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Mental Health and the American Workplace

[Trigger warning: rape, sexual assault, suicide, PTSD, physical abuse, eating disorders, anorexia, bulimia, combat, mental illness, depression, anxiety disorder, bipolar disorder, and panic attacks.]

Mental illness: a medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others, and daily functioning … mental illnesses are medical conditions that often result in a diminished capacity for coping with the ordinary demands of life.[1]

The Case of Alexander Carson[a]

2:21 am. 3:54 am. Once again Alex Carson could not sleep. So he sat up in bed to check emails. As chief executive of a fast growing health care company for less than six months, he faced the fallout of a failed medical device line and eventual congressional testimony. Six hours earlier at a benefit dinner for one of the company's corporate philanthropy partners a Board member asked "How have you been Alex?" Somehow he had been taken aback by the question, embarrassed as he looked down and noticed that his hand shook his scotch glass. "Oh, good, good, thanks. Just must have forgotten to eat," he nervously replied as he grabbed for an appetizer. It had been days since Carson was hungry, and he'd been skipping meals. His wife looked concerned as he forced down the shrimp puff. "We should get home to relieve the sitter," she said. Carson was thankful for an excuse to leave. During the ride, she reminded him how rarely he had been home. "Even when you are home, you are absent, you are either restless or lethargic," she said. "You know, the twins even wondered whether to invite you to their birthday party."

What she had said last night hurt. And she was right. He felt a wave of nausea as he looked down to find 50 new emails in the Inbox. Early mornings used to be such a productive time of day, but he had felt too exhausted and impatient for this to be the case recently. As he got up to grab a suit out of the closet, Carson stretched his neck to relieve the shooting pain behind his eye. It had also been weeks since the former tri-athlete had exercised. He wondered when he would finally get back to feeling normal. Carson shook his head in frustration when he realized he still hadn't chosen a tie. "This is such a simple decision," he thought to himself, "pick one already."

* * *

[a] The vignette and its characters are fictitious.

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6:30 am. Carson's phone vibrated to announce an email from his Chairman of the Board requesting a meeting. "Alex, is there something I should be worried about?"

Context

In late 2013, it was widely accepted that about a quarter of Americans would, at some point in their lives, struggle with a mental health issue —some of which would become chronic—and 1 in 17 suffered from a more serious illness like bipolar disorder or schizophrenia.[2] Mental health conditions tended to strike during an employee's most productive working years. Every year, mental illness and substance abuse cost employers in the U.S. $80 to $100 billion in direct costs.[3] The most common mental health disorders in the U.S. included anxiety, mood disorders, and attention deficit hyperactivity disorder (ADHD).[4] They often correlated with depression. Substance dependence or abuse was also correlated with the severity of mental illness. The U.S. Department of Health and Human Services found that 27.3% of adults aged 18 or older with serious mental illness (SMI) in 2011 also had past year substance dependence or abuse, compared to 18.9% with moderate mental illness, 15.9% with low (mild) mental illness, and 6.4% with no mental illness.[5] An estimated 10-20% of people with substance abuse problems suffered from a gambling addiction.[6]

For many reasons, patients remained untreated. The National Institute of Mental Health (NIMH)[b] noted that "research on psychiatric epidemiology shows that mental disorders are common throughout the United States, affecting tens of millions of people each year, and that only a fraction of those affected receive treatment."[7] Some patients took their own lives. Mental illness was a prime cause of suicide. In 2011, the U.S. Centers for Disease Control and Prevention (CDC) reported more deaths by suicide (39,518 deaths) than by road accidents (35,303 deaths).[8] The organization listed "self-harm" as growing public health concern.[9] (See **Appendix A** for general types of mental illness, and **Exhibit 1** for SMI among the U.S. adult population.)

This note provides an overview of mental illness, its costs to individuals, families, and organizations, and suggested best practices for managers and leaders. Managers across organizations and geographies must understand and manage employee mental health to maximize productivity and build organizations, cultures, and systems that develop human potential and well-being. While this note focuses on the U.S., the personal and managerial challenges were global and growing.

Defining the Issues

In the U.S., mental health disorders were codified in the Diagnostic and Statistical Manual of Mental Disorders (DSM). The classification of emotional and cognitive symptoms and behaviors into illnesses and disorders presented many challenges. The DSM approach arose from many different classification systems of mental disorders developed over the past few centuries, internationally. They all had different areas of emphasis such as phenomenology, etiology, course, and different theoretical orientations. The goals of classifying mental illnesses were to advance the knowledge and treatment of these conditions, to allow for a common language for communication among clinicians and researchers from different fields, and to gather epidemiological data.[10]

The American Psychiatric Association (APA) released the fifth revision (DSM-5) in May 2013. The first version of the manual was released in 1952 with 106 diagnostic categories covering 130 pages;

[b] The NIMH was one of 27 institutes or centers in the National Institutes of Health (NIH), a division of the U.S. Department of Health and Human Services.

DSM-5 had grown to over 1,000 pages and added many disorders, such as hoarding (the excessive accumulation of items such as junk mail, unworn clothes, and old newspapers). The new manual also included gambling disorder in the same chapter as other substance abuse disorders, while previous versions categorized "pathological gambling" as an impulse control disorder. Gambling addiction was also often tied to other mental illnesses that caused compulsive behavior such as bipolar disorder.[11] Internet-use gaming disorder was determined to require more research before being considered a formal disorder.

The DSM played a key role in defining, diagnosing, and treating mental illness, and many insurance companies required recognition by the DSM before covering treatment costs.[12] A DSM diagnosis determined whether patients were eligible for coverage, whether the patient qualified for disability benefits, or, in some cases, whether they were allowed to adopt children.[13] As Frank Putnam, professor of pediatrics and child psychiatry at Children's Hospital Medical Center in Cincinnati, told *The Atlantic,* "You need a diagnosis to bill—that's the way the world works. Most of the interventions we do at my center aren't billable—we lose $220 for every kid we see. You can't just treat somebody without giving a formal diagnosis." DSM recognition was also needed to receive public and private research funding.[14]

Some healthcare professionals, however, were concerned that certain new categories in DSM-5 and the expansion of some old definitions were included as a result of corporate influence.[15] As a result of public pressure for transparency, the APA started to publicly disclose financial conflicts of the group's members in 2008: 69% of the DSM-5 task force and work group had direct industry ties, a 21% increase from those on the DSM-4 taskforce.[16]

When Work Makes Us Sick

In 2013 the World Health Organization (WHO) reported that "evidence linking work organization with depression and other mental health problems, and with increased productivity losses, is beginning to accumulate. A number of studies of a diverse group of occupations have identified several job stresses (e.g., high job demands; low job control; lack of social support in the workplace) that may be associated with depression."[17] A 2013 survey by the APA found that more than 33% of working Americans experienced chronic work stress, and only 36% reported that their organizations provided sufficient support to manage stress.[18]

The WHO reported "increasing evidence that both the content and context of work can play a role in the development of mental health problems in the workplace."[19] Factors such as travel, uncertain income, deadlines, working in the public eye, and competitiveness also greatly contributed to stress levels in the workplace.[20] Military personnel, firefighters, and airline pilots were among the most stressful occupations due to the high physical risk. A study in the United Kingdom concluded that "women are at risk of increased depression and anxiety if the management style at their workplace is not inclusive or considerate; and male employees are more at risk if they feel excluded from decision making."[21] Key stress factors included:

- "Workload (both excessive or insufficient work);
- Lack of participation and control in the workplace;
- Monotonous or unpleasant tasks;
- Role ambiguity or conflict;
- Lack of recognition at work;

- Inequity;
- Poor interpersonal relationships;
- Poor working conditions;
- Poor leadership and communication;
- Conflicting home and work demands."[22]

Exhibit 2 shows employer and employee perceptions for major sources of stress.

