

Psychiatric multimorbidity and risk of dementia: A 23-year cohort study using Akrivia Health secondary mental healthcare data

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INTRODUCTION

Psychiatric disorders in adulthood have been independently associated with an increased risk of dementia in later life. However, the impact of “psychiatric multimorbidity” (the co-occurrence of two or more disorders) on the risk of developing dementia remains unclear.

OBJECTIVE

Are patients with **psychiatric multimorbidity** at a **higher risk of dementia** compared to those with a single diagnosis of anxiety, major depressive disorder (MDD), schizophrenia, or bipolar disorder?

METHOD

Sample

114,961 patients with psychiatric disorders from the Akrivia Health dataset (57% female, mean [SD] age at diagnosis 67.2 [10.9]).

Data

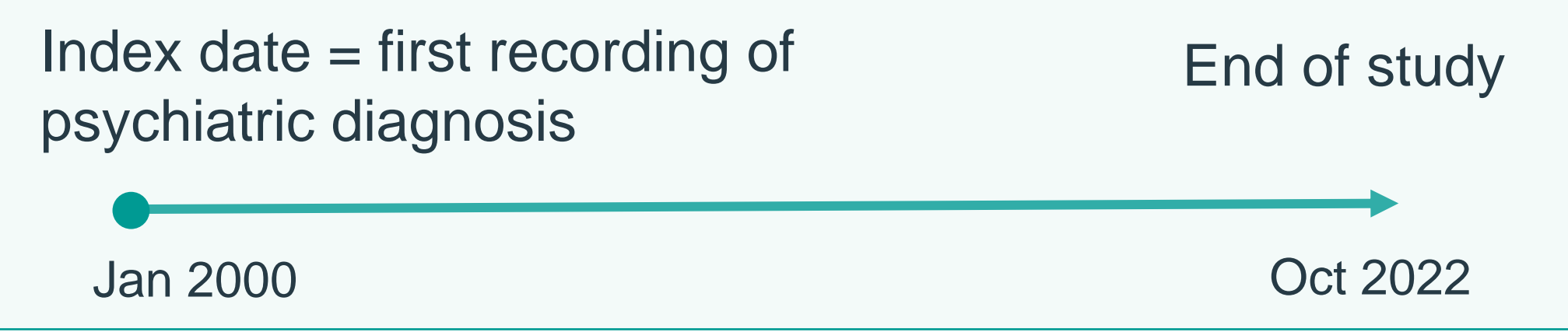
Akrivia Health curates anonymised electronic secondary mental health care records (EHR) for 5.1+ million patients in the UK.

Criteria

- aged ≥ 40 on first recording of psychiatric diagnosis
- dementia-free for two years post-diagnosis

