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Depression in Corporate America:
An Integrated Care Approach
to Increase Productivity and Improve Outcomes

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FACULTY

Steven G. Avey, MS, RPh, is executive director of the Foundation for Managed Care Pharmacy (FMCP), the research, education, and philanthropic arm of the Academy of Managed Care Pharmacy (AMCP), headquartered in Alexandria, Virginia. FMCP initiates research projects involving managed care pharmacy, with an emphasis on health outcomes, pharmacoeconomics, and pharmacy benefit design. Avey became chief executive of FMCP in 1999, following several years of service to AMCP. After joining AMCP in 1992, he quickly became involved in committee activities; he was elected treasurer of AMCP in 1996 and AMCP president in 1997.

Avey received his BS degree and MS degree in pharmacy administration from the University of Utah College of Pharmacy. He has more than 25 years experience in pharmacy, with a diverse background in retail, long-term care, and management; for the last 14 years, his focus has been on managed care pharmacy. One of his more notable achievements in this arena was to design and establish a pharmacy benefit management (PBM) division for Smith's Food & Drug Centers, a 150-store chain in the western United States. He worked directly with employers to design and implement their prescription drug programs.

Prior to his position at FMCP, Avey spent 4 years at Prospective Health Inc., serving as vice president of operations and building its PBM business from the ground floor. Under his direction, the operation grew from a start-up to an organization that processed 30 million pharmacy claims in 1999.

Alberto M. Colombi, MD, MPH, has been corporate medical director of PPG Industries, Inc., Pittsburgh, Pennsylvania, since 1995. In this capacity, he has devoted the past few years to making the case for integrated (occupational and nonoccupational) health and productivity management.

A native of Milan, Italy, Colombi earned his doctor of medicine and occupational health degrees from the University of Milan and a master's degree in public health from the University of Pittsburgh. In 2003, Colombi was instrumental in PPG receiving the Occupational and Environmental Health Foundation and the American College of Occupational and Environmental Medicine Innovation in Occupational and Environmental Health Award for the project titled "Depression in Primary Care: Worksite Intervention and Coordination of Care."

Kathryn M. Rost, PhD, is a senior health services researcher, focusing on behavioral health care, and a professor at the School of Medicine, University of Colorado Health Sciences Center. She serves on the steering committee for the MacArthur Initiative on Depression and Primary Care and developed the Depression Calculator, a tool that calculates for employers the impact of the quality of care for depression on employee productivity and absenteeism.

Rost is the principal investigator on 2 studies funded by the National Institute of Mental Health (NIMH). The first, titled "Quality Improvement for Depression," looks at the long-term impact of 4 primary care interventions to improve the treatment of depression as well as to estimate the effects of high-quality primary care on long-term disability. The second, titled "Depression Treatment Quality Indicators for Employer Use," is a 5-year NIMH Independent Scientist Career Development Award; Rost will develop evaluative methods to demonstrate for employers the impact of depression care quality improvement initiatives on employer costs. She is also coinvestigator on a Robert Wood Johnson Foundation grant to estimate the return on investment for employers who focus on improved primary care depression treatment and to encourage employer purchasers of health care to partner with health plans dedicated to providing higher-quality depression care.

Rost has written more than 100 peer-reviewed articles, given more than 80 presentations on her research, and has led or participated in 38 funded research grants. She received her doctoral degree in the behavioral sciences from Johns Hopkins University School of Hygiene and Public Health and a master's degree in social work from Washington University, St. Louis, Missouri.

Supplement Policy Statement

Standards for Supplements to the *Journal of Managed Care Pharmacy*

Sarah Hudson Scholle, DrPH, MPH, is assistant vice president for research and analysis for the National Committee for Quality Assurance (NCQA), Washington, DC, where she is responsible for overseeing the development and implementation of the research agenda. She is on leave from her position as associate professor of psychiatry at the University of Pittsburgh.

Scholle's research interests focus on assessing quality of health care and understanding consumer perceptions and preferences in health care, particularly for women and families. At NCQA, she is principal investigator of a newly funded study to identify and test the feasibility of methods to identify high-quality depression care by primary care providers that could be used in pay-for-performance programs. In addition, she is principal investigator on a study examining the feasibility of reporting Medicare quality data by race/ethnicity and is coinvestigator on a related study to determine the potential for addressing culturally and linguistically appropriate services in health plan accreditation and quality measurement. Both of these studies are funded by the California Endowments.

She is also project director for a series of studies related to the measurement of physician office systems, funded by the Robert Wood Johnson Foundation. These efforts will demonstrate the reliability and validity of the Practice Systems Assessment Survey for assessing physician office systems and examine the relationship of physician office systems to quality of care. Scholle also represents NCQA on the Agency for Healthcare Research and Quality's continuing efforts related to the Consumer Assessment of Health Plans Survey.

Scholle has written more than 40 articles in major health services and women's health journals on topics including patterns and quality of care, managed care enrollment, primary care, and patient satisfaction. She received her bachelor's degree in history and master's degree in public health from Yale University and her doctorate in public health from the Johns Hopkins University School of Hygiene and Public Health.

Sean Sullivan, JD, is cofounder, president, and CEO of the Institute for Health and Productivity Management, Scottsdale, Arizona. The Institute works with all the stakeholders in health care—purchasers, providers, and health plans—to create greater value for employers as measured by improved employee health and performance in the workplace.

Sullivan previously was president and CEO of the National Business Coalition on Health. During that time, its membership grew to more than 100 employer coalitions in 40 states, representing 8,000 employers, and became the leader of the employer-driven movement toward a value-based health care system. Prior to that, he spent 10 years as a Washington-based policy analyst, as a fellow at the American Enterprise Institute, and as executive vice president of New Directions for Policy at AEI.

He is the author of articles and monographs on health policy and health care market trends and has testified on these subjects before Congress and state legislatures. Sullivan is on the editorial boards of *Managed Health Care*, *Disease Management*, and *Managed Health Care Executive* magazines and is editor of the Institute's quarterly publication, *Health & Productivity Management*. He also serves on the Board of Trustees of the Foundation for Managed Care Pharmacy and on the Advisory Board of the Center for Practical Health Reform. Sullivan speaks nationally and internationally on the emergence of the health and productivity model as a key to human capital management for employers in the 21st century. He has a degree in economics from Harvard and a law degree from Stanford.

Supplements to the *Journal of Managed Care Pharmacy* are intended to support medical education and research in areas of clinical practice, health care quality improvement, or efficient administration and delivery of health benefits. The following standards are applied to all JMCP supplements to assure quality and assist readers in evaluating potential bias and determining alternate explanations for findings and results.

1. Disclose the principal sources of funding in a manner that permits easy recognition by the reader.
2. Disclose the existence of all potential conflicts of interest among supplement contributors, including financial or personal bias.
3. Describe all drugs by generic name unless the use of the brand name is necessary to reduce the opportunity for confusion among readers.
4. Strive to report subjects of current interest to managed care pharmacists and other managed care professionals.
5. Seek and publish content that does not duplicate content in the *Journal of Managed Care Pharmacy*.
6. Subject all supplements to expert peer review.

