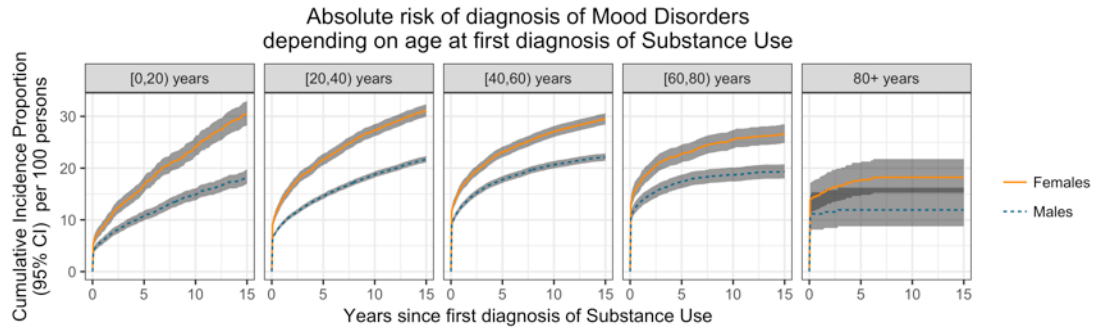
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



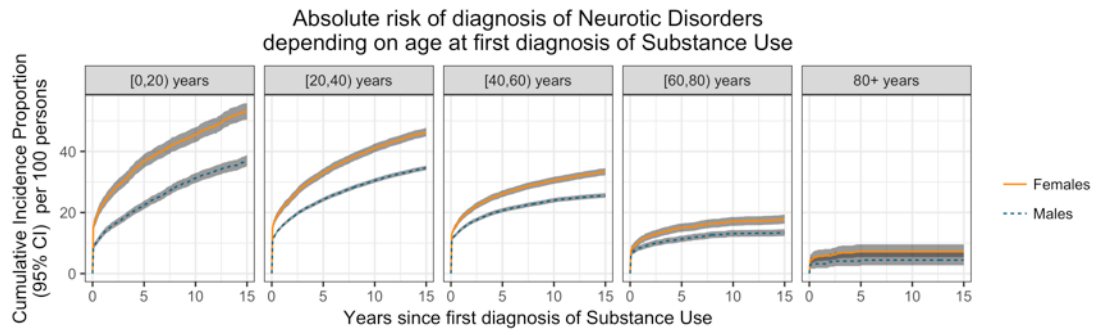
eFigure 75. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Substance Use



eFigure 76. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Substance Use

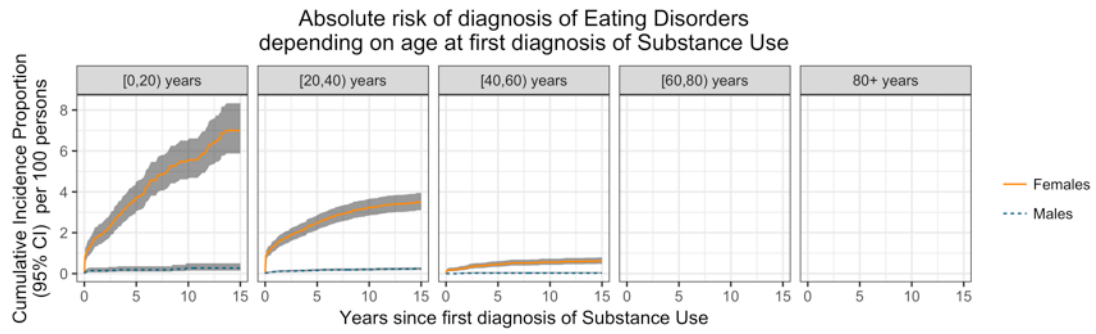


eFigure 77. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Substance Use

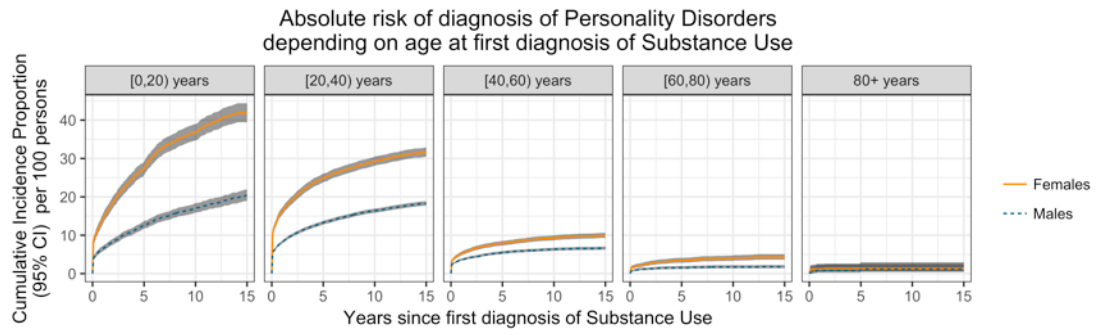


eFigure 78. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Substance Use

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

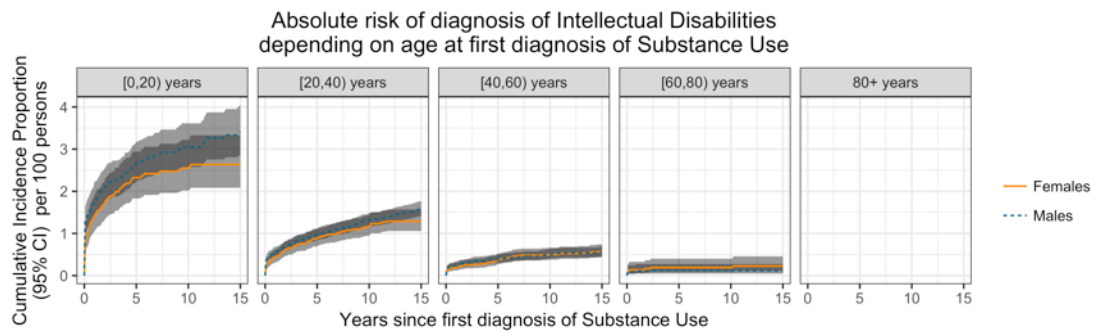


eFigure 79. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Substance Use



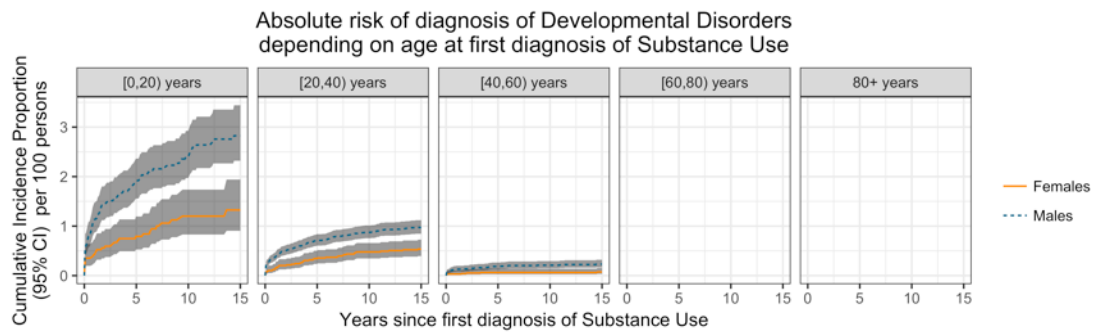
eFigure 80. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Substance Use

Estimates with less than 50 persons at risk or less than 3 cases are not shown.



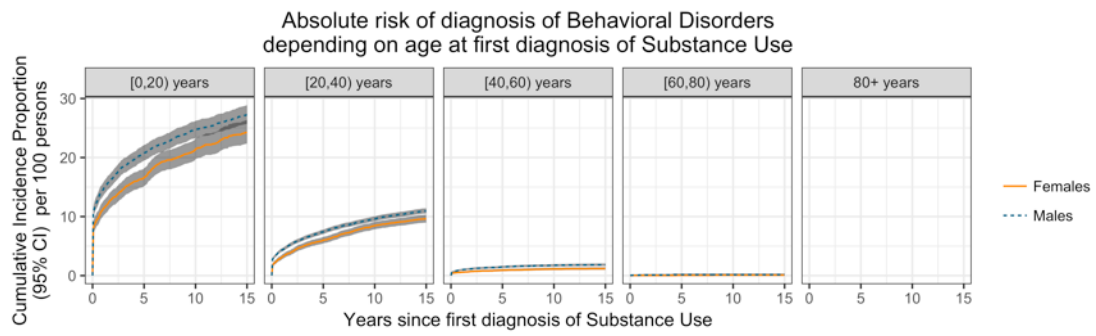
eFigure 81. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Substance Use

Estimates with less than 50 persons at risk or less than 3 cases are not shown.



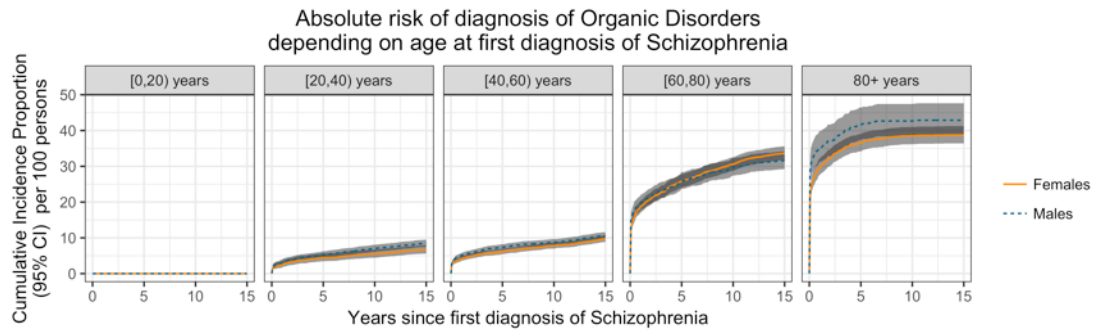
eFigure 82. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Substance Use

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

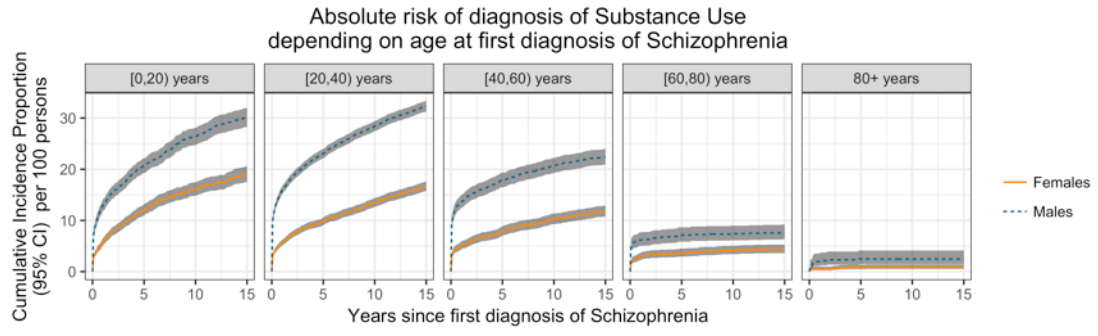


eFigure 83. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Schizophrenia

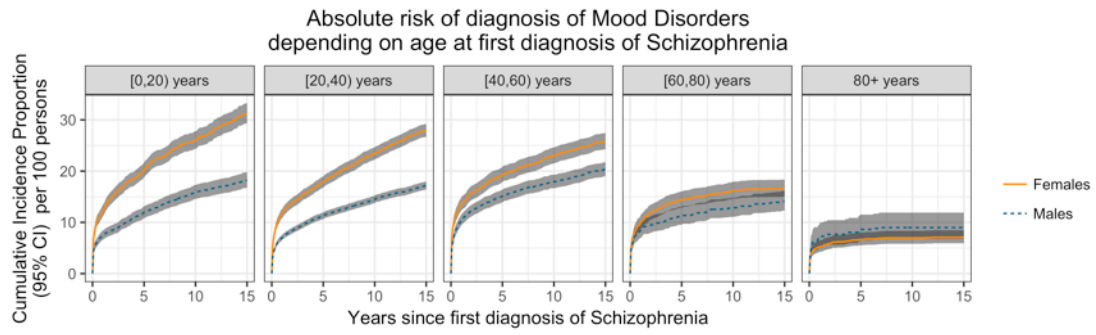
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



