

## Meadows Mental Health Policy Institute

### Increasing the Cost-Effectiveness of Depression Treatment with Collaborative Care – March 2016

Depression costs U.S. employers approximately \$187.8 billion a year.<sup>1,2</sup> This total includes annual costs of \$134 billion in health care (health and mental health combined), \$20.9 billion in absenteeism, and \$32.9 billion in lost productivity. Despite the growing body of research demonstrating the effectiveness of depression treatment, many employees and their dependents do not get the treatment they need, unnecessarily raising employers' health care and productivity costs. Implementing "Collaborative Care"<sup>3</sup> interventions can address this problem by correcting healthcare delivery system flaws that prevent individuals from accessing and successfully completing evidence-based depression treatment. But traditional employee benefits do not cover Collaborative Care interventions even though they can be cost-effective. To ensure employees and their dependents receive effective depression treatment, and employers experience the associated cost savings, innovation in benefit design and delivery systems to include Collaborative Care interventions is a necessary next step.

#### Depression Is Real

In the United States, one in five adults (20%) will experience a clinically significant form of depression in their lifetime.<sup>4</sup> About 7.5% of the US workforce has depression in any year.<sup>5</sup> Depression is a serious illness that can impact anyone, including the most productive employee and the young, rising-star executive. As the National Institute of Mental Health notes, "Depressive illnesses are disorders of the brain. Longstanding theories about depression suggest that important neurotransmitters—chemicals that brain cells use to communicate—are

---

<sup>1</sup> Mrazek, D.A., Hornberger, J.C., Altar, C.A. & Degtjar, I. (2014). A review of the clinical, economic and societal burden of treatment-resistant depression 1996-2013. *Psychiatric Services*, 65(8).

<sup>2</sup> Mrazek et al's cost analysis included four employer/private payer claims databases and one Medicare claims database. Estimates were based on a 12-month prevalence of depression in 16,000,000 adults; the percentage of people with treatment resistant depression was 12% (conservatively); average direct health care costs for people with treatment resistant depression were \$13,196 annually; average direct health care costs for people with treatment responsive depression was \$7,715; average productivity-related costs were \$6,924 and \$2,876, respectively.

<sup>3</sup> Collaborative Care is a type of integrated care in which trained primary care providers and embedded behavioral health professionals provide evidence-based treatments, supported by regular psychiatric case consultation and treatment adjustment for patients who are not improving as expected. AIMS Center, Advanced Mental Health Solutions. <https://aims.uw.edu/collaborative-care>. Accessed March 11, 2016.

<sup>4</sup> Kessler, R.C., et al. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593-603. For major depression alone, the chance of having the diagnosis at some point in one's life is one in six.

<sup>5</sup> Kessler, RC, Merikangas, R. & Wang, P. (April 2008). The Prevalence and Correlates of Workplace Depression in the National Comorbidity Survey Replication. *Journal of Occupational and Environmental Medicine*, 50(4): 381–390.

out of balance in depression.”<sup>6</sup> Recent studies have shown that the same biological and chemical factors that trigger depression can also influence heart disease.

The impact of an employee’s depression extends beyond the individual to affect family, friends, coworkers, and eventually, the bottom line. An individual with depression may be withdrawn and irritable, causing relationships with family members and friends to become strained. If the employee is one of the 15% of individuals with severe depression who commits suicide, family members’ risk for extreme guilt, depression, physical health problems and divorce are increased. An employee with depression may frequently call in sick, miss deadlines, and appear unable to concentrate, frustrating co-workers and supervisors who resent picking up the slack. Below are examples of what depression and its effects can look like in the workplace:

- Bill has been working on the assembly line at a manufacturing plant since he was 23 years old. After twenty years on the job, he was thinking about taking an early retirement deal so he could travel. Suddenly, without warning, Bill had a heart attack. Recovery was hard, making Bill feel weak and vulnerable. He had less and less motivation to exercise, follow his diet, or keep track of all his doctor’s appointments and medications. Whenever Bill would think about going back to work, his heart would race. Convinced he was having another heart attack, Bill ended up in the emergency room over and over again.
- Sierra is a 34-year-old woman who worked her way up from a secretarial position to become an Executive Vice President at a telecommunications company. She is a born leader and her department ran under budget for the first six months she was in charge. However, during her rise to the top, her husband became increasingly depressed. He drank heavily, talked about not having anything to live for, and refused to get help. Sierra worried about him constantly, especially when he was home alone with the kids. Sierra had trouble sleeping at night and couldn’t concentrate at work. She was irritable, causing previously loyal staff to look for other jobs. At the end of the year, Sierra noticed a \$1,000,000 error in her annual budget, for which she would likely lose her job.
- Sage became pregnant after two years of trying. Her coworkers celebrated with her at her baby shower, extracting promises from her for lots of baby pictures when she returned to work. A short time later, Sage gave birth to a healthy baby girl. For the first six weeks after the birth of her daughter, Sage was in heaven. She was tired, but happy. Around week seven, Sage started to feel strange. She felt “nothing” when she looked at her daughter and didn’t want to pick her up when she cried. She was having intrusive thoughts that made her worry she would hurt her daughter. She felt like she was going crazy. Sage and her husband fought all the time because Sage was unresponsive to her daughter’s need. She was too ashamed to tell anyone at work what was happening. So she became increasingly isolated, frequently calling in sick to work.

---

<sup>6</sup> What is Depression? National Institutes of Health. Accessed October 27, 2015. Retrieved from <http://www.nimh.nih.gov/health/publications/depression/index.shtml>.

- At 38, Philip Burguières was the youngest CEO ever to run a Fortune 500 company. But he felt empty. He started to think that the world would be a better place without him. Fearful of the stigma associated with depression, he provided his Board of Directors with a doctor’s letter indicating he had brain chemistry problems that required a six-month leave of absence. The company’s stock fell ten percent following the announcement of his departure for “health reasons.”

### Untreated Depression Increases an Employers’ Costs

*Medical Outcomes and Costs:* Untreated depression can increase the chances that someone will experience a medical condition. In addition, individuals with depression *and* a medical condition experience greater distress, increased functional impairment, and are less able to follow medical regimens. As a result, depression can increase medical costs and negatively affect treatment outcomes. For example:

- Men and women diagnosed with clinical depression are more than twice as likely to develop **coronary artery disease** or suffer a **heart attack**.<sup>7</sup> In addition, those who have experienced a heart attack are three times as likely to have a cardiac-related death if they also have a co-occurring depressive disorder.<sup>8,9</sup>
- Depression occurs in 10 to 27% of **stroke** survivors, and those with co-occurring depression will have a 50% higher risk of mortality<sup>10</sup> in the next 29 years.<sup>11</sup>

<sup>7</sup> American Psychological Association (n.d.). *Mind/Body Health: Heart Disease*. Retrieved November 11, 2015, from <http://www.apa.org/helpcenter/heart-disease.aspx>.

<sup>8</sup> Sherrer, J.F., Garfield, L.D., Chrisciel, T., et al. (2011). Increased risk of myocardial infarction in depressed patients with type 2 diabetes. *Diabetes Care*, 34(8):1729-34.

<sup>9</sup> Major depression and depressive symptoms are positively correlated with cardiac problems, more generally, and increasing severity of depression is associated with earlier manifestation and greater severity of cardiac events. After a myocardial infarction event (heart attack), individuals with depression have twice the risk of another cardiac event within two years of the first event. This association can be explained both biologically and behaviorally. Individuals with depression have more biomarkers that are correlated with heart problems. According to a science advisory group sponsored by the American Heart Association, these include reduced heart rate variability, evidence of hypothalamic-pituitary-adrenal dysfunction, plasma platelet problems, impaired vascular function, and a variety of other circulatory system problems. Behavioral links between depression and heart disease include diet and exercise, tobacco use, stress, isolation, and medication adherence. See a more detailed description of these findings in: Lichtman, J.H., et al. (2008). Depression and coronary heart disease: Recommendations for screening, referral, and treatment: A science advisory from the American Heart Association prevention committee of the council on cardiovascular nursing, council on clinical cardiology, council on epidemiology and prevention, and interdisciplinary council on quality of care and outcomes research: Endorsed by the American Psychiatric Association. *Circulation*, 118(17), 1768-1775.