Some researchers blamed an "always on" work culture for rising stress levels within the workplace. Popular consumer devices such as a smartphones, tablets, and portable laptops provided employees the opportunity to work anytime and anywhere. Technology had liberated many from the nine-to-five work window within the office, but had also increased the number of employees who were "plugged in" to work email after hours and even on vacation.[23] Dr. Christine Grant, a psychologist at Coventry University in the U.K., explained:

> The negative impact of this 'always on' culture is that your mind is never resting; you're not giving your body time to recover, so you're always stressed. [. . .] And the more tired and stressed we get, the more mistakes we make. Physical and mental health can suffer [. . .] There is a massive anxiety about relinquishing control [. . .] In my research I found a number of people who were burnt out because they were travelling with technology all the time, no matter what time zone they were in.[24]

Work-life balance was also a factor that affected the mental health of employees and their choices and behavior vis-à-vis the workplace. Harvard Business School Professor Leslie Perlow conducted a multi-year study on work-life balance at the Boston Consulting Group (BCG). The head of the Boston office wanted to improve employee retention, as many talented employees left the firm due to the long work hours. As part of the study, a sample group of consultants was required to leave early one night per week and arrange to have a colleague cover for them as needed. Consultants who took time off felt better about their jobs and rated their work more highly: 92% reported that they delivered value to the client, compared to 82% of the consultants who did not take time off.[25] Perlow found that the "always on" culture was the result of a "culture of responsiveness" to internal and external organizational players. She explained:

> There's a lot of pressure to be on, and there are some real, legitimate external factors [. . .], whether it's the client might call or the customer might need something [. . .] those are legitimate reasons [. . . but that] causes you to create a culture of responsiveness [. . .] The problem is that now everyone's on all the time and we come to expect that of each other. [. . .] We email each other late at night and [. . .] the person getting the e-mail [responds] "Well, maybe it's not urgent but I should respond anyway.[26]

A survey of 316 senior executives found that the organizational benefits from popular consumer devices were changing the companies' cultures in the following ways: companies were "becoming more dynamic and innovative" (49%), "communicating better and becoming more cohesive" (42%), and "becoming more open" (39%).[27] While increased isolation was identified a potential pitfall (25% of respondents said that because people were working remotely, the organization was becoming disconnected), few respondents identified devices as stress-inducers.[28] Sleep disorders such as insomnia and sleep apnea (a breathing disorder that interrupted sleep) affected 50-70 million adults in the U.S.[29] Researchers stated that exposure to computers or other light-emitting screens one hour

before bed "suppresses the release of the sleep-promoting hormone melatonin."[30] Besides tiredness and an inability to focus, lack of sleep was also linked to a higher risk of cancer, diabetes, heart disease, memory loss, obesity, and osteoporosis.[31]

Impact on Business

Productivity

According to the WHO, in 2013, 5.1% of total health care expenditures in high-income countries were spent on mental health related illnesses.[32] (See **Exhibits 3a, 3b,** and **3c** for expenditures on mental health medications by therapeutic class, behavioral health services by diagnostic category, and total mental health treatment in the U.S.) Mental health also took a high toll on employers in terms of productivity and costs. Two major costs were presenteeism and absenteeism. Presenteeism—the reduced productivity and engagement of an employee resulting from mental illness—indirectly cost companies over $300 billion in the U.S. in 2009, according to the NIMH.[33] Absenteeism (excessive workdays missed) due to mental health problems accounted for 35%–45% of all absenteeism in many developed countries.[34] (See **Exhibit 4** for an estimate of absenteeism due to depression in the U.S.)

Depression was widespread in the U.S. and largely contributed to a loss in employee productivity. In 2013 approximately 6.7% of American adults, or 14.8 million people, lived with major depression[35] and antidepressants were the top prescribed therapeutic class in the U.S. (see **Table 1**).

Table 1 Top Therapeutic Classes by Prescriptions

Dispensed Prescriptions MN	2007	2008	2009	2010	2011
Total US Market	**3,825**	**3,866**	**3,949**	**3,993**	**4,024**
1 Antidepressants	237	241	247	254	264
2 Lipid Regulators	233	242	254	260	260
3 Narcotic Analgesics	231	239	241	244	238
4 Antidiabetics	165	166	169	172	173
5 Ace Inhibitors (Plain & Combo)	159	163	166	168	164

Source: Adapted from "The Use of Medicines in the United States: Review of 2011," IMS Institute for Healthcare Informatics, p. 37, http://www.environmentalhealthnews.org/ehs/news/2013/pdf-links/IHII_Medicines_in_U.S_Report_2011-1.pdf, accessed April 2014.

One study estimated that major depressive disorder (MDD) resulted in 27.2 lost work days per affected employee.[36] However, the study concluded that the major economic impact of MDD was presenteeism, and not absenteeism. The study indicated that nearly 8% of the U.S workforce suffered with MDD. (See **Table 2** for data.)

Table 2 Major Depression in the Workplace

Demographic	Prevalence	Demographic	Prevalence
Age		Marital Status	
All respondents	7.6%	Separated/divorced/widowed	10.8
18 to 29 years old	8.5	Never married	9.5
30 to 44 years old	8.5	Married/cohabitating	5.7
45 to 59 years old	7.0	Education	

Demographic	Prevalence	Demographic	Prevalence
60 years or more	3.0	0-11 years	9.0
Sex		12 years	7.0
Female	9.9	13-15 years	8.3
Male	5.5	16 years or more	7.0
Race			
White	8.0		
Hispanic	6.5		
Black	5.6		
Other	10.5		

Source: Howard G. Birnbaum, et al., "Employer Burden of Mild, Moderate, and Severe Major Depressive Disorder: Mental Health Services Utilization and Costs, and Work Performance," Depression and Anxiety 27: 78-89 (2010).

The study reported that moderately and severely depressed employees were 4% to 5% less productive than mildly depressed or non-depressed employees and found that "increased MDD severity was not associated with reduced hours worked, it was associated with reductions in other measures of workforce performance."[37] (See **Table 3** for estimated hours worked and cost by depression severity.) Treatment costs varied by the severity of MDD: a person with severe MDD had an average 12-month cost of $91 for hospitals and $468 for other mental health services, compared to $33 and $203 respectively for a patient with mild MDD (see **Exhibit 5** for costs of treatment by severity of MDD). The study concluded, "The prevalence of mild depression and its potential to become more severe may suggest focusing treatment on the mildly depressed to head off more serious illness [. . .]. [A]ttention to severity levels may offer direction for improving care and better management of employers' direct and indirect costs."[38] **Exhibit 6** shows the total treatment and work performance costs of depression.