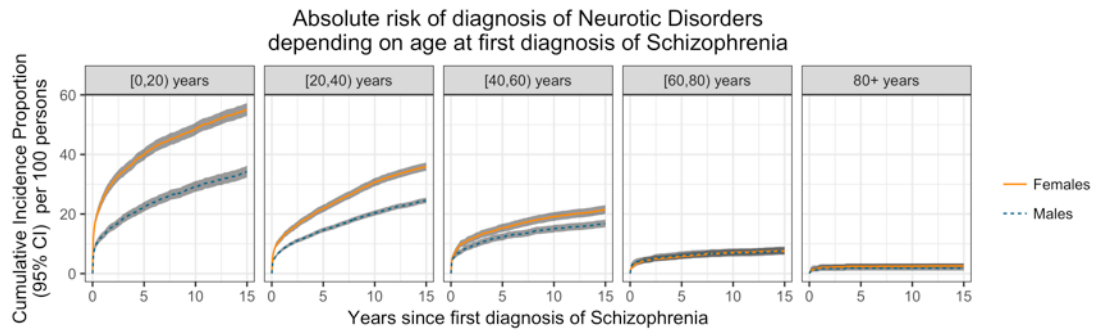
eFigure 84. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Schizophrenia



eFigure 85. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Schizophrenia

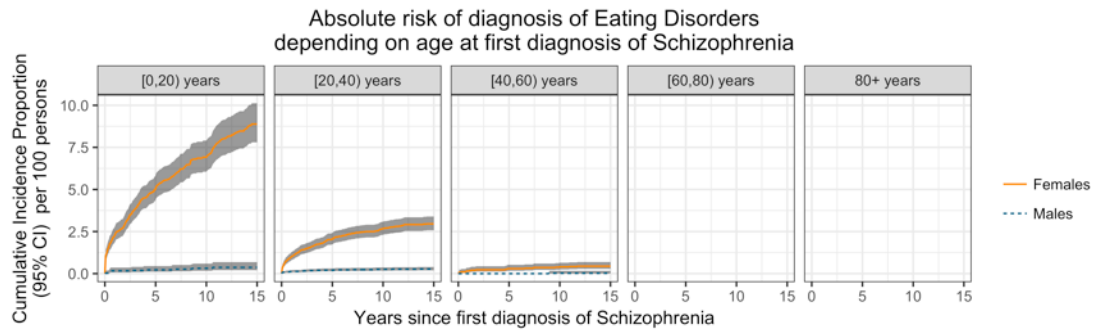


eFigure 86. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Schizophrenia

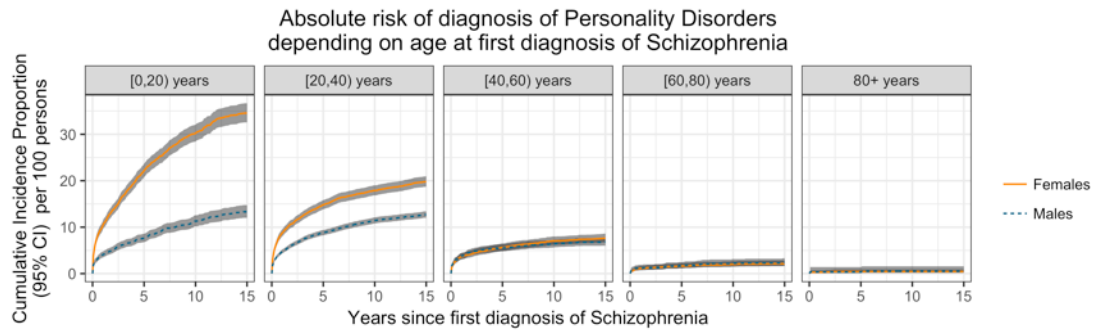


eFigure 87. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Schizophrenia

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

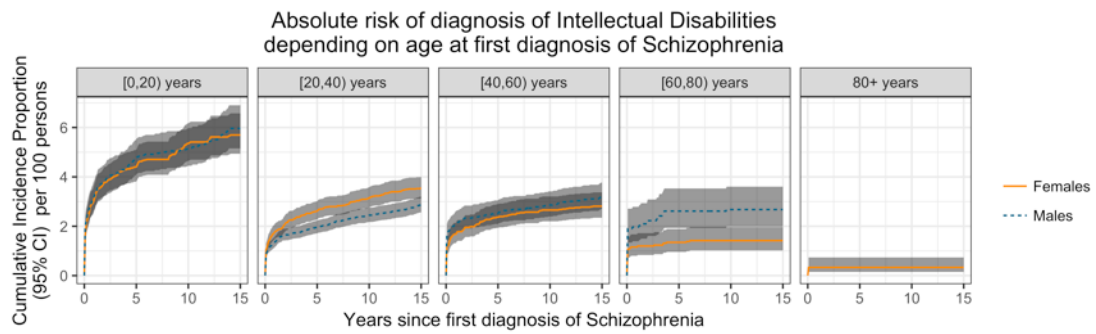


eFigure 88. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Schizophrenia



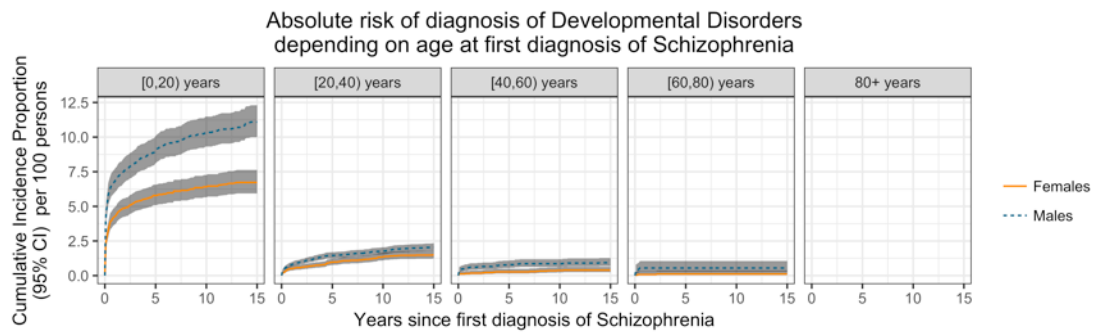
eFigure 89. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Schizophrenia

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

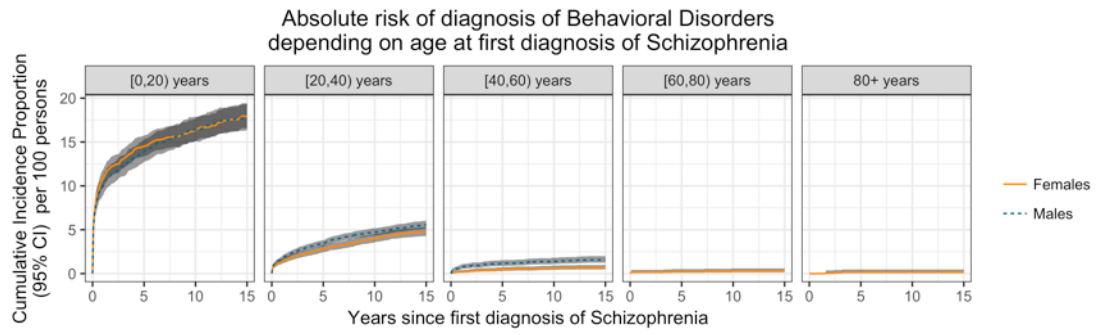


eFigure 90. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Schizophrenia

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

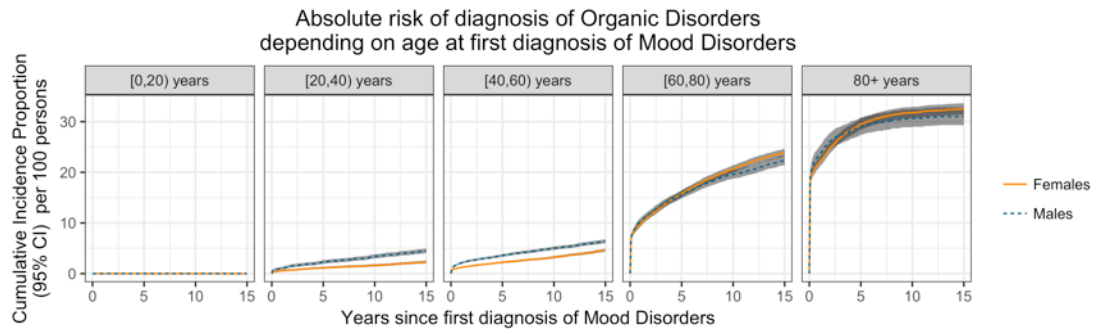


eFigure 91. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Schizophrenia

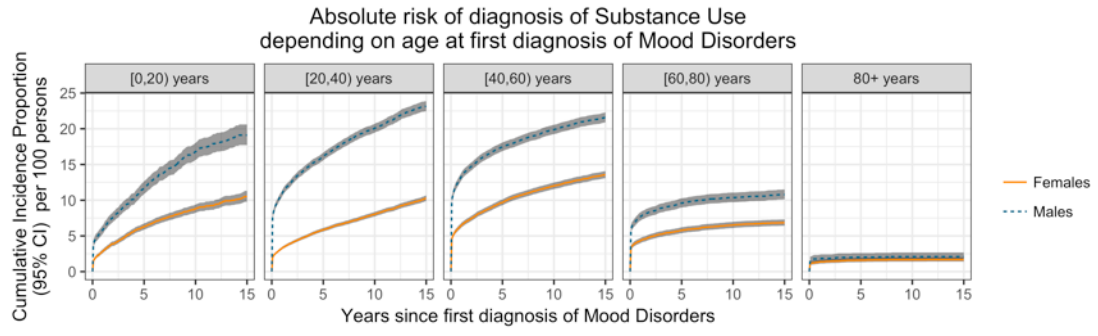


eFigure 92. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Mood Disorders

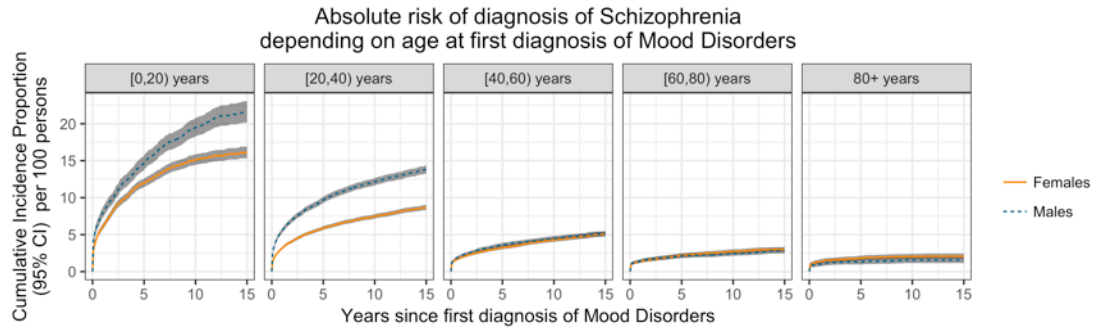
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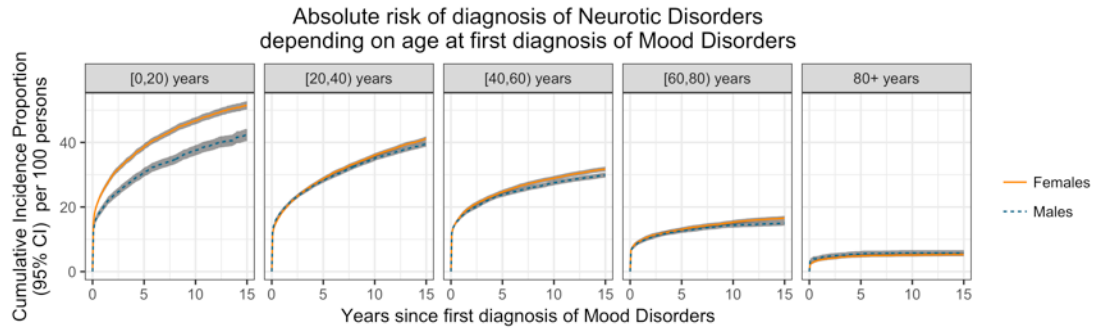
eFigure 93. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Mood Disorders



