Mental Health/Medical Care Cost Offsets: Opportunities For Managed Care

Certain types of health plans are well suited to improving mental health status and capturing overlooked cost savings.

by Mark Olfson, Merrile Sing, and Herbert J. Schlesinger

PROLOGUE: A question that sparks debate among payers, providers, and analysts of behavioral health care coverage is: Would increased access to mental health care cause a compensatory reduction in the use of medical care services? A diverse literature exists on the "mental health/medical care cost-offset effect." Here authors Mark Olfson, Merrile Sing, and Herbert Schlesinger provide an introduction to the debate and argue that some managed care firms could capture medical care cost savings by making mental health care services more accessible to some patients. Not only could health plans save money; patients could benefit from improved mental health treatment. Following this paper, psychiatrists Mary Jane England (president, Washington Business Group on Health) and Howard Goldman (University of Maryland, Baltimore) weigh in with Perspectives highlighting the pros and cons of the cost-offset debate for making health policy.

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ABSTRACT: Health services researchers have long observed that outpatient mental health treatment sometimes leads to a reduction in unnecessary or excessive general medical care expenditures. Such reductions, or cost offsets, have been found following mental health treatment of distressed elderly medical inpatients, some patients as they develop major medical illnesses, primary care outpatients with multiple unexplained somatic complaints, and nonelderly adults with alcoholism. In this paper we argue that managed care has an opportunity to capture these medical care cost savings by training utilization managers to make mental health services more accessible to patients whose excessive use of medical care is related to psychological factors. For financial reasons, such policies are most likely to develop within health care plans that integrate the financing and management of mental health and medical/surgical benefits.

THE PROVISION OF MENTAL HEALTH SERVICES sometimes leads to a decline in use of general medical services.[1] This phenomenon is commonly referred to as the "cost-offset effect": The added cost of the mental health services is offset either in part or in full by reductions in the use of general medical services.

Cost offsets are a secondary derivative rather than a primary aim of providing mental health services. Mental health care is a necessary part of comprehensive health care systems, not because of its potential to save costs but, rather, because mental disorders are real and have adverse, sometimes life-threatening, consequences and because treatments are available that effectively reduce common mental symptoms and associated disabilities.

Medical care cost offsets are possible only when a portion of medical care use is driven by psychological or psychiatric factors. The opportunities for achieving cost offsets are shaped by prevailing organizational arrangements, financial incentives, and health care management techniques. In this paper we examine empirical research on the cost-offset phenomenon; we identify patient groups with high potential to yield cost offsets; and we describe how to structure health care delivery and financing arrangements to secure these medical care savings.

■ **Pathways to achieving cost offsets.** Cost offsets may be achieved in several ways. Specialty mental health treatment may prevent unnecessary medical care use, reduce future demands on medical resources, or simply substitute for mental health care delivered by primary care providers in instances when it is ineffective.

Some mental disorders masquerade as general medical illnesses and lead to unnecessary use of medical care services. If accurate diagnosis leads to an appropriate refocusing of treatment on the underlying mental condition, it may reduce use of such unnecessary,

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and potentially harmful, medical services. Early and effective treatment of disorders such as alcohol and drug abuse may reduce medical complications and future medical costs. In still other cases, appropriate mental health care may reduce unnecessary medical spending by improving self-care and adherence to prescribed medical regimens.

These socially desirable offsets should be distinguished from cases in which services provided by mental health specialists simply replace equivalent mental health services previously delivered by primary care providers. Merely substituting providers without changing treatments results in a cost offset in accounting terms but does not reduce unnecessary or ineffective health service use. In practice, however, mental health treatment provided by mental health specialists is often more cost-effective than that provided by primary care providers.[2]

■ **The potential for cost offsets.** The potential for cost offsets exists whenever mental health factors push medical care use above optimal levels. Inpatients in medical and surgical units and patients who frequently use outpatient medical services are logical groups to examine in searching for such medical care use, because undiagnosed and untreated psychiatric symptoms and disorders are common among them.

Cost offsets are relatively unlikely to occur in connection with the mental health treatment of schizophrenia, bipolar disorder, or the other most severe mental illnesses. Severely mentally ill patients are at risk not so much for unnecessary use of medical services as for receiving insufficient or inadequate medical care.[3] Cost offsets also are unlikely to occur among socioeconomically disadvantaged groups who have limited access to medical care. In underserved populations, providing mental health treatment may lead at first to an appropriate increase, rather than a decrease, in use of medical care services, as previously unmet needs for medical care become identified.[4]

■ **Mental health status and use of medical services.** A substantial body of evidence indicates that poor mental health status often is associated with poor physical health and elevated use of medical care.[5] In one health maintenance organization (HMO), for example, primary care patients with clinical depression or anxiety had annual health care costs that were roughly twice those of patients without these disorders. The increases occurred across costs for pharmacy, laboratory, general medical care, and specialty care.[6]

An association between psychiatric symptoms and use of health services also has been observed among older primary care patients.[7] As with younger adults, the cost of providing health care to elderly

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primary care patients with significant depressive symptoms is roughly twice as great as for comparable patients without such symptoms. Importantly, older, depressed primary care patients' excess health care use is largely confined to medical services. This finding raises concern that these patients underuse mental health services. It also provides an opening for possible cost offsets.