Table 3 Major Depression Workforce Burden on Employers

	Degree of MDD	Estimate
Average monthly hours worked	Mild	155.4
	Moderate	169.4
	Severe	160.4
	Non-depressed	173.7

Source: Howard G. Birnbaum, et al., "Employer Burden of Mild, Moderate, and Severe Major Depressive Disorder: Mental Health Services Utilization and Costs, and Work Performance," Depression and Anxiety 27: 78-89 (2010).

Reputational Risk

Mental health-related issues in the workplace made more and more headlines.[39] From 2012 to late 2013, *Forbes* ran 15 articles on employee depression while *The Financial Times* printed 12 articles on mental health in the workplace. Some stories showed the tragic results of poor mental health, such as the two senior Swiss managers who killed themselves in the summer of 2013: the 49-year-old head of Swisscom and the 53-year-old triathlete CFO Pierre Wauthier of Zurich Versicherung. Wauthier left a note for his family and one for the firm wherein he implied that the stresses of the workplace and altercations with Chairman Josef Ackermann had led to his decision. A former chief executive of Deutsche Bank, Ackermann resigned the chairmanship of Zurich Versicherung and shortly thereafter stepped down from his position as deputy chairman of Siemens, as well.[40] Ackermann insisted that

the decision was unrelated to Wauthier's suicide, but pertained to disagreements over the removal of Siemens' former finance chief.[41] In 2012, Paul Flowers, former chairman of U.K. Co-operative Bank, faced two independent inquiries relating to excessive drug-use and his financial competence in leading the bank after he was filmed buying drugs including crystal methamphetamine, crack cocaine, and ketamine.[42]

In 2011 the chief executive of U.K. Lloyds Banking Group announced a "leave of absence" due to "extreme fatigue."[43] Journalists speculated that internal pressures from his transition to chief executive, a drop in Lloyds share price during the Eurozone crisis, and a grueling schedule, including meetings on Sundays, were to blame.[44]

In some professions, extreme stress increased suicide risk. In the U.S., lawyers were fourth most likely to commit suicide after dentists, pharmacists, and physicians. Bar associations in some states began addressing the high suicide rate among male trial lawyers. Florida added a mental health education requirement to its bar certification after 12 suicides occurred in the mid-2000s. Oklahoma's bar association established a 24-hour help hotline after several suicides in 2004 and 2005. The Kentucky Lawyer Assistance program had 100 lawyers available to provide guidance to at-risk peers, and over 7,000 lawyers had used the service since 2011.[45]

Morale Risk

While mental health issues affected the productivity and reputation of the individual with the disorder, if left unmanaged, the behaviors of employees with mental health disorders could affect the morale of the overall workplace. For example, an employee who acted impulsively or one who had psychopathic tendencies could make other employees feel unsafe or angry, and distract them from their work or even create an unsafe workplace. These individuals could be difficult to work with on a team or could cause conflicts with other employees. Additionally, an employee with a mental health disorder may not be able to accomplish the same work as his peers, causing coworkers to do more work, possibly leading to resentment or work overload. These issues may therefore increase absenteeism and presenteeism among employees without diagnosed mental health disorders.

Legal Costs

The inability of employees and management to come to productive arrangements could lead to disability discrimination lawsuits. In the U.S., mental disability claims of discrimination based on the Americans with Disabilities Act cost an estimated $19.8 million in 2010 and $25.5 million in 2013. The largest number of claims stemmed from depression, anxiety, and manic depressive disorders.[46] Some of these lawsuits were fraudulent. In January 2014, 106 individuals, including 80 New York City firefighters and police officers, were indicted by federal, local, and state law enforcement agencies on charges of committing the largest Social Security disability fraud in the history of the program.[47]

Managerial Responses

Leading firms were increasingly aware of the challenges employees faced as they struggled to maintain mental health. Some worked to educate managers on employee rights, re-engineered benefits to encourage prevention and early treatment, provided resources, and tried to encourage employees to be open about issues that had an impact on productivity and to offer assistance. Making health, and mental health, a core mission and part of the culture of the firm could reduce some of the risks and costs to the firm and its employees. A study of workplace outcomes of a company-sponsored telephonic outreach and care management program for depression found that employees

who received an intervention had a higher rate of productivity by 3.5 hours a week—a 9% increase (assuming a 40-hour work week) – than those who received no intervention.[48] Another study found that employees who received treatment for a mental illness and moved from a high level of psychological distress to a low level[c] after treatment showed an 11.1% increase in productivity.[49]

Making it Discussible

One issue that confounded employers' abilities to address mental health issues, especially depression, was employee concealment of any mental health issues from managers due to enduring stigma associated with mental illness. Employees often feared disclosure could negatively affect their careers.[50] Indeed, most employees remained silent about their mental health issues and many went to great lengths to appear happy and healthy in the workplace.[51]

According to a 2013 study, "When employee non-disclosure of a mental illness impacts negatively in the workplace, it presents a very challenging issue in relation to performance management for both operational managers and human resource staff."[52] The study continued, "[F]or [. . .] employees who come to work with a mental illness, their silence places them in a unique category, unprotected and being managed as though they were fit and able."[53] (Legal protections for employees, where it existed, required disclosure of the mental illness and verification.[54])

Given the concealment of mental illness, poor performance and absenteeism were often believed to be the result of something other than an illness, such as poor work ethic.[55] Consequently, action plans to improve employee performance were often put in place without regard to the true cause of poor performance. One study concluded, "Unless employees reveal at some stage they have a mental illness [. . .], failure to meet prescribed [performance] targets will be viewed as an inability to achieve performance plan requirements, that is, insubordination, which may result in termination."[56]

As one psychologist reported, "Employees are reluctant to come forward to reveal any problems they may be having. They're afraid of being taken off the job."[57] It was also less likely that co-workers would come forward with concerns about a boss or a person in a position of power.[58] John Binns, a partner at Deloitte, suggested that best practice might be to educate employers: "if the leadership of an organization sets the right tone, people feel more comfortable asking for help."[59] A U.K. study revealed that 67% of respondents refused to disclose a mental health problem to their employer or prospective employer due to the fear of stigma associated with such problems.[60] Business leaders polled by *The Guardian* in 2011 described the prevailing corporate culture as "survival of the fittest," and senior executives at the top with enormous workloads were wary of cancelling engagements due to illness.[61] Research by the European Depression Association (EDA) in 2012 suggested that one in four British employees had been diagnosed with depression, the highest percentage in Europe.[62]

Some companies developed targeted programs, such as DuPont's mental health awareness program, called ICU ("I see you") Mental Health, which was rolled out in 2011 after a regional manager based in London worried that many employees felt stressed and isolated as Greece and other European Union nations struggled economically. DuPont's approach encouraged employees to help one another when they observed a distressed coworker. ICU Mental Health was often on the agenda at the employees' monthly safety meetings.[63]

[c] The study measured psychological distress using the Kessler 6 (K6) scale, where a score from 0 to 7 reflected low psychological distress, 8 to 12 indicated moderate psychological distress, and 13 to 24 represented high psychological distress.