eFigure 94. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Mood Disorders

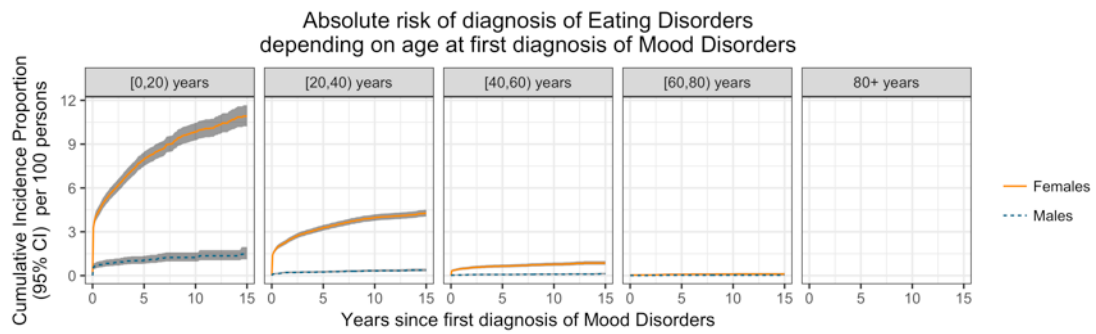


eFigure 95. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Mood Disorders

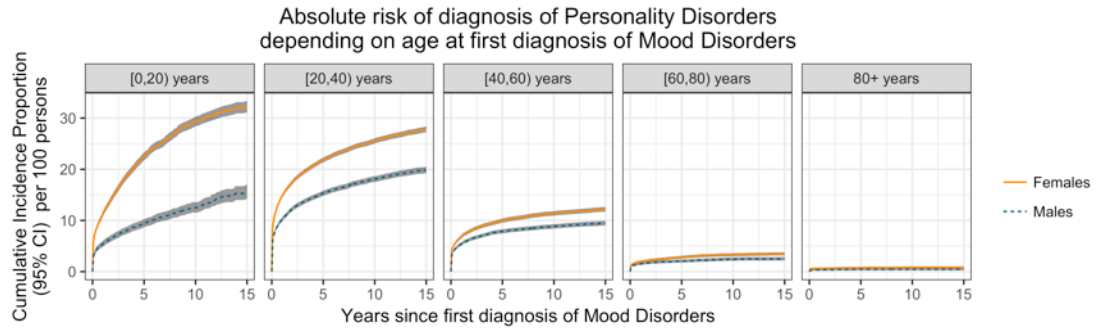


eFigure 96. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Mood Disorders

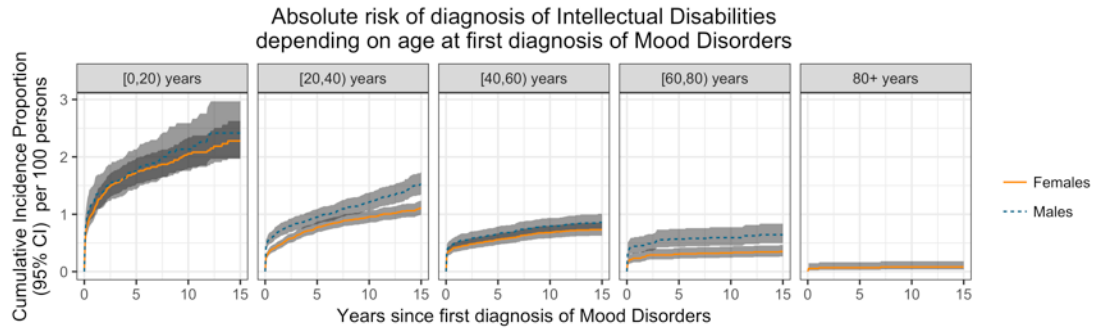
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



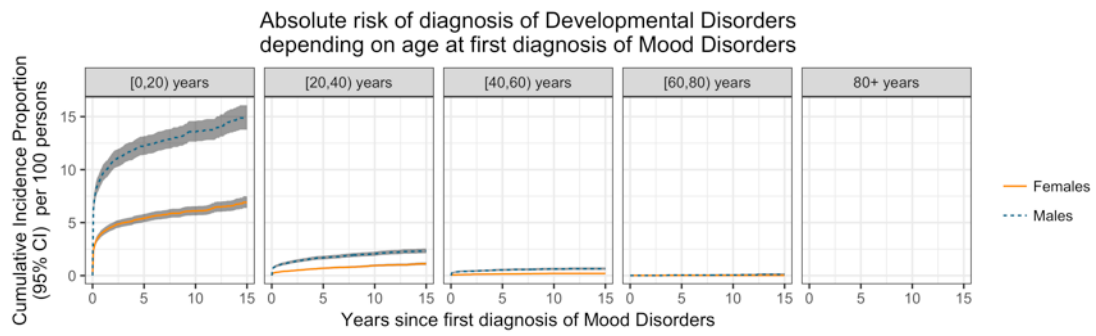
eFigure 97. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Mood Disorders



eFigure 98. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Mood Disorders

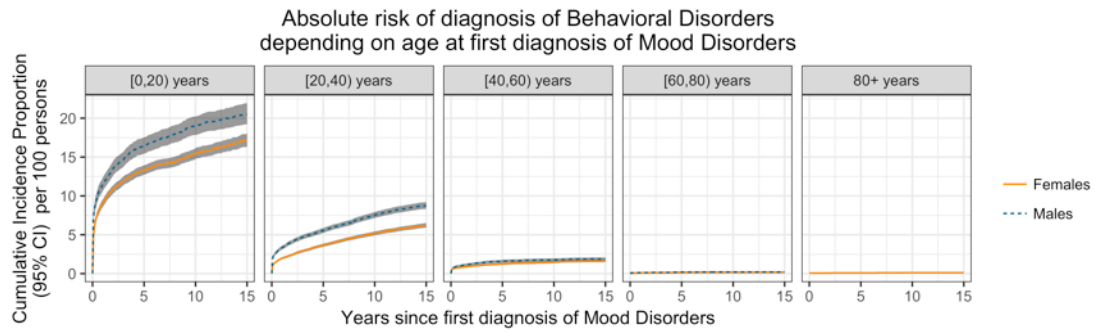


eFigure 99. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Mood Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

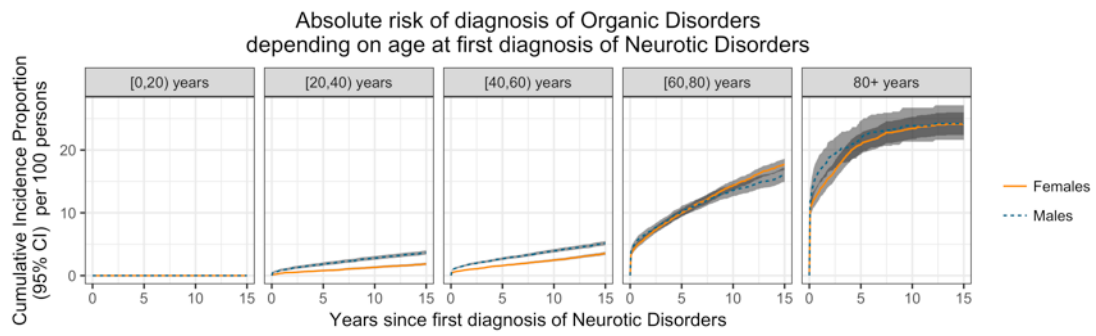


eFigure 100. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Mood Disorders

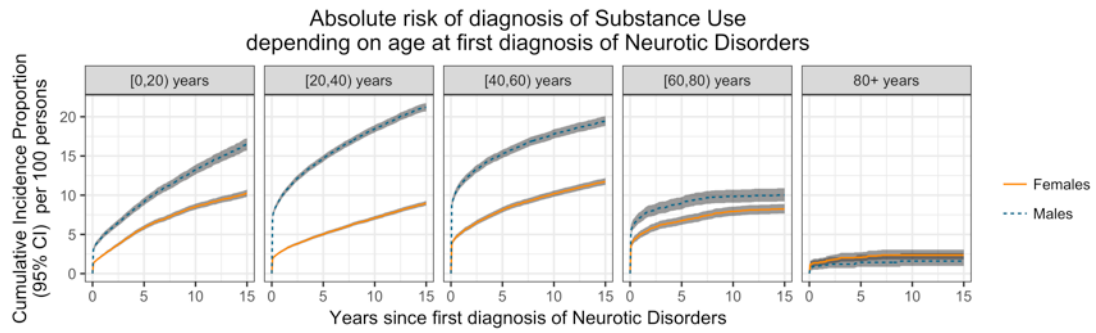
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



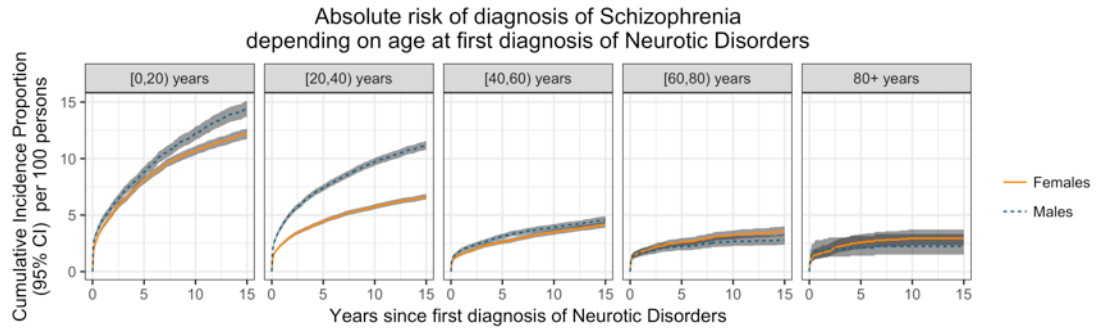
eFigure 101. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Neurotic Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



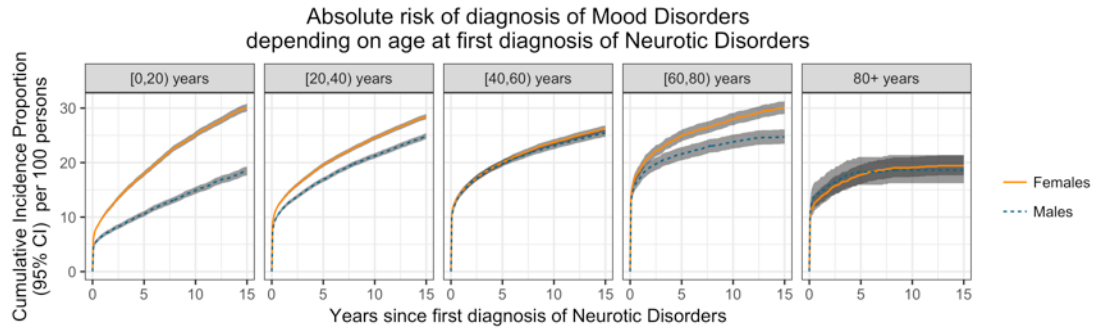
eFigure 102. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Neurotic Disorders



eFigure 103. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Neurotic Disorders