Findings From The Literature

The literature on the cost-offset effect identifies three patient groups with high potential to yield such effects: (1) distressed elderly medical inpatients, (2) primary care outpatients with multiple unexplained somatic complaints, and (3) nonelderly adults with alcoholism. Offset effects occur in these patient groups only when a portion of their medical care use is driven by psychological or psychiatric factors, and when mental health factors result in excessive or unnecessary use of medical care services.

■ **Mental health treatment for general medical inpatients.** Over the past thirty years several studies have examined the effects on medical costs of providing mental health care to medically ill inpatients. A widely cited review identified fifty-eight controlled trials of which twenty-two involved random assignment of inpatients to either a psychological intervention or continued usual care.[8] A range of psychosocial treatments were studied, including instruction, resource mobilization, emotional and social support, and various forms of short-term psychotherapy. Collectively, these trials indicate that mental health interventions were associated with an average 10 percent reduction in inpatient medical care costs. Savings tended to be greatest among older inpatients.

More than twenty years ago Walter Gruen discovered that patients experiencing their first myocardial infarction who were randomly assigned to brief supportive psychotherapy were discharged from the hospital 2.5 days earlier than were such patients who did not receive psychotherapy.[9] Two subsequent studies of elderly orthopedic surgical patients found that inpatients who received a psychiatric consultation had shorter hospital stays than their counterparts who do not receive a consultation. Psychiatric consultation was associated with 80 percent savings in inpatient costs.[10] However, a similar study of younger medically ill inpatients failed to demonstrate medical cost savings.[11]

These findings imply that under Medicare diagnosis-related groups (DRGs) and other prospective payment systems, hospitals will find it financially advantageous to make mental health consultation services available to distressed inpatients who are experiencing life-threatening medical illnesses. Managed care companies also

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should take note. Utilization managers should be aware that excessive use of medical care sometimes indicates that important mental health problems are being missed or ignored.

■ **Outpatient mental health treatment.** Some patients have a long history of multiple medical complaints that cannot be fully explained by known medical conditions. If these unexplained symptoms are sufficiently varied and protracted, formal diagnostic criteria are met for "somatization disorder."[12] This condition typically runs a chronic and relapsing course that results in exceptionally high medical care costs. Although somatization disorder occurs in only approximately 0.1 percent of the adult population, somatization symptoms are roughly 100 times as common and measurably contribute to total outpatient medical spending.[13]

Richard Smith and colleagues discovered that outpatients with somatization disorder who are randomly assigned to psychiatric consultation accumulate approximately half the medical charges of comparable patients who continue to receive only the usual care.[14] Similar savings were found in a second study of patients with somatization symptoms.[15]

A natural extension of this research is to test whether outpatient mental health consultation reduces unnecessary use of medical services by distressed patients who are high users of these services. Unfortunately, it does not.[16] This suggests that cost offsets may be achieved by offering psychiatric interventions to outpatients who use unnecessary medical care, but not necessarily to psychologically distressed patients whose high use is not unnecessary or excessive.

■ **Outpatient alcohol abuse treatment.** Naturalistic studies indicate that treatment of alcohol abuse avoids health care costs over the long term.[17] Medical care cost savings have been observed following several different types of treatments and may occur most often in patients who are successfully treated in the early stages of alcohol-use disorders.[18] Serious medical complications, such as cirrhosis, cardiomyopathy, or chronic hepatic encephalopathy, tend to develop after years of severe alcoholism. Such organ damage typically requires extensive and expensive medical care that is not likely to be precluded by mental health care.

Medical service use for persons who receive outpatient alcohol treatment is approximately 40 percent lower than it is for persons who are referred for treatment but decline it.[19] This saving is largely attributable to lower medical inpatient costs. Similar but slightly less impressive medical cost savings have been found in a fourteen-year observational study that compared patients who received alcohol treatment to similarly diagnosed persons who did not receive treatment.[20] If policies can be put in place that ensure treatment for

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recognized alcohol-abuse cases, a significant potential for long-term savings in medical care costs might be realized.

