Aligning Incentives in the Treatment of Depression in Primary Care With Evidence-Based Practice

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Deficits in the quality of treatment of depression in the primary care sector have been documented in multiple studies. Several clinical models for improving primary care treatment of depression have been shown to be cost-effective in recent years but have not proved to be sustainable over time, partly because of barriers created by common organizational and financing arrangements such as managed behavioral health care carve-outs and risk-based provider payment mechanisms. These arrangements, which often distort relative costs that primary care physicians face when making treatment decisions for patients who have depression, can steer these decisions away from evidence-based practice. Various changes, such as in contractual relationships, payment methods for primary care physicians, and performance measurement, can be made in existing institutional arrangements to better align them with emerging clinical technologies and evidence-based practice. (*Psychiatric Services* 54:682–687, 2003)

The potential for successfully treating depression in primary care has never been greater. New pharmaceutical agents and "manualized" psychotherapies have expanded the set of technologies proven effective that are available to clinicians caring for patients with depression and have produced improvements in the potential efficiency and effectiveness of depression treatment (1–3). Despite recent advances, however, several studies have documented poor quality of depression care in the primary care sector, in the form of low rates of both disease recognition and appropriate treatment by primary care physicians (4–8). As a result, government agencies, accrediting organizations—for example, the National Committee for Quality Assurance—and private advocacy organizations have made improving the treatment of depression in primary care a health policy goal.

Several clinical models have been shown to improve the primary care treatment of depression, but the models have not proved sustainable over time (9,10). For this reason, some authors have recommended that quality improvement initiatives direct attention not merely to the design of clinical interventions but also to the systems of care in which the interventions will be implemented (2,11–15).

In this article, we argue that misalignment often exists between current treatment technologies and the market institutions that govern their use. Common organizational and financing arrangements, such as managed behavioral health carve-outs and risk-based provider payment methods, favor the use of some treatments over others independent of their relative effectiveness and efficiency. These arrangements discourage clinicians from taking account of the true costs and benefits of different treatment options when making treatment decisions. Market institutions and emerging clinical technologies must be made compatible to support evidence-based practice and to promote cost-effective decision making about treatment in the primary care sector.

Below we provide a brief overview of models for improving depression treatment in primary care, discuss financial incentives that discourage improvements, describe recent institutional changes that influence incentives, and give examples of economic and organizational changes that could address the problems inhibiting the long-term sustainability of clinical models of quality improvement.

Models for improving treatment

The Surgeon General's 1999 report on mental health (1) pointed to a gap between the efficacy and the effectiveness of treatment for depression and noted that this gap is most pronounced in the primary care sector. It is well es-

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tablished that major depression goes unrecognized in the primary care sector for one-third to one-half of patients who have major depression (1,5,6). Also, the majority of patients treated in primary care do not receive antidepressant medication in accordance with the guidelines for dosage and duration of treatment published by the Agency for Healthcare Research and Quality (7,8,16–18).

Despite this efficacy-effectiveness gap, the primary care sector is the most common treatment setting for depression. According to Young and colleagues (4), 83 percent of 1,636 adults characterized as having a "probable depressive or anxiety disorder" received treatment for their condition from a health care provider during a 12-month period. Of these, the majority—61.4 percent—received treatment from a primary care physician only (4). We estimate, from the 1999 National Ambulatory Medicare Care Survey (NAMCS), that primary care physicians provided 50 percent of the office visits during which antidepressant medications were prescribed in that year, psychiatrists provided 30 percent of such visits, and other specialists provided 20 percent. These estimates are consistent with previous estimates from 1993–1994 NAMCS data (19).

Efforts aimed at improving the treatment of depression in primary care settings must take into account the organizational and economic context in which treatment choices are made. Although most patients with depression who receive treatment do so in the primary care sector, depression treatment still accounts for a relatively small proportion of all services delivered by primary care physicians. In an analysis of 1996 and 1997 data from the NAMCS, Harman and colleagues (20) found that a depression diagnosis was recorded in only 2.8 percent of all physician office visits. Thus improving the treatment of depression in primary care occurs in the context of many other pressing clinical priorities. Moreover, primary care physicians' responsibilities are continuously expanding. Their responsbilities include screening for a variety of conditions such as depression and substance abuse; managing chronic diseases such as diabetes, asthma, and congestive heart failure; and overseeing preventive measures such as smoking cessation and weight control.

