FRAMEWORKS
in Health and Quality

Value of Collaborative Care in Major Depressive Disorder

Major Depressive Disorder and the Economic Burden of Disease Management

A Resource for Employers

This resource is provided for informational purposes only and is not intended as reimbursement or legal advice. You should seek independent, qualified professional advice to ensure that your organization is in compliance with the complex legal and regulatory requirements governing health care services, and that treatment decisions are made consistent with the applicable standards of care.

©2016 Otsuka Pharmaceutical Development & Commercialization, Inc. All Rights Reserved.

June 2016 MRC2.UNB.X.00034

Major Depressive Disorder

A Resource for Employers

It is estimated that **16.2% of Americans** will be affected with MDD during their lifetime.[10]

Major depressive disorder (MDD) is a common and debilitating condition that affects many people. Depression can be a lifelong condition that includes periods of wellness and recurrence of illness. If left untreated, depression may lead to serious impairment in daily functioning and even suicide. But as debilitating as depression can be, it is treatable for many people.[1,2]

The economic burden of MDD is complex—not only is MDD and its associated comorbid medical conditions costly, but depression may also be associated with reduced productivity, increased absenteeism, work loss, and disability.[3] Gaining an understanding of MDD and making resources on managing MDD more accessible to employees may help mitigate the burden of this disease and may contribute to a more productive and engaged employee.

Understanding MDD

People with MDD have symptoms of depression that are present for at least 2 weeks and may include depressed mood, loss of interest and pleasure, significant weight gain or loss, sleep disturbances, fatigue, feelings of worthlessness, difficulty concentrating, and/or suicidal thoughts.[4]

Some facts about MDD include:

- MDD is one of the most common mental health conditions in the United States[5]
- Young, working adults are most often affected at a median age of onset of 32 years[5]
- Cardiovascular disease, diabetes, and cancer are common in patients with MDD and may negatively impact outcomes and contribute to higher health expenditures in this patient population[6,7]
- According to the World Health Organization, depression is the fourth-leading contributor to Global Burden of Disease* and is projected to be the second-leading contributor by 2020[8]

*Global Burden of Disease is measured using the disability-adjusted life year (DALY), which combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health.[9]

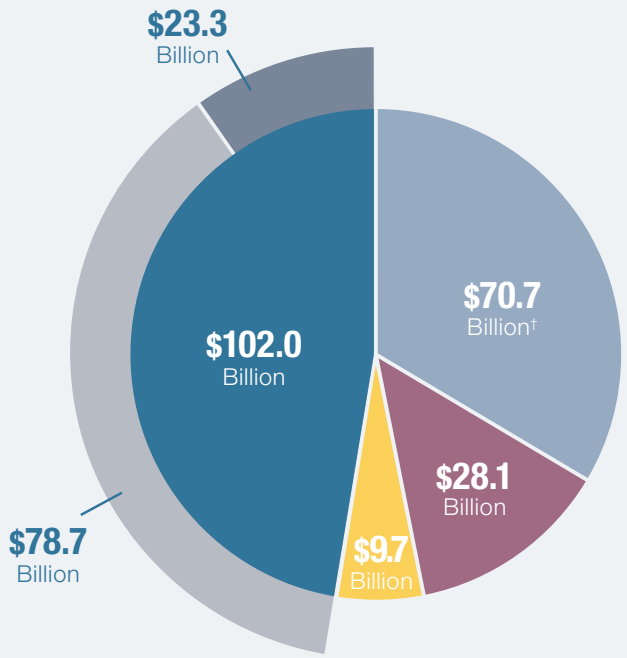
Some common risk factors for MDD may include[11]:

- Being female
- Family history of mood disorders
- History of anxiety disorder in childhood/adolescence
- Poor self-reported physical health

Psychosocial concerns may have an impact on people with MDD. Depressive symptoms may be a common response to adverse life events, particularly bereavement. Other psychosocial stressors that may increase the risk of developing MDD include lower socioeconomic status, nonmarried status, unemployment, urbanization, and violent trauma.[12]

MDD and Economic Cost Burden

People with MDD incur significant direct and indirect health care costs, with approximately $211 billion attributable to MDD. These health care costs include the economic burden of indirect costs ($102 billion) due to decreased work productivity (presenteeism) and days missed from work (absenteeism).[13]



Annual direct and indirect health care costs for patients with MDD are approximately **$211 Billion.**[13]

Economic Burden of MDD: Direct and Indirect Costs[13,*]

- Workplace costs
  - Presenteeism
  - Absenteeism
- Medical costs
- Pharmaceutical costs
- Suicide-related costs

*Incremental economic burden of patients with MDD; 2012 costs were estimated using 2010 national survey and administrative claims data.

