2007 Medical Director Colloquy

Mind Your Body: The Intersection of Physical and Behavioral Health

Based on presentations at the 2007 Medical Director Colloquy, Las Vegas, December 6–7

Continuing education credit for physicians and pharmacists is sponsored by

This activity is supported by an educational grant from AstraZeneca Pharmaceuticals LP
The Sixth Medical Director Colloquy was held in Las Vegas on Dec. 6 and 7, 2007. For the first time, America’s Health Insurance Plans (AHIP) worked with the program accreditor, The Chatham Institute, to present the program to its constituency, the medical directors, chief medical officers, and other physicians in leadership roles in health plans. As in past years, members of the Colloquy steering committee used feedback from prior programs, survey information, relevant literature, and their own considerable real-world experience in a collaborative way to design a program that would meet the educational needs of their peers.

The 2007 Medical Director Colloquy focused on the interrelationship of physical and behavioral health. Keynote Speaker David A. Shore, PhD, associate dean and founding director of the Forces of Change Program and the Harvard School of Public Health Trust Initiative, challenged the audience with compelling data that show the erosion of trust in virtually all facets of our health care system — the key causes, profound consequences, and potential cures. Shore’s sobering presentation led to lively debate and discussion.

Our faculty and program participants discussed the impact that co-morbid physical and behavioral conditions have on a sizeable number of individuals in the U.S. population. The faculty shared information culled from research studies and from the trenches — health plans, employers, and practitioners.

A special thanks goes to Albert Tzeel, MD, MHSA, one of our steering committee members, who adeptly served as the Colloquy moderator.

We believe that you will find this publication, which synthesizes the information, insights, and potential solutions to improving care coordination and clinical outcomes for patients with physical and behavioral problems, to be a valuable resource. Please take advantage of the educational opportunity provided herein through the sponsorship of The Chatham Institute.
SELF-STUDY CONTINUING EDUCATION ACTIVITY
Mind Your Body: The Intersection of Physical and Behavioral Health

Continuing education credit is offered to physicians and pharmacists who read pages 3 through 26 of this publication, complete the post-test on page 27, and submit the evaluation form on page 28. Estimated time to complete this activity is 2.75 hours.

Target audience
Medical directors, pharmacy directors, primary care physicians, and health care executives.

Purpose and overview
This publication is based upon content presented at the 2007 Medical Director Colloquy, held on Dec. 6–7, 2007, in Las Vegas.

The Colloquy focused on issues surrounding the link between physical health and behavioral health, which plays a critical role in appropriate patient management. Decision makers in managed care have many critical issues before them, including efficacy, cost, and treatment options, which can effectively improve health outcomes.

Topics discussed in this publication include the following patient care issues with regard to physical and mental health:
• Health care decision making by the patient and primary care physician
• Pay-for-performance initiatives
• Community data sharing
• Data integration/extraction
• Wellness strategies

Educational objectives
After reading this publication, participants will be able to:
• Discuss the link between physical health and behavioral health and the impact on appropriate patient care management
• Identify opportunities for health plans and practitioners to collaborate to reduce emergency care services and hospitalizations, and to ensure the appropriate use of diagnostic tests, ambulatory care, and psychotropic medications
• Identify solutions to some of the key challenges facing medical directors, pharmacy directors, and other health care professionals

Accreditation and designation
This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the sponsorship of The Chatham Institute, which is accredited by the ACCME to provide continuing medical education for physicians. The Chatham Institute designates this continuing medical education activity for a maximum of 2.75 AMA PRA Category 1 Credit(s).TM Physicians should claim only those credit hours commensurate with the extent of their participation in the activity.

The Chatham Institute is approved by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. This program is approved for 2.75 contact hours (0.275 CEU) of continuing education for pharmacists.

ACPE universal program number (UPN): 812-000-08-007-H01-P
Release Date: Mar. 15, 2008
Expiration Date: Mar. 15, 2009
Medium: Journal Supplement

Planning committee members
Jeanne L. Alexander, MD, FABPN; Elizabeth J. Buchman, MA, LMHC; Richard G. Frank, PhD; Michael Golinkoff, PhD, MBA; Anthony M. Kotin, MD; Kurt Kroenke, MD; Steven R. Peskin, MD, MBA; Juan C. Prieto, LCSW, CEAP; David A. Shore, PhD; Albert Tzeel, MD, MHSA; David J. Whitehouse, MD, PhD; Audrie Tornow, Education Manager, The Chatham Institute; Michael D. Dalzell, and Katherine T. Adams, editors, MediMedia USA Managed Markets Publishing.

Conflict-of-interest policy and disclosures of significant relationships
It is the policy of The Chatham Institute to ensure balance, independence, objectivity, and scientific rigor in all of its educational programs. All faculty members who affect the content of medical education activities sponsored by The Chatham Institute are required to disclose to the audience any real or apparent conflict of interest related to the activity. Faculty members are further required to disclose discussion of off-label uses in their presentations. Any faculty member not complying with the disclosure policy is not permitted to participate in the educational activity.

The faculty of this program has disclosed the financial relationships with commercial interests cited below. All program content has been peer reviewed for balance and any potential bias. The process to resolve conflicts of interest aims to ensure that financial relationships with commercial interests and resultant loyalties do not supersede the public interest in the design and delivery of continuing medical education activities for the profession.

Kurt Kroenke, MD: Consulting fee and honoraria from Eli Lilly & Co. and Pfizer.

Jeanne Leventhal Alexander, MD, FABPN; Elizabeth J. Buchman, MA, LMHC; Richard G. Frank, PhD; Michael Golinkoff, PhD, MBA; Anthony M. Kotin, MD; Steven R. Peskin, MD, MBA; Juan Prieto, LCSW, CEAP; David A. Shore, PhD; Albert Tzeel, MD, MHSA; David J. Whitehouse, MD, PhD; Audrie Tornow; Michael D. Dalzell; and Katherine T. Adams declare they have no financial relationships to disclose.

Program sponsorship and support
This activity is sponsored by The Chatham Institute and is supported by an educational grant from AstraZeneca Pharmaceuticals LP.
The 2007 Medical Director Colloquy explored the inextricable link of mind and body. We examined numerous challenges medical directors face in managing populations with chronic depression or other behavioral health conditions and associated comorbidities.

Major depressive disorder (MDD) is a common chronic condition in the United States, with a lifetime prevalence of 16.2 percent and a 12-month prevalence of 6.6 percent (Kessler 2003). This prevalence rate extends to employed populations, such that in the typical U.S. workforce, 6 of every 100 employees will have MDD. Between absenteeism and presenteeism, each of those workers will lose 27 workdays per year (Kessler 2006). Across the U.S. workforce, this degree of morbidity annually results in 225 million lost workdays valued at $37 billion in salary-equivalent lost productivity.

Depression is comorbid with numerous behavioral and physical disorders, and understanding the link between them is an important challenge that health care professionals must work together to address. Patients with MDD may have a concomitant anxiety disorder, impulse control disorder, or substance abuse issues (Kessler 2003). Depression often is comorbid with such chronic physical conditions as diabetes, cancer, and rheumatoid arthritis, and is intertwined with cardiovascular diseases such that it may contribute to their development, or complicate recovery from them, or both. Moreover, depression has been associated with noncompliance with antihypertensive medications (Wang 2002). Conversely, patients who adhere to antidepressant drug therapy are also more likely to comply with treatment for any other comorbid chronic condition they may have, including diabetes, coronary artery disease, and dyslipidemia (Katon 2005). The benefits to promoting adherence to a medication regimen for depression has a cascade effect: Adherence to antidepressant therapy is associated with a reduction in medical costs for treating these comorbid conditions, ranging from 6 to 20 percent over the course of 1 year (Katon 2005).

Although more patients now are being treated for depression than in years past (Kessler 2003), they are not necessarily receiving the most effective treatment; treatment entails not just diagnosing the condition and prescribing a therapy, but also monitoring the patient’s progress and adjusting or adding therapies as needed (Belmaker 2008). It is likely, then, that effective treatment of depression in primary care — the setting in which most patients with depression are seen — will provide multiple benefits for payers and patients alike (Wang 2006).

This publication provides information and insights from a roster of experts that can help elevate the standard of care for patients with depression.

References
People who are employed by or work in concert with MCOs may labor under the illusion that they are in the health care business. In fact, they are in the trust business.

Trust in people and institutions in the United States has been eroding. In 1960, 55 percent of people agreed with the statement that “most people can be trusted,” but by 2000 less than 35 percent felt this way (Purdy 2003). Americans also have expressed a loss of confidence in the leadership of major institutions over the past four decades (Figure). In a 2007 Harris poll, only 37 percent of Americans expressed a “great deal” of confidence in medical leadership, while 45 percent said they had “only some” confidence and 17 percent had “hardly any” (Harris 2007a). In this survey, medicine fell third among 16 institutions ranked by public confidence in their leaders, being tied with higher education and trailing only small business (54 percent) and the military (46 percent). But in 1966, when 73 percent of the public was greatly confident in its medical leadership, no other institution ranked higher. Since then, no other institution has suffered as steep a decline in the confidence of its leadership.

As for its trust of particular businesses, the public especially lacks trust in certain segments of the health care industry. Another Harris poll showed that only 5 percent of the public thinks that MCOs are generally honest and trustworthy (Harris 2007b); the only industries that rank lower are tobacco and oil companies. Pharmaceutical and health insurance companies are trusted by 11 percent and 7 percent, respectively, while hospitals are trusted by only 28 percent of the public (Harris 2007b).

The erosion of trust in the health care profession also is reflected in contemporary terminology. In earlier, more trusting times, health care professionals were known as doctors and nurses, who established long-term relationships with their patients. Today, they are commonly referred to as providers, a term that also obscures the difference between physicians and hospitals.

Trust vs. quality

Quality metrics were devised to dispel the myth that every doctor is above average and to demonstrate that great disparity exists in the delivery of many health care services, but the marketplace has been slow to embrace the concept. That is because in the marketplace, trust trumps quality. Trust trumps all the key variables in health care — quality, service, technology, and value — because trust serves as a proxy for each. If a patient trusts a physician, the patient assumes the physician possesses the appropriate technology and offers good quality, service, and value. Mere competence does not build trust; competence is the cost of doing business, an expectation of the marketplace. In an audience of medical directors I addressed recently, everyone in attendance indicated that his or her own doctor was average or above average. This audience was not an atypical group; the same results are seen when the question is put to, say, the owners of fine jewelry stores.

Consequences of lack of trust

Although patients may have difficulty assessing the quality of care they receive, they are quite comfortable in indicating, in verbal and nonverbal ways, whether they trust the people who care for them. When patients lack trust in their physicians, they delay seeking care, and they visit the emergency department more frequently, which results in poor clinical outcomes and the most expensive care (see, for example, Safran 1998, Trachtenberg 2005). When patients trust their health care providers, they are more likely to keep appointments, reveal relevant
personal information, and comply with therapy. Trust improves compliance, and once compliance has been achieved in one area, that trust equity can be leveraged to modify behavior in another area.