The expanding clinical reach of the primary care physician is occurring under tight budgets that create pressure to increase the number of patients treated and to meet a variety of performance standards. Therefore, interventions aimed at improving care for depression must be compatible with the overall organization of primary care practice. Otherwise, it is unlikely that these interventions will be adopted or sustained.

Moreover, overemphasizing any one activity in a tightly constrained system of care can result in distortions in clinical effort that may, on balance, disadvantage patients. Identifying and treating depression typically takes more time than treating most other conditions, and institutional arrangements provide disincentives for addressing depression in primary care. Therefore, in a successful model of quality improvement, incentives for cost-effectively treating depression should be equal to such incentives for other conditions seen in primary care, such as hypertension and diabetes.

A number of models for improving treatment of depression in primary care have been successfully tested. These models range from very simple interventions aimed at one aspect of the clinical process, such as patient screening or physician education, to more complicated models that target a number of dimensions of the treatment process (2,7,9,10,21). These multifaceted approaches include care manager models, in which the care manager conducts patient education and follow-up and provides education and information on patient progress to clinicians; a consultation-liaison model; and a collaborative model.

Some key features common to many of these models are a process for identifying and tracking cases of depression (2,10,14,21–23); involvement of a depression care manager to track and follow up with depressed patients, both those referred to specialty care and those treated by the primary care physician (2,5,6,9,14, 24); and the availability of consultation with mental health specialists, or, in some cases, collaborative management by primary care physicians and specialists (2,5,7,21,22,24–27). These models typically use evidence-based guidelines to drive these processes.

Several of these models have been shown to be more cost-effective than usual care delivered in primary care settings (10,14,28,29). For example, Simon and colleagues (26) found cost-effective a model of stepped collaborative care for patients whose depressive symptoms persisted after usual primary care management. By referring to this treatment model as "cost-effective," we do not mean that its use will result in lower treatment costs; we mean rather that the ratio of cost to benefit for the treatment is comparable to ratios for types of services that decision-making bodies consider an appropriate use of resources (30,31).

Despite promising innovations in treatment, adoption of quality improvement interventions has been slow, and the interventions have often been unsustainable (14). In some cases, the fact that the intervention increased costs, even though it increased benefits, was a key barrier to its sustainability once grant funds were no longer available to cover some or all of the extra costs. However, a bigger part of the problem in most cases is that the clinical models for quality improvement in this area are commonly designed independently of economic and organizational contexts.

Financial incentives

Existing economic and organizational arrangements create barriers to implementing and sustaining some basic elements of models for improving depression treatment in primary care. The economic issues that arise in considering problems of quality improvement are typical of incentive problems found throughout the health sector (32).

First, provider payment arrangements affect decision making within medical practices (33). Capitated or bundled payment systems represent a case in point. They create an incentive to provide fewer services than fee-for-service systems, which reward provision of additional services. In a

fee-for-service system, services that are compensated relatively generously tend to be provided at higher rates than similar or substitutable services that are compensated less generously. For example, if primary care physicians are paid at a rate of $200 per hour if they see four or five patients for "brief visits" but at a rate of $80 per hour if they bill for "psychotherapy," providers with full schedules will tend to supply more brief visits than psychotherapy.

Another problem is the absence of a mechanism for reimbursing primary care physicians for depression care managers' services or mental health specialty consultations. Also, many health systems offer primary care physicians productivity bonuses based on the total number of visits provided in the course of a week. Because identifying and treating depression often takes more time than treating other conditions, these bonuses provide disincentives for treating depression.