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CE Submission Instructions and Posttest Worksheet

Target Audience

Pharmacists working in all settings and other health care professionals

Learning Objectives

Upon completion of this program, participants will be better able to

1. recognize the importance and urgency of correctly diagnosing depression and related disorders and treating patients early and aggressively until they achieve treatment to remission;
2. understand the impact of depression on worker productivity, including absenteeism and presenteeism;
3. identify how employers can be proactive in decreasing the stigma of depression and associated diseases, thereby increasing awareness and diagnoses, to improve treatment outcomes, productivity, and job satisfaction;
4. describe how NCQA designs and monitors HEDIS measures for antidepressant medication management and gain an understanding of the implications of instituting best practices to improve HEDIS scores to employers, providers, and health plans;
5. discuss the direct and indirect value of depression pharmacotherapy and consider how the cost/benefit ratio can contribute to overall improvements in workforce health; and
6. understand the clinical and economic implications associated with treatment selection and integration of care across stakeholders.

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Challenges Facing Employers in the Treatment of Depression

STEVEN G. AVEY, MS, RPh

ABSTRACT

OBJECTIVE: To review the challenges of treating depression in the workplace in the environment of increased health care costs.

SUMMARY: The cost of health care is on the rise, and employers and employees are at odds over who will share the burden of these costs. The focus of cost containment has been to minimize drug cost; however, employers need to be aware of indirect costs of medical illness. Due to its prevalence and rate of undertreatment, depression is one of the main disease states that employers should target in their disease management efforts.

CONCLUSION: In order to treat depression appropriately, we must consider the social stigma, treatment barriers, and health care structure that exist to treat depression. Additional outcomes data is needed to demonstrate to employers, the largest purchasers of health care, the benefit of managing depression in the workplace.

KEYWORDS: Depression, Employers, Treatment

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One of the greatest challenges among employees and employers in today's economic climate is the ability to pay for health care. Between 1991 and 2002, annual national expenditures on health care nearly doubled from \$762 billion to \$1.6 trillion.¹ The cost of health care has risen in all sectors, but there has been a dramatic increase in the percentage of spending for prescription drugs compared with hospital and physician services over the decade.² There is an urgent need to determine the value being obtained for this increase in expenditures while maintaining the quality of health care.

Health Care and Employers

Employers are keenly aware of this rise in health care expenditures because they are one of the major payers for health care. In the face of double-digit inflation, employers are transferring larger fractions of the cost, especially medication costs, to their employees. This trend can unfortunately result in increased costs in other areas, thus only shifting the cost.

The Institute of Medicine has reported that, in the way we deliver health care, there are areas for improvement.³ For example, we do not offer preventive care for 50% of Americans, and the care that we do deliver is fragmented.⁴ Employers must recognize the cost savings of providing preventive care versus the cost of untreated illnesses.

Medical errors, the rise in incidence and prevalence of certain diseases, and new technologies for detection and treatment of illnesses for our aging population are also sources of rising cost to both the health care provider and patients alike. In addition to quality care, patients expect that health care providers work in a coordinated fashion to optimize treatment. Unfortunately, this does not occur in many instances.

Despite these difficulties and the rising cost of pharmaceuticals, there have been significant improvements in the treatment of many major disease states. Medications, in general, have been quite effective in improving the lives of patients with HIV, cancer, and heart disease.⁵ For example, between 1980 and 2000, there has been a one-third decrease in the number of deaths per 100,000 population due to heart disease. The question remains as to whether we are able to achieve reductions in morbidity and acute care costs while increasing productivity and quality of life for patients with mental illnesses such as depression.

Depression

One area in which there is potential room for improvement in cost savings to the employer and benefit to the employee is in the treatment of depression. Depression is one of the most debilitating diseases that have significant effects on patients, family members, and society. Major depression is currently the leading cause of disability worldwide.⁶ Individuals with depression also have increased risk of morbidity and mortality resulting from psychosocial distress, comorbid diseases, loss of productivity/

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income, and suicide.⁷ According to the National Institute of Mental Health, depression affects 18.8 million Americans, or about 10% of the adult population.⁸ The lifetime prevalence in the community sample is 16.2% according to the recent National Comorbidity Survey—Replication (NCS-R).⁹

Treatment Options

The treatment of depression has changed significantly from the days of Freudian philosophy when mental illnesses were frequently attributed to nonbiological etiologies.¹⁰ Older treatments such as insulin and electroconvulsive therapy were commonly used to treat many mental health disorders.¹⁰ When the neurochemical basis for depression was discovered, drugs such as monoamine oxidase inhibitors and tricyclic antidepressants were considered the gold standard for the treatment of depression.¹¹ Unfortunately, these agents were associated with problems such as cardiac arrhythmias, significant sedation, anticholinergic effects, and orthostatic hypotension.

In the 1980s, the first drug in a class of selective serotonin reuptake inhibitors (SSRI) was discovered and, again, dramatically changed the way we treated depression. These drugs not only treated the depressive symptoms but also were significantly better tolerated by patients. Of course, SSRIs are not without their own side effects, and patients must still be monitored for symptoms such as sedation, agitation, headache, gastrointestinal problems, and sexual dysfunction.¹¹

Challenges to Treatment

Treatment of depression, however, is not solely dependent upon choosing the right medication for a patient. There are many challenges that exist in the treatment of mental illnesses, including depression. Patients and providers alike must overcome the stigma of the disease and the antiquated views that suggest that depression is simply a state of mind. Beyond the difficulty of identifying patients with depression, getting the patient to agree to receive treatment is a significant hurdle in itself. In addition, it is difficult to convince patients to continue with their treatment when improvement is not usually seen until after 4 to 6 weeks of therapy. Patients are often faced with short-term side effects without much improvement in their mood, thus resulting in discontinuation of the medication.

Further, recent research indicates that the best method for treating depression is a combination of psychotherapy and medications.^{12,13} Providing patients with access to an adequate trial of psychotherapy is perhaps even more challenging than acquiring medications and, again, impedes the process of providing optimal therapy for the disease. Finally, we have little outcome data pertaining to treatment options for depression. More research is still needed to determine the impact of depression on absenteeism, productivity, and the overall bottom line for payers. Employers are not willing to spend more dollars without reasonable expectation of an adequate return on their investment. Payers would benefit

from data that demonstrate the value of spending more money on treatment of depression and how to spend the money in ways that make both clinical and economic sense.

Conclusion

Despite these gaps and barriers, we have opportunities, in terms of access, quality, and cost, to take advantage of newly emerging models of care to improve depression treatment. Emerging evidence has shown that quality care can prevent relapse and integrated care models can improve outcomes for patients and health care systems. Minimizing costs while improving the health and quality of life for employees remains a significant challenge for most employers. We need to have more employers who are willing to look at the problem globally instead of simply shifting cost to their employees.

DISCLOSURES

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Improving Depression Treatment by Integrated Care

KATHRYN M. ROST, PhD

ABSTRACT

OBJECTIVE: To identify the clinical and economic implications of depression in the workplace and review how integrated care models can improve overall patient outcomes.

SUMMARY: Depression is a significant financial burden to the employer due to lost days of work and decreased productivity. Employers are demanding return on the investment for their increasing health care expenditures. The cost of depression to employers may be contained by delivering care using integrated models that leverage primary care provider treatment with care management and mental health consultation.

CONCLUSION: There is a need to reduce silos in the organization and financing of mental health care to prevent cost shifting that provides no benefit to patients, payers or providers. Poor mental health care will likely lead to a rise in absenteeism and presenteeism.

KEYWORDS: Depression, Integrated care, Employer, Absenteeism, Presenteeism, Productivity

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In order to understand how we can improve the treatment of depression, it is useful to assess the problem from different perspectives. We know much about the impact of depression and its treatment from the patient and provider perspectives, but we rarely consider the ramifications of the disease on the purchaser. Purchasers have considerably more leverage than they currently exert in the quality of care health systems deliver. In particular, purchasers may be able to encourage health systems to provide better quality care by advocating for the adoption of integrated care models that are emerging for the treatment of depression and other chronic diseases. Before purchasers can advocate for these models, they must have evidence of the clinical and economic value these models produce.