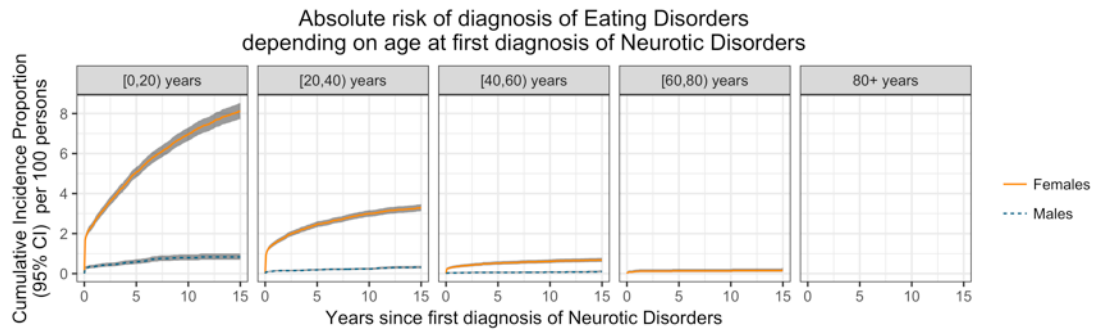


eFigure 104. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Neurotic Disorders

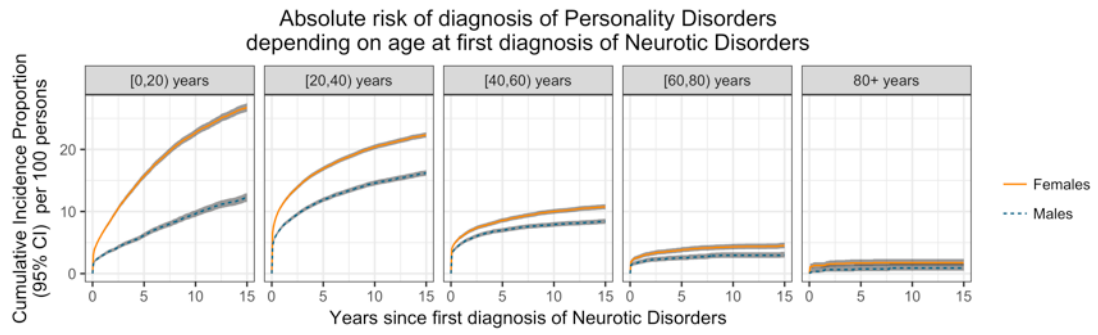


eFigure 105. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Neurotic Disorders

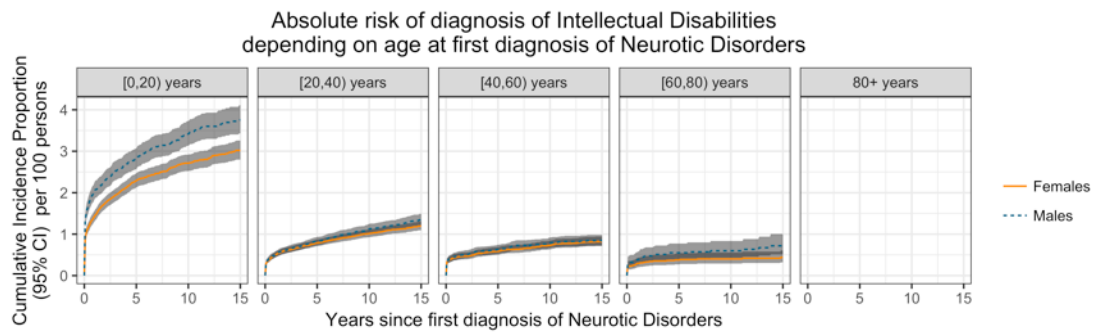
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



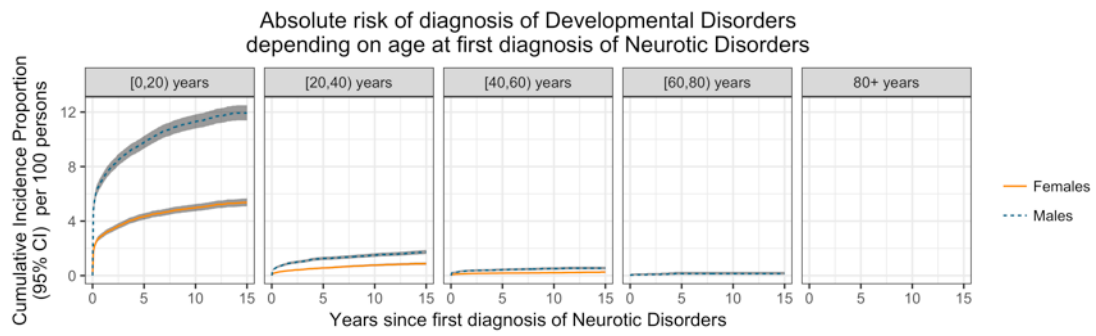
eFigure 106. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Neurotic Disorders



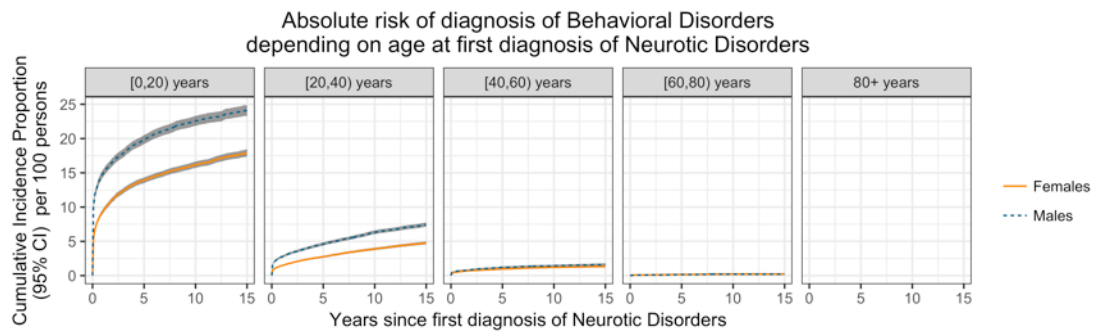
eFigure 107. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Neurotic Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



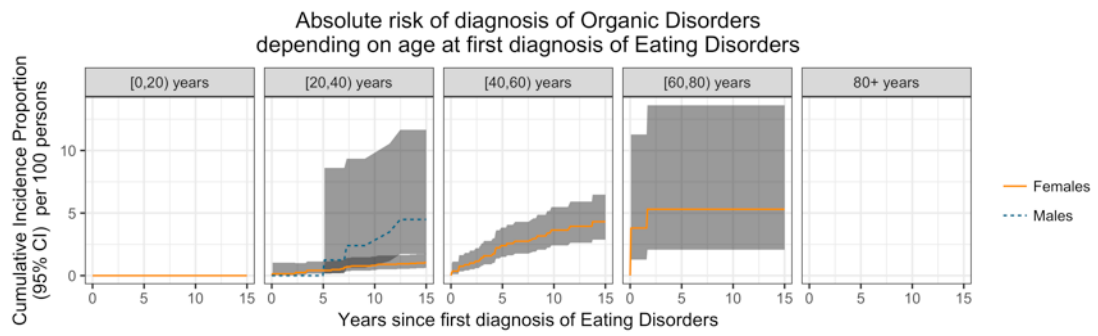
eFigure 108. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Neurotic Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 109. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Neurotic Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

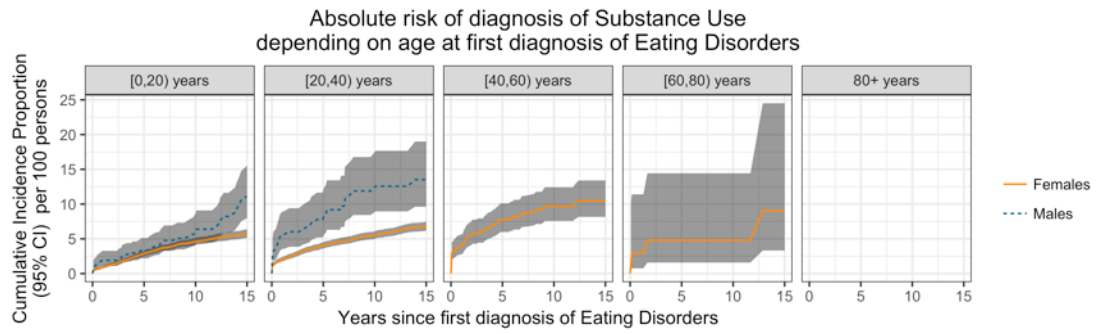


eFigure 110. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Eating Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



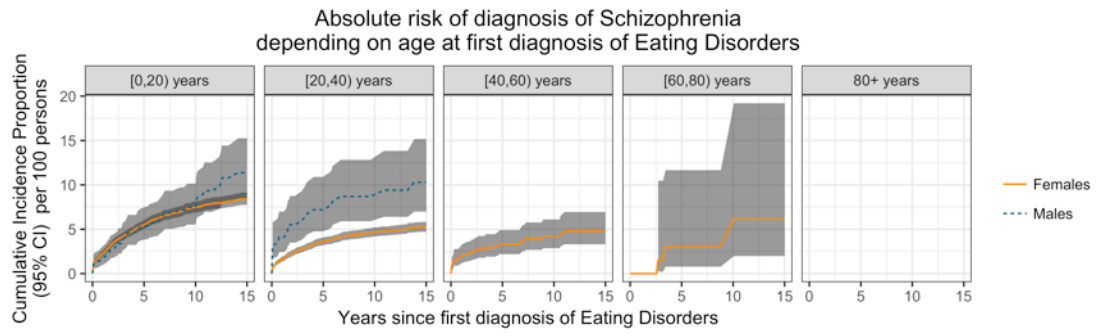
eFigure 111. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Eating Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.



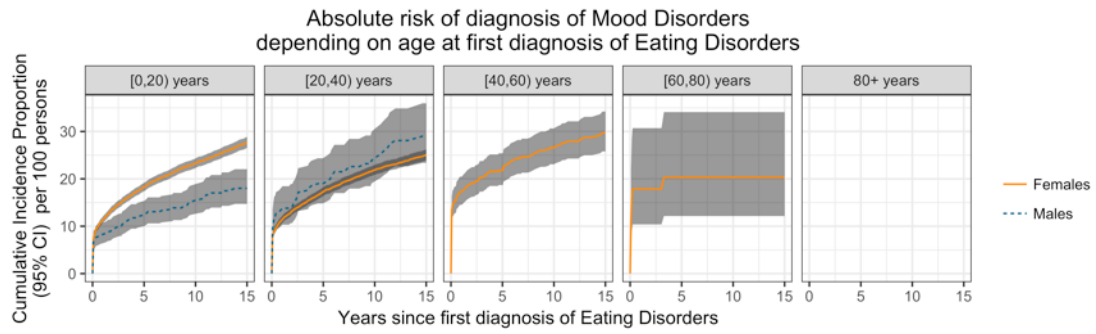
eFigure 112. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Eating Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

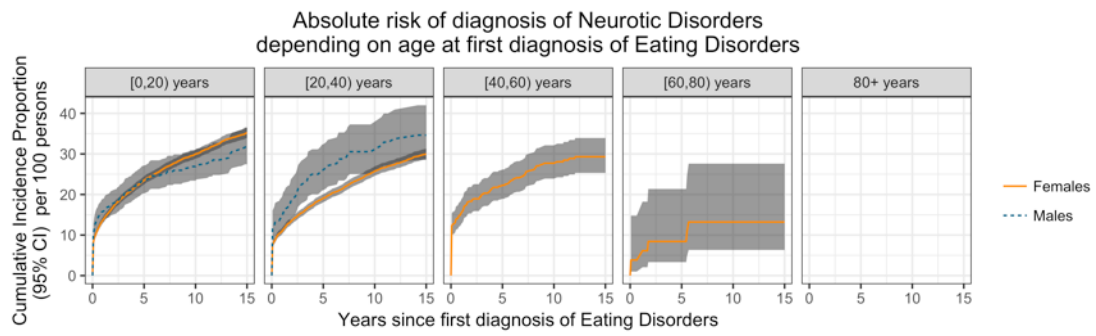


eFigure 113. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Eating Disorders

