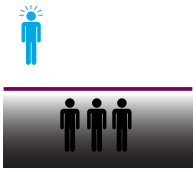
BIPOLAR DISORDER

Considerations on the cost of illness in the US

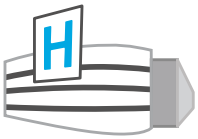
Bipolar I disorder is a recurrent condition involving episodes of depression and mania or hypomania[1]



People with bipolar disorder have been shown to experience **3x more** depressive symptoms than mania symptoms[2]

Nearly **2 times** greater direct costs for patients with bipolar depression vs nondepressive bipolar disorder[3*†]

Up to **54%** of people with bipolar disorder have been shown to have metabolic syndrome[4]



In 1 study, **~71%** of patients with bipolar I disorder (n=45) were ever hospitalized[5]

$25 billion in excess direct health care costs for bipolar I disorder estimated in 2015[6]

(Based on an estimated prevalence of 1% in adults)

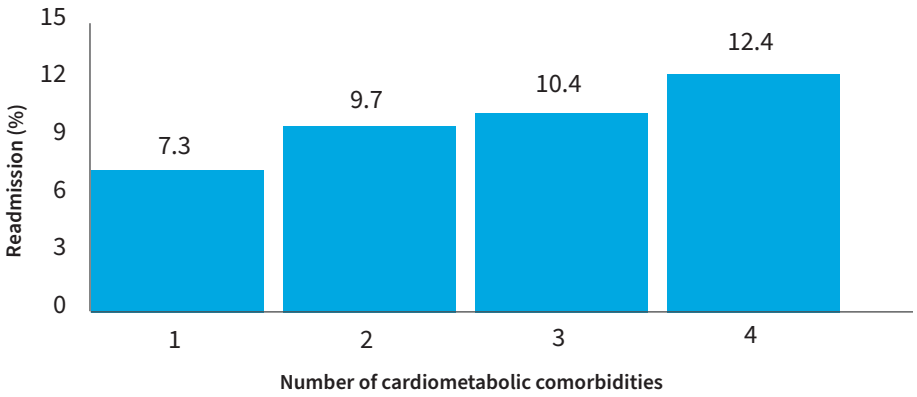
High rates of **comorbid medical** and **psychiatric** conditions occur among patients with bipolar disorder.[1,7] Patients with comorbid behavioral health conditions (inclusive of bipolar disorder) have been shown to have higher health care costs than patients without.[8‡]

Hospital readmissions correlated with the number of cardiometabolic comorbidities among adults with bipolar disorder[9]

In a study by **Correll et al**, among adults with bipolar disorder, greater cardiometabolic comorbidity burden was associated with increases in:

- **Length of stay**
- **Hospital mortality rates**
- **30-day readmission rates**
- **Cost of hospitalization**

Increases in comorbidity were associated with increased readmissions



Study description: A retrospective, observational database analysis that reviewed patients with an inpatient diagnosis of either schizophrenia (n=57,506) or bipolar disorder (n=124,803) from the Premier Perspective® Database (2010-2012). Six cardiometabolic comorbidities were examined: cerebrovascular disease, coronary or ischemic heart disease, diabetes mellitus, hyperglycemia, hyperlipidemia, and hypertension. Adult patients were categorized into 4 cohorts based on the number of ICD-9-CM cardiometabolic comorbidities. Outcome measures included length of stay, mortality, and health care costs during the index hospitalization, and 30-day all-cause readmission rates. This analysis controlled for the following baseline variables: age, gender, race, payer, Charlson Comorbidity Index, hospital region (Midwest, Northeast, South, and West), hospital location (urban/rural), hospital type (teaching/nonteaching), and hospital bed count.

Limitations: Variables that were not available in the database may have confounded the observed results. Information about prior treatments, prior hospitalizations, and reasons for death were not available in this database. It was not possible to differentiate between bipolar I and II disorder subtypes, and there was no control group of patients in this study without serious mental illness.

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*Bipolar depression: identified by members who have primary ICD-9 codes associated with bipolar depression. Nondepressive bipolar disorder: identified by members who have primary ICD-9 codes associated with bipolar disorder excluding bipolar depression. These include mania, mixed, rapid cycling and not otherwise specified. All data were generated from the 2010-2012 Gemini Healthcare, LLC Disease Benchmarks™ database, which is made up of 105+ health plans and 70+ million member lives.

†Includes inpatient, outpatient, emergency department, and pharmacy costs.

‡Data source is the Milliman research report.

ICD-9-CM=International Classification of Diseases, Ninth Revision, Clinical Modification.

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