Knowing the Legal Framework

In the U.S., employees suffering from mental illness were protected against discrimination in the workplace under the Americans with Disabilities Act (ADA). The ADA defined disability as "a physical or mental impairment that substantially limits one or more major life activities of an individual."[64] Mental impairment was "any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities."[65]

Under the ADA, employers were prohibited from asking employees or potential employees about disabilities and mental health issues, unless inquiries were related to specific work tasks. All questions about mental health on employment applications were illegal. The National Alliance on Mental Illness recommended against disclosing any mental health issue to a manager, if possible.[66] If the applicant revealed a disability, the employer was not allowed to inquire about its nature or severity and could not ask the applicant whether he/she would need special accommodations for the job but could ask if special accommodations were needed after issuing a job offer.

Under the law, however, employers could ask about specific abilities and work-related tasks in an interview. For instance, employers could ask if a potential hire worked well under stress, but not if that individual had been treated for stress.[67] Executive search firms, though, investigated past mental health issues, which many companies considered "red flags" when evaluating candidates.[68]

If a manager knew about a mental illness because an employee disclosed his/her condition, she was required under the law to make reasonable accommodations for the employee.[69] However, it was typically the responsibility of the person with the disability to tell the employer that an accommodation was needed.[70] In preparing for such conversations, supervisors would ideally want to research the mental health issues associated with the requested accommodation and obtain advice from within the organization (HR department, employee well-being programs, etc.) as well as external sources. Many managerial guides recommended that the employer allow the worker to bring a support person along to a meeting to discuss the situation. During the meeting, an employer could ask objective questions to assess whether an employee with a mental illness could perform essential duties of a job, e.g. meet standards for physical labor, get along with people, meet deadlines, or come to work every day.[71] The information shared in these sessions was deemed confidential.

Employees could also choose not to reveal any mental health issues, particularly if they worried about discrimination or limited advancement. In such instances, conversations would focus on workplace adjustments that might enhance the worker's performance and resources such as employee assistance programs that might provide support.

Accommodations revolved around flexible working arrangements in time, space (e.g., offering a different work station with fewer distractions, or providing more privacy to call a friend if upset), and work tasks (e.g., cutting bigger projects into smaller chunks or, if possible, assigning an employee to a project team led by a different type of manager). Managers were encouraged to think creatively about arrangements to improve productivity, such as offering to send a "burnt-out" employee for training instead of suggesting time off. (See **Exhibit 7a** for common steps taken by employers to manage stress and **Exhibit 7b** for examples of accommodations.)

Employees also had a set of responsibilities, although these were not regulated. For instance, an employee had to meet the skill, experience, education, and related requirements of the job.[72] Employees were expected to disclose a mental disability if it appeared to impact the health and safety of the workplace so that proper adjustments could be made. At the same time, they were expected to recognize that disclosure at a point of crisis might not ensure a practical adjustment or immediate

solution.[73] Furthermore, Title I of the ADA gave an employer the right to refuse to accommodate an individual who posed a "direct threat" to the health and safety of the other employees, as determined by objective evidence from a treatment provider or other qualified professional.

Adjusting Insurance Plans

Beyond accommodations in the workplace, employers also offered health insurance plans that included coverage for mental health care as required by the federal Health Insurance Portability and Accountability Act (HIPAA), passed in 2006, and the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008, implemented in 2013. These laws, respectively, stated that employment-based health plans could not deny benefits or charge more if an individual had a particular medical condition, including mental illness, and required employer-sponsored health plans to cover mental health coverage as it would other health services.[74] Employer-provided health insurance, out-of-pocket payments, and government sources, including Medicare and Medicaid, fueled mental health services industry revenue growth. In 2013 about 89% of employers offered mental health benefits, compared to 72% in 2005.[75]

When HIPAA was enacted in 2006, various employer-based health insurance plans provided some benefits for mental health issues, but many did not offer sufficient coverage for the treatments required. A 2006 study of the "best" mental health plans of *Fortune 100* companies in the retail sector showed annual limits on mental health outpatient visits ranging from 10 to 90.[76] Such restrictions on the number of therapy sessions and doctors' visits for mental health issues suggested that insurance providers did not recognize the chronic nature of many mental health issues. The MHPAEA required many companies' group health plans with over 50 members to set co-payments for mental health services on par with those for other medical benefits. The law went into effect in 2010 and expanded coverage limits on the number of visits to mental health professionals each year.

Before the MHPAEA, private health insurers often provided lower levels of coverage for mental health and substance abuse than for other medical treatments. Benefits were often subject to higher deductibles and copayments, more restrictive limits for hospital and outpatient stays, and more limited out-of-network providers. Moreover, insurers could exclude coverage for certain diagnoses, such as eating disorders. A study by the U.S. Government Accountability Office (GAO) of small to large U.S. employers found that, after the MHPAEA was enacted, many employers relaxed the treatment limits for mental health and substance abuse: in 2008, 35% employers had a limit on the number of office visits covered for mental illness, compared to only 7% in 2010.[77] Additionally, in 2008, 20% of respondents had lifetime dollar limits for mental health and substance abuse treatment, whereas in 2010 only 5% did. In many cases, the limits applied to both mental and medical treatments.[78] Despite the improved coverage, the GAO found varied evidence on the effect on employees' access to and use of treatment for mental illness.[79]

Providing Resources

Treatment options and mental health resources employees engaged with outside the workplace included medical professionals who diagnosed and treated mental illness, therapists, life coaches, private rehabilitation centers, and other related professions and organizations, supported by payers and those who sought treatment. Employees with untreated mental illness used non-psychiatric inpatient and outpatient services three times more frequently than those who had been treated.[80]

Employers expanded EAPs to encourage employees to make use of in-house assistance, rather than seeking therapy through their health plans. Many large companies had established EAPs to deal with temporary mental-health issues as early as 1970. EAPs typically provided confidential over-the-

phone assistance or in-person counseling. Many mental health advocates praised EAPs and believed they could help address mental health problems before they worsened.[81] In some cases, companies that integrated mental health care with other health care services, such as medical illness and disease management, improved patient outcomes and reduced company costs. For instance, in 2004, IBM integrated its services and saved $500,000 in outpatient costs in one year.[82]

EAP providers were typically outside agencies that specialized in confidentially referring employees and their families to appropriate professional health services.[83] ComPsych Corp., a leading EAP provider in the U.S., reported that 50% to 60% of its 11,000 corporate clients were considering increasing the number of EAP sessions they offered to help reduce demand for other mental health services. One study showed that 60% to 80% of employees who accessed EAP services did not go on to access additional health services.[84] Another found that 3% of employees took advantage of EAP counseling services in 2012. While 85% of employers of all sizes in 2013 promoted EAPs to help employees manage stress, only 5% of employees took advantage of the programs.[85] Experts blamed poor communication about the services and the stigmatization of mental health issues. Furthermore, employees were often distrustful or unaware of privacy policies.[86]

In 2010, Nationwide Insurance began requiring employees to access EAP benefits before they could qualify for additional mental health services. Its EAP and mental-health benefits were both run by OptumHealth, allowing employees to easily transition from one program to another. However, Nationwide did not prevent employees from accessing health services offered by other companies.[87]

Providing Options to Rest

Some companies began raising awareness and implementing preventative measures surrounding mental health. Since his return to the workplace following a leave for depression, Deloitte consultancy partner John Binns had worked to raise the awareness that mental health could become a serious issue at work through Mental Health Champions, a group of partners at the firm who were trained to have initial conversations with employees facing mental health issues. Deloitte, along with the charity SANE, worked to reduce the stigma around mental health, and encouraged employees to come forward and "tame their Black Dog [depression]."[88]