Patients' trust in their health care providers is associated with patient satisfaction — when patients do not trust them, they are dissatisfied. It is insufficient to have patients who are merely satisfied, however, because satisfied customers tend to be promiscuous in the marketplace and cannot be relied upon for repeat business. Instead, it is the very satisfied customer who matters and needs to be cultivated. Unfortunately, health care organizations tend to aggregate these two groups. A survey showing that 87 percent of patients are “satisfied” or “very satisfied” could be cause for celebration or despair, depending on the proportion who are “very satisfied.”

The desire to have someone they can trust is a reason people have been slow to embrace consumer-directed health care. Most people are not eager to direct their own health care, because what health care consumers seek is sound judgment. Health care is one of the three business sectors (financial services and legal services are the other two) in which consumers are most eager to find someone else who has both knowledge (competence) and a sound conscience, a combination that can yield advice that they believe to be trustworthy. In these three areas, the consequences of a customer’s buying decisions are of extremely high importance, and the ability of the customer to assess the buying situation is extremely low. Competence alone is insufficient to engender trust. As Alice Jacobs, MD, said in her presidential address to the American Heart Association, “Patients don’t necessarily care how much you know until they know how much you care” (Jacobs 2004).

Patients should be engaged in their health care, because the lack of such engagement can be seen as the leading cause of death in the United States, and stands behind the majority of health care expenditures. Numerous studies have shown that 70 percent of all health care costs generated in the United States are attributable to preventable risks and unhealthy choices that include smoking, poor diet, and lack of exercise. The strategies

---

**FIGURE**

Fluctuating confidence in leaders of major institutions

Since 1966, the percentage of U.S. adults expressing a “great deal” of confidence in the leaders of major institutions has declined, the steepest decline being in medicine. Other institutions included in this survey (not all are charted above) were public schools, higher education, Wall Street, small businesses, major companies, organized labor, organized religion, the Supreme Court, other courts and the judicial system, law firms, Congress, the White House, the executive branch of the federal government, television news, the press, and the military.

SOURCE: HARRIS 2007A
that have been used thus far to engage patients and to modify behavior — information and incentives — have not been very effective. For example, it has been 44 years since the issuance of the Surgeon General’s first report on the dangers of smoking, and although some segments of the population have responded to that message, smoking still remains a major health problem. Incentives are increasingly used to induce people to take some kind of action to improve or preserve their health, but incentives lack broad utility.

Health plans cannot foster engagement among their members unless physicians are engaged. Unfortunately, most physicians have become disengaged for three reasons: time, treasure, and trouble. Physicians perceive that they spend less time with patients, encounter more trouble (which they ascribe to payers), and receive less reimbursement.

**Regulation of trust**

Regulation is the tool Americans commonly resort to when they lack trust in an industry. Both the public and legislators regard regulation as the preferred vehicle for preventing undesirable outcomes. In 2004, data suggested that U.S. industries were approaching about $1 trillion spent on compliance and regulation, in an economy in which gross domestic product amounted to $11.5 trillion (Conover 2004). The total cost of health services regulation has been estimated in excess of $339.2 billion, which includes regulation of health care facilities, health professionals, health insurance, drugs, and medical devices and the medical tort system, including the cost of defensive medicine (Conover 2004). Lack of trust in an industry tends to correlate with the public’s desire to have that industry be more regulated, and managed care is among the industries that a substantial portion of the public believes needs greater regulation. Health care regulation is likely to increase further through the greater use of default options and a forcing function, a concept borrowed from product engineering. A forcing function takes certain actions completely out of the control of the individual. For example, self-cleaning ovens cannot be opened once the cleaning process has been initiated.

Historically, Americans have had to *opt in* to most programs, but in health care, there will be a shift toward *opt-out* programs. That is, people will be covered by some program automatically unless they decide not to participate.

An industry can try to recover trust through penance or by apologizing. In health care, penance is trying to right a perceived wrong through a cash payment, usually to address a lawsuit. Risk managers inappropriately and incorrectly advise health care providers that apologizing may expose them to the risk of losing a malpractice suit, but there are few data to support that contention. Evidence drawn from surveys such as the General Social Survey, conducted annually by the National Opinion Research Center, shows that 40 percent of patients believe their doctor would fail to inform them that a mistake had been made (NORC 1998). To address this situation, bills are under consideration in Massachusetts that would make statements of regret, apology, or concern regarding unanticipated medical outcomes by health care providers inadmissible as evidence in legal proceedings.1

**Restoring trust**

Change and re-engagement of disenchanted patients and health care professionals could be achieved if customary tools, information, and incentives are combined with efforts to establish a good reputation, more health provider recognition programs, and enlightened regulation. The marketplace craves consistency. The health care marketplace that is consistent and engaging will own trust.

**References**


---

1 Senate Bill 1284, An Act to Encourage Health Professionals to Apologize for Medical Mistakes, and Senate Bill 987/House Bill 1370, An Act Relative to Health Care Providers’ Statements of Regret. The Massachusetts Medical Society supports the latter, because it would provide legal protection for all health care providers, whereas the former protects only those physicians and hospitals participating in a pilot program.
Integrative Approaches to Health Care

JUAN C. PRIETO, LCSW, CEAP
Health Benefits Manager, IBM

IBM’s corporate vision is that positive effects on employees’ health and productivity can be achieved through a concerted effort involving not just the patient but also the patient’s family, physicians, and health care vendors. As a very large employer, IBM has the leverage to work with vendors to integrate behavioral health care with other aspects of health care.

Within IBM’s covered population of 550,000 employees, retirees and dependents is a subpopulation of 70,000 patients with chronic conditions, many of whom have behavioral health comorbidity. IBM has instituted a program to identify as many of these patients as possible to help them with their behavioral health needs and, in turn, address their medical needs. This article describes only IBM’s program, which may or may not be applicable to other workplace programs.

The program has a single point of entry — the personal care consultant. A patient can reach the consultant in various ways, which include nonclinical resources within the company that identify employees who may benefit from the program and numerous referral tools (Table 1).

Completing a health risk assessment (HRA) entitles an IBM employee to a $150 rebate. Results are sent to vendors so that they can provide support as necessary, and if the HRA indicates that the member is at risk, the member is so notified. The HRA is separate from the health screenings that vendors conduct when members enter their system.

Once the personal care consultant has become involved with a member, the next step is to refer that member to the appropriate service. Some members may be referred to the Life Balance program, which connects them with community resources for child and elder care, for example, but a coach is available online or via telephone to make sure the member receives all the needed support. Others may be referred to mental health or substance abuse programs. If the issue to be resolved is not too complex, the member might participate in an employee assistance program (EAP). Otherwise, the member is referred to the managed behavioral health program, which is carved out from IBM’s five self-insured medical programs. Our Life Solutions member support program covers comorbid behavioral conditions, such as depression, anxiety, stress, and substance abuse.

Activity, nutrition, and weight management
IBM offers a $150 cash payment to employees who participate in a physical activity and nutrition/weight

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Pathways for reaching the personal care consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IBM IDENTIFICATION SOURCES</strong></td>
<td><strong>IBM REFERRAL SOURCES</strong></td>
</tr>
<tr>
<td>Health risk assessment</td>
<td>Disease management</td>
</tr>
<tr>
<td>Changes in life status (e.g., marriage, death in family, new child, retirement)</td>
<td>Disability</td>
</tr>
<tr>
<td>Promotional campaigns</td>
<td>Self-referral</td>
</tr>
<tr>
<td>Seminars and health fairs</td>
<td>SCCAP (community action programs)</td>
</tr>
<tr>
<td>IBM intranet</td>
<td>Medical/primary care physician</td>
</tr>
<tr>
<td>Child care, elder care</td>
<td>Pharmacy data</td>
</tr>
<tr>
<td>Critical incidents (e.g., accidents in the workplace, job restructuring, deaths)</td>
<td>Global Well Being Services</td>
</tr>
<tr>
<td>Acquisition of new companies</td>
<td>Nurse referrals</td>
</tr>
<tr>
<td>Vendor’s web site</td>
<td>Health referrals</td>
</tr>
</tbody>
</table>
They can earn the payment if they exercise for 10 of 12 weeks in one of three ways: 4 days a week for 30 minutes each day; 2 days a week for 30 minutes each day while also completing an 8-week online tutorial aimed at changing behavior; or by participating in a web-based nutrition and weight-management program. Online coaching and support are available for these programs. Physically inactive employees generate an additional $500 to $600 per person per year in health care costs to IBM. Among the 36 percent of employees whose body mass index is greater than 27.5, an additional annual cost of $600 to $700 is incurred. In the typical workplace, only 10 to 20 percent of employees participate in physical activity programs, but at IBM the participation rate is 62 percent. Compared with employees who do not participate, the IBM program participants are 53 percent more active from year to year. An analysis of the physical activity rebate program showed that employees who participated during 2004 (n=50,916) incurred a mean annual increase in health care costs that was 22 percent less than the increase incurred by nonparticipants (n=27,999). Among nonparticipants, the increase was $279 compared with $229 for participants who did not earn the rebate (n=18,100) and $211 for those who did. Among the rebate earners, the greater the number of minutes logged, the smaller the increase in annual health care costs. Those who logged between 600 and 1,999 minutes of activity (22 percent of the rebate earners) had an increase in health costs of $270, only slightly lower than that of nonparticipants. For the 39 percent who logged between 2,000 and 3,999 minutes of activity, the increase averaged $225; 4,000 to 5,999 minutes (19 percent), $174; and 6,000 or more minutes (21 percent), $154 — 45 percent less than the increase among nonparticipants. These figures are based on medical and pharmacy claims paid from 2003 to 2005, converted to 2005 dollars and adjusted for age, gender, business unit, and insurance plan. Patients with costs greater than six standard deviations from the mean (about $75,000; n=678) were excluded from this analysis.

Among the subset of participants who completed HRAs in 2004 and 2005, the health risk increased for 23 percent (n=5,003) but decreased or stayed the same for 67 percent (n=16,824). Those who decreased or maintained their health risk status incurred less of an annual increase in health care costs than those whose health risk increased (Figure). Between 2003 and 2005, annual health costs increased by 14 percent in the group whose risk increased versus 1 percent in the group whose health risk decreased or remained the same.

**Disease management**

About 200,000 people are eligible for IBM’s disease management programs, which cover asthma, coronary artery disease (CAD), congestive heart failure (CHF), depression, and diabetes. These programs provide a support system of nurses, dietitians, pharmacists, and physicians to help patients manage their medical conditions so as to avoid potential downstream major medical expenses; increase compliance with their physician’s plan of care, medication usage, and testing in accordance with national clinical standards; and improve unhealthy lifestyle behaviors that may worsen their chronic conditions and lead to other serious illnesses.