Medical care cost savings related to alcohol treatment may not be evident in the short term. At one large HMO, for example, patients who were randomly assigned to either a 50 percent copayment or no copayment at an alcohol treatment program used medical care at about the same rate over the following year. Among those enrolled in the treatment program for at least one year, the free-care group made more alcohol treatment service contacts, achieved longer periods of abstinence, and participated in more nondrinking activities.[21] However, the improved clinical outcomes were not associated with reductions in the cost of their medical care. One reason that the research findings linking alcohol treatment to medical care cost savings are most impressive over longer time frames is that medical complications typically develop after years of untreated alcohol abuse.

■ **Policy-level research.** Most cost-offset research has examined the medical cost implications of specific mental health/substance abuse (MH/SA) treatment regimens rather than of changes in insurance benefit design or health policies. Health policies cannot possibly be manipulated to target high-risk groups with the precision that can be achieved with detailed clinical assessment methods used to select patients for clinical research. Much less is known about how mental health policies affect medical care costs than about how specific mental health treatments affect medical care costs for well-defined patient groups.

One widely cited policy study, which failed to find evidence of a cost-offset effect, randomly assigned unselected private fee-for-service enrollees to more or less generous psychotherapy insurance plans. Similar spending on medical care was found among enrollees assigned randomly to 25 percent or 50 percent copayment plans for psychotherapy. Although only a small percentage of enrollees in these two groups (3.1 percent and 2.9 percent, respectively) used any psychotherapy services, the failure to find group differences in general medical costs suggests that simply changing pricing policies would not generate discernible aggregate cost-offset effects.[22] No comparable policy study has examined whether a more selective or targeted approach to expanding access to mental health care might affect the cost of medical care.

■ **Methodological issues.** Several of the earliest studies that found a cost-offset effect used a naturalistic method that traced patients' use of medical care services before and after a mental health intervention. The increased stress experienced by persons who are about to seek mental health treatment leads to an increase in use of

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medical care, which then tends to fall as the crisis resolves. This fall tends to occur whether or not mental health treatment has been obtained. The possibility that this phenomenon, called regression to the mean, is responsible for the fall in medical care costs confounds efforts to attribute it to the mental health intervention.

Selection bias also threatens the validity of naturalistic studies that compare treated and untreated groups. Mental health treatments might be more effective in patients who elect to be treated than they would be if ostensibly similar but untreated patients could be persuaded to receive the treatment. From a methodological standpoint, the selection bias that occurs under routine practice toward delivering care to groups who are more responsive to treatment may lead to overly optimistic assessments of cost savings.

Methodological shortcomings should not keep one from appreciating the inherent policy relevance of naturalistic research in which patients participate in treatments that broadly represent usual care without added restrictions on provider choice or on the nature or duration of treatment.[23] Clinical experiments, on the other hand, often assign carefully selected patients randomly to model treatments that may not be widely available or easily replicated. Both types of studies are important, and the strengths of each complement the limitations of the other. The general consistency of findings across naturalistic and experimental designs adds weight to the expectation that offering mental health treatment may reduce the cost of providing medical care under certain circumstances.

Implications For Delivery And Financing

The delivery and financing of health care can be structured in three ways to reduce patients' use of excess medical care services because of mental health factors. First, health care systems can be organized so that the financing and management of medical and mental health services are integrated. Second, utilization managers and primary care physicians can be trained to identify patients whose excessive use of medical care is driven by mental health factors and to facilitate their access to mental health care. Third, in a managed care environment, pricing policies can be combined with utilization management techniques to increase access to mental health treatment when offset savings are possible.

■ **Organization.** It is increasingly common for the financing and management of mental health benefits to be separated or "carved out" from plans that manage medical and surgical benefits. Several large proprietary companies that specialize in managing MH/SA benefits have been created out of employers' dissatisfaction with the delivery of mental health care to their workers.

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"Fear of runaway costs has led most private-sector employers to offer less coverage of outpatient mental health care."

MH/SA benefits can be carved out by the payer or by the managed care organization. Mental health benefits that are carved out by the payer break the link between mental health and general medical financing. In these types of carve-outs, managed care plans lack a financial incentive to capture cost offsets and lose access to information about their subscribers' use of medical care services. Managed care companies that do not also manage mental health benefits have little incentive to pursue savings from cost offsets because this requires a substantial investment to develop the expertise to identify cases with high cost-offset potential.

In contrast, health care systems that integrate the financing and management of medical and mental health services have the economic incentive to develop the expertise to recognize the cases in which medical cost savings might follow from improved access to mental health care. This can occur when the same health plan delivers and manages medical and mental health care or when a managed care plan that bears financial risk for enrollees carves out mental health care.

■ **Screening.** Utilization management has been particularly effective in reducing use and costs of care for substance-use and nonpsychotic disorders.[24] But managed care plans have not given sufficient attention to the potential medical care cost savings that may follow from increased access to mental health services. Health care professionals who conduct precertification, concurrent case reviews, and high-cost case management could be trained to identify patients likely to reduce their excessive use of medical care if offered mental health services.