†Total medical costs include outpatient ($38.2 billion), inpatient ($20.6 billion), emergency department visits ($4.9 billion), and other services ($7 billion).

As the severity of MDD increases, workplace performance may be impacted. In one study using National Comorbidity Survey Replication data (2001–2002), US workforce respondents (n=4,465) who were diagnosed with severe depression were associated with higher unemployment and disability rates compared to people with mild or moderate depression.[3]

According to another study of employees (n=3,351) who participated in the American Productivity Audit from May-July 2002, 81% of lost productive time costs from depression were explained by reduced performance while at work.[14]

MDD and Raising Awareness With Your Employees

MDD may represent a significant cost burden for employers in reduced productivity and increased days missed from work in their covered lives.[3,13,14] Health plans and employers may help raise awareness through workplace disease management programs that help educate on MDD.

Many people with MDD, including those with the most severe depression, may benefit from treatment.[1]

References: 1. National Institutes of Health, National Institute of Mental Health. What is depression? http://www.nimh.nih.gov/health/topics/depression/index.shtml. Accessed December 8, 2014. **2.** National Alliance on Mental Illness. Depression overview. http://www.nami.org/Template.cfm?Section=depression. Accessed December 8, 2014. **3.** Birnbaum HG, Kessler RC, Kelley D, Ben-Hamaldi R, Joish VN, Greenberg PE. Employer burden of mild, moderate, and severe major depressive disorder: mental health services utilization and costs, and work performance. *Depress Anxiety.* 2010;27(1):78-89. **4.** American Psychiatric Association. Depressive disorders. In: *Diagnostic and Statistical Manual of Mental Disorders, 5th ed*. Washington, DC: American Psychiatric Association; 2013:155-188. **5.** Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry.* 2005;62(6):593-602. **6.** Katon WJ. Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. *Biol Psychiatry.* 2003;54(3):216-226. **7.** Chapman DP, Perry GS, Strine TW. The vital link between chronic disease and depressive disorders. *Prev Chronic Dis.* 2005;2(1):1-10 **8.** National Alliance on Mental Illness. *Depression*. Arlington, VA: National Alliance on Mental Illness; 2012. **9.** World Health Organization. Global burden of disease. http://www.who.int/topics/global_burden_of_disease/en. Accessed April 8, 2015. **10.** Kessler RC, Berglund P, Demler O, et al. The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication (NCS-R). *JAMA*. 2003;289(23): 3095-3105. **11.** Klein DN, Glenn CR, Kosty DB, Seeley JR, Rohde P, Lewinsohn PM. Predictors of first lifetime onset of major depressive disorder in young adulthood. *J Abnorm Psychol.* 2013;122(1):1-6. **12**. Gelenberg AJ, Freeman MP, Markowitz JC, et al; for the Work Group on Major Depressive Disorder, American Psychiatric Association. *Practice Guideline for the Treatment of Patients with Major Depressive Disorder. II. Formulation and Implementation of a Treatment Plan.* Arlington, VA: American Psychiatric Publishing, Inc.; 2004. **13.** Greenberg PE, Fournier AA, Sisitsky T, Pike CT, Kessler RC. The economic burden of adults with major depressive disorder in the United States (2005 and 2010). *J Clin Psychiatry.* 2015;76(2):155-162. **14.** Stewart WF, Ricci JA, Chee E, Hahn SR, Morganstein D. Cost of lost productive work time among US workers with depression. *JAMA.* 2003;289(23):3135-3144.

©2016 Otsuka Pharmaceutical Development & Commercialization, Inc. All Rights Reserved.

June 2016 MRC2.UNB.X.00034