If a member has agreed (during open enrollment) to participate in a disease management program and meets the program’s criteria for disease management, then a letter is sent to the member and the member’s physician to inform them that the member may qualify for additional support. The program is set up this way to comply with the Health Insurance Portability and Accountability Act and to meet the needs of the IBM culture — IBM employees guard their privacy fiercely.

These programs have achieved substantial reductions in utilization across the board (Table 2). We are confident that the programs have been designed from a clinical perspective to provide the care necessary to improve mem-

---

**FIGURE**

Association between change in health risk status and annual health care costs to IBM

Annual health care spending (paid medical and pharmacy claims, in 2005 dollars) for participants in IBM’s physical activity program who completed health risk assessments in both 2004 and 2005 and whose health risk increased (n=5,003) or decreased or stayed the same (n=16,824).
bers’ health. The challenge is in getting people to participate. Engagement with the disease management programs is relatively low — about 70,000 employees meet the criteria for participating, but only about 20,000 have taken advantage of these programs.

We also have seen modest improvements in compliance with medical guidelines by members participating in disease management programs for asthma, coronary artery disease, congestive heart failure, and diabetes, but adherence with therapy for depression declined 6.9 percent between the baseline period and the measurement period (Table 2). In addition, more than 70 percent of our members on psychotropic medications do not have a behavioral health diagnosis, which means their treatment is being provided at the primary care level. Moreover, about 20 percent of members on antidepressants have not been diagnosed with depression. To address these issues, we have engaged with our behavioral health and pharmacy vendors to develop an aggressive strategy to identify these members to make sure they receive the appropriate treatment and adhere to their treatment guidelines and medications. IBM’s RationalMed program examines integrated pharmacy and medical claims data to identify gaps in care. It also identifies and resolves potential safety issues that increase the near-term risk of hospitalization and other adverse events.

The glue that holds all these programs together is our EAP, which serves all covered employees and their dependents in the United States. IBM’s EAP provides up to eight confidential counseling sessions per member per year, at no cost to the employee, and it maintains a toll-free 24-hour service staffed by licensed mental health professionals.

Professional outreach
In 2004, IBM implemented an outreach program for mental health services that, with the member’s permission, contacts the member each time outpatient services are requested and then 1 day and 7 days after discharge from a hospital. In 2003, the rate of outpatient appointments kept within 14 days was 51 percent, but as a result of the outreach program, this rate improved to 79 percent in 2006. Likewise, the rate of appointments kept within 14 days of hospital discharge improved from 61 percent in 2003 to 88 percent in 2006. These developments were associated with an improvement in the rate of rehospitalization at 30 days after discharge, which decreased from 15 to 9 percent between 2003 and 2006.

The clinical status of members was measured at the onset of outpatient treatment and 6 months later, using a validated survey instrument, to assess changes in workplace productivity and absenteeism. In 2006, the survey was completed by 91 percent of the 3,227 members who received it. Among all adult respondents, inclusive of IBM employees, spouses, and adult dependents, the mean number of workdays missed was reduced by 66 percent. Likewise, the mean number of work “cutback” days — days in which part of a workday was lost — dropped 40 percent (Table 3). Among IBM employees only, the mean number of workdays missed was reduced by 82 percent, and the mean number of work cutback days fell 51 percent.

These results have convinced IBM leadership that behavior change is important, and that tripartite engagement involving the patient, physician, and vendor is the key to success.

### TABLE 2
Utilization reductions achieved through disease management

<table>
<thead>
<tr>
<th></th>
<th>Asthma</th>
<th>CAD</th>
<th>CHF</th>
<th>Depression</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER visits (number per 1,000 member months)</td>
<td>−17%</td>
<td>−20%</td>
<td>−28%</td>
<td>−10%</td>
<td>−8%</td>
</tr>
<tr>
<td>ER PMPM cost (dollars per member months)</td>
<td>−19%</td>
<td>−17%</td>
<td>−26%</td>
<td>−9%</td>
<td>−7%</td>
</tr>
<tr>
<td>Admissions (number per 1,000 member months)</td>
<td>−34%</td>
<td>−17%</td>
<td>−41%</td>
<td>−22%</td>
<td>−19%</td>
</tr>
<tr>
<td>Hospital PMPM cost (dollars per 1,000 member months)</td>
<td>−32%</td>
<td>−17%</td>
<td>−35%</td>
<td>−4%</td>
<td>−12%</td>
</tr>
<tr>
<td>Medical &amp; pharmacy cost (trend-adjusted PMPM)</td>
<td>−24%</td>
<td>−17%</td>
<td>−36%</td>
<td>−14%</td>
<td>−14%</td>
</tr>
</tbody>
</table>

CAD=coronary artery disease, CHF=congestive heart failure, ER=emergency room, PMPM=per member per month.

**SOURCE:** IBM

### TABLE 3
Reductions in absenteeism through proactive outreach

<table>
<thead>
<tr>
<th></th>
<th>Lost workdays</th>
<th>Cutback days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Onset</td>
<td>6 months</td>
</tr>
<tr>
<td>All covered adults</td>
<td>1.52</td>
<td>0.51</td>
</tr>
<tr>
<td>Active IBM employees</td>
<td>1.74</td>
<td>0.31</td>
</tr>
</tbody>
</table>

**SOURCE:** IBM
The prevalence of mood, anxiety, musculoskeletal, and sleep complaints, along with a perception of a decline in memory and attention, are common presenting complaints in the symptomatic perimenopausal population. It is not uncommon for these women also to have psychiatric comorbidities that may exacerbate their perimenopausal symptoms. Thus, symptomatic perimenopausal patients presenting with symptoms of a depressive or an anxiety disorder, or a combination of both, add to the complexity of the treatment of depression in primary care.

In the years ahead, identifying symptomatic perimenopausal women with psychiatric comorbidities will be important to MCOs on the basis of large numbers alone, due to the aging of the baby boom cohort (Ratka 2006). Reproductive aging in women has been divided into four stages by the Staging of Reproductive Aging Workshop (STRAW) staging system (Soules 2001) and later modified by the ReSTAGE Collaboration at the University of Michigan (Harlow 2008): late reproductive, in which there is no change in menstrual cyclicity; the early menopausal transition, in which a change in menstrual frequency begins; the late menopausal transition, defined as more than two skipped cycles and 3 to 11 months of amenorrhea; and postmenopause, defined as 12 months or more of amenorrhea (Burger 2007, Soules 2001). Progression through these stages is characterized by increases in serum follicle stimulating hormone (FSH), luteinizing hormone (LH), and estradiol and a decrease in luteal progesterone (Hale 2007). Women experience both ovulatory and anovulatory cycles during the transition. The late menopausal transition is characterized by 60 or more days of amenorrhea along with FSH levels of 40 IU/l or more, and is in contrast to the definition of the early menopausal transition, in which women experience changes of more than 7 days in menstrual-cycle length (Randolph 2006).

The epidemiology for this burgeoning midlife population is compelling for those who manage the health of populations. In 2000, there were 32 million women age 45 to 65, and there will be approximately 42 million (26 percent of the female population) by 2010 and 47 million (22 percent) by 2050 (Figure). One of the most distressing somatic symptoms of menopause is severe hot flashes, which 10 to 20 percent of perimenopausal women experience. It is estimated that approximately 27 million to 37 million women will experience hot flash symptoms between now and 2050, with about 7 million experiencing severe hot flashes (Ratka 2006).

**Vasomotor symptoms.** Vasomotor symptoms are the most prevalent complaint during the menopausal transition. The risk factors for vasomotor symptoms include, but are not limited to, older age (50 to 54 years) or onset of menopause prior to age 53; hysterectomy or oophorectomy in women aged 40 to 60 years without hormone replacement therapy; endocrine factors, such as lower levels of estrogen and inhibin B, or higher levels of FSH; psychiatric factors, such as depression and anxiety; higher levels of perceived stress; a history of childhood abuse; African-American or Hispanic descent; a higher-than-average body mass index; and having certain polymorphisms in genes governing estrogen receptors and the synthesis and metabolism of estrogen (Alexander 2007a). Interestingly, climate has been implicated as a factor affecting the observed frequency of hot flashes in different cultures. Sievert (2005) found an association between hot flash frequency and the difference in temperatures between the coldest and hottest months for a particular geographic location.

Several authors have observed an association between vasomotor symptoms and a higher prevalence of depressed mood regardless of prior depression (Avis 1994, Freeman 2007). Joffe (2002) found that approximately 60 percent of women age 40 to 60 with depression experi-
enced hot flashes and night sweats in comparison with 35 percent of women without depression. Simply having vasomotor symptoms places these women at increased risk of experiencing depression regardless of their prior history (Freeman 2007, Nedrow 2006), with one study finding that hot flashes almost doubled a woman’s risk of depression (Nedrow 2006). Anxiety also is a significant predictor of hot flashes among women in their early and late reproductive years (Freeman 2005, Freeman 2001), and increases the risk for complaints of hot flashes (Freeman 2005, Gold 2006, Nedrow 2006). These observations of a bidirectional dynamic interaction of vasomotor symptoms and depression/anxiety do not provide evidence as to cause and effect but merely an association. It may be that the anxiety and depression are secondary to other symptoms associated with depression, anxiety, and vasomotor symptoms, such as sleep deprivation and sympathetic outflow.

**Diagnostic difficulties.** Diagnosis and treatment of the woman presenting with a possible depressive illness, along with a symptomatic menopausal transition, presents a difficult and challenging differential diagnosis for the primary care practitioner as well as other clinician specialists. The similarity of presenting symptoms and complaints, along with the historical difficulty with the differential diagnosis of some of these symptoms (e.g., fatigue or poor sleep), requires a familiarity with the pathophysiology and etiology of these different conditions and adequate time with the patient longitudinally to ascertain the contribution of each to her current distressing complaints and condition.

First, depression and menopause share many somatic and neurobehavioral symptoms (Alexander 2007b). Somatic symptoms associated with depressive disorder, as well as with the perimenopausal or early postmenopausal include: sleep disturbance; fatigue; back pain; stiff and painful joints; worse general health; and reduced sexual responsiveness, libido, or sexual activity. Additionally, these conditions negatively affect each other; for instance, untreated depression or increased stressors have

**FIGURE**

**Projected female population of the United States**

The United States is in the midst of a surge in size of the population at risk for perimenopausal symptoms. U.S. women in the baby boom cohort (born between 1946 and 1964) began entering menopause in the early 1990s, and the youngest boomers will have become postmenopausal by the early 2020s. Meanwhile, the oldest boomers soon will begin to spur growth in the post-65 age groups. That population trend will continue through 2050, but until then, the number of women age 45 to 64 also will increase.