Depression in the Workplace

The private employer insures about 60% of Americans and is a major purchaser of health care for most working Americans.¹ Because 1 out of every 10 Americans suffer from depression annually, the likelihood of a coworker being affected by depression in the workplace is high.² In fact, absenteeism from depression is estimated to be about 1.6 days of work lost per employee per month which is equivalent to about 1,500 lost days per month for a company with 1,000 employees.³ Absenteeism results in increased workload for other employees, reduced output, and lost income from hiring temporary workers.

In addition, reduced productivity at work, or "presenteeism," is a significant but underrecognized concern for employers. It has been reported that employees who suffer from depression work at about 70% of their optimal productivity.⁴⁻⁷ Also, 62% of employees report decreased mental functioning that ultimately affects their output and time management.

In 2000, depression cost employers an estimated \$51.5 billion.⁸ Approximately 70% of that cost was due to absenteeism while the rest was attributed to productivity loss. This is a significant financial problem for employers, who are already paying \$26.1 billion for depression treatment.⁸ Employers are faced with a complex issue—increased numbers of employees being diagnosed with depression, increased rates of treatment for depression, and increases in pharmaceutical costs. Employers are seeking newer and better solutions to this problem, ones that can demonstrate sufficient return on investment to warrant adoption.

Integrated Care Models

There are a number of potential solutions to improve the clinical and economic outcomes of depression treatment. Integrated care models that are currently available focus on 3 aspects of care that are essential for the treatment of depression. The first step, using a screening tool, is to identify patients who may have depression. As we know, the majority of patients who receive treatment for depression do so from their primary care physician (PCP).⁹ The

FIGURE 1 Initial Visit Modular Flow

reason may be partly because managed care organizations are shifting the burden of depression and anxiety treatment away from mental health specialists to PCPs.¹⁰ In addition, to reduce cost, many managed behavioral health care organizations limit the number of specialty care visits a depressed patient can make.^{11,12} Even in short PCP visits, simple screening tools for depression can aid the PCP in recognizing patients who may be at risk for depression or have clinically definable disease.

In our initial program designed 10 years ago, trained nurses identified patients with depression and provided care management to them over 2 years using a decision-tree care plan (Figure 1). Nurses assessed disease severity, educated patients about treatment options, and monitored their progress over time. In today's models, care managers are also supervised by either a psychiatrist or a pharmacist.

While pharmacists can provide patient education and monitoring, they also have unique expertise in providing alternatives for drugs that are intolerable or clinically ineffective. In the future, utilization of pharmacists may be the most cost-effective solution for managing patients with complex medication regimens in the managed care setting. In addition, the shortage of psychiatrists may significantly increase the demand for advanced pharmacy practitioners to fill these care management needs.

Impact of Model

Integrated care models will in all likelihood increase the number of patients who are identified with depression and begin treatment. It has been estimated that 50% of all depressed patients in the primary care setting remain undiagnosed.¹³ In addition, the education integrated care models provide will result in greater patient understanding about the importance of treatment completion, which will, in turn, curb early discontinuation rates. More frequent contacts with care managers along with counseling about medication side effects should result in increased compliance. Patients frequently list intolerable side effects as the primary reason for discontinuing their treatment prematurely.

A national survey found that, in patients with probable anxiety or depressive disorder, only about 30% received some form of appropriate treatment.¹⁴ Although identification of patients is an important first step, the field also needs to improve the treatment patients receive once they are identified. The process of ensuring that patients actually fill a prescription and then take the medication appropriately is complex, and we must find ways to bridge gaps in the process. Even after patients initiate therapy, there is still room for potential complications. Care managers can facilitate appropriate medication switches and encourage patients to continue treatment when the initial medication fails. They can also recommend

dosage increases, if needed, to optimize therapy. Additionally, they can simply encourage patients to continue with therapy during the time it can take for antidepressant medications to take full effect. Often, patients are tempted to discontinue their medications during this time because of intolerable side effects while experiencing little clinical benefit.

Outcomes Data

We evaluated the clinical and economic outcomes of an integrated care model to demonstrate its value to potential purchasers. Over 2 years, about 74% of patients who received our intervention were in probable remission compared with only 40% of patients who received usual care. In addition to improving emotional role functioning to close to population norms, the model had a significant but smaller impact on physical functioning, possibly due to medical comorbidities commonly associated with depression. The cost of the program is \$130 per year with an additional \$134 per year for incremental treatment. Accounting for inflation for year 2005, the total cost of the model was estimated to be \$297 per year per treated depressed employee.

We recognized that patients improved clinically, but what other benefits accrued and to whom? Over 2 years, the intervention decreased the number of hours of work lost in the previous month from ~20 hours to 4 hours, resulting in an average reduction of 12.3 days of absenteeism, with an annual value of \$648 per participating employee (Figure 2). Over 2 years, the intervention also improved productivity at work in the previous 2 weeks, resulting in an average increase of 8.2%, with an annual value of \$1,982 per participating employee (Figure 3).

It is possible for employers to calculate their return on investment for their depression care program based on a business case model that I have developed. The return on investment is dependent upon the ratio of annual savings with quality depression care to the cost of the depression care program and the additional treatment it stimulates. Return on investment is dependent upon various factors such as hourly wage, sick leave benefit, likelihood of increased revenue with increased productivity, likelihood of hiring temps to cover absent employees, the company's contribution to health plan premium, and the prevalence of depression in the specific employee population. The return on investment calculation can be done for any company, health plan, or institution and is available at <http://www.depression-primarycare.org/organizations/employers/calculator>.

Conclusion

Primary care providers are faced with a difficult task of addressing a variety of health issues during every visit. Integrated care models such as the one presented here can be the part of the solution to optimize clinical and economic outcomes in the primary care treatment of depression.

FIGURE 2 Intervention Effects on Absenteeism

Average 12.3 day reduction over 2 years at an annual economic value of \$648 per depressed participant.

FIGURE 3 Intervention Effects on Productivity

Average 8.2% increase over 2 years at an annual economic value of \$1,982 per depressed participant.

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NCQA Behavioral Health Measurement Efforts

SARAH HUDSON SCHOLLE, DrPH, MPH

ABSTRACT

OBJECTIVE: To review the role of the National Committee for Quality Assurance (NCQA) in ensuring the quality of care in the managed care setting and identify novel strategies to improve performance rates for Health Plan Employer Data and Information Set (HEDIS) measures, particularly in the area of depression.

SUMMARY: NCQA, by regulating HEDIS measures, sets the standards by which managed care organizations evaluate their performance in providing care for their enrollees. The medication management measure for depression evaluates practitioner contacts and acute and continuation phase treatments for persons treated with an antidepressant. Despite increased detection and management of patients with depression, there is still room for improvement in HEDIS performance rates for this chronic disease.

CONCLUSION: NCQA hopes to improve collaboration among managed care organizations and managed behavioral health organizations. In addition, NCQA regularly reevaluates the HEDIS measures using input from panels of experts. Incentive programs for providers who deliver quality care may also help to improve HEDIS performance rates for depression. Research is under way to evaluate the feasibility and return on investment for pay-for-performance programs in depression.