<sup>10</sup> Health care costs in the last year of life are much greater than in other years of a person’s life. See for example, Tanuseputro, P., Wodchis, W. P., Fowler, R., et al. (2015). The health care cost of dying: A population-based retrospective cohort study of the last year of life in Ontario, Canada. *PLoS One*, 10(3): e0121759. doi:10.1371/journal.pone.0121759.

<sup>11</sup> Mental Health America. (n.d.). *Co-Occurring Disorders and Depression*. Retrieved November 23, 2015, from <http://www.mentalhealthamerica.net/conditions/co-occurring-disorders-and-depression>.

- Depression occurs in 25% of people with **diabetes**.<sup>12</sup> Patients with symptoms of depression are less likely to adhere to dietary restrictions or medical regimens, and more likely to use the emergency room or inpatient settings.<sup>13</sup>
- Depression occurs in 13 to 42% of patients with **rheumatoid arthritis** and is associated with worse health outcomes, including an increased risk of mortality.<sup>14</sup>
- Depression in **cancer** patients is often attributed to chemotherapy side effects, when in actuality depression is more likely to contribute to weight loss, fatigue and depressed mood. Studies also show that depression is correlated with higher mortality rates in cancer patients.<sup>15</sup>
- Nearly one-third of patients with major depressive disorder also **abuse alcohol or drugs**.<sup>16</sup> Individuals who abuse alcohol or drugs have increased medical costs and use expensive forms of acute care more often.<sup>17</sup>

*Business Cost.* Besides increasing healthcare expenses, research shows that untreated depression is a significant contributor to workplace disability costs, reduced work performance and presenteeism, absenteeism, safety issues, employee turnover and legal costs. For example:

- While 17 to 20% of all workers experiences short-term disability over a year's time, workers with depression have more than double that rate (up to 48%) in any given 12-month period.<sup>18</sup>
- Depression was negatively correlated with overall work performance and productivity, proficiency in completing job tasks, and voluntarily taking on leadership roles to help one's coworkers or the company in specific ways.<sup>19</sup>

<sup>12</sup> Williams, M.M., Clouse, R.E., & Lustman, P. (2006). Treating depression to prevent diabetes and its complications: Understanding depression as a medical risk factor. *Clinical Diabetes*, 24(2), 79-86.

<sup>13</sup> Ciechanowski, P.S., Katon, W.J., & Russo, J.E. (2000). Impact of depressive symptoms on adherence, function, and costs. *JAMA Internal Medicine*, 160(21). Retrieved from <http://archinte.jamanetwork.com/article.aspx?articleid=485556>

<sup>14</sup> Margaretten, M., Julian, L., Katz, P., & Yelin, E. (2011). Depression in patients with rheumatoid arthritis: Description, causes, and mechanisms. *International Journal of Clinical Rheumatology*, 6(6), 617-623.

<sup>15</sup> Pinquart, M. & Duberstein, P.R. (2010). Depression and cancer mortality: A meta-analysis. *Psychological Medicine*, 40(11).

<sup>16</sup> Mental Health America. (n.d.). *Co-Occurring Disorders and Depression*. Retrieved November 23, 2015, from <http://www.mentalhealthamerica.net/conditions/co-occurring-disorders-and-depression>.

<sup>17</sup> Robin E. Clark, R.E., O'Connell, E., & Samnaliev, M. (March 2010). *Substance Abuse and Healthcare Costs Knowledge Asset*. Substance Abuse Policy Research Program. Retrieved from [http://saprp.org/knowledgeassets/knowledge\\_detail.cfm?KAID=21](http://saprp.org/knowledgeassets/knowledge_detail.cfm?KAID=21).

<sup>18</sup> Goldberg, R.J., & Steury, S. (2001). Depression in the workplace: Costs and barriers to treatment. *Psychiatric Services*, 52(12), 1639-1643. See also: Depression Center, University of Michigan Health Center. (n.d.). *Depression and Lost Productivity*. Retrieved November 23, 2015, from <http://www.depressioncenter.org/work/information-for-employers/lost-productivity/>.