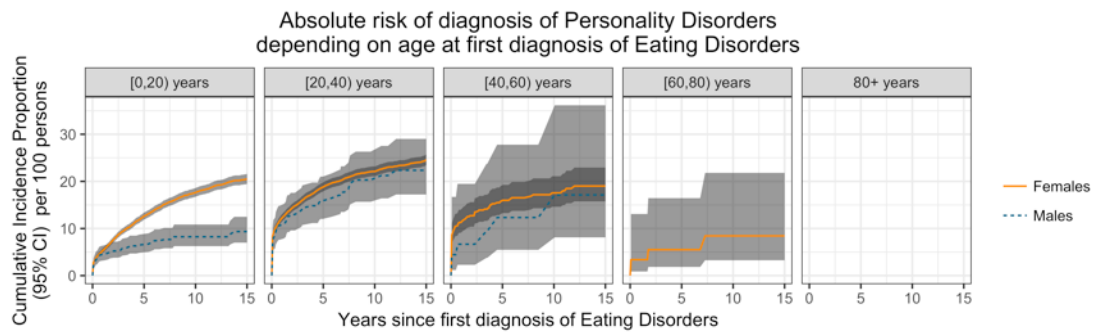
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



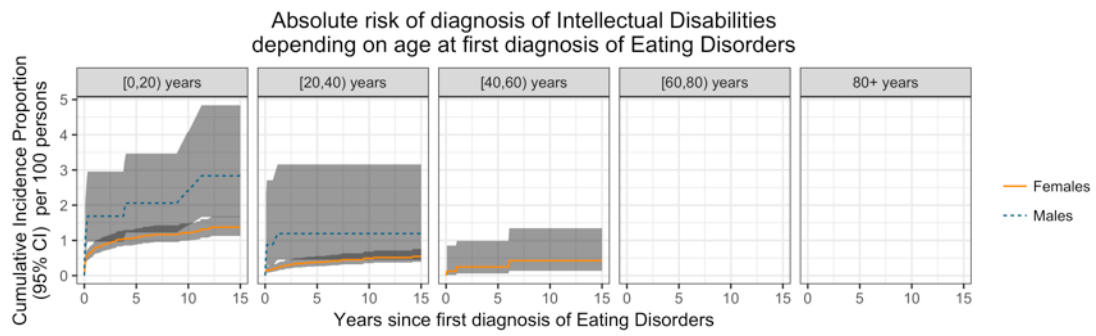
eFigure 114. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Eating Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



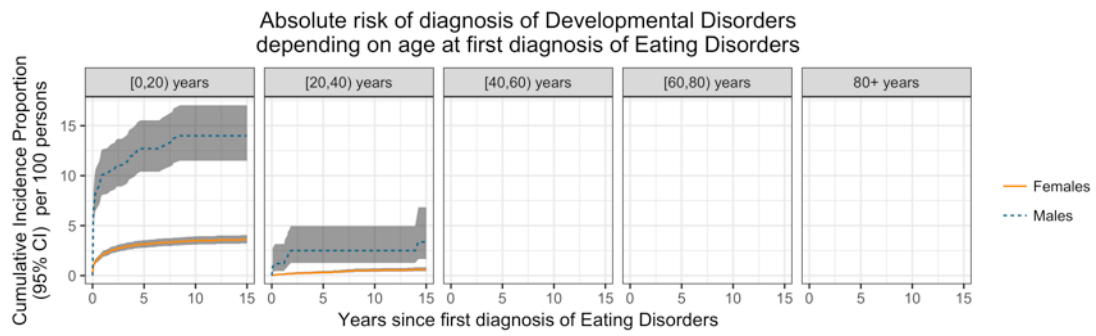
eFigure 115. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Eating Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



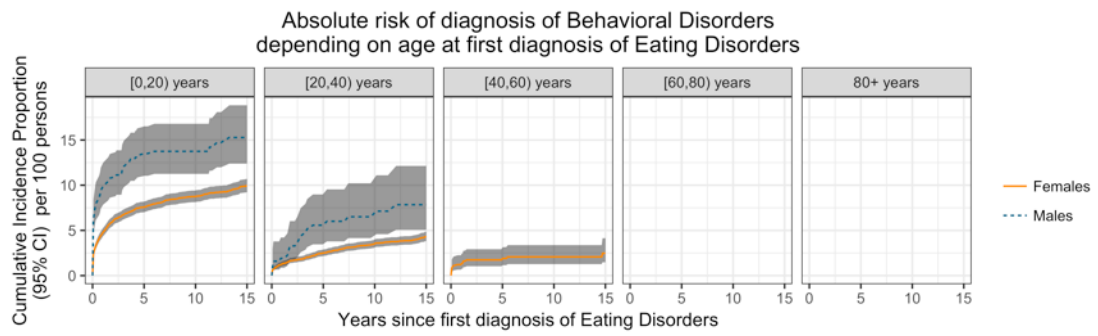
eFigure 116. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Eating Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



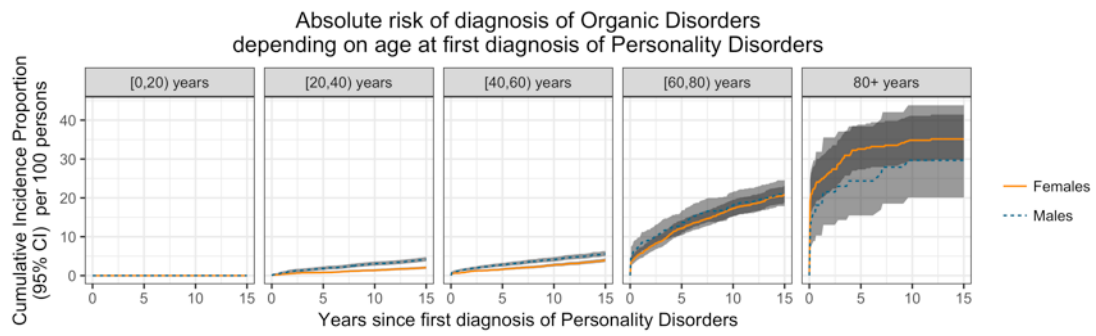
eFigure 117. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Eating Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



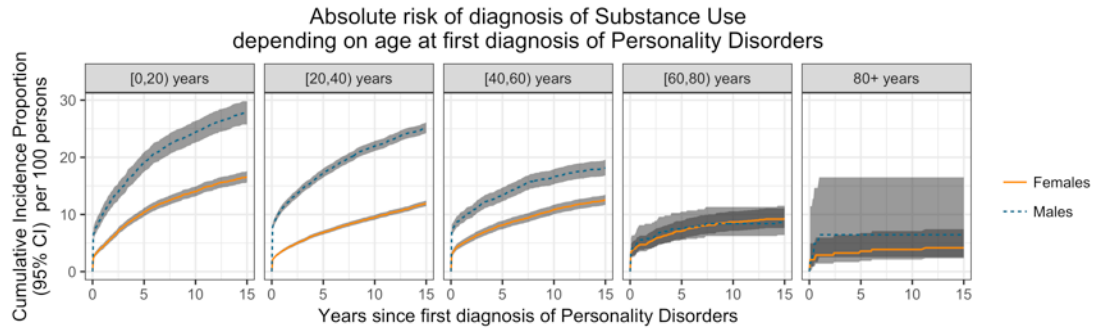
eFigure 118. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Eating Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



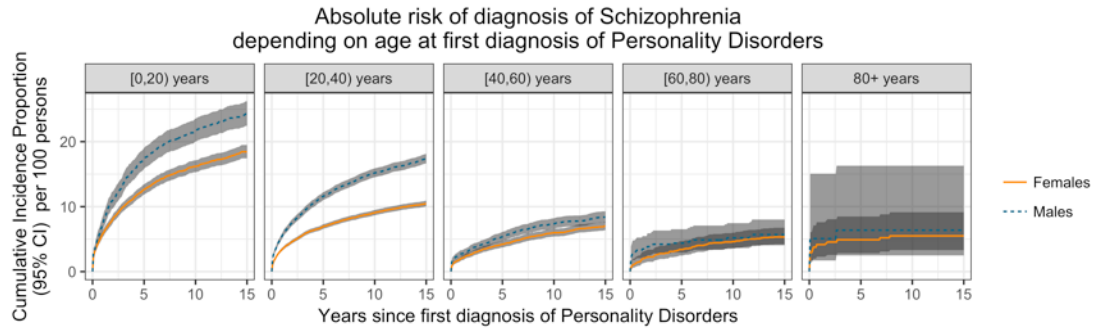
eFigure 119. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Personality Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



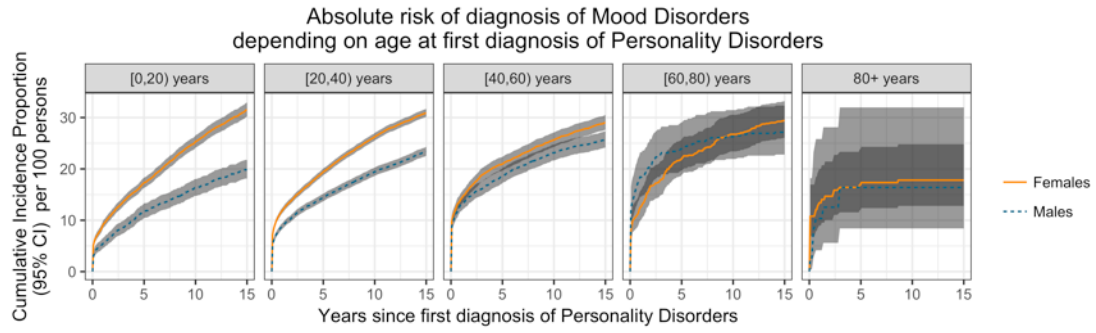
eFigure 120. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Personality Disorders



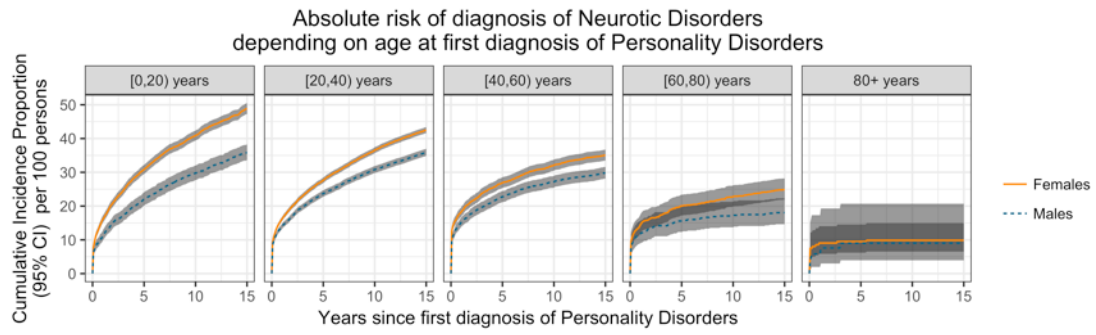
eFigure 121. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Personality Disorders



eFigure 122. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Personality Disorders

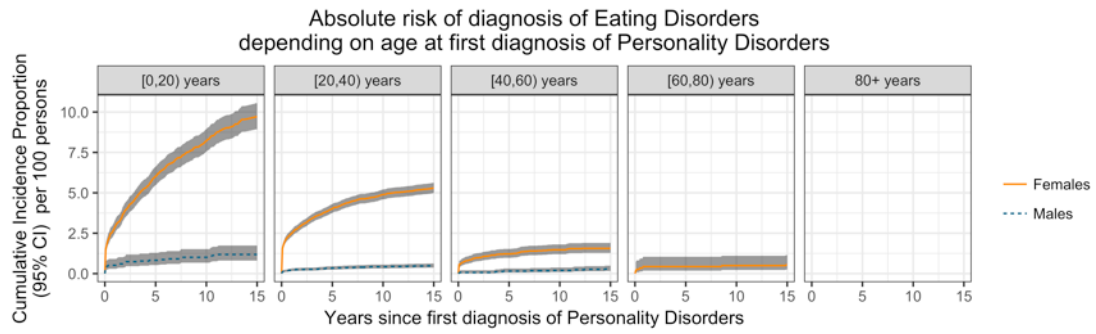


eFigure 123. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Personality Disorders