KEYWORDS: NCQA, HEDIS, Depression, Antidepressant, Quality improvement

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Organizations such as the National Committee on Quality Assurance (NCQA) and Leapfrog are setting the standards on how to measure quality. For managed care organizations, NCQA sets the standards by which health care delivery is evaluated through its accreditation programs. NCQA is a private, nonprofit organization that strives to improve the quality of health care through measurement, transparency, and accountability. The set of measurement standards, Health Plan Employer Data and Information Set (HEDIS), is developed with input from various groups including stakeholders and experts. The Committee on Performance Measurement includes national experts who determine the measures that are appropriate for HEDIS. The Measurement Advisory Panels are composed of experts for each disease state, and they decide on the specific measures based on relevance, scientific evidence, and feasibility.

HEDIS Measures for Depression

One of the HEDIS measures that evaluates the effectiveness of care is the antidepressant medication management measure (Table 1).¹ This measure is designed to evaluate the optimal number of practitioner contacts and the duration of acute phase and continuation phase treatment for persons with new episodes of depression treated with antidepressant medications. According to the recent 2004 HEDIS performance report for the commercial health plans, the average performance on acute phase treatment measure is around 60% (Table 2).² Performance for the continuation

TABLE 1 Effectiveness of Care: Antidepressant Medication Management

Optimal practitioner contacts

At least 3 follow-up contacts with primary care physician or mental health coded with mental health diagnosis during 12-week acute phase

Effective acute phase treatment

12 weeks of filled prescriptions for antidepressant drug

Effective continuation phase treatment

6 months of filled prescriptions for antidepressant drug

TABLE 2 Behavioral Health Performance, HEDIS 2004^{1*}

	Commercial	Medicaid	Medicare
Antidepressant medication management			
Acute phase	60.7	46.2	53.3
Continuation phase	44.1	29.3	39.2
Physician contacts	20.3	18.0	10.5
Follow-up after mental health hospitalization			
Within 7 days	54.4	37.7	38.8
Within 30 days	74.4	56.4	60.3

*Percent performance by health plans.

HEDIS=Health Plan Employer Data and Information Set.

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FIGURE 1 Comparing Trends in Behavioral and Nonbehavioral HEDIS Measures

AMM=antidepressant medication management; HEDIS=Health Plan Employer Data and Information Set.

phase and provider contacts measures is not as high as the acute phase treatment, and commercial plans do tend to perform better than the Medicaid and Medicare plans on all 3 of the measures. A similar pattern is seen for follow-up rate after mental health hospitalization. If we compare these performance measures to those for non-mental health conditions, we can see that there is still room for improvement (Figure 1). In 2003, the average proportion of patients who received beta-blockers after a heart attack was high, with a rate of more than 94%.² Performance rates for other chronic conditions such as asthma and diabetes management are also high compared with those for mental health measures. There has been little improvement over the past 5 years in any of the antidepressant medication management or follow-up measures. The question remains as to how we can improve our performance for mental health disorders as we have for non-mental health conditions.

Although the measures for antidepressant medication management are not perfect, there are some advantages and good rationale for using them to measure the quality of care for patients with depression. These measures ensure that we identify patients with a new episode of depression who should be treated for a specific length of time.³ One of the aims for NCQA is to encourage collaboration among the managed care organizations and managed behavioral health organizations for the purposes of sharing data.

There are several criticisms to using these measures, including

the concern that the denominator, or the number of patients identified with new episodes of depression, is too low and does not reflect actual incidence rates in the population.^{4,5} A recent improvement was the inclusion of telephone contacts into the optimal provider contacts measure. Of course, plans must be able to track telephone contacts in order to incorporate this number. Other problems that plans still face are the use of samples in primary care practice and delays in diagnosis, mainly attributable to stigmatization of the illness in the community. NCQA performs regular reviews of the depression measures in conjunction with its Behavioral Health Measurement Advisory Panel.

Measuring and Encouraging Accountability and Quality of Care

A new direction of NCQA is to incorporate measurement and accountability into provider measurement and reward programs. Programs such as Bridges to Excellence on the East coast and pay-for-performance programs in California aim to measure the quality of care given by providers and to reward them (either the providers or medical groups) for good performance.

There are 2 ways in which provider quality is being measured in pay-for-performance programs. In the first approach, NCQA integrates administrative data received from the health plans.⁶ The health plans receive a performance report, and the health plans reward those groups based upon high performance rates. Another approach is to use NCQA's recognition programs where physi-

cians ask to be recognized for the quality of their care.⁷ NCQA currently sponsors 3 recognition programs in diabetes, cardiovascular disease/stroke, and practice systems.

In the content area of practice systems, physicians conduct medical record reviews or provide information about their practice setting. NCQA conducts surveys and random audits to determine whether the physician or the practice group merits recognition. Again, HEDIS measures are utilized, and the recognition programs are conducted in partnership with national organizations such as the American Heart Association and the American Diabetes Association. Of course, these programs are strictly voluntary and only those physicians or practice groups who meet the recognition thresholds are publicly reported.

There are a growing number of organizations that are using these recognition programs to recognize physicians. For example, an employer consortium, the Bridges to Excellence program, pays rewards to providers based on NCQA's recognition programs.⁸ Recently, NCQA received a grant from the Robert Wood Johnson Foundation to identify and test the feasibility of performance measures for depression that would be suitable for pay for performance programs.⁹

Conclusion

The identification and treatment of depression has improved with education, care management programs, and better utilization of antidepressant medications. Future directions for NCQA with these projects include identifying potential indicators for depression that assess the structure and process of depression care. We plan to incorporate outcome measures in order to determine whether

patients improve clinically. We hope to meet the goals of NCQA in developing measures to improve quality of care and increase accountability at all levels of health care.

DISCLOSURES

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Promoting Health and Productivity for Depressed Patients in the Workplace

SEAN SULLIVAN, JD

ABSTRACT

OBJECTIVE: To discuss the impact of major disease states, including depression, in the loss of productivity in the workplace and how integration of health care can decrease cost to employers.

SUMMARY: The majority of costs associated with depressive illness can be traced to lost productivity, and the employer, therefore, bears most of the economic burden. Efforts to improve employee health and productivity have been hampered by the compartmentalization of medical costs, pharmacy costs, behavioral health costs, and productivity measures. This situation can be rectified by “busting” these silos and promoting a reintegration of prospective costs and parties.

Health risk assessments enable employers to identify illnesses that are suitable targets for integrated health and productivity management programs. In the case of depression, employers can act proactively to identify employees at risk, working to minimize risk factors such as stress before these individuals become heavy utilizers of company resources. For employees who are currently depressed, recent research evidence has demonstrated that pharmacotherapy can have a dramatic and positive effect on lost productivity, absenteeism, and presenteeism. The selection of antidepressants and subsequent follow-up must be improved, however, if the benefits of pharmacotherapy are to be optimized.

CONCLUSION: Understanding the linkage of disease management and productivity in the workplace can result in dramatic decreases in absenteeism and presenteeism and increased cost savings to the employers.

KEYWORDS: Health and productivity management, HPM, Depression

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Depression is one of the leading causes of disability in the United States, resulting in estimated medical costs of \$26.1 billion annually.¹ Indirect costs are even higher, with more than \$50 billion attributed to lost productivity and absenteeism among depressed employees.² The ultimate payer of these costs is the employer *not* the health plan since the majority of these costs are not incurred within the health care systems but in the workplace. Health care expenditures represent the fastest growing costs among employee benefits, but lost labor costs are much greater. In the long run, therefore, the primary objective of managing depression should be to create a new value proposition by examining the impact of health status—and cost—upon work productivity.