Health plans that wish to reduce medical care service use that is driven by mental health factors can develop protocols to help utilization managers and primary care physicians to identify patients with psychosomatic symptoms and train primary care physicians to identify patients who use excessive medical care services because of mental health factors. Without appropriate training, primary care providers may have difficulty diagnosing mental disorders in elderly patients and distinguishing somatization syndromes from general medical disorders.

Many employers do not believe that the mental health/medical cost offset exists. This may be because traditional policy instruments, such as price and benefit design, are by themselves simply

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too blunt to target high-risk groups. Capturing cost-offset savings may require the case-level precision of utilization management.

Employers who have a high rate of employee turnover may have little interest in cost offsets that do not appear until as much as a year after an employee obtained mental health treatment. Understandably, employers may be reluctant to pay for mental health services for which the financial benefits will accrue to the company that next employs their workers.

■ **Insurance benefit design.** Fear of runaway costs has led most private-sector employers to offer less coverage of outpatient mental health care than of general medical care. Concern over protracted outpatient treatment has led to the common practice of limiting coverage to twenty or thirty visits per year. Patients' out-of-pocket cost-sharing requirements also are typically higher for outpatient mental health care than they are for outpatient medical care.

There is some evidence to justify these concerns. Demand for outpatient mental health care is more price-sensitive or elastic than is demand for general medical care.[25] However, there also is evidence that even when outpatient mental health care is unmanaged and offered without limitations beyond a lifetime cap, treatment episodes typically consist of fewer than ten visits.[26]

Recent actuarial projections of the costs of liberalizing mental health benefits have assumed no cost-offset effect following the unmanaged expansion of mental health benefits.[27] Offset effects were not factored into cost projections for President Bill Clinton's 1993 proposal to reform the health care system, the proposed Domenici-Wellstone parity amendment to the Health Insurance Reform Act, or the 1996 Mental Health Parity Act. These cost projections were prepared by actuaries or consultants representing providers (such as the American Psychological Association), businesses (such as the Association of Private Pension and Welfare Plans), parity advocates (such as the Coalition for Fairness in Mental Illness Coverage), and government (such as the U.S. Congress). We agree that there is not sufficient evidence to assume that aggregate cost offsets would follow from broad and unmanaged enrichment of mental health benefits. However, medical costs may go down for certain patient groups, such as distressed elderly inpatients, primary care outpatients with unexplained somatic complaints, and nonelderly adults with alcoholism.

Public- and private-sector experience suggests that the costs of expanding mental health benefits are more closely tied to managed care practices than they are to benefit structure. In other words, more generous mental health benefits generally result in a much smaller increase in service use in a tightly managed health care

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delivery system (such as an HMO) than they would in a lightly managed delivery system (such as a preferred provider organization [PPO] in which patients can self-refer to providers).[28] Utilization management procedures in tightly managed delivery systems will save medical care costs if they increase access to mental health care for patients who use unnecessary medical care to meet their emotional needs.

In tightly managed health plans, pricing policies could be used with utilization management to facilitate savings through cost offsets. In tightly managed HMOs and managed behavioral carve-out plans, for example, lowering copayments for the first five visits (from, say, $20 to $10) may be preferable from a cost-offset perspective to increasing the annual service limit to more than twenty visits. This is because reducing copayments tends to affect the number of users rather than the length of use and because cost offsets tend to be greatest for patients whose treatment episodes are of intermediate length (more than one but fewer than twenty visits).[29]

IN A SOCIETY THAT SEEKS TO LIMIT health care spending, private and public insurers inevitably will grapple with how much they can afford to spend on health care. Calls to increase access to health services for selected patient groups will be met with skepticism by those who must pay for the care. However, the mental health/medical care cost offset poses a largely overlooked opportunity to improve mental health status and at the same time reduce inefficient medical care use for some well-defined patient groups. Managed mental health care that is integrated with the financing and management of general medical care has the necessary information and could develop the expertise to recognize the inefficiencies in medical service delivery related to psychiatric factors. The knowledge gained from three decades of research on the cost-offset effect can be used to improve both the quality of care and the efficiency of mental health and medical care delivery.

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NOTES

1. Throughout this paper the term *mental health* relates to substance abuse disorders and other mental disorders, while the term *medical* relates to all other disorders. G.O. Gabbard et al., "The Economic Impact of Psychotherapy: A Review," *American Journal of Psychiatry* 154 (1997): 147–155; E. Mumford et al., "A New Look at Evidence about Reduced Cost Medical Utilization following Mental Health Treatment," *American Journal of Psychiatry* 141 (1984): 1145–1158; and K. Jones and T. Vischi, "Impact of Alcohol, Drug Abuse, and Mental Health Treatment on Medical Care Utilization: A Review of the Research Literature," *Medical Care* 17 (1979 Supplement): 1–82.
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