The Myth of Medical Cost Offset

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Many mental health advocates seem to believe that increased access to or use of behavioral health services can substantially reduce expenditures in other medical care services—an idea generally known as the medical cost offset hypothesis.

Cost-offset claims are often used to buttress proposals for increased funding for mental health treatment or more generous insurance. A recent example of such efforts is "parity" legislation, which requires equal insurance coverage for behavioral and medical services. In this context, cost-offset claims present two problems, one conceptual or philosophical and the other empirical.

The conceptual problem is that cost-offset considerations are not a sound basis for social policy, because requiring evidence that services at least partially pay for themselves, regardless of the benefits to patients, invites discrimination across health conditions and population subgroups. Services that "pay" for themselves for example, increased intensive outpatient care as a substitute for some inpatient services and better medication management-should be delivered, of course. What puts us on thin ice is reversing the justification for health care from patients' benefits to "cost savings." This is not an original observation; Goldman (1) and others have made similar arguments.

I do not want to spend much time here on the conceptual problems, but does it not seem odd that at a time when politicians pass legislation man-

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dating parity in insurance coverage for medical and behavioral health services, mental health advocates reinforce the impression that behavioral health care should be held to different standards than medical services? Medical services primarily exist to improve patients' well-being, not to increase a patient's earnings or an employer's bottom line (through, for example, increased productivity).

In this article, I focus on the empirical problem of cost-offset claims, which is the assumption that changes in health care policies will result in major medical cost offsets. In fact, there is no evidence that increased mental health expenditures—through more generous behavioral health insurance coverage, higher quality of mental health care for a general population, or expansions of behavioral health care services—are offset to any meaningful extent by reductions in general medical spending.

Yes, specific interventions that target selected patients can indeed reduce their medical costs; however, these are special cases, and extrapolating interventions such as changes in financing, insurance regulations, or other policy reforms that affect broader populations is specious. The fallacy of this reasoning is in extrapolating from clinical interventions to policy interventions and from specific clinical groups to the general population.

Let us start by reconsidering the evidence for medical cost offsets. The strongest study design is the randomized clinical trial, and cost offsets have been subjected to this test—even successfully at times (2). In one study, a psychiatric consultation intervention among patients with somatization disorder found substantial medical cost reductions (3); in another, psychiatric consultation among some elderly inpatients reduced their medical costs (4). There are other ex-

amples of successful interventions, but unfortunately, broadening such interventions to other, seemingly promising patient groups is often unsuccessful in achieving cost offsets, even if it is clinically successful.

Von Korff and colleagues (5) found that a consultation intervention for high-cost, distressed outpatients did not reduce medical costs, but only increased total expenditures. Similarly, psychiatric intervention was not found to reduce costs for younger medical inpatients with psychological distress (6). These findings suggest the existence of niches for medical cost offsets, but also that these niches are very narrow and do not extend to a large proportion of patients. In the aggregate, cost offsets disappear, partly because they are diluted and partly because in some populations increased mental health care will lead to increased medical services—especially underserved populations.

Olfson and colleagues (7) argued that managed care organizations may learn how to take advantage of cost-offset niches, but that will take organizational skills that currently exceed their abilities.

To evaluate the consequences of cost-offset policy changes, one must go beyond clinical trials. Although such trials may provide the most convincing evidence for cost offsets in specific situations, they are not the best basis for policy reform. Clinical interventions represent micromanagement of care for selected individuals—the opposite of policy interventions, which are rules or system changes that affect a large number of individuals, often indirectly and to a relatively minor degree.

Theoretically, randomized trials still constitute the best study design, but in practice they are less suitable for policy-level research, because estimating small effects with acceptable

precision requires extremely large samples, and randomization may be needed at the level of larger units, such as health plans, hospitals, or cities.

Not surprisingly, most research on cost offsets—as on other policy issues—relies on the examination of existing data. An exception is the Rand health insurance experiment (8), a randomized trial that tested the effects of benefit expansion by assigning families to more-generous or lessgenerous fee-for-service insurance coverage. Participants who had free mental health care were found to be twice as likely to use mental health services and to have almost twice the mental health costs as those covered by an insurance plan with a 95 percent patient copayment rate (8,9). Individuals in the free plan also had much higher medical costs, although this finding was confounded by changes in medical benefits. The sample size—and, consequently, the statistical precision—for a direct test of cost offset was reduced because differential medical and mental health benefits were implemented only in the 25 to 50 percent copayment range; however, the available data showed no support for cost offset. Although the data suggested that very large cost offsets would be unlikely, the study was too small to have detected smaller cost offsets.

Two major studies in the mental health field commented on cost offsets: the Medical Outcomes Study one of the largest observational studies of health outcomes (10)—and the Fort Bragg demonstration project (11). The Medical Outcomes Study screened 22,000 outpatients in Los Angeles, Boston, and Chicago for several chronic medical conditions, including depression, and followed a panel of patients over time. A particular focus of the study was on quality of care, including an examination of outcomes for individuals with similar severity of depression, comorbidities, and socioeconomic status who did and did not receive appropriate mental health treatment, either effective medication or counseling.