In the health sector the desire to protect patients from the financial risks of illness through insurance also affects patient and clinician choices. The relative levels of coverage in health insurance plans drive patients and their physicians, acting as the patients' agents, to favor one type of care over another. Given that prescription drugs often carry copayment amounts of $10 to $20, whereas psychotherapy may carry a 50 percent copayment rate for a service costing $80 to $150, patients will tend to favor pharmacotherapy over psychotherapy, all else being equal.

A key problem is that methods used to organize and pay for health care can insulate both providers and patients from the full consequences of their treatment decisions. We refer to these incentives as distortional. When the relative prices faced by patients and clinicians do not reflect the relative costs of the services, the result will be treatment distorted and directed away from the most cost-effective forms. A standard for assessing organizational arrangements and payment methods is whether these factors lead clinical decision makers to take account of relevant social costs and benefits in making their treatment choices.

Institutional changes affecting incentives

In recent years, major structural change in the organization and financing of mental health care has occurred. Managed care has transformed health care delivery in general, but the change has been more dramatic in the mental health area (34). New institutions such as behavioral health carve-outs, which separate financial risk for mental health care from that for general medical care and prescription drugs, have become central to the delivery of mental health services (35). There is also widespread use of pharmacy benefit management carve-outs, which separate financial risk for prescription drugs from the rest of the health care benefit (36). In addition, health plans are increasingly passing greater levels of financial risk to primary care physicians and clinician organizations through capitation or risk-sharing contracts. Each of these institutional changes influences the incentives that primary care physicians encounter in the treatment of depression and results in the distortion of relative prices that clinicians face when making treatment decisions for depressed patients.

Behavioral health carve-outs

Behavioral health carve-outs are now estimated to serve between 50 percent and 70 percent of the insured population in the United States, making carve-outs the predominant form of organizing and financing mental health services in this country (35). Behavioral health carve-outs serve an important economic function in the market for mental health services by creating economies of specialization and in some cases attenuating inefficiencies stemming from adverse selection (37). However, by separating the payment for and management of specialty mental health care from the rest of health care, carve-outs also serve to fragment mental health care delivery.

Behavioral health carve-outs are nearly always implemented so that behavioral health specialty services are a "free" service for primary care physicians, thereby creating strong incentives for these physicians to refer patients with mental disorders to a mental health specialist. Moreover, it is also common for behavioral health carve-out arrangements to be accompanied by provisions that preclude primary care physicians from billing for mental health procedures. Thus, in the presence of a carve-out, a primary care physician knows that if he or she treats a patient presenting with depression, the physician will incur costs for the treatment but will not gain revenues for it. As a result, incentives are greater for responsible primary care physicians to refer patients with depression to specialty care, even patients who could be treated effectively in primary care. Furthermore, no financial incentive or obvious organizational structure encourages follow-up with the patients after referral. In addition, consultation with mental health specialists to help primary care physicians make treatment decisions for their depressed patients is rarely available or reimbursed. Under current carve-out contracts, few mechanisms exist for promoting communication between the primary care physician and the specialty provider, further inhibiting follow-up and adherence to treatment plans. Because screening and identifying depressed patients can be time-consuming, there is also little incentive for primary care physicians to identify new cases of depression. Thus the organizational and payment provisions associated with managed behavioral health carve-outs create barriers to all three elements common to most quality improvement models.

Because behavioral health carve-out contracts typically exclude prescription drugs, drug costs are "off budget" for the carve-out vendor, as well as for specialists and primary care physicians. The "free good" aspect of drugs in a carve-out context promotes the prescribing of antidepressant medications in cases in which medication and psychotherapy might be viewed as alternative treatments with similar effectiveness. Primary care physicians' training reinforces the tendency to channel the treatment of depression toward pharmacotherapy. An overemphasis on psychopharmacologic treatments for depression may result.