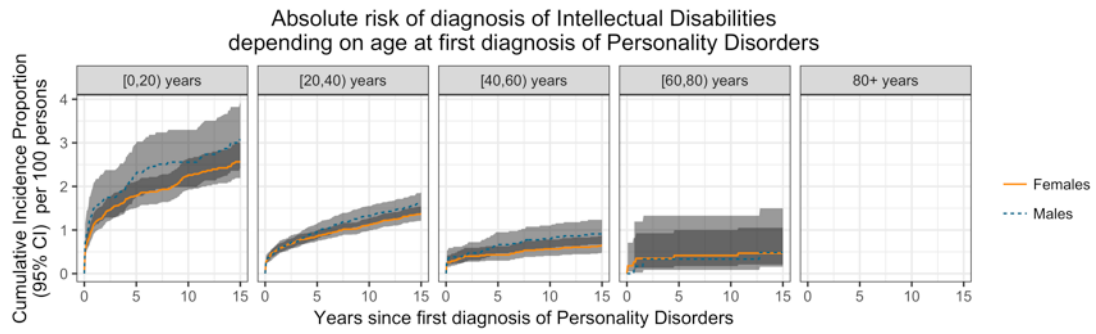


eFigure 124. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Personality Disorders

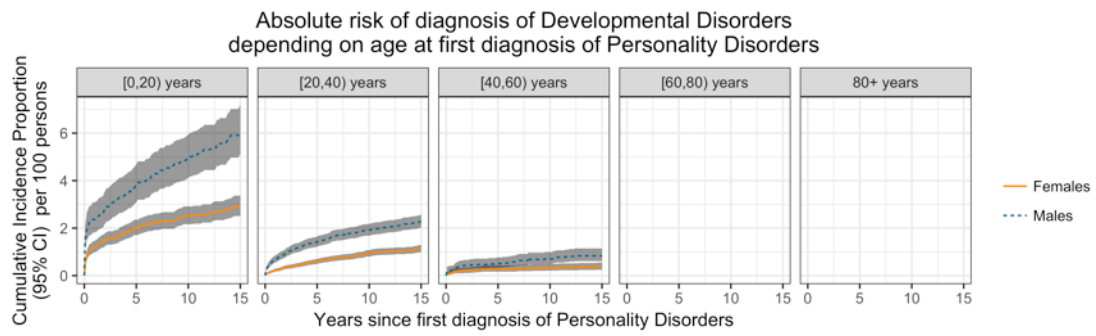
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



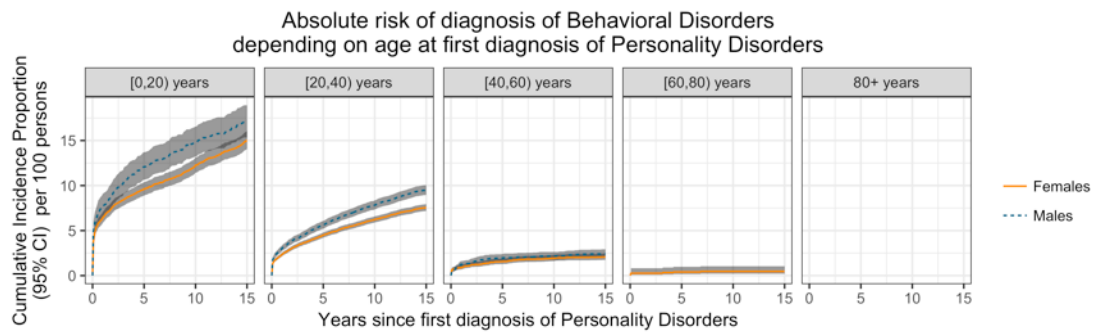
eFigure 125. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Personality Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



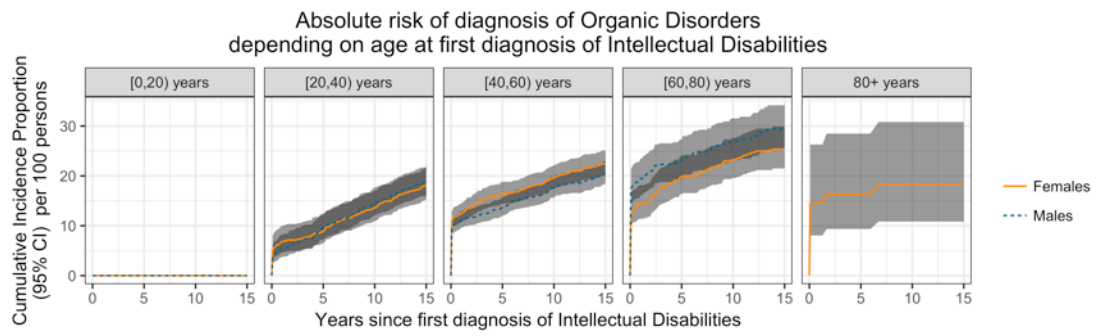
eFigure 126. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Personality Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 127. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Personality Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

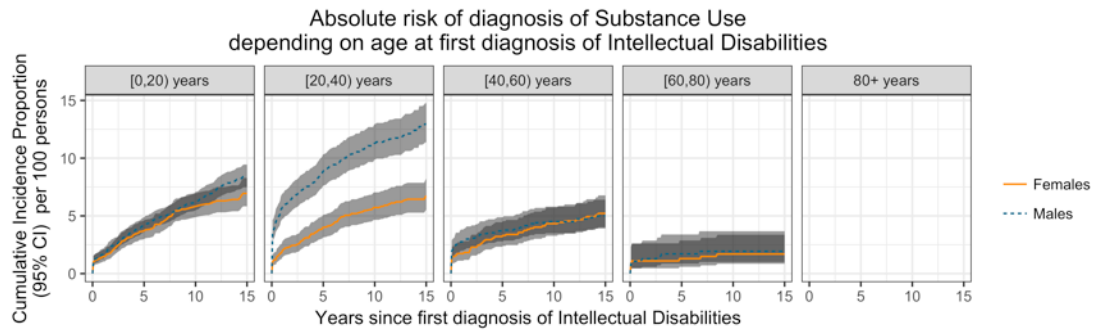


eFigure 128. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Intellectual Disabilities
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



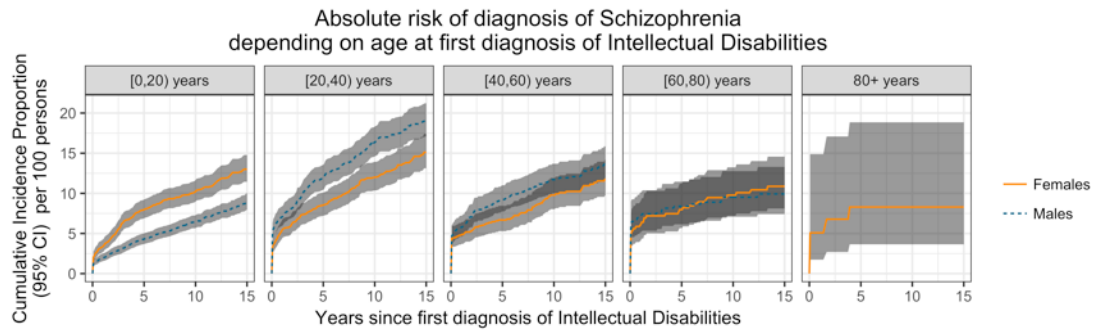
eFigure 129. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.



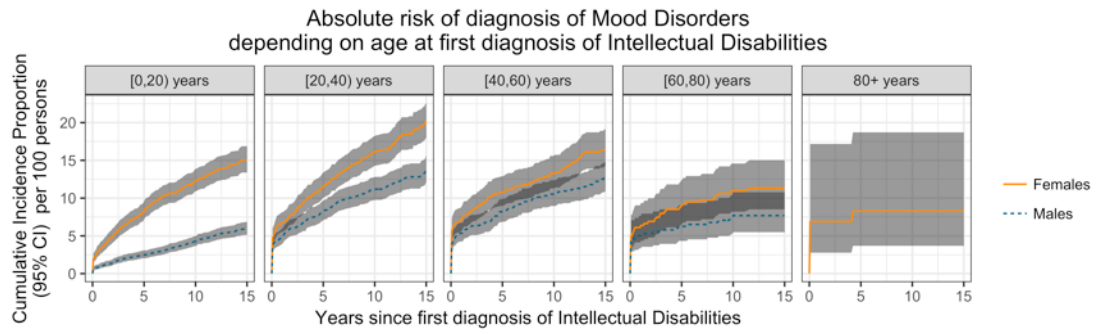
eFigure 130. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

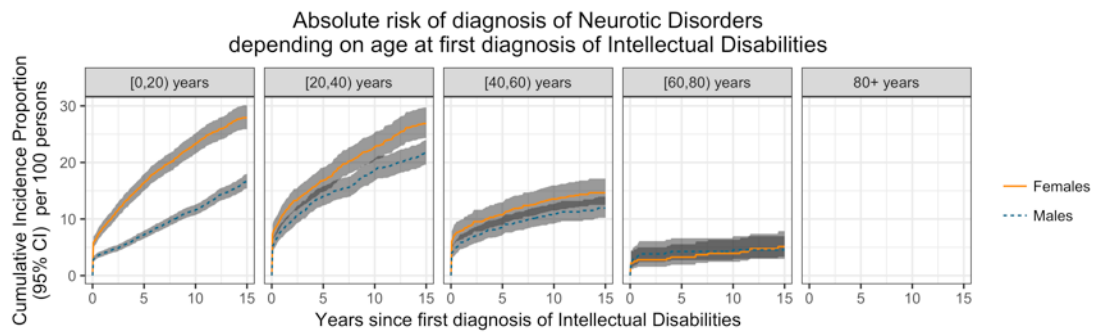


eFigure 131. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

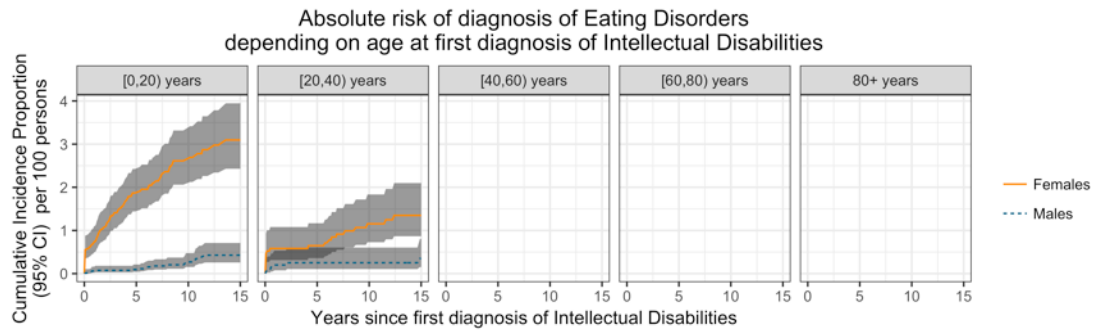


eFigure 132. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Intellectual Disabilities
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

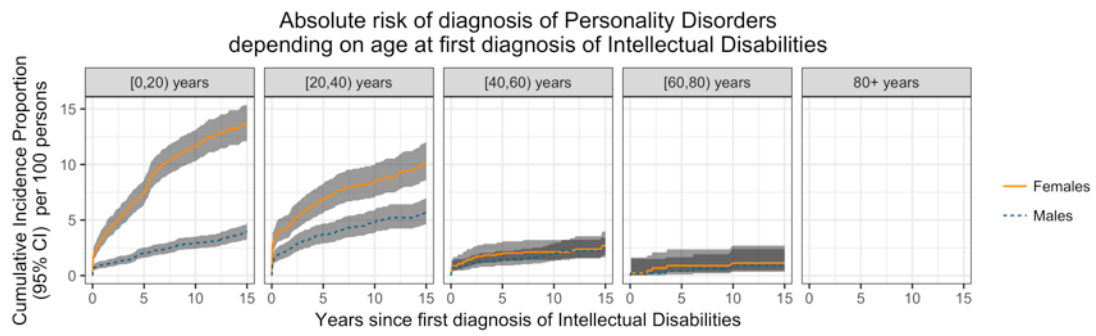


eFigure 133. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

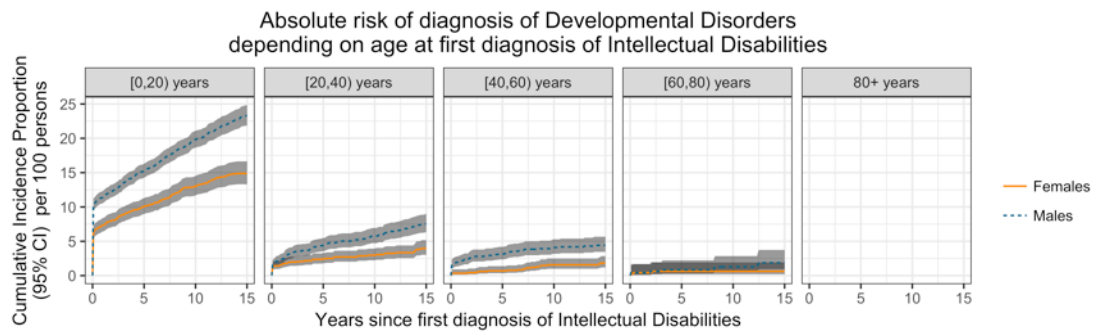


eFigure 134. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Intellectual Disabilities
 estimates with less than 50 persons at risk or less than 3 cases are not shown.