<sup>19</sup> Ford, M.T., Cerasoli, C.P., Higgins, J.A., & Decesare, A.L. (2011). Relationships between psychological, physical, and behavioral health and work performance: A review and meta-analysis. *Work & Stress*, 25 (3), 185-204.

- In a three-month period, individuals with depression missed an average of 4.8 workdays and had 11.5 days of reduced productivity.<sup>20</sup>
- When compared to healthy employees or employees with rheumatoid arthritis, employees with depression had more absenteeism and turnover.<sup>21</sup>
- Depending on the nature and severity of the depression, as well as the level of support in the workplace for recovery from depression, job turnover rates ranged from 25 to 50% among workers experiencing depression. The cost to the employer (in recruitment, training and other organizational efforts) was estimated to be three-quarters to one-and-a-half times the employee's annual salary.<sup>22</sup>
- Employees with depression are more accident-prone because of depression's interference with concentration and focus.<sup>23</sup>
- There has been a 56% rise in depression-based workplace discrimination claims filed with the Equal Employment Opportunity Commission (EEOC) between 2003 and 2013.<sup>24</sup>

### Effective Depression Treatment Yields an Attractive Return on Investment

*Improved Medical Outcomes and Reduced Medical Costs.* Studies show that effective depression treatment can improve medical outcomes and reduce medical costs. For example:

- Patients who received early antidepressant treatment after experiencing an ischemic stroke had significantly lower mortality rates compared to those who did not receive antidepressant treatment.<sup>25</sup>
- Hemoglobin A1c levels in people with diabetes were lowered when co-occurring depression was treated.<sup>26</sup>
- Antidepressant treatment of patients with asthma resulted in a reduced need for corticosteroids.<sup>27</sup>
- Simple psychosocial interventions delivered by specially trained health workers reduced the rate of postpartum depression in women.<sup>28</sup> Total costs over 12 months for at-risk

<sup>20</sup> Valenstein, M., Vijan, S., Zeber, J.E., Boehm, K., & Buttar. (2001). A. The cost-utility of screening for depression in primary care. *Annals of Internal Medicine*, 134, 345-360.

<sup>21</sup> Lerner, D., Adler, A., Chang, et al. (2004). Unemployment, job retention, and productivity loss among employees with depression. *Psychiatric Services*, 55(12), 1371-1378.

<sup>22</sup> Cocker, F., Nicholson, J.M., Graves, N. et al. (2014, September). Depression in working adults: Comparing the costs and health outcomes of working when ill. *PLoS ONE*, 9(9): e105430. Doi: 10.1371/journal.pone0105430.

<sup>23</sup> Jacob, I. (2006, October). Depression's impact on safety. *Occupational Health and Safety*.

<sup>24</sup> Dunning, M. (2014, December). Depression in the workplace remains problematic, costs employers billions. *Business Insurance*. <http://www.businessinsurance.com/article/20141207/NEWS03/312079961>.

<sup>25</sup> Mortensen, J.K., Johnsen, S.P., Larsson, H. & Andersen, G. (2015). Early antidepressant treatment and all-cause 30-day mortality in patients with ischemic stroke. *Cerebrovascular Diseases*, 40(1-2).

<sup>26</sup> Penclofer, S., et al. (2014, March). State of the science: Depression and Type 2 Diabetes. *Western Journal of Nursing Research*, 1-25.

<sup>27</sup> Van Lieshout, R.J., & MacQueen, G.M. (2012). Relations between asthma and psychological distress: An old idea revisited. *Chem Immunol Allergy*, 98, 1-13.

women receiving the intervention were 10% lower for the depression intervention than with routine care, even though the depression intervention added tasks for health workers.

*Reduced Business Costs.* Studies also show that when people with depression receive effective treatment, they have an average of 17 fewer annual disability leave days compared to those with depression who do not receive treatment.<sup>29</sup> One study from 2007 showed that individuals who received treatment for depression had 23% less absenteeism and only one third as many missed days of work.<sup>30</sup> This study went on to report that effective depression treatment led to an economic benefit of \$1,982 associated with improved productivity at work and \$619 per person due to reduced absenteeism,<sup>31</sup> amounts that are higher in today's dollars.