SOURCE: U.S. CENSUS BUREAU 2004
been associated with the worsening of hot flashes and night sweats in some women (Alexander 2007c). The neurobehavioral symptoms that have been found to be associated with both a depressive disorder and the symptomatic menopausal transition include decreased mood, diminished quality of life, and the perception of a change in cognitive function (Alexander 2007d). For the latter, symptomatic menopause may include a number of conditions that have been shown to reversibly impair executive and cognitive function as a consequence of sleep disturbance, decreased mood, or increased anxiety (Alexander 2007e). These conditions may exacerbate longstanding cognitive problems that may not have been distressing to the patient prior to their exacerbation in a symptomatic menopause, e.g., dyslexia, attention deficit disorder, historical mild narrative or expressive language problems, and letter reversal (Alexander 2007e).

Second, depression in the setting of menopause is difficult to diagnose because of the cultural loading of such labels as depression or menopausal symptoms — to the extent that some patients prefer to ascribe their symptoms to their menopause rather than to accept that they have a clinical depression, while others prefer to view their symptoms as depression rather than “medicalize their menopause stage of development” (Woods 2007).

Third, a history of childhood trauma, e.g., physical or sexual abuse, may be overlooked. Such early-life stress is important, as it has been found to be associated with an increase in the risk of depression and other psychiatric illnesses in adulthood. One mechanism is thought to be impairment in the functioning of the hypothalamic-pituitary-adrenal (HPA) axis (Heim 2004). The underappreciated effects of early stress on the HPA axis and its interactions with the hypothalamic-pituitary-ovarian axis may explain why some women are particularly sensitive to a symptomatic menopausal transition and a recurrence of depressive illness with stressors concurrent with their transition (Alexander 2007c).

Risk factors for mood disorders

Compared with premenopause, the prevalence of irritability, nervousness, mood changes, and dysphoric mood increases during early menopause (Alexander 2007d, Bromberger 2003). Contrary to common belief, however, mood problems are not a universal experience among perimenopausal women, and the majority of perimenopausal women do not develop depressive symptoms or disorders (Schmidt 2004). Premenstrual dysphoric disorder and premenstrual symptoms have been associated with an increased risk for mood symptoms during the menopausal transition (Alexander 2007d). Among premenopausal women, up to 70 percent are free of mood symptoms during their menstrual cycle and remain symptom free while going through the menopausal transition. Another 20 to 30 percent may experience mild symptoms that are neither distressing nor affect their day-to-day life. However, some women, 5 to 10 percent, do experience premenstrual dysphoria that interferes with daily activities, and about 4 percent have severe dysphoria that impairs their functioning to the same extent as major depressive disorder. These women meet the criteria for Premenstrual Dysphoric Disorder (Abraham 1989, Angst 2001, Gallant 1992, Steiner 2006). Clinicians may find it helpful to obtain an account of historical mood problems associated with a woman’s menstrual cycles. Richards (2006) observed that women underreport menstrual cycle mood problems, and Carpenter (2004) noted that women underreport frequency of night sweats. Therefore, symptom reporting may underestimate each woman’s mood problems in the past or vasomotor problems during the menopause transition.

The menopausal transition is characterized by variability in menstrual cycle characteristics and hormonal fluctuations, month to month, with both anovulatory and ovulatory cycles (Burger 2007). The general trend during reproductive aging is for FSH levels to increase while estradiol levels fall. These changes are associated with an increased risk of a mood disorder if the perimenopausal transition is prolonged (greater than 27 months) or is accompanied by more physical symptoms or stressors, such as sleep disruption (Alexander 2007d, Baker 1997, Bromberger 1996, Dennerstein 1999, Hunter 1992). Depression may be associated with changes in ovarian function. During weeks when levels of FSH decrease, depressive symptoms also may decrease. Risk factors for depressed mood states may include early menopause and greater cycle variability (Alexander 2007d).

The prevalence of depressive spectrum disorders has been estimated to range from 10 to 24 percent in the general population (Kessler 1997). A depressive spectrum disorder has been defined as the persistence of depressive mood symptoms for at least 2 weeks that falls short of meeting the criteria for a dysthymic disorder or a major depressive disorder (Rowe 2006). It is conceivable that the addition of stress or hot flashes to a depressive spectrum disorder could increase a woman’s risk for a first depressive episode (Cohen 2006, Schmidt 2004). Increased episodes of minor depression have been observed to occur in the perimenopausal transition (Cohen 2006, Schmidt 2004).

During perimenopause, major depressive disorder has been found both de novo (Cohen 2006, Freeman 2006) and in women with a history of depression (Harlow 2003). The occurrence of one episode of depression increases the risk of recurrent episodes of depression. Epidemiological studies have found that within 5 years of recovering from an initial episode of depression, 50 percent of patients are expected to experience a second episode (Keller 1998). After a second episode, the recurrence rate is 70 percent, and after a third, 90 percent.
Risk factors for dysphoric mood symptoms during the transition include a history of depressed mood or depression, including postpartum depression and premenstrual mood symptoms; stressful life events; a poor lifestyle (e.g., smoking and little exercise); health problems; negative attitudes toward aging and menopause; vasomotor and somatic symptoms; premenstrual symptoms in early perimenopausal women (age 36 to 44); and early natural menopause, i.e., before age 40 (Alexander 2007d).

The relationship of premenstrual dysphoric disorder (PMDD) to the development of perimenopausal depression is confounded by the high comorbidity of PMDD and depression. A small study where 21 percent (15/70) of depressed perimenopausal women had PMDD compared with 3 percent (1/35) of nondepressed controls suggests that PMDD may be a risk factor for perimenopausal depression (Richards 2006). However, the majority of patients in this study did not have PMDD, and the authors concluded that these disorders do not share the same etiology.

Menopausal symptoms and the continuum of depressive disorders interact reciprocally and dynamically with stress (Alexander 2007c). The menopausal transition has been found to be a time of increased sensitivity to stress, and stress also has been associated with an increase in hot flashes and sleep disturbances (Alexander 2007c). Thus, efforts to reduce levels of stress in the workplace, as well as other settings, would positively affect the incidence and exacerbation of depressive disorders and menopausal symptoms.

Treating depression in primary care

The symptomatic menopausal patient adds to the complexity of depression treatment in primary care. Recent studies on collaborative care indicate that to maximize therapeutic outcomes for depression, the integration of these patients’ care is a critical factor (Alexander 2007f). MacMillan (2005) has identified a number of critical questions for evaluating the presence of integrated care for depression:

- Is there a mechanism to ensure that the results of screening are reported to the clinician?
- What is the process by which the patient proceeds from a positive result on a screening instrument to a confirming diagnosis of depression and appropriate treatment for depression?
- Is there a clinician trained in the use of antidepressants that will follow up with patients who screen positive?
- Is there access to psychotherapists trained in approaches effective for the treatment of depression?

Primary care depression treatment programs have been observed to be maximally effective when the program has the support of the clinician. Some factors that facilitate this support involve unburdening primary care physicians by minimizing or decreasing the demands on their time, leveraging the reach of primary care physicians by facilitating appropriate care paths, creating barrier-free referral systems, as well as enlisting the aid of committed local champions (Alexander 2007d). Enlightened leadership and organizational support can result in a successful collaborative depression treatment program.

For the successful implementation of these collaborative depression treatment programs, clinicians and their institutions also must attend to external drivers. These drivers include HEDIS measures and other intra- and extra-organizational competition and performance measures; national regulatory measures; employers’ demands and contracts; and evolving reimbursement rates.

Conclusion

Successful implementation of depression treatment in primary care is critical in treating the comorbid symptomatic menopausal woman. Attending to both the psychiatric comorbidities and the menopausal symptoms will allow menopausal women to be successfully treated to remission and to maintain quality of life. Collaborative care pathways for the treatment of the symptomatic menopausal woman with depression comorbidity will successfully control and minimize the often sizable costs to the individual, her family, her workplace, the health care system, and society.

References


Heim C, Plotsky PM, Nemeroff CB. Importance of studying the contributions of early adverse experience to neurobiological findings in depression. *Neuropsychopharmacology*. 2004;29:641–648.


Efficient and Effective Care of Depression In Medical Settings

KURT KROENKE, MD
Professor of Medicine, Indiana University School of Medicine
Research Scientist, Regenstrief Institute

“I am no better in mind than in body; both alike are sick and I suffer double hurt.”
— Ovid (43 BC–17 AD), in Tristia

Patients with depressive disorders most likely are diagnosed and treated in a primary care setting. Efficient and effective care of these patients, though, is often complicated by the presence of comorbid medical and psychiatric conditions.

The nine core symptoms of depressive disorders —
- Loss of interest or pleasure (anhedonia)
- Depressed mood
- Feelings of guilt or worthlessness
- Thoughts of death or suicide
- Sleep disturbances
- Psychomotor disturbances
- Appetite changes
- Concentration difficulties
- Feelings of fatigue or low energy
—are not necessarily equal in terms of specificity. To make the diagnosis of depression in a patient with complex medical symptoms, it is important that the patient have at least one or several of the depression-specific symptoms, namely, depressed mood, anhedonia, guilt, and suicidal thoughts.

Aside from the depressive phase of bipolar disorder, there are three types of depression: major, minor, and dysthymia. A diagnosis of major depression requires the presence of at least 5 of the 9 symptoms; minor depression, 2 to 4 of the symptoms. The symptoms must be present nearly every day for at least 2 weeks. For a diagnosis of dysthymia, the symptom count is the same as for minor depression, but the required chronicity is much longer — more than 2 years. For any of these diagnoses, one of the patient’s symptoms must be depressed mood or anhedonia.

In primary care, the short self-administered questionnaire known as the PHQ-4 (Table 1, next page) is useful for quickly screening patients for depression and anxiety (Kroenke, in press). The PHQ-4 consists of four items: two address the core symptoms of depression (depressed mood, anhedonia) and two the core symptoms of general anxiety disorder (feeling nervous or anxious, constant worrying). For patients who screen positive, the longer Patient Health Questionnaire Nine Symptom Checklist (PHQ-9) and the 7-question Generalized Anxiety Disorder (GAD-7) anxiety scale can be used for diagnostic and treatment monitoring (Spitzer 1999, Spitzer 2006). These instruments are based on criteria listed in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV).

Barriers to treatment
Two barriers to the effective care of depression are stigma and concerns about suicide. Society tends to view depression as a personal failing. Further, people fear that the label “depression” will diminish their employment prospects and ability to obtain health and life insurance. The stigma of depression has been lessened somewhat by the disclosure by numerous celebrities that they have suffered from depression and received successful therapy for it, and by educational campaigns informing the public that depression is similar to common medical conditions in that it can be controlled if diagnosed and properly treated.

Primary care physicians often are reluctant to care for a patient with depression because of concerns about suicide. Suicide risk can be assessed by asking a patient this qualifying question: Have you had thoughts you might be better off dead or of hurting yourself in some way? If the answer is yes, three follow-up questions should be asked: (1) Do you have any specific plan of how you might hurt yourself? (2) Have you ever tried to hurt or harm yourself in the past? (3) How likely is it you will act on these thoughts? If the answers to all three questions are negative, the patient often can be managed in primary care rather than immediately referred to a psychiatrist.

