**Assessing physical healthcare gap among patients with severe mental illness: a large real-world investigation from Italy**

Giovanni CORRAO1,2, Matteo MONZIO COMPAGNONI1,2, Valeria VALSASSINA1,2, Antonio LORA1,3

1 National Centre for Healthcare Research and Pharmacoepidemiology, University of Milano-Bicocca, Milan, Italy

2 Unit of Biostatistics, Epidemiology and Public Health, Department of Statistics and Quantitative Methods, University of Milano-Bicocca, Milan, Italy

3 Department of Mental Health and Addiction Services, ASST Lecco, Lecco, Italy

**SUPPLEMENTARY MATERIAL**

**Address for correspondence**: Dr. Matteo Monzio Compagnoni, Department of Statistics and Quantitative Methods, Division of Biostatistics, Epidemiology and Public Health, University of Milano-Bicocca, Street Bicocca degli Arcimboldi, 8, Building U7, 20126 Milan, Italy. Phone: +39.02.64485859; E-mail: matteo.monziocompagnoni@unimib.it

**Table S1**. Diagnostic and therapeutic (ICD-9-CM, ICD-10, and ATC) codes used in the current study for drawing records and fields from Healthcare Utilization databases.

|  |
| --- |
| **DEPRESSION** |
|  | **ICD-10 codes** |
| Depressive episode | F32.\* |
| Recurrent depressive disorder | F33.\* |
| Dysthymia | F34.1 |
| Other persistent mood [affective] disorders | F34.8 |
| Persistent mood [affective] disorder, unspecified | F34.9 |
| Other recurrent mood [affective] disorders | F38.1 |
| Other specified mood [affective] disorders | F38.8 |
| Unspecified mood [affective] disorder | F39.\* |
| Post-traumatic stress disorder | F43.1 |
| Adjustment disorders | F43.2 |
| **SCHIZOPHRENIA** |
|  | **ICD-10 codes** |
| Schizophrenia | F20.\* |
| Schizotypal disorder | F21.\* |
| Delusional disorders | F22.\* |
| Brief psychotic disorder | F23.\* |
| Shared psychotic disorder | F24.\* |
| Schizoaffective disorders | F25.\* |
| Other psychotic disorder not due to a substance or known physiological condition | F28.\* |
| Unspecified psychosis not due to a substance or known physiological condition | F29.\* |
| **BIPOLAR DISORDER** |
|  | **ICD-10 codes** |
| Manic episode | F30.\* |
| Bipolar affective disorder | F31.\* |
| Cyclothymia | F34.0 |
| Other single mood [affective] disorders | F38.0 |
| **PERSONALITY DISORDER** |
|  | **ICD-10 codes** |
| Specific personality disorders | F60.\* |
| Mixed and other personality disorders | F61.\* |
| **Other diseases** |
|  | **ICD-9-CM codes** |
| Cancer | 140.x – 208.x |
| Diabetes | 250.x |
| **DRUGS** |
|  | **ATC codes** |
| Lipid-lowering agents | C10AA |
| Blood pressure-lowering agents | C02, C03, C07, C08, C09 |
| Antidiabetic agents | A10 |
| Drugs for COPD | R03 |
| NSAIDs | M01A, M02A |
| Digitalis | C01AA |
| Nitrates | C01DA |
| Antithrombotic agents | B01 |
| Antiarrhythmics | C01B |
| Antineoplastic drugs | L |
| **OUTPATIENT PROCEDURES** |
|  | **Regional procedure codes** |
| Glycated haemoglobin | 90.27.1, 90.28.1 |
| Lipid profile | 90.14.1, 90.14.3, 90.43.2 |
| Serum creatinine | 90.16.3, 90.16.4 |
| Urine albumin excretion | 90.33.4 |
| Dilated eye exam | 95.02; 95.09.1 |
|  |  |

**Table S2**. Percentage variation of the likelihood to be well adherent to recommendations among patients with severe mental disorder with respect to those without evidence of severe mental disorder, and corresponding 95% CI; data are shown according with different criteria/thresholds for defining good adherence.

|  |  |
| --- | --- |
|  | Proportion of days covered by drug availability beyond the which good adherence was assumed |
| Prevalent users of… | **≥ 60%** | **≥ 80%** | **≥ 90%** |
| blood pressure-lowering agents | -27% (-25% to -29%) | -24% (-22% to -26%) | -20% (-18% to 22%) |
| lipid-lowering agents | -8% (-4 to -11%) | -11% (-7% to -15%) | -12% (-7% to -16%) |
| glucose-lowering agents | -28% (-24% to -31%) | -23% (-19% to -27%) | -20% (-16% to -24%) |

Percentage variation of the likelihood to be well adherent to recommendations was derived from the quantity (odds ratio - 1)\*100. The corresponding 95% confidence interval was obtained from the 95% confidence interval of odds ratio. The latter was estimated with conditional logistic regression. Estimates are adjusted for the covariates listed in Table 1.