### **Barriers to Employee Use of Benefits to Obtain Treatment for Depression**

Although more than 80% of people with depression can be treated successfully with medication, psychotherapy, or a combination of both, **less than 22% receive adequate care.**<sup>32</sup> Nearly 74% of Americans who seek help for symptoms of depression go to a primary care physician (PCP) rather than a mental health professional. Unfortunately, a diagnosis of depression is missed 50% of the time in a primary care setting. Even when depression is diagnosed and addressed by a PCP, half of patients prematurely stop taking prescribed medications and many do not follow through with a specialty referral.

For patients who accept a mental health or substance use disorder (MH/SUD) treatment referral, nearly half of them drop out of treatment against their therapist's advice.<sup>33</sup> Lack of awareness of depressive symptoms, personal embarrassment, concerns about job impact, stigma, medication side effects, psychiatrist shortages, unrealistic expectations about how fast symptoms will go away, and the burden of weekly clinic visits prevent many individuals from getting the treatment they need for depression.

---

<sup>28</sup> Morrell, C.J., Warner, R., Slade, P. et al. (2009). Psychological interventions for postnatal depression: Cluster randomized trial and economic impact evaluation (The PoNDER trial). *Health Technology Assessment*, 13(30): 1-153.

<sup>29</sup> Donohue, J. M., & Pincus, H. A. (2007). Reducing the societal burden of depression: A review of economic costs, quality of care and effects of treatment. *Pharmacoeconomics*, 25(1), 7-24.

<sup>30</sup> Ibid. (See also: Langlieb, A. M., & Kahn, J. P. (2005). How much does quality mental health care profit employers? *Journal of Occupational and Environmental Medicine*, 47(11), 1099-1109.)

<sup>31</sup> Ibid.

<sup>32</sup> Kessler, R. et al. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Study Replication (NCS-R). *Journal of the American Medical Association*, 289(23), 3095-3105.

<sup>33</sup> Dropping Out of Psychotherapy, Harvard Health Publications, Harvard Medical School, October 1, 2005.

**Removing Barriers to Effective Depression Treatment: The Collaborative Care Model**

Research shows that implementing specific interventions (collectively referred to as “**Collaborative Care**”) that promote the detection of depression, “in-place” treatment (no referral needed), and treatment adherence can significantly improve outcomes by increasing the number of individuals who access and successfully complete treatment for depression.<sup>34</sup> Collaborative Care interventions include standardized depression screening in primary care, tailored patient education, care management (e.g., care coordination and triage, telephonic follow-up), and technology-enabled treatment plan monitoring. Similar to disease management programs for diabetes, these interventions promote early identification of depression, improve treatment engagement, and reduce treatment drop-out rates. In addition, integrating psychiatric consultation into medical settings, with accountability for outcomes and costs, improves mental health *and* medical treatment outcomes while ultimately reducing the cost of care.<sup>35</sup> Table 1 illustrates how Collaborative Care interventions promote effective treatment for depression.

**Table 1**

| Traditional Depression Treatment  | Collaborative Care Intervention   |
|---|---|
| 50% PCP depression detection  | Automated depression screening increases detection  |
| 50% treatment drop-out rate   | Proactive patient monitoring, prioritization of care, and follow-up by care managers  |
| 50% medication adherence  | Side effect education and monitoring, tailored dosage adjustments, progress measurement and follow-up   |
| Mental health and medical treatment silos that may result in contra-indicated medication interactions, poor adherence to treatment regimens and redundant health care costs | Professional collaboration, consultation and treatment plan coordination; implementation of adherence strategies for medical care; identification and treatment of co-occurring MH/SUD conditions; information sharing via electronic records |

But Collaborative Care interventions do not fit neatly within the benefit designs commonly offered by employers, and few insurance plans reimburse for these types of interventions.