The relationship of health status to employee productivity is vital to understand. In the coming years, the workforce will actually be shrinking so employers will need to keep their employees healthy if productivity is to be optimized. If depressed patients continue to wind up on disability, the predicted decline in skilled, middle-aged employees will result in a serious deficit in the workforce, making it very difficult to sustain a competitive enterprise.

Integration of Health Management

In order to better appreciate the impact of health upon productivity, we will need to stop thinking of people (or employees) as diagnoses or disease entities. A total health measure must be created and quantified, and the focus has now shifted to measuring functionality. This can only be achieved by integrating several key activities (Table 1). For example, a thorough health risk assessment is essential in order to identify potential (or existing, but as yet undetected) cases of disease and ultimately avoid some or all of the direct and indirect costs that will eventually occur if no intervention is implemented. A health risk assessment also enables employers and health plans to target chronic illnesses for wellness and promotion activities to reduce the total disease burden. These programs may not be effective for all conditions so thought must be given to prioritizing disease states that may actually be significantly influenced by decreased risk (e.g., obesity, diabetes, and depression).

TABLE 1 Integrated Health Management Requires Linking Several Key Activities

- Health risk assessment
- Wellness and health promotion
- Disease prevention
- Disease management
- Disability management
- Health and productivity management requires targeting these activities to produce the biggest outcomes

After prevention, the focus shifts to disease management since we will never be able to eradicate all illnesses. The prevalence and severity of some chronic conditions will almost certainly rise in the coming years in spite of all efforts, as the workforce continues to age. The next link in this integrated chain then becomes disability management. While most companies continue to regard disease management and disability management as 2 different entities with distinct data sets and processes, they should really be analyzed and handled together. Fortunately, this situation is improving in the corporate world as companies such as United Technology begin to integrate these activities.

The final piece of integrated health care management can also be viewed as the sum total of the process. It is called "health and productivity management" (HPM), and it involves the integration of data and services specific to all other activities. HPM requires the deconstruction of these other "silos" or "stovepipes" so that corporations can analyze outcomes from a broader perspective than is currently possible. It is only through this level of integration that one can rapidly and accurately quantify medical cost offsets, decreased hospitalizations, and, most importantly, improved work performance.

The integration and reconfiguration of employee health and productivity has also led to the identification of the importance of organizational health and culture. For many employers, this is a foreign term but it can have a major influence upon overall health. The term "organizational health and culture" represents an enhanced understanding of how the work environment can impact health status and functioning. Organizational health and culture is embodied in the apparent values of the workplace, the way employees interact, the means by which information is transmitted, and how work is ultimately accomplished.

The success of health promotion and disease management programs will depend essentially on the culture in which these activities take place. For example, one needs to ascertain if upper management genuinely supports HPM activities and whether or not they are truly willing to invest in employees' health. For the future, it has become clear that employers must believe that employees are the corporation's greatest asset and invest in HPM accordingly if they are to remain a viable enterprise.

Specific Steps

There are many steps involved in the integration of these activities. Busting the silos is a requisite if data is to be shared and used effectively. In the current situation, departmental incentives are typically to shift costs from one silo to the next (e.g., move employees from disability to workers compensation, turning a medical claim into a disability claim), which is of no economic benefit to the company overall. Once data is shared, it is then viewed within the context of the company's own demographics. Cost structures, risk profiles, and other demographics will vary greatly among corporations and in different regions of the country. A company's specific demographics will often dictate

TABLE 2 Leading Health Reasons for Absenteeism

Musculoskeletal	(18)
Mental health	(13)
Pregnancy	(10)

Source: IHPM Corporate Survey, May 2002.

TABLE 3 Leading Health Reasons for Presenteeism

Mental health	(16)
Musculoskeletal	(14)
Respiratory	(13)
Gastrointestinal	(9)
Migraine	(6)

Source: IHPM Corporate Survey, May 2002.

where in the HPM system the health dollars should be invested (e.g., health promotion versus disease management).

A different philosophical approach may also be necessary to integrate disease prevention with disease management. For instance, some health policy experts believe that the previous focus upon heavy utilizers in a health care system is misguided. While it is true that 20% of a beneficiary pool will be responsible for generating roughly 80% of the medical costs, the real challenge is to identify individuals in the remaining 80% of the population who are at increased risk for becoming heavy utilizers.³ The goal is to keep these employees healthy well into the future. If the entire effort is directed toward controlling medical costs, the system, the employer, and the company are doomed to failure. The current demographics are not in the employers' favor. Technology and associated costs are working against them as well.

A final component to consider is how the return on these investments will be measured. Conservative estimates suggest that nonmedical costs are at least twice as high as direct medical expenditures.⁴ Historically, employers have only been concerned with the latter. If and when mechanisms are implemented to measure the success of HPM activities, it will become evident that the lost productivity costs should be the biggest target for employer interventions. Only then will employers genuinely begin to make employee health an explicit part of their business.

Employers' Perspective

In an effort to characterize the attitudes and beliefs of administrators, the Institute for Health and Productivity Management conducted a cross-sectional survey in 2002 of corporate medical directors, benefits directors, human resources directors, and associated wellness personnel. Their survey was designed to quantify the perceived medical reasons underlying employee absenteeism and lost productivity (Table 2). The results appeared

FIGURE 1 Direct and Indirect Costs of Major Illness in the Workplace

to reflect a wide variety of corporate backgrounds and experiences. The corporate survey revealed, for instance, that musculoskeletal conditions were believed to be the leading cause of absenteeism. This may be due to antiquated perceptions about the amount of physical labor currently performed in the workplace, but it may also reflect an increase in the prevalence of osteoarthritis, as one may come to expect from an aging population. Mental health was the #2 reason listed for absenteeism and pregnancy was third, though that is generally considered to be a short-term disability as opposed to a chronic illness. Other conditions that were also identified with high absenteeism rates were respiratory conditions (e.g., allergies, chronic obstructive pulmonary disease, and asthma), gastrointestinal (GI) problems, and cardiovascular illness.

The other question on the survey asked participants to rank the leading causes for lost productivity or “presenteeism,” as it is now commonly known. The response of administrators provided additional testimony to the enormous impact that depression has on the workplace (Table 3). Presenteeism is believed to be a much bigger economic factor than absenteeism, in general, and in the survey, mental health was the leading reason listed for decreased performance. Depression, specifically, was commonly cited, suggesting that depressed employees will often show up for work but they’re “not really there,” or at least are not fully productive. Musculoskeletal problems were perceived to be a major cause of absenteeism as well, followed once more by respiratory and GI problems. It is interesting to note that migraine headaches appear on this list as well. The medical literature has shown that a relatively small expenditure for migraine treatment can have a tremendous return on investment for the employer.⁵

The relationship of indirect costs to direct costs can vary

depending upon the chronic condition in question. In the early 1990s, researchers began comparing these relative costs for disease states and this preliminary data suggests indirect costs (i.e., lost productivity) are the primary cost factor for migraine headaches, arthritis, and depression (Figure 1).⁶ In recent times, the methods for measuring presenteeism have improved substantially, and the medical community is beginning to appreciate just how large the impact of depression is on this aspect of work performance. One can anticipate that this economic factor will only gain importance as additional research is devoted to this topic.