For decades, young Wall Street analysts commonly worked over 15 hours per day. When a Bank of America intern died in August 2013 from a seizure after reportedly working three straight days with no sleep, the company recommended work limits that required employees to take four weekend days off per month.[89] In October 2013, Goldman Sachs told junior investment banking analysts that they could no longer work Saturdays and all analysts should no longer work over 75 hours per week. A former Goldman associate explained, "It isn't really external rules that force bankers to work the way they do. It's an entire cultural system."[90]

More recently, companies were helping employees practice mindfulness. Founded on Buddhist principles, mindfulness was a meditation practice in which individuals tuned into the present moment by focusing on physical sensations while acknowledging and accepting their feelings and thoughts. The intended result was lower agitation and greater focus.[91] Some of the largest and most well-known companies in the world had implemented mindfulness programs. For the executive who helped found the program at General Mills in 2006, "It's about training our minds to be more focused, to see with clarity, to have spaciousness for creativity and to feel connected. That compassion to ourselves, to everyone around us—our colleagues, customers—that's what the training of mindfulness is really about."[92] Employers used mindfulness programs, which ranged

from multiday offsite retreats to half-hour workplace sessions, in the hope that they would make employees more productive and possibly happier.[93]

Finding a Place to Excel

As mental health and disabilities were more openly discussed, more individuals shared their experiences with their challenges and sometimes credited those for their success. For instance, Bill Brenner, an author and technology editor, noted that his OCD "leads to higher output, and most of the time I'm grateful for that."[94] Many artists, musicians, and scientists who had dyslexia were could take advantage of the unique perspectives they gained from the mental illness.[95] Others, like Olympic swimmer Michael Phelps, used their ADHD to help them focus on and achieve difficult goals, while actor Jim Carrey claimed to have used his depression to emotionally connect with others.[96] Paul Orfalea, the founder of Kinko's, said that his dyslexia made his mind energetic and restless, helping him become a successful business man: "My learning disability gave me certain advantages, because I was able to live in the moment and capitalize on the opportunities I spotted."[97] Some adults on the autism spectrum who were extremely focused, accurate, and possessed acute attention to detail made ideal employees for tasks in the technology sector such as coding and software testing.[98] In 2014, software corporation SAP actively sought out autistic employees to test software and debug programs. Mortgage lender Freddie Mac offered full-time paid internships to students and recent graduates on the autism spectrum.[99] Part of the managerial response here was in implementing accommodations such as reducing distractions for individuals with ADHD, imposing norms around after hour emails for employees who might suffer from anxiety.

Among leaders, an estimated one in 25 CEOs could perhaps be diagnosed as psychopaths (quadruple the rate found in the general population).[100] Psychopathy was defined as a psychological condition characterized by an amoral ethical outlook, a lack of empathy for others, and the absence of remorse.[101] Though sometimes described as "superficially charming," psychopaths' "very low tolerance to frustration and a low threshold for discharge of aggression, including violence," could lead them to commit violent crimes such as, in extreme cases, serial murder.[102] However, many psychopaths mitigated their impulsivity and harnessed their drive to become fully-functioning and highly successful members of society.[103]

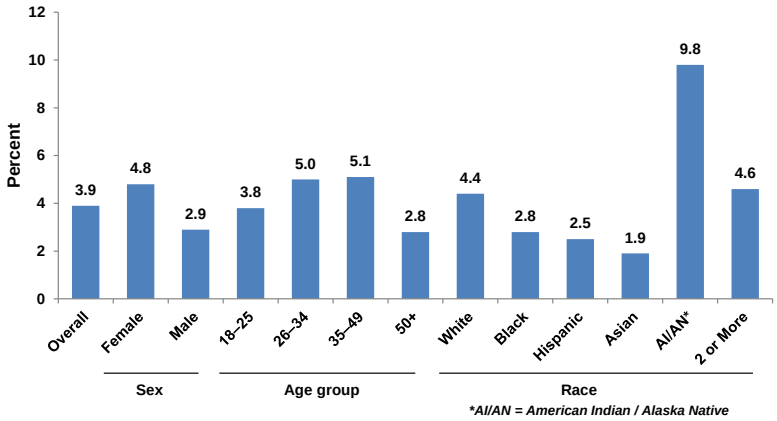
Is Alex OK?[d]

As soon as she hit send, Carla Simpson wondered what message she was sending by emailing at 5:45am. Perhaps it was because that morning's *Financial Times* had brought yet another article on the impact of mental health in the workplace (see **Appendix B**). But she had been worried about Carson and others had shared their concern with her. What did her question really mean? Was it an appropriate question to have asked? If he was not ok, what should she do? Was this stress? Depression? A midlife crisis? Or too many bad surprises early on during a leadership transition?

For the firm, health was a core mission and its founders and leaders were proud of its supportive yet results-driven culture. What else should the firm be doing and with whom should she speak, Carla wondered, as she headed out into the early dawn to log her daily six-mile run.

[d] The vignette and its characters are fictitious.

Exhibit 1 Serious Mental Illness (SMI) Among the U.S. Adult Population (2011)



Source: National Institute of Mental Health, "Serious Mental Illness (SMI) among Adults," National Institute of Mental Health website, http://www.nimh.nih.gov/statistics/SMI_AASR.shtml, accessed January 2014.

Note: An SMI has four specifications: 1) a mental, behavioral, or emotional disorder (excluding developmental and substance use disorders); 2) diagnosable currently or within the past year; 3) of sufficient duration to meet diagnostic criteria specified within the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders; 4) resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities.

Exhibit 2 Sources of Stress

Employers vs. Employees: Sources of Stress	Employer View	Employee View
Lack of work/life balance (excessive workloads or long hours	1	5
Inadequate staffing (lack of support, uneven workload or performance in group)	2	1
Technologies that expand availability during nonworking hours	3	**10**
Unclear of conflicting job expectations	4	3
Fears about job loss; too much change	5	**7**
Lack of supervisor support, feedback, and role modeling	**6**	**6**
Fears about benefit reduction/loss (e.g., lower value or loss of health care coverage, reduction in retirement benefits)	**7**	**9**
Organizational culture, including lack of teamwork and tendency to avoid accountability and assign blame to others	**8**	4
Low pay or low increases in pay	**9**	2
Lack of technology, equipment, and tools to do the job	**10**	**8**

Source: "The Business Value of a Health Workfore: Staying@Work Survey Report 2013/2014, United States," Towers Watson, January 2014, http://www.towerswatson.com/en/Insights/IC-Types/Survey-Research-Results/2013/12/stayingatwork-survey-report-2013-2014-us, accessed February 2014.

Notes: Source of employee data: 2013 Towers Watson Global Benefits Attitude Survey (GBAS) completed by 5,070 U.S. workers at companies with 1,000 or more employees. Companies responding 3, 4, or 5 on a 5-poing scale; employees choosing top three sources of stress.