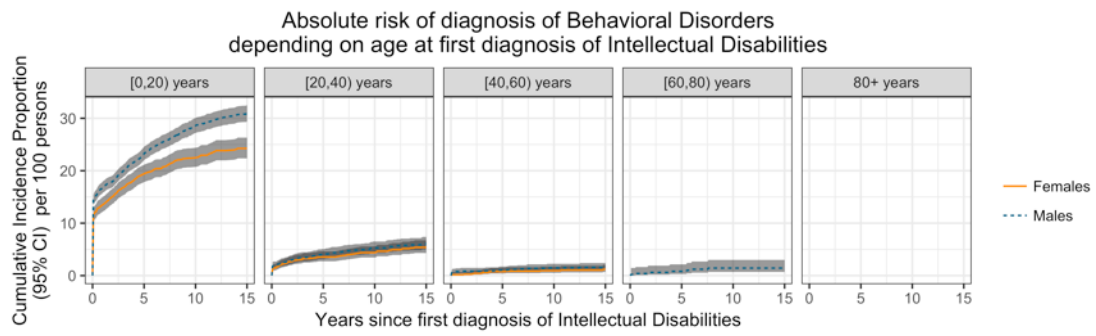
eFigure 135. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

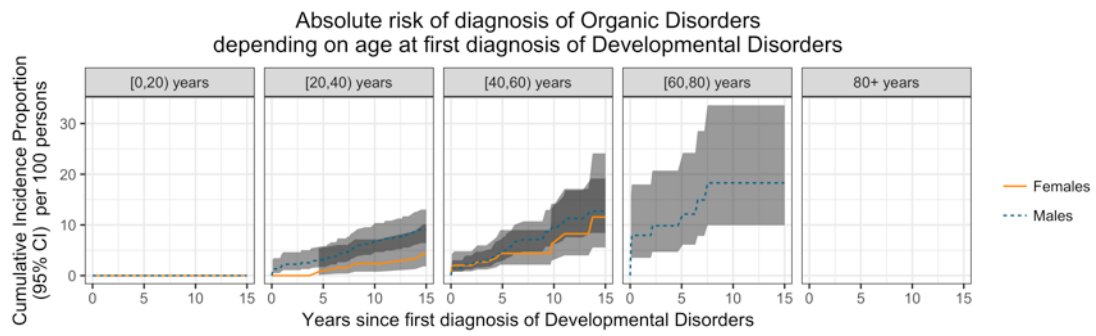


eFigure 136. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Intellectual Disabilities

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

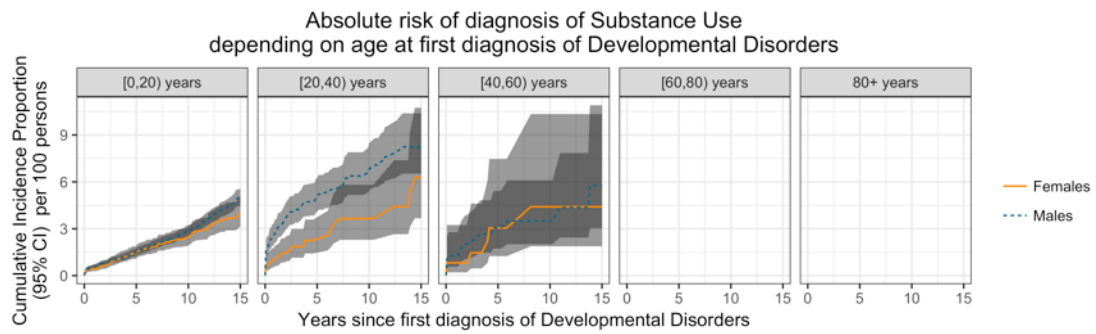


eFigure 137. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Developmental Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

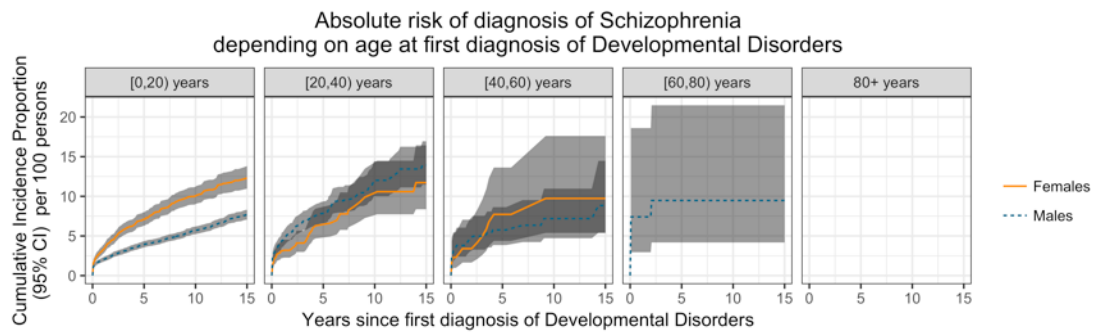


eFigure 138. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Developmental Disorders

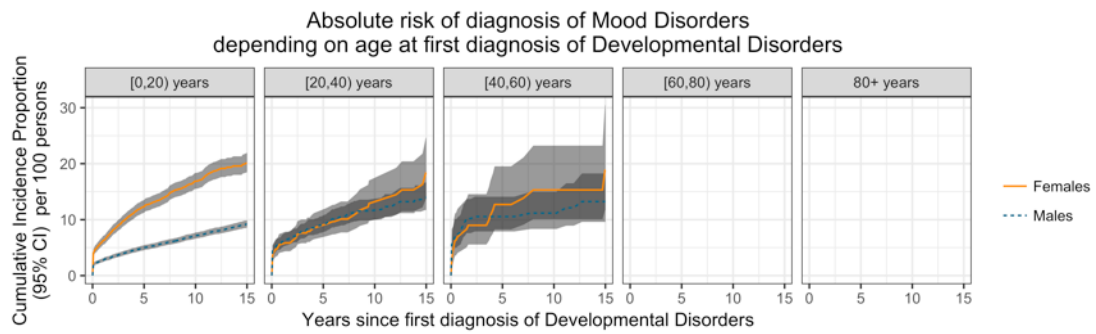
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



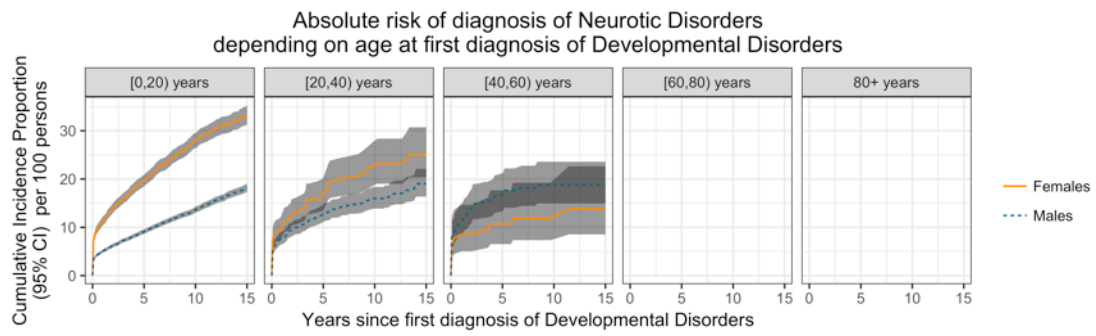
eFigure 139. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Developmental Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 140. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Developmental Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.

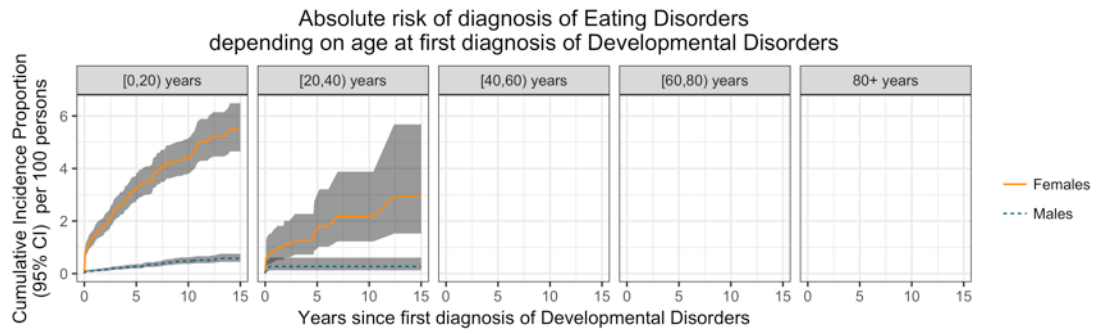


eFigure 141. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Developmental Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



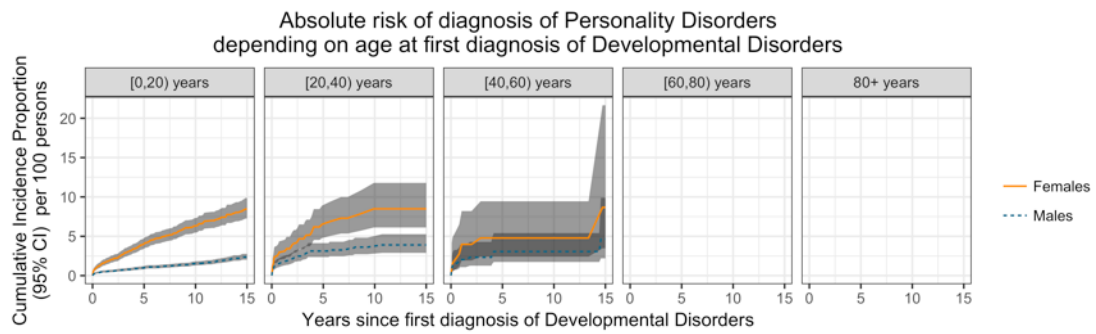
eFigure 142. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Developmental Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

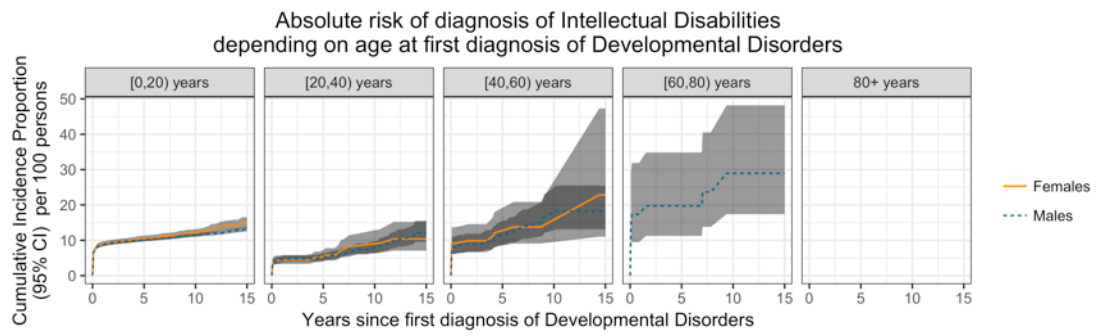


eFigure 143. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Developmental Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