Yet another area that researchers have only begun to unravel is the impact of pharmaceuticals upon productivity. As previously mentioned, depression is widely recognized as a major cause of disability. The good news is that medications can have a very favorable—and measurable—effect on worker productivity.⁷ Improvements seen with antidepressants actually appear to be much greater than with medical treatments used to manage anxiety, migraine headaches, and hypertension (Figure 2).⁷ Once more, it is hoped that contemporary research methods will be employed in the near future to improve our understanding of this issue.

Conclusion

Depression is a big cost factor for employers, but it also represents a big cost-saving opportunity. In the developed world, depression is viewed as a leading cause of disability, and its influence upon presenteeism is particularly profound. With a combination of pharmacotherapy and psychotherapy, depression is eminently treatable but oftentimes goes undiagnosed, untreated, or subopti-

FIGURE 2 Pharmaceuticals Improve Productivity

Source: Berndt ER.⁷

mally treated, and the associated costs become unnecessarily high. Integrated care models can result in substantial cost savings and a much more productive workforce.

DISCLOSURES

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Depression Management in the Workplace: A Case Study

ALBERTO M. COLOMBI, MD, MPH

ABSTRACT

OBJECTIVE: To review a case of a depression management program at PPG Industries with the potential to improve outcomes on functioning and productivity in the workplace.

SUMMARY: The need for major improvements in depression management has been well established. While most in the corporate world are aware of these deficiencies, the perception is that this fragmented system is difficult to change. PPG Industries, a medium-sized, Fortune 500 company manufacturing paints, stains, and sealants, has launched a successful and comprehensive program in the workplace that has improved outcomes for depressed employees.

The PPG approach is practical, addressing each step in the process one at a time. This process began by establishing a close working relationship between all entities responsible for employee health, many of which are currently carved out. This enabled the company to have a comprehensive view of their depressed population and to examine their functional outcomes as well. In an effort to help identify depressed employees, the company educated their physicians and care managers and launched a confidential Web site to reduce mental health stigma and aid in employee screening and education. A multidisciplinary team was then assembled to facilitate the treatment of these patients. All of these steps were measurable, and the preliminary results of this process are summarized.

CONCLUSION: A disease management program that incorporates a multifaceted, collaborative approach to treat depression is feasible and may improve care and decrease cost to employers.

KEYWORDS: Depression, PPG, Disease management, Antidepressant utilization, Primary care

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Depression is widely acknowledged in the corporate world as a topic worthy of much attention.^{1,2} Most of us are aware that improvements are desperately needed in the way we approach depressed employees, but few of us sincerely believe we can do anything about it. I strongly believe that it is possible to change this situation, and I would like to share our experience at PPG Industries with you. It may not be an entirely scientific approach, but it is a practical one and should be thought of as more of a cultural anthropology endeavor than a bioscientific experiment.

Embracing Change

The first challenge in improving depression management in the workplace is to try to change the relationships between all stakeholders—patients, providers, pharmacists, psychiatrists, medical practices, plan purchasers, and data managers. Many aspects of care are carved out these days, but we need to all get together and center on the patient's well-being, focusing on an improved continuum of care. Historically, we all have looked at the situation from our own perspectives and, from an employer's vantage point, cutting costs or services has seemed the most logical approach. However, the quality of care often suffers when we approach the situation in this manner. And bad care and bad performance is really the most expensive and wasteful solution.

So the first step is to bring all the different players to the table to reconstitute the flow of information. We need to have the right information at the right time in the right place when it is needed. Sharing and reintegrating the data among all the players is pivotal if we are ultimately to effect change in this process.

Surveying the Landscape

The next step in improving the management of depression is to use the data we've shared to assess the landscape pertaining specifically to our depressed employees. In the case of PPG, we used published data available in the medical literature but also relied upon Medstat (a health information company) to assemble data specific to our employee pool. Medstat integrated all the relevant and available costs (e.g., medical, prescription drug, absenteeism, and disability expenditures) and ranked the physical and mental conditions based on costs to the employer.

The impact of depression and other affective disorders on our expenses at PPG was predictably large, and we wanted to figure out the risk factors predisposing employees to these conditions and ascertain whether or not these were reversible. Historically, stress has been closely associated with depression, but we also wanted to look at the relative influence of other risk factors and try to identify causes that we could modify.^{3,4} Our results demonstrate that stress is, in fact, most closely associated with the prevalence and severity of depression but that few people were ready, willing, and able to change. In general, if employees demonstrate a willingness to change certain risk factors, then the

FIGURE 1 Depression in Corporate America: Antidepressant Medication Use

Source: Caremark claims data—January to November 2002.

workplace is mature for the deployment of a program. If there is a high prevalence but little readiness to change (as was demonstrated with stress and depression at PPG), then we need to focus on creating awareness and providing education.

We also looked at the mental health landscape through drug utilization patterns. Working closely with Caremark, our pharmacy benefits management company, we analyzed antidepressant utilization (as well as utilization of other medication classes) and quickly realized that our depressed population was suffering from many other medical comorbidities as well. They were very heavy utilizers in general. We also analyzed the demographics of who was receiving prescriptions, as well as who was writing them (i.e., prescribers' medical specialty). We learned, for instance, that men and women were equally likely to receive an antidepressant prescription and that the likelihood of doing so increased with age, peaking in the geriatric population (Figure 1). Analysis of the provider data revealed that most antidepressants were being prescribed by providers in the fields of family medicine and internal medicine, so we were now aware that the primary care setting was the front line (Figure 2).

Another source of vital information came from a regional study known as the Southwestern Pennsylvania Depression Report (SPDR). The SPDR demonstrated that the highest hospitalization rate for depression was in the group aged 30 to 39 years, a demographic that is at the peak of their productive years. Using the classic depression quality indicators from the Health Plan Employer Data and Information Set, the SPDR revealed that only 10% to 38% of patients received follow-up for their antidepressant treatment after discharge, and 13% of these patients were readmitted within 30 days of discharge. This study provided strong evidence of the poor quality of care that depressed patients received. Follow-up was inadequate and coordinated care was lacking.

A comprehensive analysis of our particular landscape, therefore, was fairly consistent with what has been reported nationally.^{5,6}

The health care delivery system for mental health, including depression, is very fragmented, with little collaboration between primary care, specialty care, employee assistance, and pharmacy. Many, if not all, components have been isolated or carved out, and there are no identifiable incentives for integrating diagnosis, medication management, therapy, and follow-up. What we have ultimately created is a shattered mirror where it is very difficult to accurately recompose the original image.

Changing the Workplace Environment

Although the stigma surrounding mental illness may have diminished somewhat in recent years, it still exists, and we need to deal with it effectively. To reduce stigma in our workplace, we emphasized the benefits of early recognition through Web-based screening and the availability of functional rehabilitation. As studies have shown, however, it is not enough to simply screen for depression—a program of coordinated care must also be in place.^{7,8} Integration must occur, therefore, between primary care and behavioral health specialists, and effective tools must be placed in the hands of providers to enhance treatment and patient education. Most of all, we strived to provide depressed patients with an experience of continuous progressive care to prevent them from falling through all the traditional cracks in the system.

At the point of service, we elected to train our nurses to fill the role of care managers. The goal was to enable them to serve as facilitators to help patients or employees navigate through the system, accessing support services such as the PPG Employee Assistance Program (EAP). We didn't want the nurses to become pharmacists, providing expert medication management. We didn't want them to become psychiatrists, providing formal diagnosis and comprehensive treatment plans. And we didn't want them to be psychologists either, delivering behavioral therapy. We trained our nurses to be facilitators and educators, helping to elevate depression to the level of other conditions such as high cholesterol and high

FIGURE 2 Depression in Corporate America: Antidepressant Medications by Specialty

Source: PPG Caremark claims data—January to November 2001.