Akrivia patient distribution map by UK counties

Timeline



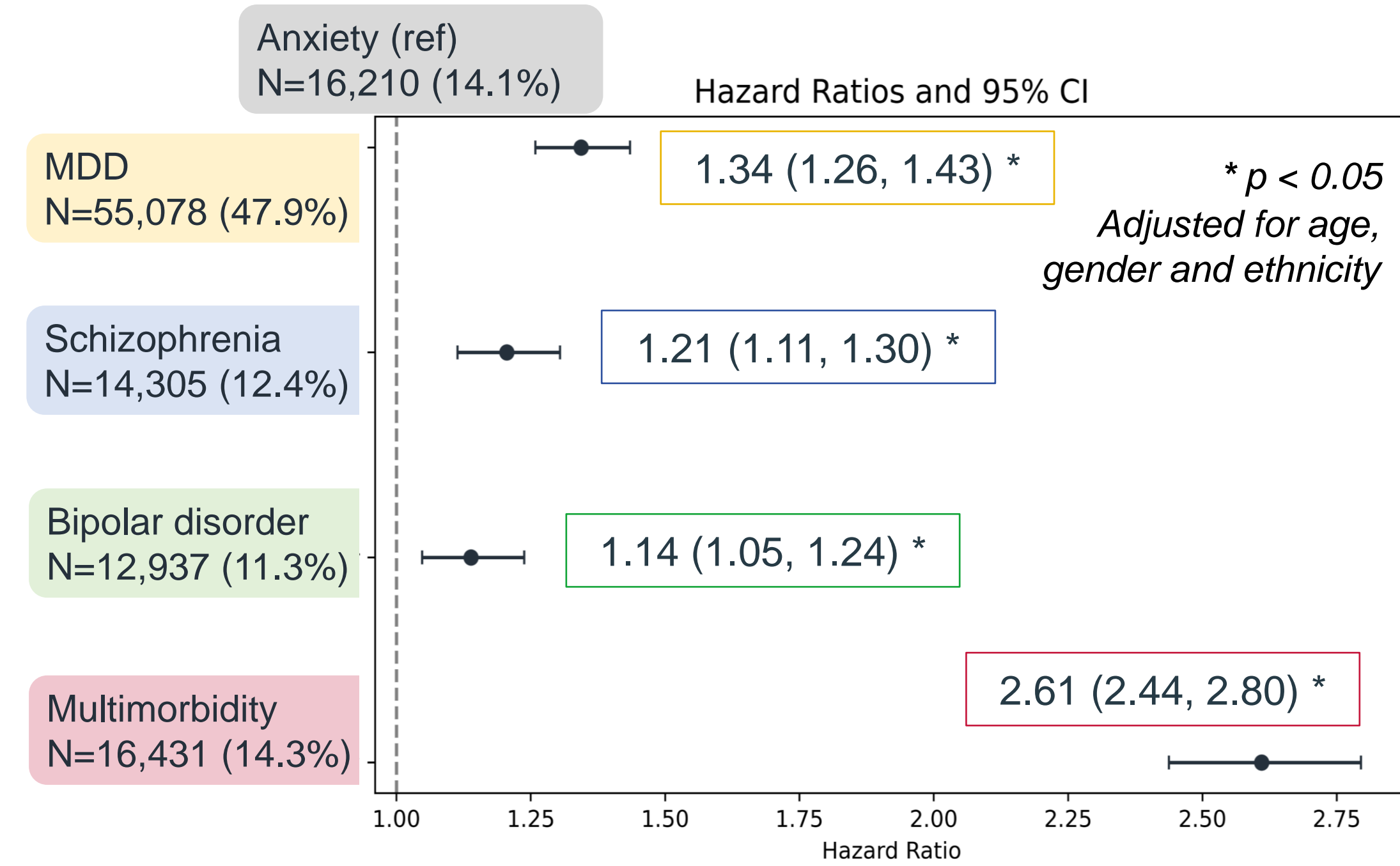
Predictors: Psychiatric Groups

- Anxiety disorders
 - MDD
 - Bipolar disorder
 - Schizophrenia
 - Psychiatric Multimorbidity: ≥ 2 of the above disorders
- Structured-at-source & Natural Language Processing (NLP) derived data
- ### Outcome
- Dementia incidence
- ### Statistical Analysis
- Survival analysis with Cox Proportional Hazards Model