<sup>34</sup> The Collaborative Care Model has been described by the AIMS Center at the University of Washington: <http://uwaims.org>

<sup>35</sup> See the Washington State Institute for Public Policy at <http://www.wsipp.wa.gov/BenefitCost> for a recent review of studies that concluded integrated mental health/physical health care in primary care settings is cost-effective.

Employers and insurers must collaborate and negotiate to develop employee benefit plans that support Collaborative Care.

### Employer Benefits and Insurance Coverage

Fee-for-service insurance reimbursement for outpatient mental health and substance use disorder treatment is typically limited to in-person visits with professionals for psychotherapy, medication, or delivery of a specific treatment (e.g., electroconvulsive therapy [ECT]).

Administration of depression screening instruments, health and behavior consults in the medical setting, telephonic intervention with the patient, case management, treatment planning, psychological consults without the patient present, progress monitoring, and patient education are rarely reimbursed. Employers who want to more effectively address depression must pay providers or insurers to deliver Collaborative Care interventions to reap more of the benefits of effective treatment for depression.

Examples of how employers can invest in Collaborative Care follow:

1. Paying for Collaborative Care interventions through an **insurer** on a capitated basis (i.e., a per employee per month fee to provide all or some of the elements of collaborative care). In this approach, the insurer implements a “depression disease management (DDM)” or “care management (CM)” program in which care managers hired by the insurer provide telephonic case management services (e.g., follow-up calls, medication checks, care coordination, patient education, triage), arrange for psychological consults, and make recommendations for treatment plan modifications. Provider reimbursement for administration of depression screening tools and progress monitoring instruments, health and behavior consults, and more than one procedure in a day should also be included. This approach is best suited for insured populations with access to a large-scale provider network. Disadvantages include patient refusals to participate in the DDM program, distrust of managed care, and complications associated with providers’ inability to identify individuals whose insurance coverage makes them eligible for the DDM program.
2. Paying for Collaborative Care interventions on a fee-for-service basis for **network providers** approved to implement them. This approach also works for large-scale provider networks and avoids the problems associated with managed care. However, it requires provider selection criteria and Collaborative Care training resources, with incentives that encourage individuals with depression to utilize qualified providers. The types of Collaborative Care interventions implemented in this approach will depend on the provider delivery system. (See *Delivery System Structure* below).
3. Paying a **contained health care system, such as an HMO, or multispecialty provider group** on a capitated, case rate (i.e., paying a fee to cover Collaborative Care for each participant) or fee-for-service basis to deliver Collaborative Care interventions. In this approach, trained Collaborative Care professionals are integrated into the delivery system, opportunities for collaboration and in-person intervention are increased, and efficiency is incentivized. This

approach may be geographically limited to the region in which the system or group is located.

### **Delivery System Structure**

Regardless of the funding mechanism, a continuum of Collaborative Care interventions must be made available such that services can be tailored to the needs of the patient and seamlessly provided within the delivery system in which treatment is sought. For example, telephonic psychiatric consultation and care management may be best suited to support a PCP who practices in a small group or rural setting, while an onsite behavioral health professional available for consultation and “warm handoffs” from PCPs (introducing the patient in-person to a mental health provider) may provide optimal assistance to a multispecialty medical clinic. For individuals with severe symptoms of depression, more intensive, specialized treatment at centers of excellence that implement Collaborative Care interventions should be available and accessible.

Additionally, providers delivering Collaborative Care interventions must be qualified and adequately trained. Treatment professionals must likely add new skills to their repertoire, including the ability to regularly track and review electronic patient data, engage with patients between sessions, triage and prioritize care, deliver short-term interventions as needed, and provide specific and concise consultation while participating as a member of a fast-paced medical team.

To fully transform a behavioral health practice and/or train clinicians to provide the full range of Collaborative Care interventions, start-up funding may be required. Investments in screening and outcome measurement tools, tracking systems, electronic medical records, communication systems, changes to billing systems, transportation expenses, and ongoing provider training and supervision will be an important component of the success of any delivery system that includes Collaborative Care interventions.

### **Collaborative Care is Cost-Effective**

Collaborative Care interventions make depression treatment more effective because they address healthcare system flaws that prevent optimal delivery of evidence-based services. And, while in the short-run implementing Collaborative Care interventions adds to the cost of depression treatment, the overall effect is to lower costs.