Pharmacy benefit management carve-outs

Just as a behavioral health carve-out contract that excludes prescription drugs creates incentives for the carve-out organization to prescribe antidepressants, a pharmacy benefit carve-out creates incentives for primary care physicians to prescribe antidepressants. When a pharmacy carve-out is in place, primary care physicians and psychiatrists typically face no financial consequences for their prescribing behavior, whereas they might bear some financial consequences for providing other services—for example, if reimbursement for their own professional services is capitated. Again, a propensity to choose psychopharmacologic treatments for depression results.

Changes in physician payment methods

Recent changes in physician payment arrangements can also distort clinical decision making about depression treatment in the primary care sector. In an effort to control costs and increase efficiency, many health plans and physician organizations now delegate financial risk for professional or other services to physicians through capitation or risk-sharing arrangements, such as withholds and bonuses. Placing primary care providers at financial risk for their own professional services, through either a capitation or a risk-sharing arrangement, creates a strong incentive for them to refer rather than treat. Furthermore, the proliferation of quality improvement initiatives has frequently resulted in paying bonuses for treating patients with conditions other than depression, such as asthma, diabetes, and cancer, thus creating financial reasons to focus attention elsewhere.

Aligning incentives with quality improvement

Because different types of depression care services are organized and paid for differently by the market institutions that govern systems of care, clinicians' decision making is sometimes distorted and directed away from evidence-based practice. Improving the adoption of evidence-based treatment for depression in primary care calls for changing existing institutional arrangements to align them with emerging clinical technologies and to "neutralize" the incentives that fragment the management of treatment. A number of approaches could be used to achieve this task, including changing contractual arrangements between the parties—health plans, carve-out vendors, and clinicians—who are involved; changing payment arrangements for primary care physicians; and implementing performance standards for these physicians and rewarding adherence to the standards.

To illustrate existing incentive problems and possible alterations in incentives that would support clinical models of quality improvement, consider the case of a primary care physician who is a member of a medical group that contracts with a network-model health maintenance organization (HMO). The HMO capitates reimbursements to the medical group for all services except mental health and substance abuse specialty care, which is carved out to a managed behavioral health care organization, and prescription drugs, which are carved out to a pharmacy benefit manager. The medical group capitates reimbursement to each primary care physician in the group for his or her own professional services only.

In this scenario, the primary care physician has little financial incentive to identify new cases of depression or to treat depressed patients. Screening and identifying depressed patients can be time-consuming, and the primary care physician receives the same fixed payment per person regardless of the total time spent with a patient. Given the competing pressures faced in primary care practice today, it is likely that this physician will identify too few cases of depression. The presence of a behavioral health carve-out, combined with capitation for the services of primary care physicians, provides a strong incentive for primary care physicians to refer patients who are identified as depressed to the specialty carve-out. Specialty care in the carve-out is a free good to the primary care physician, whereas the physician's providing behavioral health treatment to the patient is costly—particularly given the lack of resources, such as a depression care manager or mental health specialist consultations, in most primary care practice settings—and there is no payment available. Similarly, because of capitation, the physician's follow-up visits with patients who have had behavioral health specialty treatment involve costs to the physician, whose payment does not include these services because the behavioral health treatment dollars have been given to the carve-out. As a result, the primary care physician is less likely to view mental health care as his or her responsibility and may exert too little effort in follow-up of patients in treatment. Finally, because of the prescription drug carve-out, prescribing medications has a zero cost to the primary care physician. This situation is likely to contribute to an overemphasis on pharmaceutical treatment relative to other types of depression treatment, although referral to the carve-out organization is even "cheaper" for the primary care physician.

Changing arrangements with the carve-out vendor

To address the fragmentation between primary and specialty care that is created by behavioral health carve-outs, the relationship between the plan, the carve-out, and the primary care physician or practice must be altered. The key is to break down the "silos" of primary and specialty care created by carve-outs and to coordinate the activities of these sectors more closely.