Just as primary care physicians have learned to decide whether a patient with chest pain can be safely sent home
or has a serious condition that warrants an ER visit, so can they learn how to assess the risk of suicide in depressed patients in an efficient way. At Indiana University, we have devised a suicide assessment algorithm (Figure 1) that consists of eight clarifying questions for use in trials of telecare management. This algorithm has been tested in six trials enrolling more than 3,000 patients, and it may be useful in primary care. In these trials, we have learned that most suicidal ideation is passive rather than active; that is, the ideation is restricted to thoughts of death or of life not being worth living rather than being focused on the formulation of a plan to harm oneself. Further, many patients with fleeting thoughts of suicide say it is “not at all likely” that they will act on those thoughts. They commonly cite the “3 F’s” — family concerns, faith (i.e., religious beliefs), or fear of failing to complete the suicide — as their reasons for not pursuing the idea.

Another barrier to the treatment of depression in primary care is the concern about whether antidepressants increase suicide risk. A U.S. Food and Drug Administration analysis of short-term clinical trials indicated a slight increase in suicidal ideation but no completed suicides in children, adolescents, and young adults up to age 24. This was confirmed in a recent meta-analysis where the benefits of antidepressants for pediatric disorders greatly exceeded the risks of suicidal ideation or attempts (Bridge 2007). Nevertheless, antidepressants now carry a “black box” warning to inform physicians about these findings and to encourage the monitoring and observation of all patients, particularly who are age 24 younger and who are prescribed an antidepressant. The FDA is still analyzing the risk of suicide in adults prescribed an antidepressant.

Drug therapies for depression

In addition to psychotherapy, numerous pharmacotherapies are available for depression, including serotonin reuptake inhibitors (SSRIs, e.g., fluoxetine, sertraline, citalopram); serotonin-norepinephrine reuptake inhibitors (SNRIs, e.g., venlafaxine, duloxetine); norepinephrine reuptake inhibitors (e.g., tricyclic antidepressants [TCAs] such as nortriptyline); bupropion, a dopamine reuptake inhibitor; and mirtazapine, a purported antagonist of serotonin receptors as well as $\alpha_2$-adrenoceptors. Through the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study, it was determined that, among numerous treatment options, no treatment for depression was clearly superior to any other (Rush 2006). The study enrolled adult outpatients with major depressive disorder (N=3,671) and provided them with up to four successive levels of care. Patients who failed to achieve symptom remission at one level of care were encouraged to advance to the next level. Remission was defined as a score of $\leq 5$ on the Quick Inventory of Depressive Symptomatology — Self Report (QIDS–SR16). Patients with psychosis or bipolar disorder were excluded, but the trial enrolled patients with most other psychiatric disorders or a recent history of substance abuse provided that inpatient detoxification was not required. These considerations created a patient population typical of clinical practice.

Table 1 presents the results of the STAR*D treatment levels. Patients who failed cognitive therapy, with or without citalopram, could advance to level 2A, which consisted of nortriptyline or mirtazapine monotherapy or augmentation of the bupropion or venlafaxine treatment with lithium or thyroxine. These options also were available to the patients who opted for pharmacotherapy without cognitive therapy at level 2. At level 4 (n=123),

| TABLE 1 | The self-administered PHQ-4 for quickly screening patients for depression and anxiety |
|--------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| **PHQ-4**               | Over the last 2 weeks, how often have you been bothered by the following problems? | Not at all | Several days | More than half the days | Nearly every day |
| Feeling nervous, anxious, or on edge | 0 | 1 | 2 | 3 |
| Not being able to stop or control worrying | 0 | 1 | 2 | 3 |
| Feeling down, depressed, or hopeless | 0 | 1 | 2 | 3 |
| Little interest or pleasure in doing things | 0 | 1 | 2 | 3 |

SOURCE: KROENKE, IN PRESS

or has a serious condition that warrants an ER visit, so can they learn how to assess the risk of suicide in depressed patients in an efficient way. At Indiana University, we have devised a suicide assessment algorithm (Figure 1) that consists of eight clarifying questions for use in trials of telecare management. This algorithm has been tested in six trials enrolling more than 3,000 patients, and it may be useful in primary care. In these trials, we have learned that most suicidal ideation is passive rather than active; that is, the ideation is restricted to thoughts of death or of life not being worth living rather than being focused on the formulation of a plan to harm oneself. Further, many patients with fleeting thoughts of suicide say it is “not at all likely” that they will act on those thoughts. They commonly cite the “3 F’s” — family concerns, faith (i.e., religious beliefs), or fear of failing to complete the suicide — as their reasons for not pursuing the idea.

Another barrier to the treatment of depression in primary care is the concern about whether antidepressants increase suicide risk. A U.S. Food and Drug Administration analysis of short-term clinical trials indicated a slight increase in suicidal ideation but no completed suicides in children, adolescents, and young adults up to age 24. This was confirmed in a recent meta-analysis where the benefits of antidepressants for pediatric disorders greatly exceeded the risks of suicidal ideation or attempts (Bridge 2007). Nevertheless, antidepressants now carry a “black box” warning to inform physicians about these findings and to encourage the monitoring and observation of all patients, particularly who are age 24 younger and who are prescribed an antidepressant. The FDA is still analyzing the risk of suicide in adults prescribed an antidepressant.

Drug therapies for depression

In addition to psychotherapy, numerous pharmacotherapies are available for depression, including serotonin reuptake inhibitors (SSRIs, e.g., fluoxetine, sertraline, citalopram); serotonin-norepinephrine reuptake inhibitors (SNRIs, e.g., venlafaxine, duloxetine); norepinephrine reuptake inhibitors (e.g., tricyclic antidepressants [TCAs] such as nortriptyline); bupropion, a dopamine reuptake inhibitor; and mirtazapine, a purported antagonist of serotonin receptors as well as $\alpha_2$-adrenoceptors. Through the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study, it was determined that, among numerous treatment options, no treatment for depression was clearly superior to any other (Rush 2006). The study enrolled adult outpatients with major depressive disorder (N=3,671) and provided them with up to four successive levels of care. Patients who failed to achieve symptom remission at one level of care were encouraged to advance to the next level. Remission was defined as a score of $\leq 5$ on the Quick Inventory of Depressive Symptomatology — Self Report (QIDS–SR16). Patients with psychosis or bipolar disorder were excluded, but the trial enrolled patients with most other psychiatric disorders or a recent history of substance abuse provided that inpatient detoxification was not required. These considerations created a patient population typical of clinical practice.

Table 1 presents the results of the STAR*D treatment levels. Patients who failed cognitive therapy, with or without citalopram, could advance to level 2A, which consisted of nortriptyline or mirtazapine monotherapy or augmentation of the bupropion or venlafaxine treatment with lithium or thyroxine. These options also were available to the patients who opted for pharmacotherapy without cognitive therapy at level 2. At level 4 (n=123),
the options were monotherapy with tranylcypromine, a MAO inhibitor, or venlafaxine plus mirtazapine. At any level, patients were free to exit the study.

At level 1, the remission rate was 37 percent. Remission rates declined at succeeding levels, falling to 31 percent (439/1439) at level 2, 14 percent (53/390) at level 3, and 13 percent (16/123) at level 4. These results suggest that in a population of 100 patients with major depressive disorder, the theoretical cumulative remission rate that could be achieved with all four levels is 67 percent (Rush 2006). This calculation, however, assumes no dropouts and does not account for relapse. When the relapse rates reported in STAR*D are taken into consideration, the cumulative sustained recovery rate after four treatments is 43 percent (Nelson 2006).

The STAR*D findings indicate that depression probably needs to be treated more like hypertension, asthma, or diabetes. That is, patients need to be monitored after therapy has been implemented, doses often need to be adjusted, and sometimes drugs need to be switched or combined. While we cannot say at this point that any one particular treatment is more effective than another, we can say that monotherapy probably will be insufficient for a substantial number of patients. Just as many patients require at least two drugs to control hypertension, so too combined therapies may be required to achieve remission of depression in many patients. Whether those treatments should consist of two drugs or a drug and evidence-based psychotherapy (cognitive-behavioral, interpersonal, or problem solving), has not been determined (Yates 2007, Gaynes 2005).

STAR*D provides no answers about when therapy should be switched or added. My own practice is to switch to a different drug if the patient experiences adverse effects or has mild symptoms and a minimal response. For such a patient, my goal is to avoid polypharmacy, and the increased costs that entails, to promote compliance. On the other hand, I would add a drug if the patient has at least a partial response after presenting with relatively severe symptoms. My intention in this case would be to continue the benefits experienced from the first drug while also maintaining patient optimism about treatment rather than to communicate a sense of “failure.”

---

**FIGURE 1**

Suicide assessment algorithm*

You had indicated that, in the past two weeks, you had thoughts you would be better off dead or of hurting yourself in any way? Is this the way you have felt?

1. Have you ever tried to harm yourself or end your life in the past?
   - No ________ Yes (or Don’t Know) ________
2. Have you recently had thoughts of harming yourself in some way, or ending your life?
   - No ________ Yes (or Don’t Know) ________
3. Do you know how you might harm yourself or end your life?
   - Do you have a specific plan?
     - No ________ Yes (or Don’t Know) ________
3a. If “yes” or “don’t know” — Could you tell me more about this?

** IF 1, 2, 3 ALL “NO” → DONE.**
**IF ANY “YES” OR “UNCERTAIN” – PROCEED **

Optional clarifying questions (if it is unclear if patient has a plan) shaded response = risk

1. Do you live alone? (No ___ Yes ___)
2. Have you thought about taking an overdose of medication, driving your car off the road, using a gun, or doing something else serious like this? (No ___ Yes ___ → What is it? _____)
3. Do you (a) own a gun? (No ___ Yes ___)
4. Have you been stockpiling (saving up) medication?
   - (No ___ Yes ___)
5. Do you feel hopeless about the future?
   - (No ___ A little ___ Somewhat ___ Very ___)
6. Is anything preventing you from harming yourself?
   - (No ___ Yes → What ________)
7. Do you feel you can resist your impulses to harm yourself?
   - (No ___ Yes ___)
8. Right now, how strong is your wish to die?
   - (No wish _____ Weak _____ Strong _____)

4. There’s a big difference between having a thought and acting on a thought. How likely do you think it is that you will act on these thoughts about hurting yourself or ending your life some time over the next month?
   - a. Not at all likely _____ → Why not? ___ [Ask # 5]
   - b. Somewhat likely ______ → [Action Today] †
   - c. Very likely ______ → [Action Today] †

5. Just to make sure, it sounds like you would NOT do anything to hurt yourself or end your life in the next month, is that correct?
   - a. That’s right, I DO NOT plan to hurt myself ______ → [Action Routine]
   - b. I’m not sure – it’s possible I might do something ______ → [Action Today] †

* Copyright, Kurt Kroenke, MD
† “Action Today” typically would involve an expedited/urgent psychiatric consultation
Depression and comorbidity

Depression often occurs concurrently with one of three types of comorbidities: medical (e.g., cardiovascular disease, cancer, neurologic disorders), physical symptoms (e.g., pain), and psychiatric disorders (e.g., anxiety). In patients with depression and coronary artery disease (CAD), three studies have shown that treatment with sertraline (Glassman 2002), cognitive-behavioral therapy (Berkman 2003), or citalopram and/or interpersonal therapy (Lespérance 2007) can safely improve depression. No mortality benefit was demonstrated in any of these trials, although such a benefit does not have to be demonstrated to justify the treatment of depression in patients with CAD.