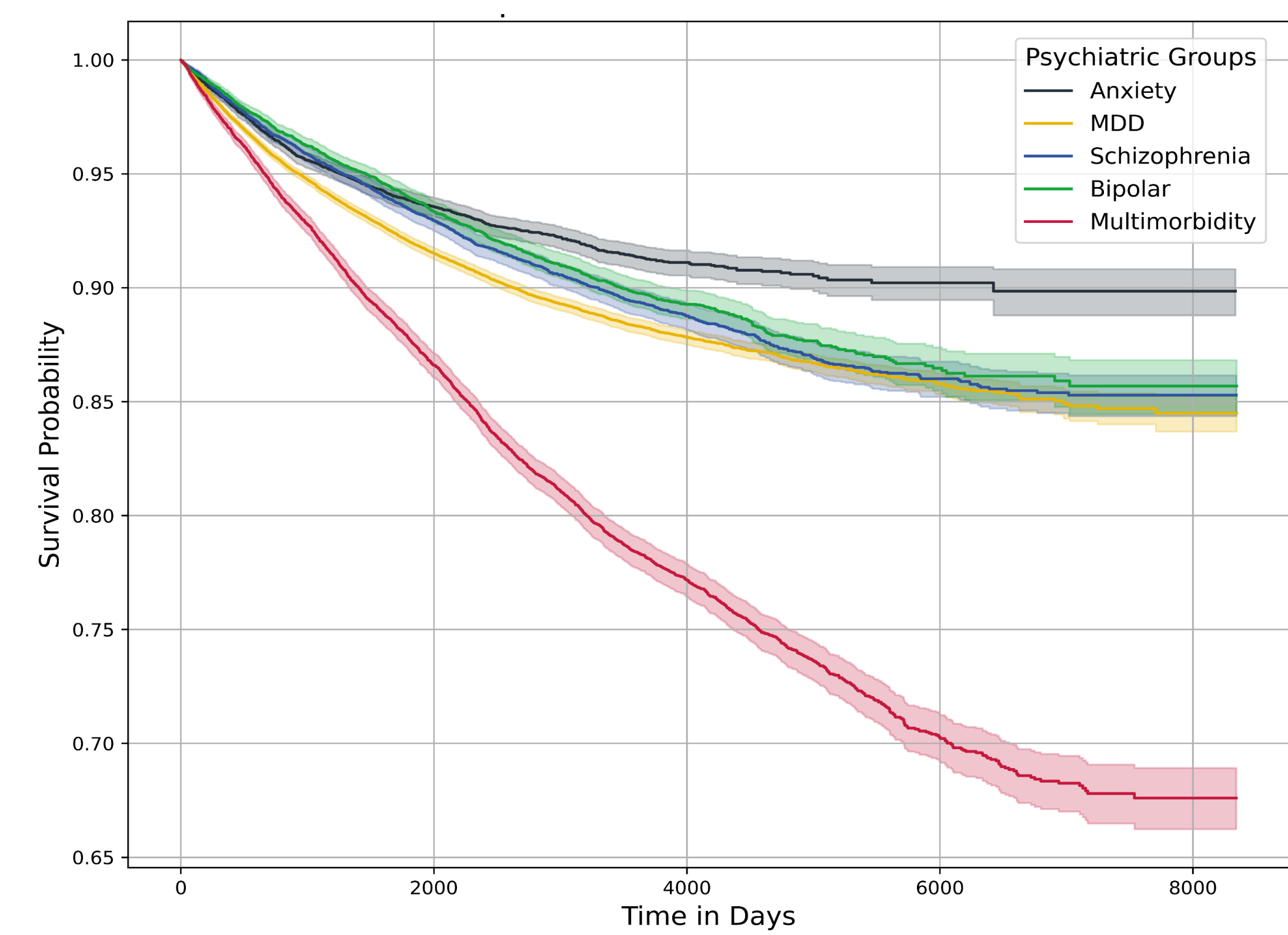
RESULTS

12,628 (11%) patients developed dementia over a median of 8 years of follow-up (13.5 incidence rate per 1000 person-years).

Cox Proportional Hazards Regression for Dementia



Kaplan Meier Survival Curves



CONCLUSIONS

- Using Akrivia Health data, we show for the first time that **psychiatric multimorbidity** is associated with **over double the risk of dementia** compared to having a single disorder.
- Elevated risks were also observed, to a lesser extent, for MDD, schizophrenia and bipolar disorder when compared to anxiety.
- Early identification and tailored interventions for individuals at risk of psychiatric multimorbidity may help prevent or delay the onset of dementia.