FIGURE 3 Depression in Corporate America: Collaborative Project: >18 Months

blood pressure in our wellness activities.

This emphasis upon depression, wellness, and the role of nurses in our system was also conveyed effectively to our employees. We let them know about the accessible Web-based screening tools for depression and that standardized guidelines for treatment were readily available. We also gave them a good idea of what to expect when they went to a physician seeking help for their depression.

The integration of health care specialists requires that careful thought also be devoted to identifying where the expert support should come from. From my perspective, expert support can be provided by psychiatrists, psychologists, or pharmacists, depending on your specific institutional resources. I believe that pharmacists should seriously consider developing a role in

managing depression that is analogous to certified diabetes educators.⁹ Pharmacists could be formally trained to arrive at worksites or come to employers with the expressed purpose of educating them about depression and its appropriate treatment. I would encourage pharmacists to consider this role and the additional value it would bring to patients and to the profession.

The PPG Experience

One year ago, we embarked on this ambitious project, bringing all the stakeholders together for the first time. This first step was critical but we had to get all of them together, including the behavioral health carve-out, if we were to make it work (Figure 3).

The method we chose for training the trainers (i.e., the nurses) was to put together a series of seminars, which included a day-long conference as well as 9 hours of Web-site instruction. The Web casts, in particular, represented a more cost-effective approach to us, and we used the opportunity to emphasize such topics as appropriate use of the screening tool (PHQ9), mechanics of effective collaborative care efforts, and methods to improve access to employer assistance programs. None of this was revolutionary—it was just a very practical approach to laying down the foundation for our intervention.

Simultaneously, we also had to reach out to the primary care physicians to improve their ability to identify and successfully manage depressed patients. The logistics of reaching out to a large pool of physicians is often daunting, so we wanted to make our approach more tangible by identifying exactly how many practices and providers we were talking about. We wanted to make everyone more comfortable by demonstrating that it was a finite number of physician practices that we were reaching out to: 62, in our case, would cover 50% of our employees. Our health plan (Highmark) then started working with the larger primary care practices first, sending out liaison personnel to train the physicians in the use of screening tools and circulating the AMA toolkit for depression. Highmark also created prescription pads to facilitate the necessary referrals (e.g., to educational and support services).

Another feature of our primary care intervention was to open up direct access for patients to behavioral health specialists. A 24-hour telephone support service was also created for patients with more urgent needs.

Once patients were initiated on medication, we wanted to make sure that they gave the antidepressant a full therapeutic trial and, if successful, that they continued to take it for a minimum of 6 months. The only good medicine is the medicine people actually take, and studies have shown that most patients stop their antidepressant before 6 months.⁶ Consequently, we emphasized to providers and care managers that they needed to convince patients that they are active players in treating their own chronic conditions. In surgery, the surgeon knows what to do, and a general assembly is not usually required to decide which surgery is appropriate. In chronic care, successful treatment requires

TABLE 1 Internet Tools Utilization Progress

www.MagellanHealth.com	2002—6-month YTD	2003—6-month YTD	2004—6-month YTD
PPG activity	Result: 35 users 5 pages viewed per user	Result: 65 users 8.6 pages viewed per user	Result: 130 users 39.47 pages viewed per user
EAP counseling service information	Yes	Yes	Yes
EAP referral information	Yes	Yes	Yes
Online EAP authorization	No	Yes – 1 person	Yes – 5 persons
Interactive tools (educational)	N/A	Yes – 3 users	Yes – 16 users
Self-improvement programs (Feature added 2003)		0 self-improve users	6 self-improve users
Web-based self-screening tools	No	Yes	Yes

N/A = not available.

TABLE 2 Return to Function: Impact on Health and Productivity

EAP Participant Survey Responses	Impact on Ability to Function		Remaining Percentages
How much would you say your ability to function at work has changed since your counseling sessions began?	16.5%	Much improved work functionality	38% report function about the same at work
	45.5%	Improved work functionality	0 report deteriorated work functionality
How much would you say your ability to function at home has changed since your counseling sessions began?	24.5%	Much improved home functionality	13% report function about the same at home
	62%	Improved home functionality	0 report deteriorated home functionality
Approximately how many days of work do you think you would have missed had you not received these services?	.5%	$\frac{1}{2}$ day absent	
	10.5%	1 day absent	
	.5%	2 days absent	
	.5%	3 days absent	62% estimate they would have been absent
	14%	4 days absent	0 days
	12%	5 or more days absent	
If you were to seek help again, would you contact this program?	81.9%	Yes, definitely	.1% neutral response
	19%	Yes, I think so	0% negative responses

N = 61, which is a 30% response rate based on closed cases over an 18-month period. The EAP participant survey is a 20-question instrument given to EAP participants by the local counselor and is mailed to Magellan Health for analysis. Percentages have been rounded.

a team effort, and the patient needs to be a very active member of the team.

Measuring Outcomes

As mentioned previously, we have established a variety of objectives for the various stages in the disease management process. Awareness, early recognition, treatment, follow-up, and monitoring adherence have all been cited. For the sake of evaluating our relative success, we had to identify or create methods to measure our impact upon every step in this process. For instance, we measured improvements in access to care by quantifying the number of employees who actually visited the depression Web site (MagellanHealth.com) and by recording the number contacting the EAP. From 2002 to 2003, the number of employees accessing the depression Web site went up 3-fold, and

the amount of time people spent on the Web site also increased dramatically (Table 1). There was also a significant increase in the number of employees using the Web-based screening tool (from 5 to 42) and in the number contacting EAP for assistance (from 42 to 157). Several data points, therefore, suggested to us that the awareness intervention was translating into increased access and increased utilization of frontline services.

This increase in awareness and assessment also appears to be equating to an increase in the number of verified depression cases. During the past year, we saw a 30% increase in the number of cases opened by EAP (from 63 to 82). As other experts have mentioned, lost productivity represents the greatest cost to employers, and we are beginning to witness significant improvements in this regard as well.¹⁰ From a survey administered to the EAP cases, we learned that employees experienced a substantial

increase in functionality at home and in the workplace (Table 2). Self-reports of absenteeism suggest that lost work days have also diminished among our depressed employees. Although our findings in the productivity spectrum are favorable, we hope that more sophisticated tools can be developed in the future that will give us a more comprehensive look at the impact of depression on functionality in the workplace. We hope that a measure of physician performance can be integrated some day as well.

Conclusion

I hope that my description of the PPG experience has convinced you from a practical perspective that it is possible to effect change in the way depression is managed by employers. The first and most crucial step is to get all the stakeholders together to share their information. Once this data is analyzed, we need to pursue a collaborative approach to improving detection, treatment, and follow-up. The employee or patient must be motivated to become an active member of this treatment team. If such collaboration can be accomplished, improved care and reduced costs are very much achievable objectives.

DISCLOSURES

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Depression in Corporate America: An Integrated Care Approach to Increase Productivity and Improve Outcomes

The University of South Carolina College of Pharmacy is approved by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. A total of 0.20 CEUs (2.0 contact hours) will be awarded and a continuing education statement will be sent to pharmacists for successful completion of this continuing education program, which is defined as receiving a minimum score of 70% on the posttest and completion of the Program Evaluation form. ACPE Universal Program No. 062-000-05-036-H04. (Release date: 4/1/05; Expiration date: 4/1/07)

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In order to receive CE credit for this program, you must complete the following forms online:

1. Posttest form for this program, "Depression in Corporate America: An Integrated Care Approach to Increase Productivity and Improve Outcomes" on the AMCP.org CE Learning Center site—to receive CE credit, you must receive a score of at least 70%. You will have 2 opportunities to pass the posttest.
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Upon successful completion of this program, you will automatically receive your CE statement. Your CE credits will be automatically archived and tracked for you on the AMCP.org CE Learning Center site. All information is kept confidential.