After a stroke, about one third of survivors experience depression. In a study enrolling patients with at least moderately severe depression following ischemic stroke (N=188), a remission rate of 39 percent was achieved in the intervention group versus 23 percent in the control group (P=.01) (Williams 2007). The intervention consisted of three components: activating the patient to recognize symptoms of depression and accept treatment, initiating antidepressant treatment, and monitoring and adjusting treatment. Patients in the control group received usual care (i.e., antidepressants at the discretion of the physician but no depression-related education). The 39 percent remission rate in the intervention group equaled or exceeded remission rates achieved in trials enrolling patients without stroke-related depression.

Another study found that treating depression in patients with comorbid arthritis (N=1,001) yielded additional benefits beyond a reduction in depressive symptoms — a 53 percent reduction in pain intensity compared with patients receiving usual care (P=.009) and diminished interference from arthritis in activities of daily living (Lin 2003).

We have found that in primary care, the presence of any physical symptom doubles and may even triple the likelihood of a diagnosis of a mood or anxiety disorder, and the presence of somatoform symptoms (symptoms lacking an adequate physical explanation) are especially associated with psychiatric disorders (Kroenke 1994). As the number of physical symptoms increases, so does the prevalence of a mood or anxiety disorder (Figure 2). In this sense, the physical symptom count is sort of a “psychiatric sed rate (ESR),” i.e., an indicator of potential “psychopathologic inflammation.” The total number of explained and unexplained physical symptoms is more important than any individual symptom (Kroenke 2006).

A clinical problem that arises when patients complain about multiple physical symptoms is the belief that each one needs to be addressed, which could entail multiple tests. We have found that once a patient has three or more unexplained symptoms, it is appropriate to curtail an exhaustive pursuit of medical explanations and to start thinking about somatization. In a 14-country World Health Organization study (Simon 1999), 69 percent of patients with major depression (N=1,146) presented in primary care with physical symptoms only. Fifty percent presented with multiple unexplained physical symptoms, and half of those patients reported three or more unexplained physical symptoms.

A recent literature review (Katon 2007) examined the relationship between somatic symptoms and depression or anxiety in four kinds of disease: cardiac (heart failure, CAD), pulmonary (asthma, chronic obstructive pulmonary disease [COPD]), diabetes, and arthritis (both osteoarthritis and rheumatoid arthritis [RA]). We found that depression and anxiety explained as much of the variance in somatic symptoms as did physiological measures of disease severity; that is, in CAD, the presence of depression explained as much of the angina reported as did left ventricular ejection fraction or the number of coronary arteries involved. In patients with asthma or COPD, it explained as much of the shortness of breath as did spirometry. It also explained as much of the diabetes symptoms as did levels of HbA1C, and as much of the pain in RA as did the number of swollen or tender joints, the erythrocyte sedimentation rate, or X-ray findings. This study emphasizes that clinicians need to assess and treat both medical and psychiatric disorders to improve patients’ overall functioning and quality of life.

![Figure 2](image-url)

**FIGURE 2**

Prevalence of mood/anxiety disorders increases with number of physical symptoms
and to reduce excessive utilization of health care resources.

Pain is the leading cause of work disability in the United States and is the most frequent physical symptom that patients present, while depression is the most frequent psychological symptom. Pain and depression often are comorbid, having a 30 to 50 percent overlap with each other. Pain increases the risk of depression (Table 2), and pain increases the risk of a poor response to depression treatment (Table 3).

The effect of pain on the outcomes of treatment for depression was recently examined in patients enrolled in a study known as RESPECT (Re-engineering systems for the treatment of depression in primary care) (Dietrich 2004, Kroenke 2008). The study enrolled patients with major depressive disorder or dysthymia (N=405) seen at 60 primary care practices. Patients were randomized by practice to enhanced care (telephone-based depression care management) or usual care. At baseline, 42 percent of depressed patients had pain severe enough to interfere moderately with daily activities. At 6 months, 32 percent of patients still had moderately severe pain. Interestingly, the level of pain had a stronger effect on outcomes than the treatment (Figure 3). These findings suggest that clinicians should ask about pain when initiating treatment for depression or if a patient is resistant to depression therapy. In the depressed patient with concomitant pain, treatment options include an antidepressant with norepinephrine reuptake inhibition, e.g., a TCA or an SNRI; optimization of analgesic medication; or referral of the patient to a multidisciplinary pain clinic, which can provide evidence-based cognitive-behavioral therapies, or pain self-management programs.

Depression often coexists with common anxiety disorders. The prevalence of four common anxiety disorders in primary care by administering the GAD-7 questionnaire to 965 patients was recently studied (Kroenke 2007). The prevalence of each anxiety disorder was in the range of 6 to 9 percent, and each was associated with considerably more disability days (self-reported days when symptoms interfered with usual activities) in comparison with the absence of an anxiety disorder (Table 4, next page). Also, comorbid anxiety increases the degree of impairment experienced by patients with depression (Kroenke, in press).

Collaborative care

Contemporary health care terminology includes numerous related terms — collaborative care, stepped care, multi-

---

**TABLE 2**

<table>
<thead>
<tr>
<th>Pain severity</th>
<th>Pain score*</th>
<th>Odds ratio for depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>1–3</td>
<td>2.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>4–6</td>
<td>5.2</td>
</tr>
<tr>
<td>Severe</td>
<td>7–10</td>
<td>12.2</td>
</tr>
</tbody>
</table>

* Pain severity was rated on a 0–10 scale.

SOURCE: BAIR 2004

**TABLE 3**

<table>
<thead>
<tr>
<th>Pain severity</th>
<th>% of patients (N=573)</th>
<th>Odds ratio for poor depression response (95% confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>31</td>
<td>—</td>
</tr>
<tr>
<td>Mild</td>
<td>25</td>
<td>1.5 (0.8–3.2)</td>
</tr>
<tr>
<td>Moderate</td>
<td>30</td>
<td>2.3 (1.1–4.0)</td>
</tr>
<tr>
<td>Severe</td>
<td>14</td>
<td>4.1 (1.9–8.8)</td>
</tr>
</tbody>
</table>

SOURCE: BAIR 2004
component interventions, systems-based interventions, care management, disease management — all of which deliver a common message: the doctor can’t do it alone. Optimal outcomes require additional support. A recent literature review identified 28 randomized controlled trials of multifaceted interventions employed in primary care with the intention of improving depression outcomes (Williams 2007). All 28 interventions involved a care manager, usually a nurse or a pharmacist, and all provided patient support and education. In 25 studies, the care manager also communicated with the physician, and in 24 studies monitored symptoms and adherence. A minority of the studies provided self-management support (10 studies) and psychological treatments (five studies).

RESPECT serves as an example of collaborative care. In RESPECT, the intervention consisted of clinician-provided care provided augmented with staff-provided telephone support supervised by a psychiatrist (Dietrich 2004). A reduction of 50 percent or more in depressive symptoms was achieved after 3 months by 53 percent (97/183) of patients receiving telecare management versus 34 percent (52/152) of patients receiving usual care (P=.001); after 6 months, the percentage of patients with this extent of symptom reduction had increased to 60 percent (106/177) in the intervention group versus 47 percent (68/146) in the usual care group (P=.02).

Conclusion

The message from STAR*D and enhanced care trials is that efforts to control depression in the primary care setting need to be intensified. Clinicians must be aware that depression often occurs concurrently with other conditions, such as chronic medical disorders, anxiety, or somatic symptoms, such as pain. Outcomes can be improved efficiently if health care expertise is targeted to the patient’s needs through a collaborative care program that complements clinical care. Treatment should be tailored according to patient preferences and carefully monitored so that medications can be added or switched as necessary, and timely referrals can be made. Integrated care of medical and mental disorders is necessary to optimize health care use, to appropriately prescribe medications and other treatments, and to improve clinical outcomes.

“The mind may undoubtedly affect the body; but the body also affects the mind. There is a re-action between them; and by lessening it on either side, you diminish the pain on both.”

— Leigh Hunt, Poet

---

**TABLE 4**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>N</th>
<th>Prevalence (%)</th>
<th>Disability days, past 3 months (95% confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No anxiety disorder</td>
<td>777</td>
<td>—</td>
<td>5.7 (4.5–6.8)</td>
</tr>
<tr>
<td>Posttraumatic stress disorder</td>
<td>83</td>
<td>8.6</td>
<td>12.5 (9.3–15.8)</td>
</tr>
<tr>
<td>Generalized anxiety disorder</td>
<td>73</td>
<td>7.6</td>
<td>18.1 (14.5–21.7)</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>66</td>
<td>6.8</td>
<td>17.7 (14.0–21.4)</td>
</tr>
<tr>
<td>Social anxiety disorder</td>
<td>60</td>
<td>6.2</td>
<td>15.9 (12.1–19.7)</td>
</tr>
</tbody>
</table>

SOURCE: KROENKE 2007

**References**


POST-PRESENTATION DISCUSSION

QUESTION: What are your thoughts about links between insomnia and depression or anxiety?

KURT KROENKE, MD: Fatigue and sleep problems are core diagnostic criteria for depressive disorders as well as some of the anxiety disorders, such as generalized anxiety disorder. It is difficult to disentangle the relationship. Also, when you look at residual symptoms of depression, fatigue and sleep disturbances are among the more common symptoms that may persist despite treatment. In a primary care setting, a patient complains of being tired and not sleeping. With that clue, you screen for depression, and the patient may meet criteria for a depression diagnosis. Several months later, their mood and other symptoms may have improved, but they still are tired and not sleeping. We should not always be so confident that fatigue and sleep disturbance are solely related to depression and anxiety. They are useful for cluing us in to the possibility that the patient may have a depressive disorder or an anxiety disorder, but sometimes that may not be the sole cause. In cancer patients, for example, fatigue is probably only partly due to depression.

QUESTION: A function of health plans is to identify patients with the potential to become high utilizers so that intervention can take place earlier. Are there any studies showing whether there is a cause-and-effect relationship between depression or other behavioral health conditions and physical comorbidities? For example, is a person with a particular comorbidity predisposed to depression, or is a depressed person more likely to develop type 2 diabetes?