One approach would be to extend the carve-out boundaries to include primary care physicians in the carve-out's provider network. Through a planning grant from the Robert Wood Johnson Foundation program, Depression in Primary Care: Linking Clinical and System Strategies, a partnership between the University of California, San Francisco, primary care practices, Blue Shield of California, and United Behavioral Health—the last group a behavioral health carve-out vendor—is developing a plan to implement a model of this type. Primary care physicians would be paid on a fee-for-service basis by

the carve-out to treat patients with depression in their practices. As is standard in behavioral health carve-outs, primary care physicians could provide a maximum number of visits—for example, five—before the carve-out's utilization review process would assess the medical necessity of continued treatment. In addition, the carve-out vendor could offer a specialist consultation service for primary care physicians who treat depressed patients in their practices or a depression care manager to follow up with depressed patients by phone.

Changing primary care physician payment methods

Health plans or provider organizations can change their existing methods of paying primary care physicians to change incentives for treating depression. The type of changes that would be appropriate depends on the particular institutional arrangements in place. For example, in a staff-model HMO in which physicians are salaried but are eligible to receive a bonus based on the average number of patients seen per day—a "productivity bonus"—the HMO can weight primary care physicians' visits for depression treatment higher than other types of visits so that these physicians will not be at a financial disadvantage because of treating depressed patients. An option for a network-model HMO plan like that in the example above is to adopt financial incentives for primary care physicians to meet certain cost or utilization targets. For example, a proportion of each payment to primary care physicians could be withheld and returned, or a bonus paid, if the physicians met certain targets or goals for depression treatment, such as standards for cost-effective prescribing.

Implementing performance standards

The health plan or physician organization can adopt performance standards based on key indicators of depression treatment, such as rates of specialty referral and follow-up or patterns of prescribing, and can profile the primary care physician in relation to these indicators. When a physician's prescribing patterns are compared with those of his or her peers, the physician develops a reputation stake in treatment provided for depression. Profiling can also play an educational role for the primary care physician. Financial incentives, either bonuses or penalties, can be attached to these indicators to provide additional encouragement for the physician to achieve the desired goals.

Conclusions

Existing institutional arrangements like behavioral health carve-outs fragment the delivery and financing of mental health services and distort costs that primary care physicians face when making treatment decisions for patients with depression. Because of these economic and organizational obstacles, clinical interventions to improve quality of care for depression in the primary care sector stand little chance of long-term success.

Although it is possible to change institutional arrangements to better align them with evidence-based practice for the treatment of depression, there is no standard model or approach for doing so. Instead, the context is critical. Different institutional arrangements create different incentives for the treatment of depression in primary care. For example, the organizational structure and financial incentives for primary care physicians in a staff-model HMO are likely to be quite different from those in a network-model plan with a behavioral health carve-out. Although barriers to high-quality treatment of depression in primary care exist in both of these systems, each system will require different types of changes to promote cost-effective and evidence-based treatment practices.

Although economic and organizational changes must be tailored to the structure of the system of care, several key principles should guide design and implementation of system changes: reimbursement systems and administrative processes should be adapted to allow for payment of components of evidence-based practices, payment and organizational strategies should be used to overcome fragmentation and coordination problems, and changes should be implemented in a manner complementary to existing institutions governing the primary and specialty care sectors.

Over the next three years, demonstration projects funded by the Robert Wood Johnson Foundation program Depression in Primary Care: Linking Clinical and System Strategies will attempt to address both clinical and economic or systems barriers to high-quality depression treatment in primary care settings. These and other projects should provide important experience in aligning system incentives to support clinical models of quality improvement and, ultimately, cost-effective clinical decision making by primary care physicians. ♦

Acknowledgments

This work was supported by grant 044908 from the Robert Wood Johnson Foundation, grant MH-30915 from the National Institute of Mental Health, and grant 5-P01-HS-10803-2 from the Agency for Healthcare Research and Quality. In addition, Dr. Huskamp received support from grant 1-K01-MH-66109 from the National Institute of Mental Health, and Dr. Pincus received support from the University of Pittsburgh Mental Health Intervention Center for Mood and Anxiety Disorders. Rachel Mosher, B.A., provided expert research assistance. The authors thank Thomas McGuire, Ph.D., and Lin Hough, M.P.H., for helpful discussions.

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