Note: There will be a \$10 processing fee for nonmembers. (See payment instructions on site.)

Posttest Worksheet: Depression in Corporate America: An Integrated Care Approach to Increase Productivity and Improve Outcomes

1. All of the following are challenges to implementing a quality depression management program EXCEPT:
  - a. With health care expenditures continuously rising, many payers are looking for ways to curtail all health-related spending.
  - b. Although many payers recognize they are spending a lot of money to treat depression, many are unaware of programs that offer more effective results.
  - c. There is a large amount of outcomes data that demonstrates excellent results in the treatment of depression.
  - d. Many health plans may only offer coverage for medications with little coordination of care among different health care providers.
  - e. The new advancements in drug therapy and counseling services are not well understood by the payer community.
2. All of the following are true regarding depression therapy EXCEPT:
  - a. Combination of medication and counseling is the most effective way of treating depression.
  - b. Medication is given for longer periods of time because studies have shown that the potential for relapse is higher with short-term treatments.
  - c. SSRIs have improved the overall effectiveness of depression therapy because their side-effect profiles are better than the older treatments.
  - d. Prior to the 1950s, depression and other mental health disorders were thought to have a nonbiological origin such as childhood behavioral trauma.
  - e. All of these statements are true for depression therapy.

3. Organizations such as NCQA attempt to improve the management of depression in all of the following ways EXCEPT
  - a. measuring HEDIS standards that health plans strive to attain for ongoing accreditation.
  - b. advertising in medical journals about the advantages of SSRI therapy.
  - c. continuously reevaluating existing therapies and including standards with those that have been shown to be most effective.
  - d. focusing on outcomes and quality improvement efforts to impact total care (depression being one example).
  - e. All of the above are true.
4. NCQA statistics show that steady improvements have been made in adherence to standards for
  - a. the treatment of all diseases.
  - b. the treatment of behavioral health illness.
  - c. the treatment of nonbehavioral health illnesses.
  - d. the treatment of depression.
  - e. None of the above
5. Approximately how many Americans experience an episode of major depression each year?
  - a. 1 in 2 Americans
  - b. 1 in 4 Americans
  - c. 1 in 5 Americans
  - d. 1 in 10 Americans
  - e. 1 in 20 Americans
6. All of the following are true for depression EXCEPT:
  - a. Depressed workers report 1.6 missed days of work each month.
  - b. Depressed workers report that their productivity has declined about 30%.
  - c. In 2000, depression cost employers about \$51.5 billion in absenteeism and lost productivity.
  - d. Employers pay out about \$26 billion to treat depression each year.
  - e. There is a trend of decreasing overall cost to employers for treatment of depression.
7. Which one of the following is a specific HEDIS measure?
  - a. At least 3 follow-up visits with a primary care practitioner during the acute phase of depression treatment
  - b. At least 18 months of refilled antidepressant medication during the continuation phase
  - c. At least 2 visits with a psychiatrist during the first 3 months of depression treatment
  - d. Evidence of supervision of depression management by a pharmacist or a nurse
  - e. At least 6 months of refilled SSRIs during the continuation phase
8. According to NCQA statistics for 2004, the percentage of commercial plans that met the acute phase medication management HEDIS measure was approximately
  - a. 10%.
  - b. 20%.
  - c. 40%.
  - d. 60%.
  - e. 80%.
9. According to NCQA statistics for 2004, the percentage of commercial plans that met the practitioner contact HEDIS measure was approximately
  - a. 10%.
  - b. 20%.
  - c. 40%.
  - d. 60%.
  - e. 80%.
10. Which of the following statements describe the compliance rates of health plans for HEDIS measures?
  - a. Commercial plans do best and Medicaid plans do poorest.
  - b. Medicare plans do best and Medicaid plans do poorest.
  - c. Medicaid plans do best and Medicare plans do poorest.
  - d. Medicare plans do best and commercial plans do poorest.
  - e. Commercial plans do best and Medicare plans do poorest.
11. Integrated health management requires the linkage of several important activities EXCEPT
  - a. health risk assessment.
  - b. wellness and health promotion.
  - c. disease prevention.
  - d. health and productivity management.
  - e. All of the above are important.

12. Health and productivity management involves the following activities EXCEPT
  - a. integrated collection of data.
  - b. disability case management.
  - c. disease state management.
  - d. formulary management based on cost of drug.
  - e. reduction of total health-related costs, including lost productivity and performance.
13. According to an Institute of Health and Productivity Management survey, the leading causes of health-related absence include all of the following EXCEPT
  - a. musculoskeletal disorders.
  - b. mental health disorders.
  - c. dental problems.
  - d. pregnancy.
  - e. gastrointestinal disorders.
14. According to an Institute of Health and Productivity Management survey, the leading cause of health-related presenteeism is
  - a. musculoskeletal disorders.
  - b. mental health disorders.
  - c. dental problems.
  - d. pregnancy.
  - e. gastrointestinal disorders.
15. All of the following diseases have a higher cost associated with productivity loss than with health care costs EXCEPT
  - a. hypertension.
  - b. migraine.
  - c. depression.
  - d. diabetes.
  - e. arthritis.
16. During the assessment of antidepressant utilization using Caremark data, PPG found that
  - a. women were twice as likely to receive an antidepressant.
  - b. older patients were more likely to receive an antidepressant.
  - c. younger patients had more medications prescribed than older patients.
  - d. spouses were the primary beneficiaries of antidepressants.
  - e. psychiatrists were the most frequent prescribers of antidepressants.
17. PPG implemented an initiative to improve the management of depression that had a worksite intervention program. Elements of this program included all of the following EXCEPT
  - a. training nurses and educating the wellness team.
  - b. familiarizing all parties about depression screening.
  - c. facilitating access to support services.
  - d. reducing the number of hours worked per employee by 10 hours per week.
  - e. following up with high-risk employees.
18. PPG has been working with primary care physicians to improve depression management by sending out a mailing that includes which of the following?
  - a. A prescription pad for referrals to support
  - b. An AMA toolkit that includes clinical practice guidelines for depression treatment
  - c. The PHQ-9 screening tool and scoring page
  - d. A Geriatric Depression Scale
  - e. All of the above
19. Which of the following statements is false regarding the outcomes of the new depression initiatives put in place by PPG?
  - a. The Web-based self-screening tool usage increased 8-fold from 2002 to 2003.
  - b. Although PPG put a lot of work into their employee assistance program for depression, they did not see any kind of positive results.
  - c. The number of employees who contacted Employee Assistance Counseling increased from 42 in 2002 to 157 in 2003.
  - d. The MagellanHealth.com Web site provided information to 3 times as many people in 2003 as in 2002.
  - e. Eighty-two percent of people who used the counseling services indicated they would definitely use them again if needed.
20. When Dr. Rost does a cost-effectiveness analysis of a depression management program, she takes all of the following into consideration EXCEPT
  - a. the average hourly wage of employees + fringe benefit costs.
  - b. sick leave benefit.
  - c. the likelihood of hiring temps to cover absent employees.
  - d. the number of dependents of employees with depression.
  - e. the prevalence of depression in the employee population.

[illegible]

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