KROENKE: That question is still unanswered. I am very pragmatic. As a clinician, I cannot answer the question yet of whether the depression is causing the cardiovascular disease, or whether they are amplifying each other. The reality is that if I have a patient with diabetes, hypertension, and CAD, I know they are interrelated. I know diabetes increases the risk of CAD, as does hypertension, and I treat both. It is the same with depression and CAD. Until we have a unifying hypothesis, if patients have CAD, I treat it, and if they have CAD and depression I treat both.
Evidence-based treatment of depression improves patients’ well-being and quality of life, and may result in financial gains for health plans, employers, and patients. In primary care, however, the adoption of evidence-based treatment for patients with depression is lagging.

Pharmacologic treatment of depression can be thought of as consisting of an acute phase and a continuation phase. In its measure of the quality of antidepressant care provided by MCOs, the National Committee For Quality Assurance requires a minimum of three follow-up visits over the course of the first 12 weeks of treatment (the acute phase) to monitor and adjust treatment (NCQA 2007). NCQA also judges the quality of depression care by looking at the percentage of members that remain in treatment during the acute phase and the percentage that continues treatment for 6 months. By these standards, the quality-improvement trend in recent years has been flat (Figure). The lack of improvement in continuity of contact with patients with depression is consistent with reports of declines in psychosocial aspects of care for patients with bipolar disorder or schizophrenia. In these populations, there has been an upward trend in the quality of medication management but a downward drift in the intensity and amount of evidence-based psychosocial support. This tension pervades all mental health treatment and is particularly evident in the treatment of depression.

The capability of primary care practitioners to efficiently care for depression has improved dramatically, owing to the development of screening instruments and better-tolerated drug therapies. Although primary care physicians have been historically weak in recognizing and treating depression, they now have tools to improve care for patients with depression.

**Financial benefits of treating depression**

For primary care physicians, the key elements of evidence-based treatment of depression are time spent by the physician with the patient and with other members of the care team, care manager services, specialty consultation, and registry-decision support. Evidence-based treatment incorporating these elements usually increases treatment costs, but it also improves outcomes (Lave 1998). In a study in which patients with major depression were randomly assigned to treatment with either nortriptyline, interpersonal psychotherapy, or usual care (whatever care the physician provided after being informed that the patient was depressed), nortriptyline was slightly more effective and less costly than interpersonal psychotherapy, and either therapy was more effective and more costly than usual care, but without generating meaningful cost offsets (Lave 1998). In a few targeted areas, however, treatment of depression may offset medical costs; for example, depressed patients post myocardial infarction or post hip fracture (especially in older patients) or with diabetes (Simon 2007). A recent meta-analysis suggests that evidence-based treatment of depression also produces modest improvements in labor outcomes (e.g., hours worked per week, odds of being unable to work) (Timbie 2006). This study involved four randomized controlled trials (the only ones among 706 studies found through database searches that met the authors’ inclusion criteria) in which the interventions were mostly collaborative care and the controls mostly usual care. Measured by Cohen’s $d$, the size of the clinical effect (reduction in symptoms of depression) of the interventions was an improvement of 0.34 standard deviation, but the size of their effect on the labor supply was only 0.12 standard deviation (a Cohen’s $d$ of 0.2 is regarded as representing a small effect size).

Researchers cognizant of the paucity of studies of the effect of depression treatment on workplace productivity recently generated new evidence that a systematic program to screen and treat depressed workers can improve clinical outcomes and productivity (Wang 2007).
Compared with usual care, the intervention (telephonic screening and care management in support of outpatient psychotherapy and/or antidepressant medication) was associated with an annualized gain of two weeks of work. However, improvement in worker productivity stemming from improved depression care will accrue partly to employers but largely to households, simply because of the arithmetic of employer-based health insurance: about one third of the covered population is the employer’s workers while the other two thirds are the employees’ dependents.

**Raising the standards**

In primary care, usual care for depression has not risen to the standards of evidence-based medicine. Primary care physicians still fail to recognize depression on a regular basis, although greater use of screening instruments could help identify more patients with depression. Primary care physicians also fail to allocate much time to patients with depression. The mean duration of a primary care visit is 17 minutes, and if the case involves depression or anxiety, the length of the visit increases by only 1.8 minutes (Frank 2007). If a mental health problem is raised during a primary care visit, videotape evidence suggests the subject is changed in about 1 minute (Tai-Seale 2007).

Further, the median number of visits in the United States for a patient with major depression is two, one for the initial assessment and one for follow-up. A high percentage of usual-care patients lack adequate follow-up care. It has been found that in usual care, physicians often fail to observe or use longitudinal information about patients’ progress, which leads them to adjust treatment according to the level of symptoms rather than a change in symptom patterns (Frank 2007).

Barriers to greater adoption of evidence-based treatment in primary care are physicians’ ingrained attitudes and habits; organization of their practices, which affects their ability to implement quality improvement programs and use decision support tools; and payment policies. Physicians feel extraordinarily constrained by their 17-minute visits, and it is difficult for them to add extra time to a visit, whether to deal

---

**FIGURE**

HEDIS antidepressant medication management rates, 2001–2006

**A. Optimal practitioner contacts**

- Commercial
- Medicare
- Medicaid

**B. Effective acute phase treatment**

**C. Effective continuation phase treatment**

The three components of a HEDIS measure for antidepressant medication management have been largely unchanged since 2001: (A) *Optimal practitioner contacts*, reporting the percentage of eligible members newly diagnosed with depression and treated with an antidepressant medication who received ≥3 follow-up visits during the 12-week acute treatment phase; (B) *Effective acute phase treatment*, reporting the percentage of eligible members remaining on antidepressant medication throughout the 12-week acute treatment phase; and (C) *Effective continuation phase treatment*, reporting the percentage of eligible members remaining on an antidepressant medication for ≥6 months.

SOURCE: NCQA 2007
with depression, diabetes, or post-myocardial infarction management. Even when a productivity formula was adjusted to give primary care physicians more time for depression care (by allowing a 30-minute visit for depression to count as two visits), few physicians availed themselves of the extra time (Feldman 2006). It is possible that physicians failed to change their habits because the patients eligible for visits under the adjusted formula constituted too small a percentage of their practice. As a result of the failure of physicians to extend the duration of a visit, once a prescription is written for an antidepressant, there is little discussion with a patient about side effects and follow-up care. Consequently, patients with depression are less likely to have return visits than patients with other chronic conditions.

The structure of primary care practices also impedes effective depression care. About 30 percent of primary care physicians are solo practitioners, and another 20 to 30 percent are small group practices consisting of fewer than five physicians. Thus, up to half of primary care physicians practice in a setting that tends to preclude taking on the quasi-fixed cost of a care manager. Caseloads of 40 to 80 patients per care manager appear to be necessary if the hiring of a care manager is to be tenable in a primary care practice. Because of cost, small groups also are less likely to use electronic records.

Payment policies also can be an impediment to evidence-based treatment of depression. Medicare and other payers do not pay for care management or certain types of consults. Some health plans that carve out behavioral health are reluctant to pay on a fee-for-service basis for any kind of mental health visits within a primary care setting. Carve-outs, though, could be structured to promote evidence-based treatment of depression, and primary care physicians can be credentialed and paid on a fee-for-service basis. An indication of the relatively low status afforded to depression treatment in primary care is reflected in the accompanying table.

**Conclusion**

Health plans consistently deliver less effort to depression care performance. Plan-physician interactions on depression care are relatively low compared with other chronic conditions, and fewer financial and nonfinancial incentives are tied to performance for treatment of depression.

Just by doing more of what they do for almost every other chronic condition, health plans can improve depression care in the managed care setting. They can consistently measure key activities, using HEDIS measures, for example; provide physicians with feedback on their performance; and include depression care in incentive schemes. Primary care physicians typically do not measure depression symptoms longitudinally, but if they are encouraged to use tools like the PHQ-9, the Patient Health Questionnaire Nine Symptom Checklist (see Kroenke, page 15), and low-cost spreadsheets, this use of longitudinal data would facilitate rational adjustment of therapy.

**References**


PANEL DISCUSSION
Integrating Physical and Behavioral Health Care

FACULTY
ELISABETH J. BUCHMAN, MA, LMHC, Director of Behavioral Health & Wellness, Regence
MICHAEL GOLINKOFF, PHD, MBA, National Clinical Director, Aetna Behavioral Health
ANTHONY M. KOTIN, MD, Chief Clinical Officer, Magellan Health Services; Chair, Association for Behavioral Health and Wellness
DAVID WHITEHOUSE, MD, PHD, MBA, Chief Medical Officer, Strategy and Innovation, United Behavioral Health

Colloquy attendees were given the opportunity to pose questions to an expert panel. A selection of questions and answers is presented below.

QUESTION: Where are we with mental health parity?
ANTHONY M. KOTIN, MD: Speaking as chair of the Association for Behavioral Health and Wellness, I can say that this industry trade association supports parity at the federal level — we think it is essential. We favor the Senate version of the bill. Opening up the behavioral health benefit to be equal to the medical benefit will enhance our ability to manage patients properly across comorbid states. There should be no differentiation between physical and behavioral health benefits.

ELISABETH J. BUCHMAN, MA, LMHC: At the state level, about 40 states now have some form of mental health parity, but no two states are alike. Some have biological models and some have DSM-IV–driven models, so the lack of a uniform definition makes it challenging to manage care across those states. Federal parity legislation may assist with this complexity, depending on when federal law supersedes state law.

QUESTION: What has spurred interest in integrating behavioral health and medical management?
KOTIN: Through the literature and millions of claims, we have found that patients suffering from a behavioral health disorder and a comorbid condition have at least 2 times greater total medical costs. Sleep disorders, for example, strongly affect physical health. The causative relationships aren’t clear, but improved management of behavioral health would dramatic improve management of comorbid medical conditions.

MICHAEL GOLINKOFF, PHD, MBA: At Aetna, we have a program for those persons with chronic medical conditions that screen positive for depression and standard depression management programs. For many years, Aetna subcontracted behavioral care management. The initial motivation to bring it back in-house was the recognition of comorbid conditions and the need to have better integrated behavioral health care services for persons with chronic medical problems. Recently, this decision has been reinforced by the growing awareness that medical outcomes ultimately are driven by the behavioral health decisions that patients and providers make every day. It has nothing to do with comorbidity. Rather, it’s how we choose to act, our attitudes and values, that drives outcomes. We need to leverage the knowledge behavioral health specialists bring to our organizations to influence those behaviors and attitudes in the most effective way.

BUCHMAN: Regence is an affiliation of BlueCross and BlueShield health plans operating in the Pacific Northwest and Intermountain West regions. We serve approximately 3 million covered lives. In late 2001, we began insourcing behavioral health. At the same time, our senior executive leadership set forth a new vision for Regence to transform the health care system. This vision addresses three main targets, seeking to reduce waste, confusion, and tyranny in the system for our members and their families. When members are shuffled back and forth between primary care and mental health care, there can be confusion regarding where they should go for the best care. Insourcing behavioral health was a key initial step on the path to integrating medical and behavioral health services and promoting a collaborative care model.