Despite all the attention given in that study to the effects of cost offsets, we found no evidence in the results to suggest that providing patients with increased mental health care services or specialty care or more appropriate care reduced the use of either outpatient or inpatient medical services. The cost-offset hypothesis should have been able to pass this test much more easily than one in which more generous mental health insurance coverage achieved medical cost offsets.

This latter type of test was conducted by the Rand health insurance experiment (8), and it is the relevant study for someone who wants to use cost-offset claims as a justification for mental health parity. However, the closest thing we found to cost reductions in the Medical Outcomes Study was cost shifting. Patients of mental health specialists had fewer visits to general medical providers than patients who received mental health care in the general medical sector, but when the patients themselves distinguished visits for mental health reasons from visits for medical reasons, the difference disappeared.

In fact, studies in which medical visits are classified by provider type rather than by type of visit are likely to find a spurious cost-offset effect, which in reality is just cost shifting between provider sectors. Unlike cost offsets, cost shifting provides no benefit from a social perspective, and it is important not to confuse the two.

The Fort Bragg study was a demonstration project that compared care under traditional insurance with an exemplary system of care that was designed to provide comprehensive mental health services to children and adolescents. The design of the study was stronger than that of a purely observational study, although it was not as strong as a randomized trial because sites were not randomly assigned to the intervention or control condition. The key aim of the study was to determine whether an improved mental health system for children could lower health care expenditures. The study satisfied the recommendation of earlier cost-offset studies to focus on high-cost users and provide a follow-up period of at least a year (2,12). Mental health expenditures were found to be much higher in the demonstration, but they were not offset by cost savings elsewhere (13).

A later analysis of the study expanded cost measures to a broader array of costs, including services received outside the catchment area and services used by other family members (14). Even then there was no substantial cost offset for medical costs, although some partial cost shifting occurred, in that out-of-catchment-area expenses appear to have shifted inside the catchment area for the demonstration.

Many other data sets have been analyzed for cost offsets, usually in smaller studies or secondary data analyses. Unfortunately, serious methodological problems are common. The first studies that claimed cost offsets monitored patients over time and noted a drop in total health care expenditures after mental health treatment (15). Although there are numerous similar reports, the drop in health care costs after an acute episode is a typical case of regression to the mean, which exists whether or not individuals receive appropriate mental health care.

Another group of cost-offset studies compares the costs of treated and untreated patients. The problem here is a selection bias caused by noncomparable samples. These types of comparisons can create apparent effects, and they are especially problematic for administrative data analyses that have limited information about case-mix differences. In fact, selection bias in these studies is so strong that it can overwhelm "true" effects. For example, with limited case-mix measures, observational data could even be used to demonstrate that antidepressant medication—or psychotherapy—leads to worse outcomes than no treatment because of the much greater severity of symptoms in patients who receive treatment (10).

Thus the scientific evidence does not favor sweeping cost-offset claims. Why, then, do a large number of mental health practitioners take their existence for granted? Perhaps the reason is that information becomes distorted as it trickles from academic publication through the trade press to informal conversations and eventually to individual belief systems. The perceived end message may have little to do with the original message, and it can incorporate professional biases or

political agendas that have been introduced along the way.

A robust statistical finding that has been churned through this mill is that patients with mental disorders have higher medical costs (16–18). Carefully worded statements in scientific publications about this association evolve into "depression causes higher medical costs" and eventually into "psychiatric care reduces medical costs." Professional organizations jump on the final version for editorials and press releases and bolster sweeping claims of cost offsets with selective evidence from narrow trials.

In summary, I am skeptical about the appropriateness of medical costoffset claims as a justification for policy changes in mental health care. I do not mean to say that economic concerns should not be acknowledged, but the proper argument focuses on cost-effectiveness. Many of the strategies used in today's health care market, such as reduced reliance on specialty providers, focus explicitly and almost exclusively on cost containment. The medical costoffset argument plays to this trend and singles out behavioral health care as different from other medical services. This approach is very problematic, especially if cost offsets fail to materialize—in my opinion, the most likely outcome of expanding mental health insurance.

A stronger argument in advocating for behavioral health care is that of value of care in terms of health improvements per dollar spent—a much more comprehensive standard that, in addition to any possible cost offsets, includes health outcomes (10,19). For a health plan or an employer, the value of care or its cost-effectiveness should be as important as absolute costs. There is little point in spending money on something that is cheap if it provides no benefits.

Even though health care policy decisions are largely political, the importance of cost-effectiveness considerations will undoubtedly increase in the future. Cost-effectiveness arguments may not have the same immediate policy appeal as promises to save money—but broken promises do not further the cause of behavioral health care in the long run. •

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ongoing psychological assessment and interventions to maintain psychological safety and effective coping skills. Psychoeducation about normal responses after rape and the need for ongoing community and family support will help to promote recovery. •

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