Exhibit 3a Mental Health Medication Use and Expenditures among U.S. Adults (1998, 2008, 2009, and 2010)

Coverage group	Expenditures (millions of dollars)				Users (millions)				Expenditure per person (dollars)			
	1998	2008	2009	2010	1998	2008	2009	2010	1998	2008	2009	2010
All coverage groups	**$10,677**	**$27,358**	**$27,509**	**$29,250**	**15.1**	**27.2**	**28.4**	**29.9**	**$707**	**$1,006**	**$969**	**$978**
Antianxiety, all classes	1,422	2,067	1,275	1,503	5.3	9.3	9.2	9.5	268	222	139	158
Antidepressants, all classes	6,990	13,012	13,171	15,164	11.2	21.5	22.3	23.3	624	605	591	651
Antipsychotics, all classes	1,506	7,215	7,825	8,958	1.4	2.8	3.4	3.1	1,075	2,577	2,302	2,890
Antimanics, anticonvulsants	595	3,036	3,119	1,535	1.0	2.4	2.5	2.7	595	1,265	1,248	568
Medicare, aged 65 or older (total)	**1,572**	**2,877**	**3,454**	**4,076**	**3.3**	**5.5**	**5.5**	**5.9**	**476**	**523**	**628**	**691**
Antianxiety, all classes	357	355	273	330	1.5	2.2	2.1	1.8	238	161	130	184
Antidepressants, all classes	1,093	1,936	2,019	2,920	2.1	4.1	4.0	4.7	521	472	505	621
Antipsychotics, all classes	*	*	671	*	0.2	0.2	0.3	0.4	*	*	2,238	*
Antimanics, anticonvulsants	*	*	*	*	*	*	0.2	0.2	*	*	*	*
Medicare, aged 18 to 64 (total)	**1,862**	**4,440**	**5,267**	**5,974**	**1.2**	**2.3**	**2.4**	**2.8**	**1,551**	**1,930**	**2,194**	**2,134**
Antianxiety, all classes	217	624	241	291	0.6	1.1	1.1	1.2	361	567	219	243
Antidepressants, all classes	773	1,461	1,728	1,952	0.8	1.8	1.9	2.2	966	811	909	887
Antipsychotics, all classes	*	1,703	2,454	3,331	0.3	0.6	0.8	0.7	*	2,838	3,068	4,759
Antimanics, anticonvulsants	*	*	*	312	*	*	0.4	0.6	*	*	*	519
Private insurance (total)	**4,980**	**12,887**	**13,477**	**13,149**	**7.9**	**14.3**	**15.4**	**16.1**	**630**	**901**	**875**	**817**
Antianxiety, all classes	593	648	448	553	2.3	4.2	4.2	4.6	258	154	107	120
Antidepressants, all classes	3,864	7,276	7,606	8,257	6.4	11.6	12.6	12.7	604	627	604	650
Antipsychotics, all classes	*	2,095	2,261	2,064	0.4	0.9	1.1	1.0	*	2,327	2,055	2,064
Antimanics, anticonvulsants	*	1,473	1,666	693	0.4	1.0	1.2	1.3	*	1,473	1,388	533
Medicaid/other public (total)	**1,720**	**5,082**	**4,063**	**4,599**	**1.8**	**2.9**	**3.1**	**3.0**	**955**	**1,752**	**1,311**	**1,533**
Antianxiety, all classes	191	217	241	236	0.8	1.1	1.0	1.2	239	198	241	197
Antidepressants, all classes	868	1,219	1,217	1,456	1.2	2.1	2.3	2.2	724	580	529	662
Antipsychotics, all classes	456	2,680	2,016	2,335	0.5	0.7	0.8	0.8	912	3,828	2,520	2,918
Antimanics, anticonvulsants	*	801	403	343	0.3	0.6	0.5	0.4	*	1,336	806	857
Uninsured (total)	**$544**	**$2,072**	**$1,249**	**$1,452**	**0.9**	**2.2**	**2.0**	**2.1**	**$604**	**$942**	**$624**	**$692**
Antianxiety, all classes	*	223	72	92	0.3	0.8	0.8	0.8	*	279	90	115
Antidepressants, all classes	392	1,122	602	578	0.7	1.8	1.5	1.5	559	623	401	386
Antipsychotics, all classes	*	*	*	*	*	0.3	0.3	0.2	*	*	*	*
Antimanics, anticonvulsants	*	*	*	*	*	*	0.2	0.2	*	*	*	*

Source: Medical Expenditure Panel Survey, 1998–2010, Agency for Healthcare Research and Quality in "Behavioral Health, United States, 2012," Substance Abuse and Mental Health Services Administration, p. 333-4, http://media.samhsa.gov/data/2012BehavioralHealthUS/2012-BHUS.pdf , accessed October 2014.

Note: * Estimates are considered unreliable because of low precision. Antianxiety medications include sedative and hypnotic medications. Data are based on a household survey of a nationally representative sample. All classes of medication combined do not add to total because the table does not detail classes of medication with a relatively small number of fills. Estimates were adjusted to 2012 dollars using the GDP Price Index. The index is compiled by the U.S. Department of Commerce's Bureau of Economic Analysis.

Exhibit 3b Private Insurance Beneficiaries and Expenditures for Mental Health and Substance Abuse Treatment Among Adults Aged 18 to 64 in the United States, by Diagnosis (2011)

Diagnostic category	Percentage of all beneficiaries in sample	Total expenditures for behavioral health services (millions $)	Average expenditure per beneficiary
Mental health disorders			
Adjustment disorders	1.8%	$169.0	$672
Anxiety disorders	3.0	235.6	540
Attention-deficit/hyperactivity disorder & other disruptive behavior disorders	0.9	38.4	286
Bipolar disorders	0.8	198.0	1,637
Depressive disorders	3.9	534.6	954
Developmental disorders	0.0	3.4	952
Impulse control disorders	0.0	2.8	812
Personality disorders	0.0	4.3	790
Schizophrenia & other psychotic disorders	0.2	79.6	3,050
Miscellaneous disorders			
Substance use disorders	0.7	79.6	830
Alcohol use disorders	0.3	188.6	4,216
Drug use disorders	0.4	207.5	3,687

Source: MarketScan® Commercial Claims and Encounters Database, 2011, Truven Health Analytic in "Behavioral Health, United States, 2012," Substance Abuse and Mental Health Services Administration, http://media.samhsa.gov/data/2012BehavioralHealthUS/2012-BHUS.pdf , accessed September 2014.

Note: Data are based on insurance claims from a sample of large self-insured employer-sponsored group health plans. Expenditures are for behavioral health services for the primary diagnosis of the diagnostic category being reported. Thus, the depressive disorders row only includes mental health expenditures that are attributed to depression via the primary diagnosis. Data are presented for the sample and are not weighted to the U.S. population.

Exhibit 3c Total Private Insurance Beneficiaries and Expenditures for Mental Health Services in the United States, With and Without Prescription Medications (2011)

Characteristic	Beneficiaries using a mental health service, with prescription medication	Beneficiaries using inpatient/outpatient mental health service, without prescription medication	Total mental health expenditures, with prescription medication (millions $)	Total mental health expenditures, without prescription medication (millions $)	Avg mental health expenditure per service user, with prescription medication	Avg mental health expenditure per service user, without prescription medication
Total	**4,059,986**	**1,715,293**	**$4,148**	**$1,804**	**$1,022**	**$1,051**
Age						
≥ 17	521,540	382,062	800	452	1,534	1,186
18–25	378,158	226,240	474	275	1,256	1,215
26–64	3,160,288	1,106,991	2,872	1,076	909	972
Sex						
Male	1,513,518	700,468	1,628	727	1,076	1,037
Female	2,546,468	1,014,825	2,519	1,077	989	1,062

Source: MarketScan® Commercial Claims and Encounters Database, 2011, Truven Health Analytics in "Behavioral Health, United States, 2012," Substance Abuse and Mental Health Services Administration, http://www.samhsa.gov/data/2012BehavioralHealthUS/2012-BHUS.pdf, accessed September 2014.