DAVID WHITEHOUSE, MD, PHD, MBA: At United Behavioral Health, we realized that if we asked our people to try to solve problems in terms of medical behavior and health psychology integration — engaging and activating people — they would use the whole realm of their psychological expertise and would feel more satisfied about their job, and we would, in turn, provide greater value to our clients.

KOTIN: Our pharmacy data show that 75 to 80 percent of psychotropic medications are not prescribed by people who are formally trained in behavioral health illnesses, and 30 percent of patients are prescribed...
psychotropic drugs inappropriately. Five percent of the population receives five or more psychotropic medications concurrently, prescribed by nonbehavioral health clinicians. These numbers are disturbing, but this will continue to happen unless behavioral health organizations collectively — as an industry — do something to remedy this situation. We need to give practitioners the tools they need to properly diagnose and treat behavioral health illness.

QUESTION: During this colloquy, we have heard a lot of intriguing ideas about new developments focusing on cost and quality. What strategies have your organizations used to work directly with physicians to implement those ideas?

GOLINKOFF: At Aetna, we try to put a clinical care manager into the patient and physician relationship, and we offer primary care physicians training on the diagnosis and treatment of depression. We also have modified our compensation. We will pay for a completed PHQ-9 as a lab test, and we allow physicians to bill 30 and 45 minutes for a visit, not just 17 minutes. We have built some web-based tools for patients that provide assessment and progress-tracking capabilities. Physicians are trained to encourage patients to use these tools after diagnosis. Reception of this program in the primary care community has been excellent. We’re seeing people staying on their medications longer, and we’re seeing depression scores going down.

QUESTION: The legal profession’s pay has steadily increased, but the medical profession’s pay has not. In the legal profession, the client pays for time spent speaking with an attorney. You’re asking for professional time from clinicians, so why is that cost being transferred to the doctor?

KOTIN: In this instance, money is not a motivating factor for physicians. It’s simply that they are too busy, and their office flow is geared toward medical conditions. As an internist, the last thing I wanted to see walking into my office was a depressed person. It wasn’t that I didn’t care, but I felt powerless to do much about it. Through surveys, primary care physicians have indicated to us that they want to be able to get psychiatric consultations. And even though historically we have provided 800 numbers and publicity campaigns in response to those surveys, in the course of a month, calls for psychiatric consults have numbered only in the single digits. CME activities get primary care physicians to the table, but we don’t really move the boulder very far using those techniques. For nonbehavioral health physicians, our most widely accepted programs have been based on pharmaceutical interventions. If the drug regimen doesn’t seem optimal, a one-on-one dialog between the primary care physician and a psychiatrist seems to have the biggest effect. But that’s not necessarily the most effective way to improve things.

WHITEHOUSE: In the Kansas City Community Initiative on Depression (Butcher 2005), a community came together and said, “As a community, we are really falling short — in businesses, in hospitals, in primary care and specialist offices, as well as in the psychiatric and therapy community.” People stopped pointing figures and came together and something did happen — the HEDIS numbers improved and treatment improved. Perhaps the solution that will have the best chance of really making a difference will be a community solution.

QUESTION: What are employers doing differently about the integration of behavioral and physical health?

KOTIN: At Magellan, several large employers have come to us because of disenchantment with the standard disease management players. Forward-thinking employers are thinking about how behavioral health conditions and comorbidities affect the workforce. We’re seeing a greater interest in combined services. That is tough to do, because you don’t offer the complete solution when you deal with carve-out disease management vendors. But some very large employers have said they don’t care how hard it is. They just want everyone to sit in the same room and figure it out.

BUCHMAN: Regence serves many small and medium-size employers, and they are uniquely challenged to provide worksite wellness programs. Our new Vitality product helps employers establish wellness programs that meet their needs. Many have been requesting stress management programs in the workplace.

WHITEHOUSE: At United, we’re seeing an increased interest in having productivity tools, like the World Health Organization Health and Work Performance Questionnaire (HPQ) or the Work Limitations Questionnaire (WLQ), added to health risk assessments. We’ve also seen an understanding that even if a person is genetically vulnerable to depression, it often takes stress to push that person over the edge; there has been an increasing awareness of the impact of stress on medical costs, compliance, presenteeism, return to work, and productivity, although there is a reluctance to look at work structure and autonomy in the workplace as contributors to stress. It may be that the stressed and distressed, and not those who fit the DSM-IV diagnosis who are creating the greatest impact. We also have to deal with the fact that some companies may even have a “stress-envy” culture — in some high-tech companies, if you don’t come in looking bedraggled, it is clear that you are going nowhere. The culture fosters stress, which leads to depression, and then the company pays to get it fixed. That’s a real issue.

Reference
CONTINUING EDUCATION POST-TEST
Mind Your Body: The Intersection of Physical and Behavioral Health

Please tear out the combined answer sheet/evaluation form on page 28. On the answer sheet, place an X through the box of the letter corresponding with the correct response for each question. There is only one correct answer to each question.

1. According to Shore, poor clinical outcomes and overly expensive health care most likely result from:
   a. Failure to comply with the prescribed therapy.
   b. Cost of therapy.
   c. Lack of trust in the health care providers.
   d. Inconvenience of available services.

2. At IBM, the reduction in mean number of workdays missed was largely the result of:
   a. Behavioral change through enrollment in the Employee Assistance Plan.
   b. Improvement in outpatient health care services.
   c. Implementation of disease management programs.

3. Somatic symptoms common to women with depression and to women in menopause are:
   a. Sleep disorders.
   b. Physical pain.
   c. Reduced sexual responsiveness.
   d. Dysthymia.
   e. All of the above.

4. Progression through the four stages of reproductive aging in women is characterized by ___ FSH, LH, and estradiol, and ___ luteal progesterone.
   a. Increased, decreased
   b. Decreased, decreased
   c. Increased, increased
   d. Decreased, increased

5. The diagnosis and treatment of depression in perimenopausal women is difficult because:
   a. Somatic and neurobehavioral symptoms are shared or may overlap.
   b. Cultural “loading” sometimes determines the diagnosis.
   c. Early life stress is overlooked.
   d. All of the above.

6. The primary barrier to effective care of depression is:
   a. Social stigma.
   b. Cost of therapy.
   c. Threat of suicide.
   d. Diffuse symptoms.

7. To make a diagnosis of minor depression in a patient, ___ of the 9 core symptoms must be present, and one of the symptoms must be _____.
   a. 1 to 3 symptoms; depressed mood or thoughts of death or suicide.
   b. 2 to 4 symptoms; depressed mood and anhedonia.
   c. 3 to 5 symptoms; depressed mood and sleep disturbances.
   d. 5 to 9 symptoms; anhedonia and thoughts of death or suicide.

8. The STAR*D study concluded that depression is best treated with:
   a. Monotherapy.
   b. Polypharmacy.
   c. Monotherapy combined with psychotherapy.
   d. Initial monotherapy with continuous patient monitoring to determine effective treatment.

9. Depression associated with a comorbidity such as diabetes or heart disease is best treated:
   a. Concurrently with an antidepressant.
   b. By depression counseling.
   c. Concurrently with psychotherapy.
   d. By alleviating physical distress.
   e. A combination of some or all of the above.

10. The mean duration of a primary care visit that involves depression or anxiety is:
    a. Less than 15 minutes.
    b. 18.8 minutes.
    c. 17 minutes.
    d. About 20 minutes.

11. Barriers to the adoption of evidence-based treatment in primary care include:
    a. Reimbursement policies.
    b. Ingrained attitudes and habits.
    c. Inability to expand practice.
    d. Inability to implement quality improvement programs and decision support tools.
    e. All of the above.

12. Primary care treatment of depression can be improved by:
    a. Implementing a care management function.
    b. Greater use of depression measurement tools in evaluating patients.
    c. Restructuring carve-outs to promote evidenced-based treatment of depression.
    d. All of the above.
CONTINUING EDUCATION ANSWER SHEET/EVALUATION/CERTIFICATE REQUEST

Mind Your Body: The Intersection of Physical and Behavioral Health

CE Credit for Physicians/Pharmacists

Sponsored by
The Chatham Institute

I certify that I have completed this educational activity and post-test and claim (please check one):
□ Physician credit hours
□ Pharmacist contact hours

Signature: ____________________________

PLEASE PRINT CLEARLY

First name, MI __________________________
Last name, degree ______________________
Title ____________________________
Affiliation ________________________
Mailing address ________________________
City___________ State ___ ZIP______
Daytime telephone (_____ ) _____________
Fax (_____ ) ________________________
E-mail ____________________________

Physician — This activity is designated for a maximum of 2.75 AMA PRA Category I Credits(s).™

Pharmacist — This activity is approved for 2.75 contact hours (0.275 CEU).

ACPE Universal Program Number (UPN): 812-000-08-007-H01-P

Release date: Mar. 15, 2008
Expiration date: Mar. 1, 2009

To receive credit, complete the answer sheet/evaluation form and mail or fax the completed form to:
The Chatham Institute
26 Main Street, 3rd Floor
Chatham, NJ 07928-2402
Fax: (800) 239-2984

Allow up to 6 to 8 weeks for processing.

T7Z06-MG

Credit will be awarded upon successful completion of assessment questions (70 percent or better) and completion of program evaluation. If a score of 70 percent or better is not achieved, no credit will be awarded and the registrant will be notified.

The cost of this activity is provided at no charge through an educational grant from AstraZeneca Pharmaceuticals LP.

EXAMINATION: Place an X through the box of the letter that represents the best answer to each question on page 27. There is only ONE correct answer per question. Place all answers on this form:

A. B. C. D. E.
1. □ □ □ □ □
2. □ □ □ □ □
3. □ □ □ □ □
4. □ □ □ □ □
5. □ □ □ □ □
6. □ □ □ □ □
7. □ □ □ □ □
8. □ □ □ □ □
9. □ □ □ □ □
10. □ □ □ □ □
11. □ □ □ □ □
12. □ □ □ □ □

PROGRAM EVALUATION

Effectiveness of this method of presentation:

Excellent Very good Good Fair Poor

5 4 3 2 1 N/A

What other topics would you like to see addressed? ____________________________

Comments: ________________________________________________________________

Treat/manage patients?
5 4 3 2 1 N/A

Communicate with patients?
5 4 3 2 1 N/A

Manage my medical practice?
5 4 3 2 1 N/A

Other ________________________________

Was this publication fair, balanced, and free of commercial bias? □ Yes □ No

If no, please explain: ____________________________

Please use the following scale to answer the next four questions:

Strongly Agree ..........5
Agree ......................4
Neutral ....................3
Disagree .................2
Strongly Disagree ....1

Did this educational activity meet my needs, contribute to my personal effectiveness, and improve my ability to:

Yes No

Treat/manage patients?

Communicate with patients?

Manage my medical practice?

Other ________________________________