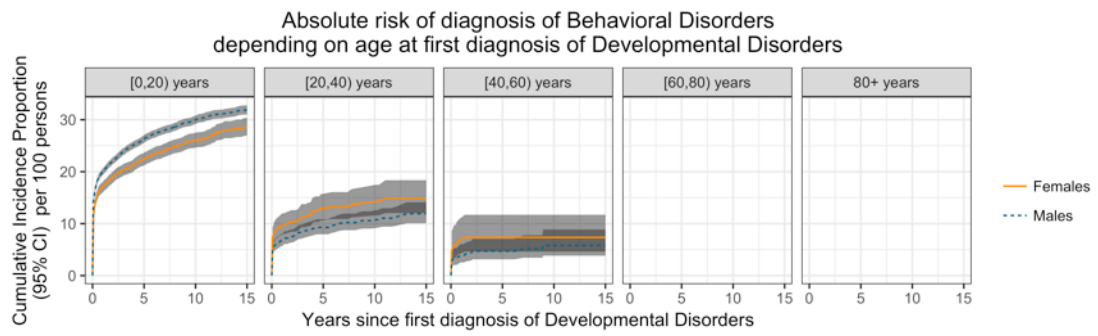


eFigure 144. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Developmental Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

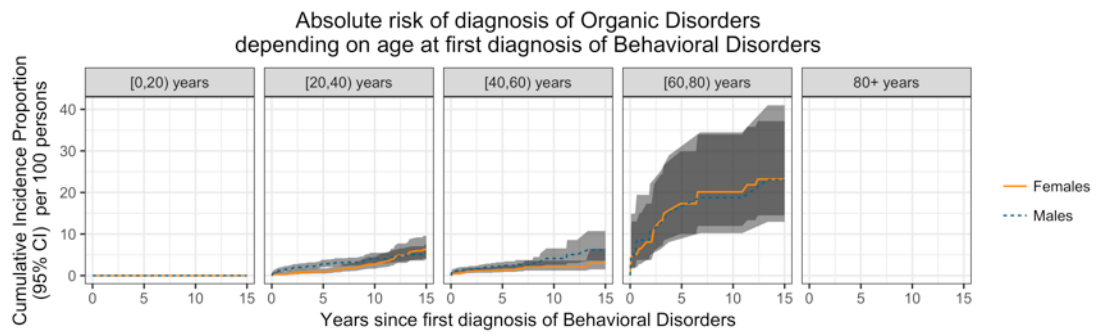


eFigure 145. Absolute Risks of Being Diagnosed With Behavioral Disorders After a First Diagnosis of Prior Developmental Disorders

Estimates with less than 50 persons at risk or less than 3 cases are not shown.

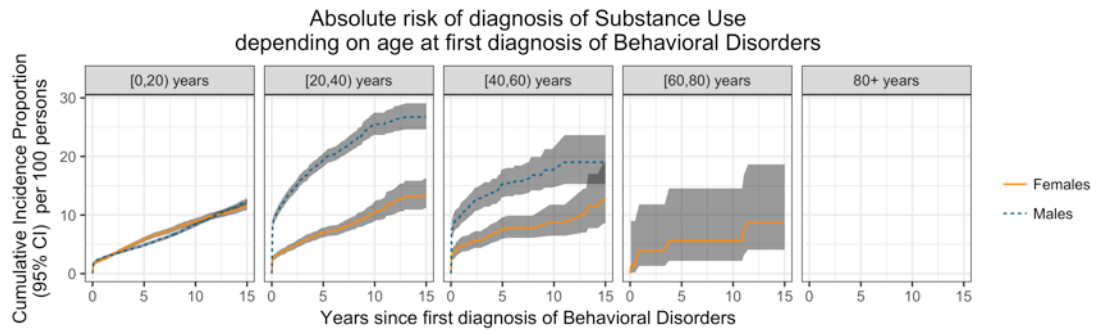


eFigure 146. Absolute Risks of Being Diagnosed With Organic Disorders After a First Diagnosis of Prior Behavioral Disorders
Estimates with less than 50 persons at risk or less than 3 cases are not shown.

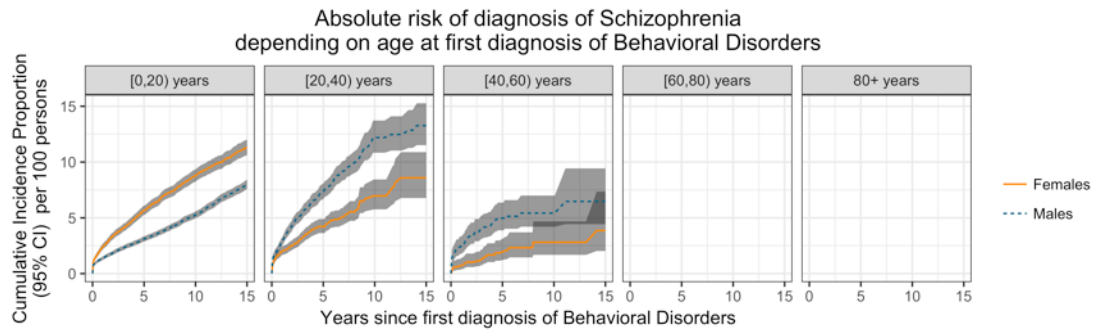


eFigure 147. Absolute Risks of Being Diagnosed With Substance Use After a First Diagnosis of Prior Behavioral Disorders

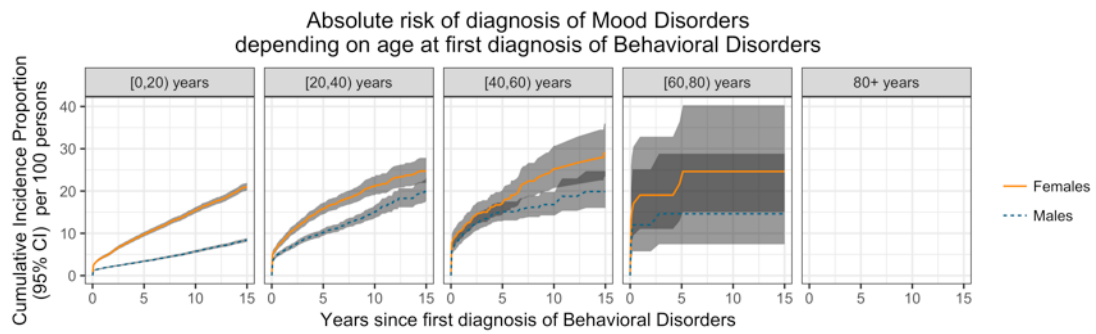
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



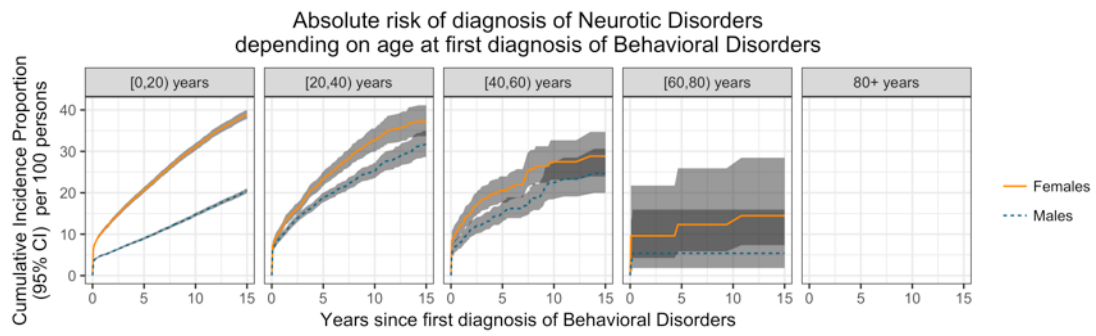
eFigure 148. Absolute Risks of Being Diagnosed With Schizophrenia After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 149. Absolute Risks of Being Diagnosed With Mood Disorders After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

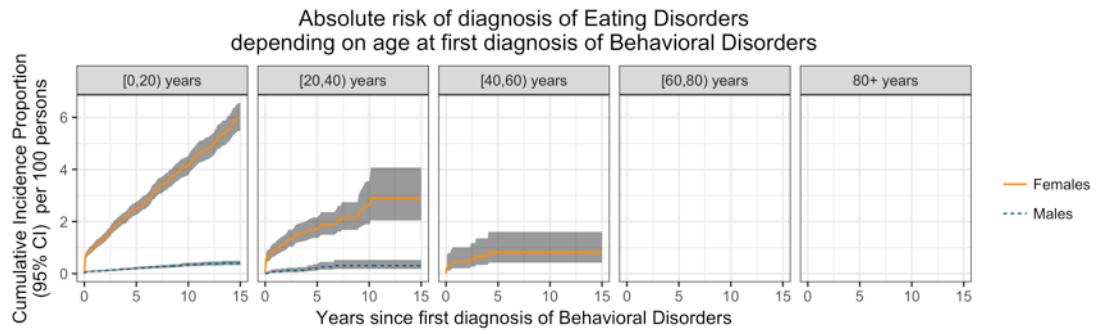


eFigure 150. Absolute Risks of Being Diagnosed With Neurotic Disorders After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

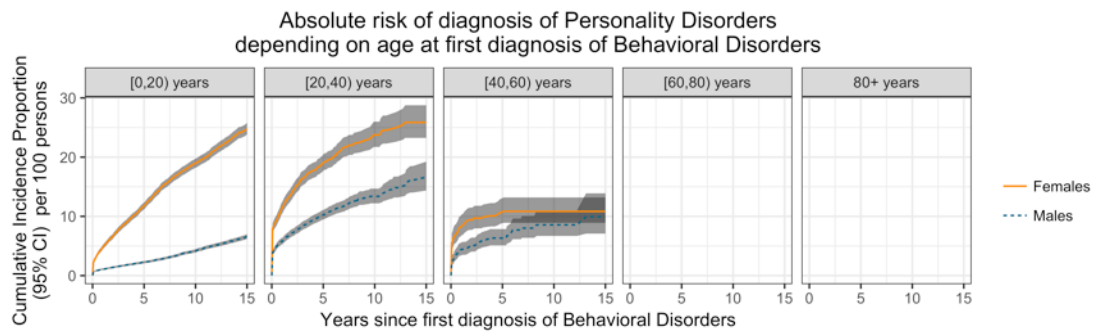


eFigure 151. Absolute Risks of Being Diagnosed With Eating Disorders After a First Diagnosis of Prior Behavioral Disorders

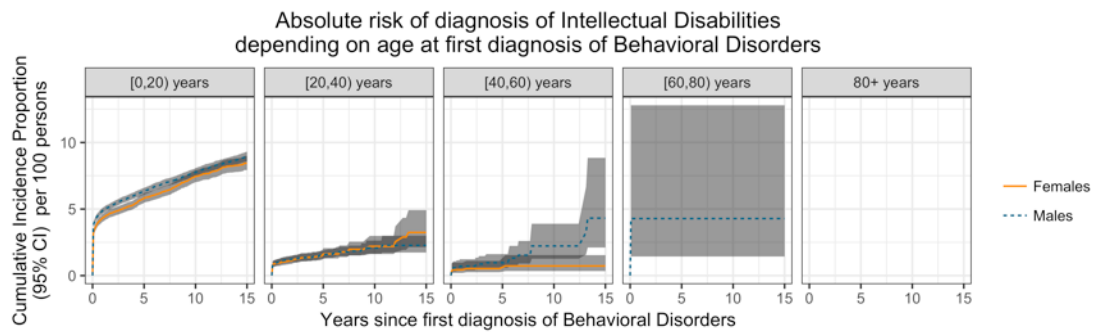
Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 152. Absolute Risks of Being Diagnosed With Personality Disorders After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 153. Absolute Risks of Being Diagnosed With Intellectual Disabilities After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.



eFigure 154. Absolute Risks of Being Diagnosed With Developmental Disorders After a First Diagnosis of Prior Behavioral Disorders
 Estimates with less than 50 persons at risk or less than 3 cases are not shown.