Note: Data are presented for the sample and are not weighted to the U.S. population. Mental health expenditures are calculated by summing the amount paid for claims with a primary diagnosis of a mental health disorder. Beneficiaries were considered to be using a mental health service if they had a claim with a mental health diagnosis as the primary diagnosis.

Exhibit 4 Costs of Absenteeism from Depression, United States, 2011-2012

Estimated Mean Missed Work Days and Annual Loss Resulting from Absenteeism among U.S. Workers Diagnosed with Depression
Controlling for age, gender, income, education, race, marital stutus, region, and obesity status

	Estimated Missed Work Days per Year	Additional Missed Work Days per Year Compared with those Without Depression	Estimated Number of U.S. Workers-	Estimated Cost of Incremental Absenteeism--
Full-time workers with depression diagnosis	8.7	+4.3	13,076,559	$19,032,180,580
Part-time workers with depression diagnosis	13.7	+5.0	5,047,161	$4,261,536,828
TOTAL			18,123,720	$23,293,717,408

Source: Gallup-Healthways Well-Being Index.

Note: - Assumes 120,720,000 full-time and 30,480,000 part-time workers.

-- $341 per missed work day is based on (inflation-adjusted) research published in *The Journal of Occupational and Environmental Medicine* (Goetzel et al) 2003; 45(1), 5–14.

Source: Dan Witters, Sangeeta Agrawal, and Diana Liu, "Depression Costs U.S. Workplaces $23 Billion in Absenteeism," Gallup, July 24, 2013, http://www.gallup.com/poll/163619/depression-costs-workplaces-billion-absenteeism.aspx, accessed February 2014.

Note: Gallup produces the Gallup-Healthways Well Being Index, which reported that depression costs U.S. workplaces $23 Billion in Absenteeism.

Exhibit 5 12-Month Treatment and Medication Cost by Sector of Treatment for Major Depressive Disorder by Severity Group (N=54,465)

Sector of Treatment	Cost for depressed respondents		Cost by depression severity					
			Mild		Moderate		Severe	
	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)
Hospital	$57	($0, $129)	$33	($0, $105)	$24	($0, $72)	$91	($0, $229)
Psychiatrist	$106	($66, $146)	$152	($0, $409)	$51	($22, $80)	$138	($94, $182)
Other mental health	$350	($250, $448)	$203	($33, $374)	$254	($157, $352)	$468	($295, $640)
Any mental health	$513	($388, $670)	$388	($129, $757)	$329	($223, $426)	$697	($475, $892)
General medical	$111	($82, $140)	$53	($17, $88)	$100	($56, $143)	$138	($94, $180)
Any healthcare	$624	($483, $791)	$442	($187, $819)	$429	($297, $534)	$834	($592, $1050)
Antidepressants	$188	($152, $224)	$88	($34, $142)	$139	($98, $180)	$256	($195, $317)

Source: Howard G. Birnbaum, et al., "Employer Burden of Mild, Moderate, and Severe Major Depressive Disorder: Mental Health Services Utilization and Costs, and Work Performance," Depression and Anxiety 27: 78-89 (2010).

Note: Total cost computed by multiplying average number of visits and pill days on medication by unit costs computed from the employer claims data (2001–2002) for major depressive disorder patients.

Exhibit 6 Treatment and Work Performance Costs of Depression in a Firm of 10,000 Employees

	Severity of depression			
	Mild	**Moderate**	**Severe**	**Total cost (or employees)**
	[A]	[B]	[C]	[D]=[A]+[B]+[C]
Prevalence of depression by severity	13.8%	38.5%	47.7%	
Number of depressed employees	105	293	363	(760)
Treatment rate	34.8%	48.0%	58.7%	
Number of treated employees	36	140	213	(390)
Percent of depressed receiving adequate treatment	8.6%	13.6%	25.1%	
Number of employees treated adequately	9	40	91	(140)
Treatment adequacy as a proportion of all treatment	24.7%	28.3%	42.8%	
Annualized depression treatment cost per depressed employee[b] , any healthcare[a]	$442	$429	$834	
Annualized depression treatment cost of all depressed employees, any healthcare	$46,357	$125,525	$302,342	$474,224
Percent of depression treatment cost by severity	9.8%	26.5%	63.8%	
Annualized work performance cost per depressed employee	$527	$2,256	$2,389	
Annualized work performance cost of all depressed employees	$55,272	$660,106	$866,060	$1,581,438
Percent of work performance cost by severity	3.5%	41.7%	54.8%	
Annualized treatment cost + work performance cost per depressed employee	$969	$2,685	$3,223	
Annualized treatment cost + work performance cost of all depressed employees	$101,629	$785,631	$1,168,402	$2,055,662
Percent of treatment cost + work performance cost by severity	4.9%	38.2%	56.8%	

Source: Howard G. Birnbaum, et al., "Employer Burden of Mild, Moderate, and Severe Major Depressive Disorder: Mental Health Services Utilization and Costs, and Work Performance," *Depression and Anxiety* 27: 78-89 (2010).

Note: The number of depressed employees is calculated by multiplying the 10,000 employees in the firm by the overall depression prevalence rate (7.6%) and the prevalence rate of depression by severity.

[a] Any healthcare includes hospital, psychiatrist, other mental health treatment sectors and general medicine treatment.

[b] Total cost computed by multiplying average number of visits by unit costs computed from AG's employer claims data (2001-2002) for MDD patients.

[c] Total cost computed by multiplying average number of pill days on medication by unit costs computed from AG's employer claims data (2001-2002) for MDD patients.

Exhibit 7a Steps Taken by Employers to Manage Stress

	United States
Promotion of Employee Assistance Programs (EAP)	85%
Access to financial planning information/services	61%
Flexible working options	51%
Expanding EAP services and/or other stress management activities to dependents	46%
Education and awareness campaigns	40%
Stress management interventions (e.g., stress management workshops, yoga, tai chi)	39%
Training for managers	34%
Specialized training for employees	23%
External specialist/resources used to design and deliver program(s)	23%
Risk assessments/stress audits	22%
Anti-stress space	10%
Written guidelines on stress	7%

Source: "The Business Value of a Health Workfore: Staying@Work Survey Report 2013/2014, United States," Towers Watson, January 2014, http://www.towerswatson.com/en/Insights/IC-Types/Survey-Research-Results/2013/12/stayingatwork-survey-report-2013-2014-us, accessed February 2014.

Exhibit 7b Examples of Accommodations for Employees with Severe Mental Illness

- Providing self-paced workloads and flexible hours
- Modifying job responsibilities
- Allowing leave (paid or unpaid) during periods of hospitalization or incapacity
- Assigning a supportive and understanding supervisor
- Modifying work hours to allow people to attend appointments with their psychiatrist
- Providing easy access to supervision and supports in the workplace
- Providing frequent guidance and feedback about job performance

Source: U.S. Department of Health and Human Services, Office on Women's Health, taken verbatim from "Americans with Disabilities Act and mental illness," http://www.womenshealth.gov/mental-health/your-rights/americans-disability-act.html, accessed January 8, 2014.