Research on the cost-effectiveness of Collaborative Care interventions compared to that of treatment for depression on its own is relatively new, but the results are positive. The Washington State Institute for Public Policy (WSIPP) found that Collaborative Care interventions had a statistically significant impact on depression outcomes, a statistically insignificant

increase in cost of care, reduced lifetime healthcare expenses, and better labor market outcomes (e.g., turnover, unemployment), with no combination of assumptions resulting in Collaborative Care failing a benefit cost test.<sup>36</sup> Several studies evaluating the cost-effectiveness of Collaborative Care interventions relative to routine care in primary care settings demonstrated healthcare savings over time.<sup>37</sup> A good estimate of the investment in enhanced treatment is \$1,000 over two years per person treated for depression.<sup>38</sup> However, **healthcare savings** over four years have been estimated to be approximately \$3,300 per person; **productivity and absenteeism savings** in the first two years have been estimated to be approximately another \$2,500 per person treated.<sup>39</sup>

In conclusion, the return on investment in Collaborative Care strategies is reduced healthcare costs over time, improved healthcare outcomes (for both mental health and physical health), decreased business costs related to disability, productivity, absenteeism and turnover, and improved quality of life for employees and their families.

### **How the Meadows Mental Health Policy Institute Can Increase the Cost-Effectiveness of Depression Treatment through Collaborative Care**

The Meadows Mental Health Policy Institute's (MMHPI) role in promoting Collaborative Care to enhance access to effective treatment for depression includes the following three components:

1. *Working with Employers*: MMHPI will identify and work with employers who are interested in implementing Collaborative Care. MMHPI can consult with these employers regarding benefit design, assist with requests for proposals (RFPs) for insurers and/or multispecialty provider groups, and design pilots or studies to measure cost-effectiveness of these projects from the employer's perspective, including factors such as total health insurance premiums, labor productivity, and labor turnover.

---

<sup>36</sup> Washington State Institute for Public Policy (December 2015). *Benefit-cost results: Collaborative Primary Care for Depression with Comorbid Medical Conditions*. Olympia, WA: Author.

<sup>37</sup> Grochtdrels, T., Brettschneider, C., Weggener, A. et al. (2015). Cost-effectiveness of collaborative care for the treatment of depressive disorders in primary care: A systematic review. *PLoS ONE 10*(5): e0123078. doi:10.1371/journal.pone.0123078.

<sup>38</sup> Institute for Clinical Systems Improvement. (n.d.). *The Value of Providing Collaborative Care Models for Treating Employees with Depression*. See also "A new direction in depression treatment in Minnesota: DIAMOND program, Institute for Clinical Systems Improvement, Bloomington, Minnesota," APA Achievement Award (2010). *Psychiatric Services, 61*(10), 1042-1044.

The DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) Project changes how care for the patient with depression is delivered and paid for in primary care. Its scope is "to assist primary care in developing systems that support effective assessment, diagnosis and ongoing management of new or existing diagnosis of major depression in adults age 18 and over, and to assist individuals to achieve remission of symptoms, reduce relapse and return to previous level of functioning."

<sup>39</sup> Ibid.

2. *Help Providers Implement Collaborative Care:* MMHPI will collaboratively work to secure funding for provider groups or networks interested in developing the infrastructure and expertise necessary to provide the full continuum of Collaborative Care interventions. MMHPI can assist these groups with tailoring their services to targeted medical delivery systems by filling resource gaps within the service area, facilitating integration with the existing medical system(s), and brokering training in Collaborative Care strategies.
3. *Evaluate and Support Collaborative Care Systems Once Operational:* MMHPI could conduct readiness reviews of healthcare delivery systems, and/or audits of Collaborative Care delivery systems or strategies after they are operational, to identify training opportunities, provide coaching in cost-effective Collaborative Care interventions, and secure evidence of improved treatment of depression, comorbid health outcomes, and reduced costs. Data from these reviews can persuade other employers about the importance of offering coverage for Collaborative Care strategies.