Appendix A: Overview of General Types of Mental Health Disorders

Anxiety Disorder Collectively the most prevalent mental disorders in the U.S., anxiety—a normal reaction to stress—disorders took many forms, including: generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD), panic disorder, post-traumatic stress disorder (PTSD), and social phobia.[104] The lifetime prevalence of anxiety disorders in the adult U.S. population reached 28.8%, with 22.8% of these cases defined as severe, interfering with day-to-day activities. Of those suffering from an anxiety disorder, 42.2% received some form of treatment or service.[105]

Attention Deficit Hyperactivity Disorder More common among children, attention deficit hyperactivity disorder (ADHD, ADD) could continue into adulthood and was characterized by a difficulty staying focused and controlling personal behavior, as well as hyperactivity.[106] Although only 8.1% of the adult population experienced ADHD, 41.3% of these cases to be severe. The 30-44 year old demographic (8.3%) suffered from ADHD more than any other adult demographic.[107]

Autism Spectrum Disorder Autism spectrum disorder (ASD) referred to a collection of developmental brain disorders—typically discovered during childhood—including: Autistic disorder, Asperger's disorder, Pervasive developmental disorder not otherwise specified (PDD-NOS), Rett's disorder, and Childhood disintegrative disorder (CDD).[108] Severity of symptoms varied considerably, but those diagnosed with ASD dealt with their symptoms through their lifetimes.

Bipolar Disorder Also known as manic-depressive illness, bipolar disorder caused severe swings in mood, energy, and activity levels. Although bipolar symptoms could negatively impact the ability to conduct daily tasks, treatment existed that enabled people to lead productive lives.[109] The severity of bipolar disorder was reflected in the numbers. While 3.9% of the adult population suffered from the disorder, nearly 83% of these cases were defined as severe. Among adults, 18-29 year-olds (5.9%) suffered from the disorder more than others, and the average age-of-onset was 25 years old. About half of the sick sought treatment.[110]

Borderline Personality Disorder People that suffered from borderline personality disorder (BPD) had difficulty controlling their emotions and thoughts and displayed impulsive and reckless behavior. Typically people with BPD also suffered from other mental health issues.[111]

Depression People suffering from depression experienced sad and downtrodden thoughts, impacting their daily lives. Effective medications, psychotherapies, and other treatments existed to treat depression,[112] which had a 16.5% lifetime prevalence among the U.S. adult population, of which 30.4% of cases were characterized as severe. Depression was estimated to cause 200 million lost workdays each year at a cost to [U.S.] employers of $17 to $44 billion.[113]

Eating Disorders Common eating disorders included anorexia nervosa, bulimia nervosa, and binge-eating disorder. All were characterized by a severe disruption in a person's daily diet.[114] The lifetime prevalences were 0.6%, 0.6%, and 2.8%, respectively. Fewer than half of people suffering from some eating disorder received treatment.[115]

Schizophrenia According to the NIMH, "schizophrenia is a chronic, severe, and disabling brain disorder that has affected people throughout history. People with the disorder may hear voices that other people don't hear. They may believe other people are reading their minds, controlling their thoughts, or plotting to harm them." Treatment can alleviate some symptoms, although they commonly remain in some capacity throughout a person's lifetime. Approximately 2.4 million American men and women, or 1.1% of the population, had schizophrenia.[116]

Appendix B: *Financial Times* Article on Mental Health

Business leaders must take a stand on mental health

Leaders need to take a stand on a growing problem, writes Dennis Stevenson

The fact that we only talk about workplace stress when there is a high-profile case of mental ill-health is a problem. Such cases seem to be occurring more frequently, or at least more publicly. Sir Hector Sants, for example, the former head of the UK financial regulator, has stepped down from a senior role at Barclays after last month's announcement that he was taking leave because of "exhaustion and stress". António Horta-Osório, chief executive of Lloyds Banking Group, two years ago took a leave of absence on doctors' advice, returning in early 2012. Carsten Schloter, chief executive of Swisscom, Switzerland's biggest telecoms company, is presumed to have committed suicide in July, having talked publicly about the relentless demands of the job. The following month, Pierre Wauthier, chief financial officer of Zurich Insurance, committed suicide, blaming a difficult work relationship.

These events vary from deeply unpleasant for the individual affected to shocking and tragic for them and their friends, families and colleagues. They also bring to the surface how ill-prepared society is to deal with mental health, and highlight the lack of understanding of this widespread family of diseases – now among the world's most prevalent illnesses.

I am no expert – beyond my own first-hand knowledge of depression: I "came out" (tellingly, this is the term that tends to be used) in the 1990s when I agreed to be featured in publicity for a government mental health programme. I now chair a charity, MQ, which aims to become the leading fundraiser for focused research so badly needed in this field. But I know enough to know this is an area where business can and should also take a lead.

This is not because of the role of the workplace as an incubator of stress: there is no direct link between stress and mental illness, still less suicide. Many people thrive on stress – and almost all survive it. Stress can provoke an underlying predisposition to mental ill health, but one cannot elide the two. They are not two sides of the same coin.

Indeed, mental illness is an illness, just like hypertension. That may sound semantic but it is important. It helps sufferers counter the (understandable) impulse to think: "I must snap out of it." That will not lead them to good health, any more than it would for blood pressure. Recognising these illnesses as illnesses will help sufferers and those around them take them seriously.

The most common question I heard after revealing my condition was: "Should I come out?" My reply was "no". There is no virtue in doing so if it harms your life. We must work to make it acceptable – to reduce the number of people who feel they must hide, freeing them to understand their illness and seek treatment.

And this is why business leaders must take the lead. Many mentally unwell people refuse either to accept treatment or to discuss their illness for fear of impairing their careers. If chief executives make clear that they expect colleagues with such problems to come forward, that it will not harm their prospects and that their illness is like any other, it will help.

This would push at an open door. This year, with Gavin Barwell, a Conservative MP, I took the Mental Health (Discrimination) Bill through parliament. It went through with scarcely any negative

public reaction, building on the brave work of people such as Stephen Fry in describing their own illness.

But removing stigma goes only so far. We need better treatment. The clinical outlook for sufferers is less than satisfactory: drugs and psychological treatments work, but not for all people and not all the time. Suicide has become a global health crisis – we are living in an age where it is a leading cause of mortality among people aged 15-44. Disability and premature death because of mental ill-health are not caused only by societal issues; a big obstacle to progress is how little we understand of how the brain works.

But this, too, is changing. Genetic sequencing and MRI scanning allow us better insight into brain function and to spot patterns that indicate why some are unwell and others are not. The analysis of big data sets from such studies is the new frontier in the understanding of mental ill-health. MQ has been established to aid and abet this process.

Virtually everyone reading this will have been touched by mental ill-health, either personally or in their family. To anyone reading this in a position of authority in business – or indeed in any employing situation – I send the following plea. Please be aware that business has a vital role in creating widespread acceptance of mental ill-health as a "normal", so that tragic deaths such as those of Schloter and Wauthier become much rarer events.

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